VENTURA COUNTY

PACIFIC ROCK QUARRY EXPANSION PROJECT

FINAL
ENVIRONMENTAL IMPACT REPORT

STATE CLEARINGHOUSE NO. 2017081052

VOLUME II – APPENDICES



MAY 2025

Lead Agency:
Ventura County Resource Management Agency, Planning Division

Preparer:
Benchmark Resources

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State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
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January 22, 2021

Mr. Justin Bertoline
Ventura County, Planning Division
800 South Victoria Avenue, L#1740
Ventura, CA 93009
Justin.Bertoline@ventura.org

Subject: Pacific Rock Quarry Expansion Project, Draft Environmental Impact Report, SCH #2017081052, Ventura County

Dear Mr. Bertoline:

The California Department of Fish and Wildlife (CDFW) has reviewed Ventura County's (County; Lead Agency) Draft Environmental Impact Report (DEIR) for the Pacific Rock Quarry Expansion Project (Project). Review of the DEIR included the following documents: Draft Environmental Impact Report, Appendix A – EIR Scoping Records Appendices (Appendix A), and Appendix C – Biological Resource Appendices (Appendix C).

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish and wildlife. Likewise, we appreciate the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under the Fish and Game Code.

CDFW's Role

CDFW is California's Trustee Agency for fish and wildlife resources and holds those resources in trust by statute for all the people of the State [Fish & Game Code, §§ 711.7, subdivision (a) & 1802; Pub. Resources Code, § 21070; California Environmental Quality Act (CEQA) Guidelines, [§ 15386, subdivision (a)]. CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species (Id., § 1802). Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect state fish and wildlife resources.

CDFW is also submitting comments as a Responsible Agency under CEQA (Public Resources Code, § 21069; CEQA Guidelines, § 15381). CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code, including lake and streambed alteration regulatory authority (Fish & Game Code, § 1600 *et seq*.). Likewise, to the extent implementation of the Project as proposed may result in "take", as defined by State law, of any species protected under the California Endangered Species Act (CESA) (Fish & Game Code, § 2050 *et seq.*), or CESA-listed rare plant pursuant to the Native Plant Protection Act (NPPA; Fish

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& Game Code, §1900 *et seq.*), CDFW recommends the Project proponent obtain appropriate authorization under the Fish and Game Code.

Project Description and Summary

Objective: The County and Pacific Rock, Inc. (Applicant) are proposing the Project. The Applicant is requesting the approval of a Conditional Use Permit (CUP) modification to extend the life of the existing permitted operations for an additional 30 years, significant expansion of the mining area, extend the operational days from six to seven 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.

The Applicant is requesting that the County approve a CUP modification to extend the life of the permit and continue to operate on property zoned Open Space (OS-160) and Agricultural Exclusive (AE-40). Both parcels occur within a Habitat Connectivity and Wildlife Corridor overlay zone, pursuant to Ventura County's Zoning Ordinance.

The existing facility is an active quarry that supplies large rock for the production of riprap and various sizes of crushed rock and aggregate materials to public works and private projects in Ventura County. The request includes expansion of the mining area to the east and onto recently acquired adjacent land. The CUP area would increase from 111.5 acres to 204.4 acres, an increase of 93 acres. The mining and facilities area would increase from 62.5 acres to 172.8 acres, an increase of 110.3 acres. The maximum depth of mining activities is 180 feet. Expected impacts to vegetation communities are detailed in Table 1 below.

Table 1. A summary of anticipated impacts to plant communities, as depicted in Appendix C.

Plant Community	Acres within Study Area	Acres Impacted by Project	Percent Impacted of Total within Study Area
Laurel Sumac Scrub	120.52	71.02	59%
California Sagebrush Scrub	0.14	0.14	100%
Deerweed Scrub	1.30	0	0
Giant Wild Rye Grasslands	2.04	1.50	74%
Cattail Marsh	0.32	0.19	59%
Red Willow Thicket	2.01	0	0
Mountain Mahogany Scrub	0.23	0.23	100%
Disturbed Chamise/Ceonothus Chaparral	1.43	1.34	94%
Coast Live Oak Woodland	1.52	0	0
Russian Thistle Fields	2.93	1.52	52%
Non-Native Annual Grassland	16.38	11.50	70%
Agriculture	19	10.21	54%
Ornamental	4.25	0.01	0.2%
Developed	1.70	0.29	17%
Previously Cleared Land	79.90	69.03	86%
Detention Pond	3.73	0	0
Total	**257.4**	**166.98**	

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The proposed Project is expected to impact 23 unnamed drainage features and may impact one detention pond. The detention pond is approximately 3.75 acres in size and contains habitat for multiple Endangered Species Act- (ESA) and CESA-listed species as well as California Species of Special Concern (SSC) including, but not limited to, least Bell's vireo (*Vireo bellii pusillus*), yellow warbler (*Setophaga petechia*), and western pond turtle (*Actinemys marmoratais*). The feature is situated immediately adjacent to existing mining operations and captures all runoff from the facility. Many of the 23 unnamed drainage features are hydrologically connected to Conejo Creek and emergent wetlands downstream. In total, there is approximately 20,000 linear feet of ephemeral streams within the Project footprint. The acreage of impacts to streams and corresponding habitat was not provided.

Existing mining methods including rock blasting, sorting, processing/crushing, and stockpiling would occur throughout the enlarged area. The Applicant is also requesting approval of an amendment to the existing Reclamation Plan to account for the proposed expanded mine area and to amend specifications for reclaimed conditions at the site. The proposed Reclamation Plan amendment specifies end land uses as "open space" on the benched portions, and "agriculture" on the remaining areas, where grasses would be planted for cattle grazing. The proposed reclamation would also involve import and placement of fill material at the site.

Location: The Project is located within the westernmost portion of the Santa Monica Mountains and 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. The Connection is characterized as a corridor connecting the Santa Monica Mountains to Conejo Mountain. More specifically, the Project 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. The physical address for the site is 1000 South Howard Road, Camarillo, California 93012. The existing quarry is located within Assessor's Parcel Number (APN) 234-0-060-220. Proposed expansion areas are within additional portions of APN 234-0-060-220 and a portion of APN 234-0-060-190. Both parcels are located in Section 8, Township 1 North, Range 20 West, San Bernardino Baseline and Meridian.

Comments and Recommendations

CDFW previously commented on the proposed Project on October 2, 2017, because many of those comments have yet to be fully addressed those comments are attached as Attachment B to this letter. CDFW offers the comments and recommendations below to reassert its concerns and to assist the County in adequately identifying, avoiding, and/or mitigating the Project's significant, or potentially significant, direct, and indirect impacts on fish and wildlife (biological) resources. CDFW recommends the measures or revisions below be included in a science-based monitoring program that contains adaptive management strategies as part of the Project's CEQA mitigation, monitoring and reporting program (Pub. Resources Code, § 21081.6; CEQA Guidelines, § 15097) (see Attachment A).

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Specific Comments

Comment #1: Mountain Lion (*Puma concolor*)

Issue: The County/Applicant stated, "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." CDFW disagrees with this statement and is concerned that the Project may impact mountain lion (*Puma concolor*) because the Project occurs within the range of mountain lion habitat.

Specific impacts: The Project as proposed may impact the southern California mountain lion population by increasing human presence, traffic, noise, air pollutants and dust, artificial lighting, and will significantly and permanently reduce the width of the existing wildlife corridor.

Why impacts would occur: Mountain lions may occur within the Project footprint or in areas immediate adjacent to the Project. The Project may increase human presence (e.g., new development, public trail access), traffic, noise, and artificial lighting during Project construction and over the life of the Project. Most factors affecting the ability of the southern California mountain lion populations to survive and reproduce are caused by humans (Yap et al. 2019). As California has continued to grow in human population and communities expand into wildland areas, there has been a commensurate increase in direct and indirect interaction between mountain lions and people (CDFW 2013). As a result, the need to relocate or humanely euthanize mountain lions (depredation kills) may increase for public safety. Mountain lions are exceptionally vulnerable to human disturbance (Lucas 2020). Areas of high human activity have lower occupancy of rare carnivores. Mountain lions tend to avoid roads and trials by the mere presence of those features, regardless of how much they are used (Lucas 2020). Increased traffic could cause vehicle strikes. Mountain lions avoid areas with low woody vegetation cover and artificial outdoor lighting (Beier 1995). As human population density increases, the probability of mountain lion persistence decreases (Woodroffe 2000).

The Project as proposed would also impair a wildlife corridor. The Project would permanently impact the County's Wildlife Linkage and [habitat] Corridor. Loss of wildlife connectivity is another primary driver for the potential demise of the southern California mountain lion population (Yap et al. 2019). Habitat loss and fragmentation due to roads and development has driven the southern California mountain lion population towards extinction (Yap et al. 2019). Conserving and restoring habitat connectivity and corridors is essential for mitigating impacts to mountain lions. This is especially critical in the face of climate change-driven habitat loss and increased frequency of fires (Yap et al. 2019). Under a high emissions and warm and wet climate scenario, much of the chaparral habitat in southern California that provide habitat for mountain lions would be climactically highly stressed by the year 2070 (Thorne et al. 2016).

Evidence impact would be significant: The mountain lion is a specially protected mammal in the State (Fish and Game Code, § 4800). In addition, on April 21, 2020, the California Fish and Game Commission accepted a petition to list an evolutionarily significant unit (ESU) of mountain lion in southern and central coastal California as threatened under CESA (CDFW 2020a). As a CESA-candidate species, the mountain lion in southern California is granted full protection of a threatened species under CESA. Moreover, the Project may not fully mitigate for impacts to the vegetation where mountain lions may occur, which comprises the majority of the 110.3 acre increase of proposed mining activities. This is a substantial and significant impact to mountain

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lion habitat. The Project would continue to have significant impacts because mitigation as proposed would not result in adequate and successful mitigation for the unavoidable direct and indirect, permanent, or temporal losses, of habitat for mountain lion.

Recommended Potentially Feasible Mitigation Measure(s)

Mitigation Measure #1: CDFW recommends setting aside a minimum of 110.3 acres of replacement habitat. CDFW recommends the replacement habitat be located adjacent to the County's Wildlife Linkage and Corridor in order to widen the corridor at locations where the corridor is less than one mile. There should be no net loss of suitable habitat for mountain lions. The County should consult and collaborate with CDFW to conserve areas beneficial to the southern California mountain lion population that may improve chances of survival and reproduction of mountain lions in the face of climate change. The mitigation lands should be protected in perpetuity under a conservation easement dedicated to a local land conservancy or other appropriate entity that has been approved to hold and manage mitigation lands pursuant to Assembly Bill 1094 (2012). Assembly Bill 1094 amended Government Code, sections 65965-65968. Under Government Code, section 65967(c), the lead agency must exercise due diligence in reviewing the qualifications of a governmental entity, special district, or nonprofit organization to effectively manage and steward land, water, or natural resources on mitigation lands it approves. An appropriate non-wasting endowment should be provided for the long-term management of mitigation lands. A conservation easement and endowment funds should be fully acquired, established, transferred, or otherwise executed prior to implementing Project-related ground-disturbing activities and prior to the County's issuance of grading permits.

Mitigation Measure #2: Due to potential habitat within the Project footprint, a CDFW-approved biologist knowledgeable of mountain lion species ecology should survey areas that may provide habitat for mountain lion natal dens. This should be performed within one year of Project implementation, including site preparation, equipment staging, and mobilization. Caves and other natural cavities and thickets of brush and timber provide cover and are used for denning. Females may be in estrus at any time of the year, but in California, most births probably occur in spring. Survey results, including negative findings, should be submitted to CDFW prior to Project implementation. The survey report should include a map of potential denning sites. The survey report should also include measures to avoid impacts to dens and cubs if necessary.

Mitigation Measure #3: If potential habitat for natal dens is identified, CDFW recommends fully avoiding potential impacts to mountain lions, especially during spring, to protect vulnerable cubs. Two weeks prior to Project implementation, and once a week during construction activities, a CDFW-approved biologist should conduct a survey for mountain lion natal dens. The survey area should include the construction footprint and the area within 2,000 feet (or the limits of the property line) of the Project disturbance boundaries. CDFW should be notified within 24 hours upon location of a natal den. If an active natal den is located, during construction activities, all work should cease. No work should occur within a 2,000-foot buffer from a natal den. A qualified biologist should notify CDFW to determine the appropriate course of action. CDFW should also be consulted to determine an appropriate setback from the natal den that would not adversely affect the successful rearing of the cubs. No construction activities or human intrusion should occur within the established setback until mountain lion cubs have been successfully reared; the mountain lions have left the area; or as determined in consultation with CDFW.

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Mitigation Measure #4: If "take" or adverse impacts to mountain lion cannot be avoided either during Project construction and over the life of the Project, the County must consult with CDFW to determine if a CESA ITP is required (pursuant to Fish & Game Code, § 2080 *et seq*.).

Mitigation Measure #5: CDFW highly discourages the use of rodenticides and second-generation anticoagulant rodenticides due to their harmful effects on the ecosystem and wildlife. CDFW recommends the County include a mitigation measure prohibiting the use of such harmful materials.

Comment #2: Impacts to Rare Plants

Issue #1: Page three of the Pacific Rock Quarry Expansion Project: June 18 Rare Plant Survey […] (2018 Plant Survey) states "[f]ive […] special-status [plant] 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*)." CDFW is concerned that the mitigation proposed in the DEIR, at a 1:1 ratio, is insufficient.

Issue #2: CDFW expressed concerns regarding impacts to Conejo buckwheat, an endemic species to Ventura County and designated CESA-listed rare plant pursuant to the NPPA in the October 2, 2017 NOP comment letter. As previously stated in 2017, the NPPA prohibits the take and/or possession of State listed rare plants unless authorized by CDFW or in certain limited circumstances. **Take of Conejo buckwheat or other CESA-listed rare plants may only be permitted through an incidental take permit (ITP)** or other authorization issued by the Department pursuant to California Code of Regulations, Title 14, section, 786.9 subdivision (b). CDFW is concerned the loss of CESA-listed rare plants will occur if appropriate avoidance, minimization, and/or mitigation for these species is not adopted, including an ITP.

Issue #3: The observed and potentially occurring Special-Status Species table on pages 29-31 of Appendix C indicate that Several ESA- and CESA-listed plant species including Catalina mariposa lily, Verity's dudleya (*Dudleya verity*), and Conejo dudleya (*Dudleya parva*) were observed within study area in 2010, but not during 2016 surveys. However, in the 2018 Plant Survey, Mariposa lily and Conejo buckwheat were observed within the study area. Collectively, the survey results are inconsistent and suggest there is a high likelihood of each of the species to occur within the footprint of the proposed Project. CDFW suggests the County propose mitigation measures for plants observed during all three surveys (2010, 2016, 2018) to sufficiently mitigate impacts to rare plants that have been documented to occur within the Project footprint. CDFW is aware of the 2013 fire that took place within the vicinity of the Project. However, burned habitat is habitat reset to an early seral stage. Burned habitat does not decline in value or importance by default of being burned. Given time, burned habitat is expected to successionally progress back to the pre-burn vegetation community. The burned habitat still contains all of the vegetation species that occurred pre-fire, in the form of 1) embryos (seed bank) or 2) basal burls or roots that allow for resprouting of vegetation. Either way, the site is still considered to currently support, even after a burn, the same vegetation (Coop et al. 2020).

Specific Impacts: Direct impacts to rare plants that occur on site or within the immediate vicinity of the Project are likely to occur. This may result in mortality, reduced reproductive capacity, population declines, or local extirpation of a sensitive or special status plant.

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Why impacts would occur: Wildfires are significant drivers of landscape change and can act as a catalyst for promoting biological diversity. Many California endemic and rare plants occur in fire dependent ecosystems or are fire adapted which means seeds or bulbs generally germinate with fire-related cues (e.g., heat, smoke) (USFWS 1999). For plants with underground bulbs (i.e., geophytes), the absence of visible above-ground plants may not necessarily be indicative of actual population absence or size. A population may still exist via underground bulbs even when no above-ground individuals are observed (Miller et al. 2004). Many *Calochortus* species are gap specialists and depend on disturbances such as fire to open the habitat, to provide nutrients, and to allow for a successful reproduction year.

Rare plants may have established in the Project site post-fire and have since been undetected. As stated above, burned habitat does not decline in value or importance by default of being burned. Given time, burned habitat is expected to successionally progress back to the pre-burn vegetation community. The burned habitat still contains all of the vegetation species that occurred pre-fire, in the form of 1) embryos (seed bank) or 2) basal burls or roots that allow for resprouting of vegetation. Project construction and activities such as vegetation clearing, operating large equipment (e.g., loaders, dozers, drilling rigs, and cranes), and ground disturbance (e.g., staging, access, grading, excavating, drilling) may have direct impacts on sensitive or special status plant species and indirect impacts by modifying or removing habitat (Coop et al. 2020).

Evidence impacts would be significant: Impacts to special status plant species should be considered significant under CEQA unless they are clearly mitigated below a level of significance. Inadequate avoidance, minimization, and mitigation measures for impacts to special status plant species will result in the Project continuing to have a substantial adverse direct, indirect, and cumulative effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by CDFW or U.S. Fish and Wildlife Service (USFWS). Additionally, plants that have a California Native Plant Society (CNPS) California Rare Plant Rank (CRPR) of 1A, 1B, 2A, and 2B are rare throughout their range, endemic to California, and are seriously or moderately threatened in California. All plants constituting CRPR 1A, 1B, 2A, and 2B meet the definitions of CESA and are eligible for State listing. Impacts to these species or their habitat must be analyzed during preparation of environmental documents relating to CEQA, as they meet the definition of rare or endangered (CEQA Guidelines, § 15380). Please see CNPS Rare Plant Ranks page for additional rank definitions.

Recommended Potentially Feasible Mitigation Measure(s): The following mitigation measures should be performed.

Mitigation Measure #1: The EIR should provide species-specific measures to fully avoid impacts to all ESA- and CESA-listed plants. This may include flagging all plants and/or perimeter of populations; no-work buffers around plants and/or populations (e.g., flagged perimeter plus 50 feet); restrictions on ground disturbing activities within protected areas; relocation of staging and other material piling areas away from protected areas; restrictions on herbicide use and/or type of herbicide and/or application method within 100 feet of sensitive plants; and worker education and training.

Mitigation Measure #2: CDFW recommends the environmental document provide measures to fully mitigate the loss of individual ESA- and CESA-listed plants and habitat.

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a) The EIR should provide a map showing which plants or populations will be impacted and provide a table that clearly documents the number of plants and 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).

b) CDFW recommends the EIR be conditioned to provide a minimum mitigation ratio above 1:1 for sensitive plant species. CDFW recommends a replacement ratio of 3:1 to10:1 depending on the population and occurrence status of the species (1.e., generally 5:1 for CRPR 3 and 4 species; 7:1 for CRPR 2; and 10:1 for CRPR 1). This should be for the number of plants replaced to number impacted, including acres of habitat created to acres of habitat impacted. Rare plants are habitat specialists that require specific conditions to persist such as vegetation composition (species abundance, diversity, cover), soils, substrate, slope, hydrology, and pollinators. Accordingly, mitigation for impacts to rare plants should also include habitat.

c) The EIR should provide species-specific measures for on-site mitigation. Each species-specific mitigation plan should adopt an ecosystem-based approach and be of sufficient detail and resolution to describe the following at a minimum: 1) identify the impact and level of impact (e.g., acres or individual plants/habitat impacted); 2) location of on-site mitigation and adequacy of the location(s) to serve as mitigation; 3) assessment of appropriate reference sites; 4) scientific [Genus and species (subspecies/variety if applicable)] of plants being used for restoration; 5) location(s) of propagule source; 6) species-specific planting methods (i.e., container or seed); 7) measurable goals and success criteria for establishing self-sustaining populations (e.g. percent survival rate, absolute cover); 8) long-term monitoring, and; 9) adaptive management techniques.

Please note that CDFW generally does not support the use of salvaging, translocation, or transplantation as the primary mitigation strategy for unavoidable impacts to rare, threatened, or endangered plant species.

Recommendation #1: Given the mixed conclusions of species presence over the past few years, CDFW recommends the County update and consolidate all plant survey results (2010, 2016, and 2018) and propose mitigation for all species impacted. If new, significant effects to rare plants are identified and mitigation measures or project revisions must be added to the EIR, CDFW recommends recirculating the environmental document so CDFW may provide additional comments on avoidance, minimization, and mitigation measures (CEQA Guidelines, § 15073.5).

Comment #3: Impacts to Aquatic and Riparian Resources; Lake and Streambed Alteration Agreement (LSAA)

Issue: In Appendix C, the County/Applicant indicates that the Project may impact 23 ephemeral streams, one ponded detention basin, and associated habitats that are subject to Fish and Game Code, section 1600 *et seq*. Within the same appendix, the following statement is made, “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.” The document also stated that an updated wetland delineation was performed in 2017. The updated information, including the

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Jurisdictional Wetland Delineation Report, were not clearly apparent. As such, CDFW is only able to comment on the information provided. Please provide CDFW with the updated information, including any information regarding the delineations of basins or streams subject to Fish and Game code section 1602, for review. Upon review, CDFW may provide additional comments, as necessary.

Specific Impact: The Project proposes to modify 23 unnamed ephemeral streams and may impact one ponded detention basin. Collectively, 20,000 linear feet of ephemeral streams may be directly impacted as a result of the Project. The detention basin is approximately 3.75 acres. Modification of these features may result in the loss of streams and associated watershed function and biological diversity. Frequent mining activities on or near streams is likely to diminish on site and downstream water quality. Altering these drainage features will also alter the hydrologic and geomorphic processes and may impact Conejo Creek and emergent fish and wildlife downstream. Project activities may also impact tributaries that occur upstream, outside of the Project boundary, where hydrologic connectivity occurs.

Why Impact Would Occur: The Project will directly impact 23 ephemeral streams and potentially one detention basin. Collectively, this would result in the potential loss of several acres of natural drainage patterns, soils, and associated vegetation. These actions may also result in changes to the streams, altering hydrologic and geomorphic processes that may impact plant and wildlife species.

Evidence Impact Would Be Significant: The Project may substantially adversely affect the existing stream patterns of the Project site through the alteration or diversion of streams, which absent specific mitigation, could result in substantial erosion or siltation on site or off site of the Project. Debris, soil, silt, sawdust, rubbish, raw cement/concrete, or washings thereof, asphalt, paint or other coating material, oil or other petroleum products, or any other substances which could be hazardous or deleterious to aquatic life, wildlife, or riparian habitat resulting from Project related activities may enter the stream.

Recommended potentially feasible mitigation measure(s)

Mitigation Measure #1: The Project applicant (or "entity") must provide written notification to CDFW pursuant to section 1600 *et seq.* of the Fish and Game Code. Based on this notification and other information, CDFW shall determine whether a Lake and Streambed Alteration (LSA) Agreement is required prior to conducting the proposed activities. A notification package for a LSA may be obtained by accessing CDFW's web site at https://www.wildlife.ca.gov/conservation/lsa.

CDFW's issuance of an LSA Agreement for a Project that is subject to CEQA will require CEQA compliance actions by CDFW as a Responsible Agency. As a Responsible Agency, CDFW may consider the CEQA document of the Lead Agency for the Project. To minimize additional requirements by CDFW pursuant to section 1600 *et seq.* and/or under CEQA, the CEQA document should fully identify the potential impacts to streams or riparian resources and provide adequate avoidance, mitigation, monitoring, and reporting commitments for issuance of the LSA Agreement.

Mitigation Measure #2: Any LSA Agreement issued for the Project by CDFW may include additional measures protective of streambeds on and downstream of the Project such as

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additional erosion and pollution control measures. To compensate for any on-site and off-site impacts to riparian resources, additional mitigation conditioned in any LSA Agreement may include the following: avoidance of resources, on-site or off-site creation, enhancement, or restoration, and/or protection and management of mitigation lands in perpetuity.

Mitigation Measure #3: CDFW recommends fully avoiding impacts to waters and riparian/wetland vegetation communities. If feasible, CDFW recommends redesigning the Project to avoid impacts to the existing drainage features that support sensitive vegetation communities. CDFW also recommends the County consider Project alternatives that could incorporate the unnamed streams into the planned development. Design alternatives should attempt to retain as much surface flow and natural hydrologic processes as possible. CDFW recommends taking an inter-disciplinary approach to involve landscape architects, engineers, and wildlife biologists, and hydrologists to develop design alternatives that could fully avoid or lessen impacts to waters and riparian/wetland vegetation communities.

Mitigation Measure #4: If impacts to streams is unavoidable, CDFW recommends that mitigation occur at a CDFW-approved bank. Mitigation bank credits should be purchased, approved, or otherwise fully executed prior to implementing Project-related ground-disturbing activities and prior to the County's issuance of grading permits.

Mitigation Measure #5: If credits at a CDFW-approved mitigation bank are not available, CDFW recommends setting aside replacement habitat to be protected in perpetuity under a conservation easement dedicated to a local land conservancy or other appropriate entity that has been approved to hold and manage mitigation lands. Mitigation lands should be in the same watershed as the Project site and support in-kind vegetation. An appropriate non-wasting endowment should be provided for the long-term management of mitigation lands. A conservation easement and endowment funds should be fully acquired, established, transferred, or otherwise executed prior to implementing Project-related ground-disturbing activities prior to the County's issuance of grading permits.

Mitigation Measure #6: If impacts to riparian habitat, such as arroyo willow thicket, mulefat thicket, and cattail marshes cannot be avoided, CDFW suggests mitigation should be achieved entirely on site if possible. CDFW recommends that impacts be mitigated at no less than 3:1. CDFW recommends that an on-site Habitat Mitigation and Monitoring Plan (HMMP) be developed. An HMMP should provide specific, detailed, and enforceable measures.

Mitigation Measure #7: CDFW recommends that all on-site mitigation sites for impacts to waters and riparian/wetland vegetation communities be protected in perpetuity from public encroachment and structural intrusion. This should include all water features on site, including ephemeral and perennial bodies.

CDFW recommends the County fund a minimum of 10 years of initial restoration and maintenance. If applicable, mitigation lands (unnamed creeks, surrounding natural areas) should be protected in perpetuity under a conservation easement dedicated to a local land conservancy or other appropriate entity that has been approved to hold and manage mitigation lands. An appropriate non-wasting endowment should be provided for the long-term management of mitigation lands. A conservation easement and endowment funds should be fully acquired, established, transferred, or otherwise executed prior to implementing Project-related ground-disturbing activities and prior to the County's issuance of grading permits.

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Recommendation #1: As part of the LSAA Notification process, CDFW requests a map showing features potentially subject to CDFW's broad regulatory authority over streams. CDFW also requests a hydrological evaluation of the 200, 100, 50, 25, 10, 5, and 2-year frequency storm event for existing and proposed conditions.

Comment #4: Crotch's Bumble Bee

Issue #1: The DEIR concluded that Project impacts to California sage brush is limited to 0.14 acre. Therefore, potential impacts to Crotch's bumble bee (an invertebrate of conservation and an SSC), habitat is limited to 0.14 acres and is not significant. CDFW disagrees with this statement because Crotch's bumble bees are generalist foragers and have been reported visiting a wide variety of flowering plants (Biesmeijer et al. 2006; Xerces 2018). They are known to occur in laurel sumac scrub, grassland, meadows, and coastal sage scrub, among other vegetation communities.

Issue #2: The DEIR and Appendix C do not provide information as to what criteria would be used to conclude that the species is not present. CDFW is concerned that crotch's bumble bee surveys will not be performed in all habitat areas where they may occur and cannot decern whether the surveys will be adequately performed based on the information provided.

Specific impacts: The Project as proposed would increase mining activities by 110.3 acres, the majority of which is comprised of native vegetation including, but not limited to, laurel sumac scrub, grasslands, and ceanothus scrub. Native vegetation communities and grasslands could provide Crotch's bumble bee habitat. The Project as proposed would grade and/or develop habitat that could support Crotch's bumble bee. The Project may result in temporal or permanent loss of suitable nesting and foraging habitat for Crotch's bumble bee. Project ground-disturbing activities and vegetation removal may cause death or injury of adults, eggs, and larva, burrow collapse, nest abandonment, and reduced nest success.

Why impacts would occur: Crotch's bumble bees may occur in a variety of habitats expected to be impacted by the Project and are not limited to the 0.14 acres of coastal sage scrub described in the DEIR. Suitable Crotch's bumble bee habitat includes areas of grasslands and scrub that contain requisite habitat elements, such as small mammal burrows. Crotch's bumble bee primarily nest in late February through late October underground in abandoned small mammal burrows, but may also nest under perennial bunch grasses or thatched annual grasses, under-brush piles, in old bird nests, and in dead trees or hollow logs (Williams et al. 2014; Hatfield et al. 2018). Overwintering sites utilized by Crotch's bumble bee mated queens include soft, disturbed soil (Goulson 2010), or under leaf litter or other debris (Williams et al. 2014). Ground disturbance and vegetation removal associated with Project implementation during the breeding season could result in the incidental loss of breeding success or otherwise lead to nest abandonment in areas adjacent to the Project site. Project activities may result in temporal or permanent loss of colonies, and suitable nesting and foraging habitat.

Evidence impact would be significant: Crotch's bumble bee is listed as an invertebrate of conservation priority under the California Terrestrial and Vernal Pool Invertebrates of Conservation Priority (CDFW 2017). Crotch's bumble bee has a State ranking of S1/S2. This means that the Crotch's bumble bee is considered critically imperiled or imperiled and is extremely rare (often 5 or fewer populations). Also, Crotch's bumble bee has a very restricted

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range and steep population declines make the species vulnerable to extirpation from the State (CDFW 2017). Accordingly, Crotch's bumble bee meets the CEQA definition of rare, threatened, or endangered species (CEQA Guidelines, § 15380). Therefore, take of Crotch's bumble bee could require a mandatory finding of significance by the City (CEQA Guidelines, § 15065).

Recommended Potentially Feasible Mitigation Measure(s)

Mitigation Measure #1: Crotch's bumble bee surveys should be expanded to native vegetation communities and grasslands beyond coastal sage scrub. Survey's should be performed by a qualified entomologist familiar with the species behavior and life history to determine the presence/absence of Crotch's bumble bee and within one year prior to vegetation removal and/or grading. Surveys should be conducted during flying season when the species is most likely to be detected above ground, between March 1 to September 1 (Thorp et al. 1983). Survey results, including negative findings, should be submitted to CDFW prior to implementing Project-related ground-disturbing activities. At minimum, a survey report should provide the following:

a) A description and map of the survey area, focusing on areas that could provide suitable habitat for Crotch's bumble bee. CDFW recommends the map show surveyor(s) track lines to document that the entire site was covered during field surveys.
b) Field survey conditions that should include name(s) of qualified entomologist(s) and brief qualifications; date and time of survey; survey duration; general weather conditions; survey goals, and species searched.
c) Map(s) showing the location of nests/colonies.
d) A description of physical (e.g., soil, moisture, slope) and biological (e.g., plant composition) conditions where each nest/colony is found. A sufficient description of biological conditions, primarily impacted habitat, should include native plant composition (e.g., density, cover, and abundance) within impacted habitat (e.g., species list separated by vegetation class; density, cover, and abundance of each species).

Mitigation Measure #2: If "take" or adverse impacts to Crotch's bumble bee cannot be avoided either during Project activities or over the life of the Project, the County must consult CDFW to determine appropriate avoidance and/or minimization measures for the species.

Comment #5: Impacts to Oak Trees and Oak Woodland

Issue: According to page 3.5-50 of Appendix C, several coast live oak trees (*Quercus agrifolia*), including heritage oaks, will be removed as a result of the Project. Coast live oak has a CNPS rarity ranking of S4. CDFW is concerned that the proposed mitigation for impacts to oak trees may be insufficient for impacts to oak trees and oak woodlands. In addition, Table 3.5-7 of Appendix C states that zero of the 1.52 acres of coast live oak woodlands would be impacted as a result of the Project. CDFW believes this should be revisited considering the Project includes oak tree removal (as referenced above).

Specific impact: CDFW is concerned with proposed mitigation because:

a) BIO-5 may defer payment of an in-lieu fee to the County's oak tree mitigation fund and/or relocation of oak trees as mitigation, instead of restoration/replanting as the primary mitigation;

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b) BIO-5 may not address a significant portion of coast live oak woodland canopy within the Project site. The acreage of impact was not discussed in the DIER; and,
c) BIO-5 does not include an attempt to replant oak trees within the vicinity of the Project. As a result, trees may be planted in areas that have not historically supported oak woodlands or would not provide appropriate hydrological conditions.

As a result, the Project may continue to have temporal or permanent impacts to oak trees and oak woodlands.

Why impacts would occur: The Project would remove and impact oak woodlands that include oak trees and understory associated vegetation. Mitigation Measure BIO-5, as it is currently proposed, may be insufficient for mitigating impacts to oak trees and oak woodlands. First, BIO-5 focuses primarily on individual oak tree replacement instead of applying an ecosystem-based approach to restore the oak woodland. Second, BIO-5 may defer to or include in-lieu fees and as means of mitigation for individual oak trees. It is unclear how in-lieu fees will be used for mitigation such that there is no net loss of oak trees. Lastly, BIO-5 may defer to or include relocation/translocation of individual oak trees. CDFW views relocation/translocation as experimental in nature (Fiedler 1991; CNPS 1998; Fahselt 2007; Godefroid 2010). A study conducted in Calabasas on the survivorship of 25 transplanted oak trees yielded a low 8 percent establishment and no more than 40 percent change of long-term survival, perhaps considerably less, of the oak trees that established (Dagit and Downer 1997).

Evidence impacts would be significant: Oak trees provide nesting and perching habitat for approximately 170 species of birds (Griffin and Muick 1990). Oak woodlands serve several important ecological functions such as protecting soils from erosion and land sliding; regulating water flow in watersheds; and maintaining water quality in streams and rivers. Oak woodlands also have higher levels of biodiversity than any other terrestrial ecosystem in California (Block et al. 1990). Coast live oak and old-growth oak trees (native oak tree that is greater than 15 inches in diameter) are of importance due to increased biological values and increased temporal loss. Due to the historic and on-going loss of this ecologically important vegetation community, oak trees and woodlands are protected by local and State ordinances. CDFW considers oak woodlands a sensitive vegetation community.

The current mitigation as proposed would not result in adequate successful mitigation for the unavoidable direct and indirect, permanent, or temporal losses, of oak woodlands. First, the acreage of oak woodland habitat should be disclosed in the DEIR. Second, the Mitigation Measure BIO-5 should clearly include the commensurate acreage of mitigation for impacts to oak woodlands. Absent appropriate mitigation for impacts for the unknown acres of oak woodland, the Project would continue to have significant impacts. Inadequate or lack of avoidance, minimization, and mitigation measures for impacts to special status plant species will result in the Project continuing to have a substantial adverse direct, indirect, and cumulative effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by CDFW.

Recommended Potentially Feasible Mitigation Measure(s)

Mitigation Measure #1: In order to ensure no net loss of oak trees/oak woodlands, CDFW recommends the following replacement ratios: (1) trees less than 5 inches diameter at breast

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height (DBH) should be replaced at 2:1; (2) trees between 5 and 12 inches DBH should be replaced at 3:1; (3) trees between 12 and 24 inches DBH should be replaced at 5:1; (4) trees greater than 24 inches DBH should be replaced at 10:1. Oak trees should be used to recreate functioning oak woodland of similar composition, density, structure, and function to the selected oak woodland that was impacted.

Mitigation Measure #2: Mitigation should restore a minimum of the currently unknown acres of oak woodlands on site in approximately the same footprint as Project impacts. The mitigation site should mimic the pre-Project percent basal, canopy, and vegetation cover of oak woodland impacted. Associated understory and early successional native species should be planted and monitored along with trees to achieve viable habitat and adequately compensate for biological functions lost.

Mitigation Measure #3: Prior to any Project ground-disturbing activities, the County should develop and implement an Oak Woodland Mitigation Program with the following components:

1) An inventory of all oak trees removed or encroached upon during project activities, separated by species and DBH;
2) Acres of oak woodlands impacted, and density, coverage, and abundance of understory vegetation species impacted by life form (i.e., grass, forb, shrub, subshrub, vine);
3) Mitigation ratios applied and total number and/or area of replacement trees and vegetation;
4) Location of restoration areas and a discussion of the adequacy of the location(s) to serve as mitigation (e.g., would support oak trees/oak woodlands; avoid habitat type conversion);
5) The location and assessment of appropriate reference site(s) to inform the appropriate planting rate to recreate the pre-project function, density, percent basal, canopy, and vegetation cover of oak woodland impacted;
6) Scientific [Genus and species (subspecies/variety if applicable)] of all plants being used for restoration;
7) Location(s) of propagule source. Propagules should be collected or grown from on-site sources or adjacent areas within the same watershed and should not be purchased from a supplier. Seeds must originate from plants/trees of the same species (i.e., Genus, species, subspecies, and variety) as the species impacted;
8) Species-specific planting methods (i.e., container or bulbs);
9) Planting schedule;
10) Measures to control exotic vegetation and protection from herbivory;
11) Measurable goals and success criteria for establishing self-sustaining populations (e.g., percent survival rate, absolute cover). Measurable success criteria should be based on present site/habitat conditions and/or functional local native oak woodlands as reference sites;
12) Contingency measures should the success criteria not be met;
13) Long-term monitoring for at least 10 years;
14) Adaptive management techniques, including replacement plants if necessary; and,
15) Annual reporting criteria and requirements.

Mitigation Measure #4: CDFW recommends that a sufficient depth and composition of soils be replaced on the remediated landslide suitable to support all dominant co-dominate plants found in coast live oak woodlands. Use of engineered fill should be kept minimal to the extent feasible.

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Planting on graded slopes for the purposes of mitigation should be kept minimal to the extent feasible.

Mitigation Measure #5: If on-site oak woodland mitigation is not feasible, CDFW recommends the County set aside replacement habitat to be protected in perpetuity under a conservation easement dedicated to a local land conservancy or other appropriate entity that has been approved to hold and manage mitigation lands. Mitigation lands should be in the same watershed as the Project site and replace at minimum the acreage of oak woodlands of similar composition as the oak woodlands impacted. An appropriate non-wasting endowment should be provided for the long-term management of mitigation lands. A conservation easement and endowment funds should be fully acquired, established, transferred, or otherwise executed prior to implementing Project-related ground-disturbing activities and prior to the County's issuance of grading permits.

Comment #6: Impacts to Locally Important Upland Plant Communities

Issue: CDFW is concerned that the County has not proposed mitigation for locally important upland plant communities, including vegetation alliances that fall within the coastal sage scrub vegetation community.

Specific impact: The Project proposes to impact a substantial amount of native Upland Scrub and Grassland habitat, see Table 1 above for acreage impacts per plant community. The absence of mitigation for Upland Scrub and Grassland habitats is insufficient and will result in permanent loss of habitat for plants and wildlife. Appendix C states 11.50 non-native annual grasslands and 1.34 acres of disturbed chamise/ceanothus chaparral will be impacted as a result of the Project. Despite their status as a "semi-natural" or "introduced" plant communities, these habitats still support and provide habitat for plants and wildlife.

Why impacts would occur: approximately 85 acres of Upland Scrub and Grassland habitat that support rare plants, birds, and wildlife will be impacted as a result of Project activities. Laurel sumac scrub (*Malosma laurina* Alliance) and deerweed Scrub (*Acmispon glaber* Alliance) are part of the coastal sage scrub vegetation community (Westman 1981) and will be significantly impacted by the project. In addition, giant wild rye grasslands (*Elymus condensatus* Alliance), mountain mahogany scrub (*Cercocarpus montanus* Alliance), and chamise/ceanothus chaparral (*Adenostoma fascicultatum* Alliance) are also sensitive upland plant communities that support wildlife. Collectively, the aforementioned vegetation communities are referred to as Upland Scrub and Grassland.

Evidence impacts would be significant: California coastal sage scrub covers approximately 7,501 square kilometers of the State. By the end of the century, up to 3,000 square kilometers of lands will not be suitable to support California coastal sage scrub under projected climate change scenarios (Thorne et al 2016). In southern California, human activities have eliminated coastal sage scrub from 70 to 90 percent of the original land area occupied by this habitat and contributed to significant fragmentation and degradation of existing habitat (EcoAdapt 2017). Southern California's sage scrub habitats are sensitive to impacts resulting from climate change such as increase frequency and intensity of wildfires and extreme high and low temperature events (EcoAdapt 2017). Additionally, land-use conversion is a significant barrier to sage scrub habitat continuity and dispersal in the face of climate change. In light of climate change and developmental pressures on the State's shrublands, one of the goals of the 2030 Natural and

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Working Lands Climate Change Implementation Plan is to conserve shrublands and protect land from conversion to more intensified uses (CalEPA et al. 2019).

Pursuant under CEQA Guidelines, section 15125(c), CDFW considers southern California coastal sage scrub habitats as locally significant. The absence of mitigation for many of the habitats listed above will result in significant loss of viable and valuable habitat. As a result, the Project may continue to have a significant change on the environment absent appropriate mitigation for the unavoidable direct and indirect, permanent, or temporal losses, of native and undisturbed vegetation and habitat (CEQA Guidelines, § 15382). Collectively, Upland Scrub and Grassland habitats currently support or provide suitable habitat for plants and wildlife, including a rare plant and wildlife, including SSC. Inadequate or lack of avoidance, minimization, and mitigation measures for impacts to special status plant and wildlife species and sensitive vegetation communities will result in the Project continuing to have a substantial adverse direct, indirect, and cumulative effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by CDFW and USFWS.

Recommended Potentially Feasible Mitigation Measure(s)

Mitigation Measure #1: CDFW recommends the County prepare an Upland Restoration Plan inclusive of Upland Scrub and Grasslands listed above. CDFW recommends taking an inter-disciplinary approach, inclusive of wildlife biologists and restoration professionals, to restore scrub and grassland habitats. The County should replace acreage of Upland Scrub and Grasslands at no less than the total acres impacted and use only native grasses or forbs indigenous to grasslands in region/watershed. Restoration should consider habitat requirements (e.g., refugia, structure, variation in plant density and cover) of wildlife that could occur in these two vegetation communities. CDFW recommends that the location of the mitigation site avoid the conversion of other habitats (e.g., scrubland to grassland). Scrub and grassland restoration should occur in areas appropriate abiotic and biotic conditions to support each habitat type.

Comment #7: Impacts to Bats

Issue: The Project site contains potential habitat for bats to forage and roost. CDFW is concerned that impacts to bats was not addressed in any of the documents reviewed. Without a comprehensive bat analysis, bats, including CESA-listed species, may be adversely impacted by Project activities.

Specific impacts: The Project proposes to remove several trees. Direct impacts include removal of trees, vegetation, and/or structures that may provide roosting habitat and therefore has the potential for the direct loss of bats. Indirect impacts to bats and roosts could result from increased noise disturbances, human activity, dust, vegetation clearing, ground disturbing activities (e.g., staging, access, excavation, grading), and vibrations caused by heavy equipment. Demolition, grading, and excavating activities may impact bats potentially using man-made structures or surrounding trees as roost sites.

Why impacts would occur: Bats use trees and man-made structures for daytime and nighttime roosts, and forage in sources of open water such as ponds and lakes (Avila-Flores and Fenton 2005; Oprea et al. 2009; Remington and Cooper 2014). Modifications to roost sites can have significant impacts on the bats' usability of the roost and can impact the bats' fitness and

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survivability (Johnston et al. 2004). Extra noise, vibration, or the reconfiguration of large objects can lead to the disturbance of roosting bats which may have a negative impact on the animals. Human disturbance can also lead to a change in humidity, temperatures, or the approach to a roost that could force the animals to change their mode of egress and/or ingress to a roost. Although temporary, such disturbance can lead to the abandonment of a maternity roost (Johnston et al. 2004).

Evidence impact would be significant: Bats are considered non-game mammals and are afforded protection by State law from take and/or harassment (Fish & Game Code, § 4150; Cal. Code of Regs, § 251.1). Several bat species are considered SSC and meet the CEQA definition of rare, threatened, or endangered species (CEQA Guidelines, § 15065). Take of SSC could require a mandatory finding of significance by the City (CEQA Guidelines, § 15065).

Recommended Potentially Feasible Mitigation Measure(s):

Mitigation Measure #1: CDFW recommends a qualified bat specialist conduct bat surveys to determine baseline conditions within the Project site and within a 500-foot buffer to identify trees and/or structures (i.e., tunnels, maintenance buildings, food concession stands, comfort stations) that could provide daytime and/or nighttime roost sites. CDFW recommends using acoustic recognition technology to maximize detection of bats. Night roosts are typically utilized from the approach of sunset until sunrise. In most parts of California, night roost use will only occur from spring through fall while day roosts are typically utilized during the spring, summer, and fall in California (Johnston et al. 2004).

Mitigation Measure #2: Survey methodology and results, including negative findings, should be included in final environmental documents. Depending on survey results, please discuss potentially significant effects of the proposed Project on the bats and include species specific mitigation measures to reduce impacts to below a level of significance (CEQA Guidelines, § 15125).

Mitigation Measure #3: If maternity roosts are found, CDFW recommends, the following three mitigation measures.

a) If maternity roosts are found, to the extent feasible, work shall be scheduled between October 1 and February 28, outside of the maternity roosting season when young bats are present but are not yet ready to fly out of the roost (March 1 to September 30).

b) If maternity roosts are found and if trees and/or structures must be removed/demolished during the maternity season, a qualified bat specialist shall conduct a pre-construction survey to identify those trees and/or structures proposed for disturbance that could provide hibernacula or nursery colony roosting habitat. Acoustic recognition technology will be used to maximize detection of bats. Each tree and/or structure identified as potentially supporting an active maternity roost shall be closely inspected by the bat specialist no more than 7 days prior to tree and/or structure disturbance to determine the presence or absence of roosting bats more precisely. If maternity roosts are detected, trees and/or structures determined to be maternity roosts shall be left in place until the end of the maternity season. Work shall not occur within 100 feet of or directly under or adjacent to an active roost and work shall not occur between 30 minutes before sunset and 30 minutes after sunrise.

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c) If bats are not detected, but the bat specialist determines that roosting bats may be present at any time of year, trees will be pushed down using heavy machinery rather than felling it with a chainsaw. To ensure the optimum warning for any roosting bats that may still be present, trees shall be pushed lightly two to three times, with a pause of approximately 30 seconds between each nudge to allow bats to become active. The tree shall then be pushed to the ground slowly and remain in place until it is inspected by a bat specialist. Trees that are known to be bat roosts shall not be bucked or mulched immediately. A period of at least 24 hours, and preferably 48 hours, shall elapse prior to such operations to allow bats to escape. Bats shall be allowed to escape prior to demolition of buildings. This may be accomplished by placing one-way exclusionary devices into areas where bats are entering a building that allow bats to exit but not enter the building.

Comment #8: Impacts to Least Bell's Vireo and Coastal California Gnatcatcher

Issue: CDFW is concerned that protocol surveys performed for ESA- and CESA-listed least Bell's vireo and ESA-listed coastal California gnatcatcher (*Polioptila californica californica*) in 2010 are outdated and inadequate.

Specific impacts: Least Bell's vireo and coastal California gnatcatchers may occur on the Project's site or within the vicinity of the Project. Without recent protocol surveys (i.e., 1- to 2-years old), these species may be directly or indirectly impacted. The Project, as proposed, will remove several acres of suitable habitat for least Bell's vireo and coastal California gnatcatcher. The Project's site contains elements of coastal sage scrub (see Comment #6) and riparian habitats which are suitable habitat for the two species. Indirect effects such as noise, dust, and artificial lighting may also adversely impact the two species as well as other nesting birds.

Why impacts would occur: Least Bell's vireo are expanding into their historical range, as well as, dispersing into new locations with suitable habitat. In addition, coastal California gnatcatchers affected by local fires (e.g., the Hills and Woolsey fires) may have moved into new locations. Least Bell's vireo and coastal California gnatcatcher have a high potential to occur within the Project site. Absent current protocol surveys, direct and indirect impacts to both/either species may occur since Individuals may have migrated into the Project area/vicinity over the last decade. Protocol surveys are necessary to identify listed species and supporting habitat necessary for their survival. Direct impacts to both species could result from Project construction and activities (e.g., equipment staging, mobilization, and grading); ground disturbance; vegetation clearing; and trampling or crushing from construction equipment, vehicles, and foot traffic. Indirect impacts could result from temporary or permanent loss of suitable habitat including coastal sage scrub (see Comment #6) and an undisclosed acreage of riparian habitat. Additional impacts could result from increased noise disturbances, dust, and vibrations caused by heavy equipment.

Evidence impact would be significant: Ground clearing and construction activities could lead to the direct mortality of a listed species or species of special concern. The loss of occupied and suitable habitat could yield a loss of foraging potential, nesting sites, roosting sites, or refugia and would constitute a significant impact absent appropriate mitigation. CDFW considers impacts to CESA-listed and SSC a significant direct and cumulative adverse effect without implementing appropriate avoidance and/or mitigation measures. In addition, nests of all native bird species are protected under State laws and regulations, including Fish and Game Code,

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sections 3503 and 3503.5. Noise from increased road use, generators, and other equipment may disrupt mating calls which could impact their reproductive success (Patricelli and Blickley 2006, Halfwerk et al. 2011). CDFW also considers impacts to Species of Special Concern (SSC) a significant direct and cumulative adverse effect without implementing appropriate avoid and/or mitigation measures.

Recommended Potentially Feasible Mitigation Measure(s): CDFW recommends the following measure.

Mitigation Measure #1: CDFW recommends the County/Applicant perform appropriate protocol survey for least Bell's vireo and coastal California gnatcatcher prior to Project construction. The survey(s) should be performed based on the species found, or likely to occur, on the Project's site. Survey results including negative findings should be submitted to CDFW and UWFSW prior to implementing Project related ground disturbing activities.

Mitigation Measure #2: If necessary, the survey report should provide a mitigation plan. The objective of which should be to offset the Project-induced qualitative and quantitative losses of wildlife habitat values. The plan should provide measures to fully avoid and/or mitigate for permanent impacts.

Mitigation Measure #3: CDFW recommends fully avoiding impacts to least Bell's vireo and coastal California gnatcatcher. CDFW recommends that the County submit an avoidance plan to CDFW for review and comment. A final avoidance plan should be fully developed prior to implementing Project related ground disturbing activities.

Mitigation Measure #4: If the Project will have permanent impacts to least Bell's vireo or coastal California gnatcatcher habitat, either during Project activities or over the life of the Project, CDFW recommends participation in a mitigation bank. CDFW recommends that mitigation occur at a state-approved bank. Mitigation bank credits should be purchased, approved, or otherwise fully executed prior to implementing Project related ground disturbing activities.

Mitigation Measure #5: If credits at a state-approved mitigation bank are not available for mitigating impacts to least Bell's vireo and coastal California gnatcatcher and their habitat, CDFW recommends setting aside replacement habitat to be protected in perpetuity under a conservation easement dedicated to a local land conservancy or other appropriate entity that has been approved to hold and manage mitigation lands pursuant to Assembly Bill 1094 (2012), which amended Government Code sections 65965-65968. Under Government Code section 65967(c), the lead agency must exercise due diligence in reviewing the qualifications of a governmental entity, special district, or nonprofit organization to effectively manage and steward land, water, or natural resources on mitigation lands it approves. An appropriate non-wasting endowment should be provided for the long-term management of mitigation lands. A burrowing owl mitigation plan should include me sures to protect the targeted habitat values in perpetuity from direct and indirect negative impacts. Issues that should be addressed include, but are not limited to, restrictions on access; proposed land dedications; control of illegal dumping; water pollution; and increased human intrusion. A conservation easement and endowment funds should be fully acquired, established, transferred, or otherwise executed prior to implementing Project related ground disturbing activities.

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Mitigation Measure #6: If "take" or adverse impacts to least Bell's vireo and/or coastal California gnatcatcher cannot be avoided either during Project activities or over the life of the Project, the County must consult CDFW to determine if a CESA ITP is required (pursuant to Fish & Game Code, § 2080 et seq.) and with UWFWS to determine if an ESA ITP is required, prior to construction.

Comment #9: Impacts to Non-Game Mammals and Wildlife

Issue: Wildlife may still move through the Project site during the daytime or nighttime. CDFW is concerned that any wildlife potentially moving through or seeking temporary refuge on the Project site may be directly impacted during Project activities and construction. Any final fence, or other design features, design should allow for wildlife movement.

Specific impacts: Project activities and construction equipment may directly impact wildlife and birds moving through or seeking temporary refuge on site. This could result in wildlife and bird mortality. Furthermore, depending on the final fencing design, the Project may cumulatively restrict wildlife movement opportunity.

Why impacts would occur: Direct impacts to wildlife may occur from: ground disturbing activities (e.g., staging, access, excavation, grading); wildlife being trapped or entangled in construction materials and erection of restrictive fencing; and wildlife could be trampled by heavy equipment operating in the Project site.

Evidence impact would be significant: Mammals occurring naturally in California are considered non-game mammals and are afforded protection by State law from take and/or harassment (Fish & Game Code, § 4150; Cal. Code of Regs, § 251.1).

Recommended Potentially Feasible Mitigation Measure(s): CDFW recommends the following four mitigation measures to avoid and minimize direct impacts to wildlife during Project construction and activities.

Mitigation Measure #1: If fencing is proposed for use during construction or during the life of the Project, fences shall be constructed with materials that are not harmful to wildlife. Prohibited materials include, but are not limited to, spikes, glass, razor, or barbed wire. Fencing shall also be minimized so as not to restrict free wildlife movement through habitat areas.

Mitigation Measure #2: To avoid direct mortality, a qualified biological monitor shall be on site prior to and during ground and habitat disturbing activities to move out of harm's way special status species or other wildlife of low mobility that would be injured or killed by grubbing or Project-related construction activities. Salvaged wildlife of low mobility shall be removed and placed onto adjacent and suitable (i.e., species appropriate) habitat out of harm's way.

It should be noted that the temporary relocation of on-site wildlife does not constitute effective mitigation for the purposes of offsetting Program impacts associated with habitat loss.

Mitigation Measure #3: Grubbing and grading shall be done to avoid islands of habitat where wildlife may take refuge and later be killed by heavy equipment. Grubbing and grading shall be done from the center of the Project site, working outward towards adjacent habitat off site where wildlife may safely escape.

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Comment #10: Impacts to Fish and Fish Passage

Issue: CDFW is concerned that impacts to native fish and fish passage was not adequately assessed. CDFW is concerned that indirect, and potentially direct, affects to native fish, including ESA-listed southern California steelhead (*Oncorhynchus mykiss*) (SCS) and arroyo chub (*Gila orcuttii*) (SSC), may by substantially impacted by Project activities.

Specific Impact: The Project is expected to impact several 23 ephemeral streams and one detention basin, some of these features have hydrologic connectivity with Conejo Creek. Direct and indirect impacts to these streams (see Comment #3) may substantially adversely affect native fish, including SCS and arroyo chub, and fish passage. Potential impacts include, but are not limited to, harmful quantities of pollutants (including high levels of dust) that would adversely affect fish and the habitat which they depend upon.

Evidence impact would be significant: Conejo Creek supports native fish species SCS and arroyo chub. In 2013 CDFW scientists observed an adult SCS upstream of the Project (approximately 100 meters downstream of the State Highway 101 overpass).

Recommended Potentially Feasible Mitigation Measure(s)

Mitigation Measure #1: An Aquatic Resource Study would be performed prior to project construction. The study is to include an analysis of fish passage. If it is determined that native fish or fish passage will be directly or indirectly impacted by the Project, the County will consult with CDFW to determine additional, appropriate avoidance, minimization, and mitigation measures.

Mitigation Measure #2: If necessary, the survey report should provide a mitigation plan. The objective of which should be to offset the Project-induced qualitative and quantitative losses of wildlife habitat values. The plan should provide measures to fully avoid and/or mitigate for permanent impacts.

Mitigation Measure #3: CDFW recommends fully avoiding impacts to sensitive aquatic resources, including arroyo chub and SCS. CDFW recommends that the County submit an avoidance plan to CDFW for review and comment. A final avoidance plan should be fully developed prior to implementing Project related ground disturbing activities.

Mitigation Measure #4: If “take” or adverse impacts to ESA- or CESA-listed species cannot be avoided either during Project activities or over the life of the Project, the County must consult CDFW and/or USFWS (as appropriate) to determine if an ITP is required. This consultation must occur to prior to Project construction.

Additional Recommendations

Alternatives. CDFW recommends the County consider Alternative that would fully avoid or minimize impacts to streams, sensitive plants and wildlife, oak woodlands, and large swaths of undisturbed, native plant communities. CDFW recommends the County recirculate the environmental document after including alternative locations in order to foster meaningful public participation and informed decision making [CEQA Guidelines, §§ 15088.5, 15126.6(f)]. If the County concludes that no feasible alternative locations exist, or the use of alternative locations

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as a mitigation measures is infeasible, the County must disclose the reasons in the final environmental document and recirculate [CEQA Guidelines, §§ 15088.5(a)(3), 15126.6(f)(2)].

Seed Collection. CDFW recommends that some sensitive plant propagules collected from the Project site be deposited as a Documented Conservation Seed Collection at either Santa Barbara Botanic Garden or the California Botanic Garden (formerly known as Rancho Santa Ana Botanic Garden). A Documented Conservation Seed Collection is when propagules from a California Native Plant Society-ranked and/or CESA-listed plant species is collected and stored as part of a permanent genetic collection in a protected location. Documented conservation collections are important for conserving rare plant genetic material in order to provide a source material for future restoration and recovery and protect against possible species extinction. The County should provide evidence of Documented Conservation Seed Collection and funding to CDFW prior to implementing Project-related ground-disturbing activities and prior to the County's issuance of grading permits.

Fuel Modification. If the Project includes fuel modification, CDFW recommends that the final environmental include avoidance and mitigation measures for any fuel modification activities conducted within and adjacent to the Project area. A weed management plan should be developed for all areas adjacent to open space that will be subject to fuel modification disturbance. CDFW also recommends that any irrigation proposed in fuel modification zones drain back into the development and not onto natural habitat land as perennial sources of water allow for the introduction of invasive Argentine ants.

Mitigation and Monitoring Reporting Plan. Per Public Resources Code section 21081.6(a)(1), CDFW has provided the County with a summary of our suggested mitigation measures and recommendations in the form of an attached Draft Mitigation and Monitoring Reporting Plan (MMRP; Attachment A). A final MMRP shall reflect results following additional plant and wildlife surveys and the Project's final on and/or off-site mitigation plans.

Filing Fees

The Project, as proposed, would have an impact on fish and/or wildlife, and assessment of filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the County and serve to help defray the cost of environmental review by CDFW. Payment of the fee is required for the underlying Project approval to be operative, vested, and final (Cal. Code Regs., tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089).

Conclusion

We appreciate the opportunity to comment on the Project to assist the County in adequately analyzing and minimizing/mitigating impacts to biological resources. CDFW requests an opportunity to review and comment on any response that the County has to our comments and to receive notification of any forthcoming hearing date(s) for the Project [CEQA Guidelines, § 15073(e)]. If you have any questions or comments regarding this letter, please contact Baron Barrera, Environmental Scientist, at Baron.Barrera@wildlife.ca.gov.

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Sincerely,

DocuSigned by:
Erinn Wilson-Olgin
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Erinn Wilson-Olgin
Environmental Program Manager I

ec: CDFW
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State of California – Natural Resources Agency
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GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director

Attachment A: Draft Mitigation and Monitoring Reporting Plan

CDFW recommends the following language to be incorporated into a future environmental document for the Project. A final MMRP shall reflect results following additional plant and wildlife surveys and the Project's final on and/or off-site mitigation plans.

Biological Resources (BIO)			
Mitigation Measure (MM) or Recommendation (REC)		**Timing**	**Responsible Party**
MM-BIO-1-Impacts to Mountain Lion – Replacement Habitat	CDFW recommends setting aside a minimum of 110.3 acres of replacement habitat. CDFW recommends the replacement habitat be located adjacent to the County's Wildlife Linkage and Corridor in order to widen the corridor at locations where the corridor is less than one mile. There should be no net loss of suitable habitat for mountain lions. The County should consult and collaborate with CDFW to conserve areas beneficial to the southern California mountain lion population that may improve chances of survival and reproduction of mountain lions in the face of climate change. The mitigation lands should be protected in perpetuity under a conservation easement dedicated to a local land conservancy or other appropriate entity that has been approved to hold and manage mitigation lands pursuant to Assembly Bill 1094 (2012). Assembly Bill 1094 amended Government Code, sections 65965-65968. Under Government Code, section 65967(c), the lead agency must exercise due diligence in reviewing the qualifications of a governmental entity, special district, or nonprofit organization to effectively manage and steward land, water, or natural resources on mitigation lands it approves. An appropriate non-wasting endowment should be provided for the long-term management of mitigation lands. A conservation easement and endowment funds should be fully acquired, established,	Prior to Project construction and activities	Ventura County/ Applicant

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	transferred, or otherwise executed prior to implementing Project-related ground-disturbing activities and prior to the County's issuance of grading permits.		
MM-BIO-2- Impacts to Mountain Lion – Surveys	Due to potential habitat within the Project footprint, within one year prior to Project implementation that includes site preparation, equipment staging, and mobilization, a CDFW-approved biologist knowledgeable of mountain lion species ecology should survey areas that may provide habitat for mountain lion natal dens. Caves and other natural cavities, and thickets in brush and timber provide cover and are used for denning. Females may be in estrus at any time of the year, but in California, most births probably occur in spring. Survey results, including negative findings, should be submitted to CDFW prior to Project implementation. The survey report should include a map of potential denning sites. The survey report should include measures to avoid impacts dens and cubs if necessary.	Prior to Project construction and activities	Ventura County/ Applicant
MM-BIO-3- Impacts to Mountain Lion – Avoiding Natal Dens	If potential habitat for natal dense are identified, CDFW recommends fully avoiding potential impacts to mountain lions, especially during spring, to protect vulnerable cubs. Two weeks prior to Project implementation, and once a week during construction activities, a CDFW-approved biologist should conduct a survey for mountain lion natal dens. The survey area should include the construction footprint and the area within 2,000 feet (or the limits of the property line) of the Project disturbance boundaries. CDFW should be notified within 24 hours upon location of a natal den. If an active natal den is located, during construction activities, all work should cease. No work should occur within a 2,000-foot buffer from a natal den. A qualified biologist should notify CDFW to determine the appropriate course of action. CDFW should also be consulted to determine an appropriate setback from the natal den that would not adversely affect the successful rearing of the cubs. No construction activities or human intrusion should occur within the established setback	Prior to Project construction and activities	Ventura County/ Applicant

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	until mountain lion cubs have been successfully reared; the mountain lions have left the area; or as determined in consultation with CDFW.		
MM-BIO-4- Impacts to Mountain Lion – Take Permit	If "take" or adverse impacts to mountain lion cannot be avoided either during Project construction or over the life of the Project, the County will consult CDFW to determine if a CESA ITP is required.	Prior to Project construction and activities	Ventura County/ Applicant
MM-BIO-5- Impacts to Mountain Lion – Rodenticides	The use of rodenticides and second-generation anticoagulant rodenticides are prohibited from use, due to their harmful effects on the ecosystem and wildlife.	After Project construction and activities	Ventura County/ Applicant
MM-BIO-6- Impacts to Rare Plants – Work Restrictions	The EIR should provide species-specific measures to fully avoid impacts to all ESA- and CESA-listed plants. This may include flagging all plants and/or perimeter of populations; no-work buffers around plants and/or populations (e.g., flagged perimeter plus 50 feet); restrictions on ground disturbing activities within protected areas; relocation of staging and other material piling areas away from protected areas; restrictions on herbicide use and/or type of herbicide and/or application method within 100 feet of sensitive plants; and worker education and training.	Prior to Project construction and activities	Ventura County/ Applicant
MM-BIO-7- Impacts to Rare Plants – Species Specific Mitigation	CDFW recommends the EIR provide measures to fully mitigate the loss of individual ESA- and CESA-listed plants and habitat. d) The EIR should provide a map showing which plants or populations will be impacted and provide a table that clearly documents the number of plants and 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). e) CDFW recommends the EIR be conditioned to provide a minimum mitigation ratio of 5:1 for CRPR 3 and 4 species;	Prior to Project construction and activities	Ventura County/ Applicant

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	7:1 for CRPR 2; and 10:1 for CRPR 1. This should be for the number of plants replaced to number impacted, including acres of habitat created to acres of habitat impacted. Rare plants are habitat specialists that require specific conditions to persist such as vegetation composition (species abundance, diversity, cover), soils, substrate, slope, hydrology, and pollinators. Accordingly, mitigation for impacts to rare plants should also include habitat. f) The EIR should provide species-specific measures for on-site mitigation. Each species-specific mitigation plan should adopt an ecosystem-based approach and be of sufficient detail and resolution to describe the following at a minimum: 1) identify the impact and level of impact (e.g., acres or individual plants/habitat impacted); 2) location of on-site mitigation and adequacy of the location(s) to serve as mitigation; 3) assessment of appropriate reference sites; 4) scientific [Genus and species (subspecies/variety if applicable)] of plants being used for restoration; 5) location(s) of propagule source; 6) species-specific planting methods (i.e., container or seed); 7) measurable goals and success criteria for establishing self-sustaining populations (e.g. percent survival rate, absolute cover); 8) long-term monitoring, and; 9) adaptive management techniques. Please note that CDFW generally does not support the use of salvaging, translocation, or transplantation as the primary mitigation strategy for unavoidable impacts to rare, threatened, or endangered plant species.		
MM-BIO-8-Impacts to Rare Plants –	Given the mixed conclusions of species presence over the past few years, CDFW recommends the County update and consolidate all plant survey results (2010, 2016, and 2018) and proposing mitigation for all species impacted. If new significant effects to rare	Prior to Project construction and activities	Ventura County/ Applicant

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Consolidate Plant Studies	plants are identified and mitigation measures or project revisions must be added to the EIR, CDFW recommends recirculating the environmental document so CDFW may provide additional comments on avoidance, minimization, and mitigation measures (CEQA Guidelines, § 15073.5).		
MM-BIO-9- Impacts to Aquatic and Riparian Resources – Lake and Streambed Alteration Agreement	The Project applicant (or "entity") must provide written notification to CDFW pursuant to section 1600 *et seq.* of the Fish and Game Code. Based on this notification and other information, CDFW shall determine whether a Lake and Streambed Alteration (LSA) Agreement is required prior to conducting the proposed activities. A notification package for a LSA may be obtained by accessing CDFW's web site at https://www.wildlife.ca.gov/conservation/lsa. CDFW's issuance of an LSA Agreement for a Project that is subject to CEQA will require CEQA compliance actions by CDFW as a Responsible Agency. As a Responsible Agency, CDFW may consider the CEQA document of the Lead Agency for the Project. To minimize additional requirements by CDFW pursuant to section 1600 *et seq.* and/or under CEQA, the CEQA document should fully identify the potential impacts to streams or riparian resources and provide adequate avoidance, mitigation, monitoring, and reporting commitments for issuance of the LSA Agreement.	Prior to/During Project construction and activities	Ventura County/ Applicant
MM-BIO-10- Impacts to Aquatic and Riparian Resources – Replacement Habitat	Any LSA Agreement issued for the Project by CDFW may include additional measures protective of streambeds on and downstream of the Project such as additional erosion and pollution control measures. To compensate for any on-site and off-site impacts to riparian resources, additional mitigation conditioned in any LSA Agreement may include the following: avoidance of resources, on-site or off-site creation, enhancement, or restoration, and/or protection and management of mitigation lands in perpetuity.	Prior to/After Project construction and activities	Ventura County/ Applicant
MM-BIO-11- Impacts to Aquatic and	CDFW recommends fully avoiding impacts to waters and riparian/wetland vegetation communities. If feasible, CDFW recommends redesigning the Project to avoid impacts to the existing drainage features that support sensitive vegetation	Prior to/After Project	Ventura County/ Applicant

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Riparian Resources – Interdisciplinary Approach	communities. CDFW also recommends the County consider Project alternatives that could incorporate the unnamed streams into the planned development. Design alternatives should attempt to retain as much surface flow and natural hydrologic processes as possible. CDFW recommends taking an inter-disciplinary approach to involve landscape architects, engineers, and wildlife biologists, and hydrologists to develop design alternatives that could fully avoid or lessen impacts to waters and riparian/wetland vegetation communities.	construction and activities	
MM-BIO-12- Impacts to Aquatic and Riparian Resources – Replacement Habitat	If impacts to streams is unavoidable, CDFW recommends that mitigation occur at a CDFW-approved bank. Mitigation bank credits should be purchased, approved, or otherwise fully executed prior to implementing Project-related ground-disturbing activities and prior to the County's issuance of grading permits.	Prior to/After Project construction and activities	Ventura County/ Applicant
MM-BIO-13- Impacts to Aquatic and Riparian Resources – Replacement Habitat	If credits at a CDFW-approved mitigation bank are not available, CDFW recommends setting aside replacement habitat to be protected in perpetuity under a conservation easement dedicated to a local land conservancy or other appropriate entity that has been approved to hold and manage mitigation lands. Mitigation lands should be in the same watershed as the Project site and support in-kind vegetation. An appropriate non-wasting endowment should be provided for the long-term management of mitigation lands. A conservation easement and endowment funds should be fully acquired, established, transferred, or otherwise executed prior to implementing Project-related ground-disturbing activities prior to the County's issuance of grading permits.	After Project construction and activities	Ventura County/ Applicant
MM-BIO-14- Impacts to Aquatic and Riparian	If impacts to riparian habitat, such as arroyo willow thicket, mulefat thicket, and cattail marshes cannot be avoided, CDFW suggests mitigation should be achieved entirely on site if possible. CDFW recommends that impacts be mitigated at no less than 3:1. CDFW recommends that an on-site Habitat Mitigation and Monitoring Plan	Prior to/After Project construction and activities	Ventura County/ Applicant

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Resources – Replacement Habitat	(HMMP) be developed. An HMMP should provide specific, detailed, and enforceable measures. -term management of mitigation lands. A conservation easement and endowment funds shall be fully acquired, established, transferred, or otherwise executed prior to implementing Project-related ground-disturbing activities and prior to the County's issuance of grading permits.		
MM-BIO-15- Impacts to Aquatic and Riparian Resources – Replacement Habitat	CDFW recommends that all on-site mitigation sites for impacts to waters and riparian/wetland vegetation communities be protected in perpetuity from public encroachment and structural intrusion. This should include all water features on site, including ephemeral and perennial bodies. CDFW recommends the County fund a minimum of 10 years of initial restoration and maintenance. If applicable, mitigation lands (unnamed creeks, surrounding natural areas) should be protected in perpetuity under a conservation easement dedicated to a local land conservancy or other appropriate entity that has been approved to hold and manage mitigation lands. An appropriate non-wasting endowment should be provided for the long-term management of mitigation lands. A conservation easement and endowment funds should be fully acquired, established, transferred, or otherwise executed prior to implementing Project-related ground-disturbing activities and prior to the County's issuance of grading permits.	Prior to Project construction and activities	Ventura County/ Applicant
MM-BIO-16- Aquatic and Riparian Resources – Replacement Habitat	As part of the LSAA Notification process, CDFW requests a map showing features potentially subject to CDFW's broad regulatory authority over streams. CDFW also requests a hydrological evaluation of the 200, 100, 50, 25, 10, 5, and 2-year frequency storm event for existing and proposed conditions.	Prior to Project construction and activities	Ventura County/ Applicant

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MM-BIO-17-Impacts to Crotch's Bumble Bee – Surveys	Due to suitable habitat within the Project site, Crotch's bumble bee surveys should be expanded to native vegetated communities beyond coastal sage scrub. Survey's should be performed by a qualified entomologist familiar with the species behavior and life history to determine the presence/absence of Crotch's bumble bee and within one year prior to vegetation removal and/or grading. Surveys should be conducted during flying season when the species is most likely to be detected above ground, between March 1 to September 1 (Thorp et al. 1983). Survey results, including negative findings, should be submitted to CDFW prior to implementing Project-related ground-disturbing activities. At minimum, a survey report should provide the following: e) A description and map of the survey area, focusing on areas that could provide suitable habitat for Crotch's bumble bee. CDFW recommends the map show surveyor(s) track lines to document that the entire site was covered during field surveys. f) Field survey conditions that should include name(s) of qualified entomologist(s) and brief qualifications; date and time of survey; survey duration; general weather conditions; survey goals, and species searched. g) Map(s) showing the location of nests/colonies. A description of physical (e.g., soil, moisture, slope) and biological (e.g., plant composition) conditions where each nest/colony is found. A sufficient description of biological conditions, primarily impacted habitat, should include native plant composition (e.g., density, cover, and abundance) within impacted habitat (e.g., species list separated by vegetation class; density, cover, and abundance of each species).	Prior to/During Project construction and activities	Ventura County/ Applicant

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MM-BIO-18- Impacts to Crotch's Bumble Bee – Incidental Take Permit	If "take" or adverse impacts to Crotch's bumble bee cannot be avoided either during Project activities or over the life of the Project, the County must consult CDFW to determine if a CESA Incidental Take Permit is required (pursuant to Fish & Game Code, § 2080 *et seq.*).	Prior to Project construction and activities	Ventura County/ Applicant
MM-BIO-19- Impacts to Oak Woodlands – Habitat Replacement	In order to ensure no net loss of oak trees/oak woodlands, CDFW recommends the following replacement ratios: (1) trees less than 5 inches diameter at breast height (DBH) should be replaced at 2:1; (2) trees between 5 and 12 inches DBH should be replaced at 3:1; (3) trees between 12 and 24 inches DBH should be replaced at 5:1; (4) trees greater than 24 inches DBH should be replaced at 10:1. Oak trees should be used to recreate functioning oak woodland of similar composition, density, structure, and function to the selected oak woodland that was impacted.	Prior to/During Project construction and activities	Ventura County/ Applicant
MM-BIO-20- Impacts to Oak Woodlands – Habitat Replacement	Mitigation should restore a minimum of the currently unknown acres of oak woodlands on site in approximately the same footprint as Project impacts. The mitigation site should mimic the pre-Project percent basal, canopy, and vegetation cover of oak woodland impacted. Associated understory and early successional native species should be planted and monitored along with trees to achieve viable habitat and adequately compensate for biological functions lost.	Prior to Project construction and activities	Ventura County/ Applicant

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MM-BIO-21-Impacts to Oak Woodlands – Oak Woodland Habitat Mitigation Program	Prior to any Project ground-disturbing activities, the County should develop and implement an Oak Woodland Mitigation Program with the following components: 16) An inventory of all oak trees removed or encroached upon during project activities, separated by species and DBH; 17) Acres of oak woodlands impacted, and density, coverage, and abundance of understory vegetation species impacted by life form (i.e., grass, forb, shrub, subshrub, vine); 18) Mitigation ratios applied and total number and/or area of replacement trees and vegetation; 19) Location of restoration areas and a discussion of the adequacy of the location(s) to serve as mitigation (e.g., would support oak trees/oak woodlands; avoid habitat type conversion); 20) The location and assessment of appropriate reference site(s) to inform the appropriate planting rate to recreate the pre-project function, density, percent basal, canopy, and vegetation cover of oak woodland impacted; 21) Scientific [Genus and species (subspecies/variety if applicable)] of all plants being used for restoration; 22) Location(s) of propagule source. Propagules should be collected or grown from on-site sources or adjacent areas within the same watershed and should not be purchased from a supplier. Seeds must originate from plants/trees of the same species (i.e., Genus, species, subspecies, and variety) as the species impacted; 23) Species-specific planting methods (i.e., container or bulbs); 24) Planting schedule; 25) Measures to control exotic vegetation and protection from herbivory; 26) Measurable goals and success criteria for establishing self-sustaining populations (e.g., percent survival rate, absolute cover). Measurable success criteria should be based on	Prior to Project construction and activities	Ventura County/ Applicant

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	present site/habitat conditions and/or functional local native oak woodlands as reference sites; 27) Contingency measures should the success criteria not be met; 28) Long-term monitoring for at least 10 years; 29) Adaptive management techniques, including replacement plants if necessary; and, 30) Annual reporting criteria and requirements.		
MM-BIO-22- Impacts to Oak Woodlands – Soils	CDFW recommends that a sufficient depth and composition of soils be replaced on the remediated landslide suitable to support all dominant co-dominate plants found in coast live oak woodlands. Use of engineered fill should be kept minimal to the extent feasible.	Prior to Project construction and activities	Ventura County/ Applicant
MM-BIO-23- Impacts to Oak Woodlands – Long Term Conservation	If on-site oak woodland mitigation is not feasible, CDFW recommends the County set aside replacement habitat to be protected in perpetuity under a conservation easement dedicated to a local land conservancy or other appropriate entity that has been approved to hold and manage mitigation lands. Mitigation lands should be in the same watershed as the Project site and replace at minimum the acreage of oak woodlands of similar composition as the oak woodlands impacted. An appropriate non-wasting endowment should be provided for the long-term management of mitigation lands. A conservation easement and endowment funds should be fully acquired, established, transferred, or otherwise executed prior to implementing Project-related ground-disturbing activities and prior to the County's issuance of grading permits.	Prior to/During Project construction and activities	Ventura County/ Applicant
MM-BIO-24- Impacts to Upland Habitat Alliances	CDFW recommends the County prepare an Upland Restoration Plan inclusive of Upland Scrub and Grasslands listed above. CDFW recommends taking an inter-disciplinary approach, inclusive of wildlife biologists and restoration professionals, to restore scrub and grassland habitats. The County should replace	Prior to/During Project	Ventura County/ Applicant

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	acreage of Upland Scrub and Grasslands at no less than the total acres impacted and use only native grasses or forbs indigenous to grasslands in region/watershed. Restoration should consider habitat requirements (e.g., refugia, structure, variation in plant density and cover) of wildlife that could occur in these two vegetation communities. CDFW recommends that the location of the mitigation site avoid the conversion of other habitats (e.g., scrubland to grassland). Scrub and grassland restoration should occur in areas appropriate abiotic and biotic conditions to support each habitat type.	construction and activities	
MM-BIO-25- Impacts to Bats – Surveys	CDFW recommends a qualified bat specialist conduct bat surveys to determine baseline conditions within the Project site and within a 500-foot buffer to identify trees and/or structures (i.e., tunnels, maintenance buildings, food concession stands, comfort stations) that could provide daytime and/or nighttime roost sites. CDFW recommends using acoustic recognition technology to maximize detection of bats. Night roosts are typically utilized from the approach of sunset until sunrise. In most parts of California, night roost use will only occur from spring through fall while day roosts are typically utilized during the spring, summer, and fall in California (Johnston et al. 2004).	Prior to/During Project construction and activities	Ventura County/ Applicant
MM-BIO-26- Impacts to Bats – Reporting Methods	Survey methodology and results, including negative findings, should be included in final environmental documents. Depending on survey results, please discuss potentially significant effects of the proposed Project on the bats and include species specific mitigation measures to reduce impacts to below a level of significance (CEQA Guidelines, § 15125).	During Project construction and activities	Ventura County/ Applicant
MM-BIO-27- Impacts to Bats – Mitigation	If maternity roosts are found, CDFW recommends, the following three mitigation measures. d) If maternity roosts are found, to the extent feasible, work shall be scheduled between October 1 and February 28, outside of the maternity roosting season when young bats are present but are not yet ready to fly out of the roost	Prior to Project construction and activities	Ventura County/ Applicant

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	(March 1 to September 30). e) If maternity roosts are found and if trees and/or structures must be removed/demolished during the maternity season, a qualified bat specialist shall conduct a pre-construction survey to identify those trees and/or structures proposed for disturbance that could provide hibernacula or nursery colony roosting habitat. Acoustic recognition technology will be used to maximize detection of bats. Each tree and/or structure identified as potentially supporting an active maternity roost shall be closely inspected by the bat specialist no more than 7 days prior to tree and/or structure disturbance to determine the presence or absence of roosting bats more precisely. If maternity roosts are detected, trees and/or structures determined to be maternity roosts shall be left in place until the end of the maternity season. Work shall not occur within 100 feet of or directly under or adjacent to an active roost and work shall not occur between 30 minutes before sunset and 30 minutes after sunrise. f) If bats are not detected, but the bat specialist determines that roosting bats may be present at any time of year, trees will be pushed down using heavy machinery rather than felling it with a chainsaw. To ensure the optimum warning for any roosting bats that may still be present, trees shall be pushed lightly two to three times, with a pause of approximately 30 seconds between each nudge to allow bats to become active. The tree shall then be pushed to the ground slowly and remain in place until it is inspected by a bat specialist. Trees that are known to be bat roosts shall not be bucked or mulched immediately. A period of at least 24 hours, and preferably 48 hours, shall elapse prior to such operations to allow bats to escape. Bats shall be		

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	allowed to escape prior to demolition of buildings. This may be accomplished by placing one-way exclusionary devices into areas where bats are entering a building that allow bats to exit but not enter the building.		
MM-BIO-28- Impacts to Non-Game Mammals and Wildlife	If fencing is proposed for use during construction or during the life of the Project, fences shall be constructed with materials that are not harmful to wildlife. Prohibited materials include, but are not limited to, spikes, glass, razor, or barbed wire. Fencing shall also be minimized so as not to restrict free wildlife movement through habitat areas.	Prior to Project construction and activities	Ventura County/ Applicant
MM-BIO-29- Impacts to Non-Game Mammals and Wildlife	To avoid direct mortality, a qualified biological monitor shall be on site prior to and during ground and habitat disturbing activities to move out of harm's way special status species or other wildlife of low mobility that would be injured or killed by grubbing or Project-related construction activities. Salvaged wildlife of low mobility shall be removed and placed onto adjacent and suitable (i.e., species appropriate) habitat out of harm's way. It should be noted that the temporary relocation of on-site wildlife does not constitute effective mitigation for the purposes of offsetting Program impacts associated with habitat loss.	Prior to Project construction and activities	Ventura County/ Applicant
MM-BIO-30- Impacts to Non-Game Mammals and Wildlife	Grubbing and grading shall be done to avoid islands of habitat where wildlife may take refuge and later be killed by heavy equipment. Grubbing and grading shall be done from the center of the Project site, working outward towards adjacent habitat off site where wildlife may safely escape.	Prior to Project construction and activities	Ventura County/ Applicant
MM-BIO-31- Impacts to Least Bell's Vireo and Coastal	CDFW recommends the County/Applicant perform appropriate survey protocols for least Bell's vireo and coastal California gnatcatcher prior to Project construction. The survey(s) should be performed based on the species found, or likely to occur, on the Project's site, the mitigative response to which will vary. If the newly performed surveys indicate there is a potential impact to	Prior to Project construction and activities	Ventura County/ Applicant

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California Gnatcatcher	either species, the County will coordinate with CDFW and/or UWFWS, as necessary, prior to Project construction.		
MM-BIO-32- Impacts to Least Bell's Vireo and Coastal California Gnatcatcher	If necessary, the survey report should provide a mitigation plan. The objective of which should be to offset the Project-induced qualitative and quantitative losses of wildlife habitat values. The plan should provide measures to fully avoid and/or mitigate for permanent impacts.	Prior to Project construction and activities	Ventura County/ Applicant
MM-BIO-33- Impacts to Least Bell's Vireo and Coastal California Gnatcatcher	CDFW recommends fully avoiding impacts to least Bell's vireo and coastal California gnatcatcher. CDFW recommends that the County submit an avoidance plan to CDFW for review and comment. A final avoidance plan should be fully developed prior to implementing Project related ground disturbing activities.	Prior to Project construction and activities	Ventura County/ Applicant
MM-BIO-34- Impacts to Least Bell's Vireo and Coastal California Gnatcatcher	If the Project will have permanent impacts to least Bell's vireo or coastal California gnatcatcher habitat, either during Project activities or over the life of the Project, CDFW recommends participation in a mitigation bank. CDFW recommends that mitigation occur at a state-approved bank. Mitigation bank credits should be purchased, approved, or otherwise fully executed prior to implementing Project related ground disturbing activities.	Prior to Project construction and activities	Ventura County/ Applicant
MM-BIO-35- Impacts to Least Bell's Vireo and Coastal California Gnatcatcher	If credits at a state-approved mitigation bank are not available for mitigating impacts to least Bell's vireo and coastal California gnatcatcher and their habitat, CDFW recommends setting aside replacement habitat to be protected in perpetuity under a conservation easement dedicated to a local land conservancy or other appropriate entity that has been approved to hold and manage mitigation lands pursuant to Assembly Bill 1094 (2012), which amended Government Code sections 65965-65968. Under Government Code section 65967(c), the lead agency must exercise due diligence in reviewing the qualifications of a governmental entity, special district, or nonprofit organization to	Prior to Project construction and activities	Ventura County/ Applicant

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	effectively manage and steward land, water, or natural resources on mitigation lands it approves. An appropriate non-wasting endowment should be provided for the long-term management of mitigation lands. A burrowing owl mitigation plan should include me sures to protect the targeted habitat values in perpetuity from direct and indirect negative impacts. Issues that should be addressed include, but are not limited to, restrictions on access; proposed land dedications; control of illegal dumping; water pollution; and increased human intrusion. A conservation easement and endowment funds should be fully acquired, established, transferred, or otherwise executed prior to implementing Project related ground disturbing activities		
MM-BIO-36- Impacts to Fish and Fish Passage	An Aquatic Resource Study would be performed prior to project construction. The study is to include an analysis of fish passage. If it is determined that native fish or fish passage will be directly or indirectly impacted by the Project, the County will consult with CDFW to determine additional, appropriate avoidance, minimization, and mitigation measures.	Prior to Project construction and activities	Ventura County/ Applicant
MM-BIO-37- Impacts to Fish and Fish Passage	If necessary, the survey report should provide a mitigation plan. The objective of which should be to offset the Project-induced qualitative and quantitative losses of wildlife habitat values. The plan should provide measures to fully avoid and/or mitigate for permanent impacts.	Prior to Project construction and activities	Ventura County/ Applicant
MM-BIO-38- Impacts to Fish and Fish Passage	CDFW recommends fully avoiding impacts to sensitive aquatic resources, including SCS. CDFW recommends that the County submit an avoidance plan to CDFW for review and comment. A final avoidance plan should be fully developed prior to implementing Project related ground disturbing activities.	Prior to Project construction and activities	Ventura County/ Applicant
MM-BIO-39- Impacts to Fish and Fish Passage	If “take” or adverse impacts to ESA- or CESA-listed species cannot be avoided either during Project activities or over the life of the Project, the County must consult CDFW and/or USFWS (as appropriate) to determine if an ITP is required. This consultation	Prior to Project construction and activities	Ventura County/ Applicant

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	must occur to prior to Project construction.		
REC-1-Seed Collection	The County should deposit some sensitive plant species propagules collected from the Project site as a Documented Conservation Seed Collection at either Santa Barbara Botanic Garden or the California Botanic Garden (formerly known as Rancho Santa Ana Botanic Garden). The County should provide evidence of Documented Conservation Seed Collection and funding to CDFW prior to implementing Project-related ground-disturbing activities and prior to the County's issuance of grading permits.	Prior to Project construction and activities	Ventura County/ Applicant
REC-2-Fuel Modification	If the Project includes fuel modification, the County should provide avoidance and mitigation measures for any fuel modification activities conducted within and adjacent to the Project area. A weed management plan should be developed for all areas adjacent to open space that will be subject to fuel modification disturbance. The County should also ensure that any irrigation proposed in fuel modification zones drain back into the development and not onto natural habitat land as perennial sources of water allow for the introduction of invasive Argentine ants.	Prior to Project construction and activities	Ventura County/ Applicant

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Attachment B: Previous CDFW Project Comments (2017)

From: Brandt, Joseph <joseph_brandt@fws.gov>
Sent: Tuesday, January 12, 2021 3:43 PM
To: Bertoline, Justin <Justin.Bertoline@ventura.org>
Subject: Providing comments on the Pacific Rock Quarry Expansion Project (SCH Number 2017081052)

Hello Justin,

I am writing to inform you that the USFWS would like to provide comments on the project and its potential effects on the federally threated plant, *Dudleya verityi.* We understand that the deadline for comments is this Friday. We found out about the project yesterday. This is not a lot of time to prepare a comment letter. Would you be willing to accept our comment letter if it were to arrive late, no later than Friday, Jan 22nd?

Thank you for your consideration.

Joseph Brandt
Wildlife Biologist
Ventura Fish and Wildlife Office
USFWS Ecological Services
direct phone: (805)677-3324
office: (805)644-1766 ext 53324
DOI Regions 8 &10

From: Lin, Alan S@DOT <alan.lin@dot.ca.gov>
Sent: Tuesday, January 12, 2021 3:29 PM
To: OPR State Clearinghouse <State.Clearinghouse@opr.ca.gov>; Bertoline, Justin <Justin.Bertoline@ventura.org>
Subject: SCH # 2017081052 Pacific Rock Quarry Expansion Project

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Attached, please find Caltrans comment letter.

Thank you!

Alan Lin, P.E.
Transportation Engineer, Civil
IGR, Division of Planning
State of California
Department of Transportation
Mail Station 16
100 South Main Street
Los Angeles, CA 90012
213-269-1124 Mobile

DEPARTMENT OF TRANSPORTATION
DISTRICT 7
100 S. MAIN STREET, MS 16
LOS ANGELES, CA 90012
PHONE (213) 897-8391
FAX (213) 897-1337
TTY 711
www.dot.ca.gov

Serious Drought.
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January 12, 2021

Mr. Justin Bertoline
Case Planner
Ventura County
800 South Victoria Avenue, L#1740
Ventura, CA 93009

RE: Pacific Rock Quarry Expansion Project
Vic. VEN-101 PM 7.89
SCH # 2017081052
GTS # VEN-2020-00435AL-MND

Dear Mr. Bertoline:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the above referenced project. The applicant requests that a modified Conditional Use Permit (CUP) be granted and an amended Reclamation Plan be approved to authorize the expansion and continued operations of an existing surface mining facility for an additional 25-year period. The project site is about two miles away from the State facilities (US-101).

The mission of Caltrans is to provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability. Senate Bill 743 (2013) has been codified into CEQA law. It mandates that CEQA review of transportation impacts of proposed developments be modified by using Vehicle Miles Traveled (VMT) as the primary metric in identifying transportation impacts. As a reminder, Vehicle Miles Traveled (VMT) is the standard transportation analysis metric in CEQA for land use projects after the July 1, 2020 statewide implementation date. You may reference The Governor's Office of Planning and Research (OPR) website for more information.

http://opr.ca.gov/ceqa/updates/guidelines/

Also, Caltrans has published the VMT-focused Transportation Impact Study Guide (TISG), dated May 20, 2020 and Caltrans Interim Land Development and Intergovernmental Review (LD-IGR) Safety Review Practitioners Guidance, prepared in July 2020.

https://dot.ca.gov/programs/transportation-planning/office-of-smart-mobility-climate-change/sb-743

Caltrans concurs that “this EIR recognizes that VMT associated with the Project would have the potential to increase as compared to the existing operation baseline conditions. However, given that the Project itself would not induce aggregate transport travel and the Project would create the potential for reductions in regional VMT, this analysis concludes that the Project impact related to VMT is less than significant and no mitigation is required.”

For this project, transportation of heavy construction equipment and/or materials, which requires the use of oversized-transport vehicles on State highways, will require a transportation permit from Caltrans. It is recommended that large size truck trips be limited to off-peak commute periods and idle time not to exceed 10 minutes.

If you have any questions, please feel free to contact Mr. Alan Lin the project coordinator at (213) 897-8391 and refer to GTS # VEN-2020-00435AL-MND.

Sincerely,

Miya Edmonson

MIYA EDMONSON
IGR/CEQA Branch Chief

email: State Clearinghouse

From: Tasiopoulos, Theodore@CalRecycle <Theodore.Tasiopoulos@calrecycle.ca.gov>
Sent: Tuesday, January 12, 2021 9:56 AM
To: 'state.clearinghouse@opr.ca.gov' <state.clearinghouse@opr.ca.gov>
Cc: Escotto, Benjamin@CalRecycle <Benjamin.Escotto@calrecycle.ca.gov>; Debley, Sean <Sean.Debley@ventura.org>; Bertoline, Justin <Justin.Bertoline@ventura.org>
Subject: SCH# 2017081052, Comment Letter for Pacific Rock Quarry Expansion Project Draft EIR

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SCH,

In an effort to assist in your transition to a paperless process, attached is CalRecycle staff's comment letter for **SCH No. 2017081052** – Pacific Rock Quarry Expansion Project Draft EIR – Ventura County.

Thank you.

Ted Tasiopoulos, R.E.H.S.
Environmental Scientist
Waste Permitting, Compliance and Mitigation Division
Permitting and Assistance Branch-South Section
Department of Resources Recycling and Recovery (CalRecycle)
1001 I Street, Sacramento, CA 95814
Office: (916) 341-6084 | Email: Theodore.Tasiopoulos@CalRecycle.ca.gov



January 12, 2021

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

Subject: **SCH No. 2017081052** – Pacific Rock Quarry Expansion Project – Ventura County

Dear Mr. Bertoline:

Thank you for allowing the Department of Resources Recycling and Recovery (CalRecycle) staff to provide comments on the proposed project and for your agency's consideration of these comments as part of the California Environmental Quality Act (CEQA) process.

PROJECT DESCRIPTION

The Ventura County Resources Management Agency, Planning Division acting as Lead Agency, has prepared and circulated a Draft Environmental Impact Report (Draft EIR) in order to comply with CEQA and to provide information to, and solicit consultation with, Responsible Agencies in the approval of the proposed project.

The Pacific Rock Quarry Expansion Project is located at 1000 South Howard Road, Camarillo, CA, which is approximately 1.5 miles east of Lewis Road and approximately two miles south of State Highway 101 in unincorporated Ventura County. The proposed project encompasses 204 acres of a 718 acre property which includes the existing mining operation and areas proposed for mine expansion and reclamation. The existing quarry is located within the Tax Assessor's Parcel Number (APN) 234-0-060-220. Proposed expansion areas are within additional portions of APN 234-0-060-220 and a portion of APN 234-0-060-190. Zoning designation is Agricultural Exclusive (AE-40) and Open Space (OS-160).

The proposed project requests the following modifications to existing Conditional Use Permit (CUP) No. 3817-3:

(1) Amend the current reclamation plan and allow for the expansion of the existing mining area;
(2) Extend the life of the existing permitted operations for an additional 30 years;

(3) 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);
(4) Allow construction and mobile mining equipment in outdoor storage areas;
(5) Operate a concrete and asphalt recycling plant;
(6) Allow for imported material to be used in reclamation fill; and
(7) Replace an existing mobile home to be used as a 24-hour security trailer.

COMMENTS

CalRecycle staff's comments on the proposed project are listed below. Where a specific location in the document is noted for the comment, please ensure the comment is addressed throughout all sections of the Draft EIR, in addition to the specific location noted.

Page 2-12, Section 2.6.6, Proposed Recycle Operations –
The Applicant proposes the use of a portable recycling plant to crush and process recycled concrete and asphalt at the site. The recycling plant would utilize conveyors, a crusher, and screen to recycle materials. Concrete and asphalt debris would be received, crushed, and sold as base material.

Comment: Pursuant to Title 14 California Code of Regulations (14 CCR) Section 17381(e)(1)(A) and (k)(1), concrete and fully cured asphalt are defined as "construction and demolition debris" and "inert debris" (CDI). Pursuant to 14 CCR 17381.1(a), a site that receives only construction and demolition debris and inert debris and which meets the requirements of the section shall be classified as a CDI recycling center or inert debris recycling center and not be subject to the construction and demolition/inert debris regulatory requirements. In accordance with 14 CCR Section 17381.1(h), sites which do not meet the applicable requirements of 14 CCR Section 17381.1(a), do not qualify as recycling centers and shall comply with Article 5.9 – Construction and Demolition and Inert Debris Transfer/Processing Regulatory Requirements, and all laws and regulations applicable to them. Also, per 14 CCR Section 17381.1(h), the burden of proof shall be on the owner and operator of a site to demonstrate that the activities at the site are not subject to the requirements of Article 5.9.

Page 2-12, Section 2.6.7, Proposed Fill Import and Export –
Clean fill material would be imported to the site and processed for sale as aggregate material or used in preparing pad areas of the site for the end use of agriculture. Fill material would consist of soil, mud, rocks, and minor amounts organic material, but would not contain construction debris.

Comment: Pursuant to 14 CCR Section 17388.2(a) and (a)(1), the following disposal activities do not constitute construction and demolition waste or inert debris operations or facilities: any use (e.g., grading) of gravel, rock, soil, sand, and similar, whether processed or not that has never been used in connection with any structure, road, parking lot, or similar use. Pursuant to 14 CCR 17852(a)(11), "compostable

material" means any organic material that when accumulated becomes active compost. Per 14 CCR 17852(a)(15)(B)(2), disposal of compostable material does not include the use of compostable material for mine reclamation in accordance with applicable law. However, the proposed use of organic material for fill may be considered disposal and subject to solid waste regulatory requirements.

Solid Waste Regulatory Oversight

The Ventura County Resource Management Agency, Environmental Health Division is the Local Enforcement Agency (LEA) for Ventura County and responsible for providing regulatory oversight of solid waste handling activities, including permitting and inspections. Please contact the LEA, Sean Debley, at 805.654.2813 or Sean.Debley@ventura.org to discuss the regulatory requirements for the proposed project.

CONCLUSION

CalRecycle staff thanks the Lead Agency for the opportunity to review and comment on the environmental document and hopes that this comment letter will be useful to the Lead Agency preparing the Final EIR and in carrying out their responsibilities in the CEQA process.

CalRecycle staff requests copies of any subsequent environmental documents, copies of public notices and any Notices of Determination for this proposed project. If the environmental document is adopted during a public hearing, CalRecycle staff requests 10 days advance notice of this hearing. If the document is adopted without a public hearing, CalRecycle staff requests 10 days advance notification of the date of the adoption and proposed project approval by the decision-making body.

If you have any questions regarding these comments, please contact me at 916.341.6084 or by e-mail at Theodore.Tasiopoulos@calrecycle.ca.gov.

Sincerely,



Theodore Tasiopoulos, Environmental Scientist
Permitting & Assistance Branch – South Unit
Waste Permitting, Compliance & Mitigation Division
CalRecycle

cc: Benjamin Escotto, Supervisor
Permitting & Assistance Branch – South Unit

Sean Debley, Manager
LEA

From: Michelle Danna <mdanna@cityofcamarillo.org>
Sent: Friday, January 15, 2021 2:45 PM
To: Bertoline, Justin <Justin.Bertoline@ventura.org>
Cc: Greg Ramirez <gramirez@cityofcamarillo.org>; Joe Vacca <jvacca@cityofcamarillo.org>; Klotzle, Dave <dklotzle@cityofcamarillo.org>
Subject: LU10-0003 | Pacific Rock DEIR | Comments From City of Camarillo

Good Afternoon, Justin.

Attached please find a letter from the City of Camarillo on the Pacific Rock Quarry Expansion, in response to the Notice of Availability of the Draft EIR for the project.

Thank you,
Michelle

Michelle Glueckert D'Anna, Community Relations Officer
City of Camarillo | 601 Carmen Drive, Camarillo, CA 93010
P (805) 388-5370 | F (805) 388-5388 | mdanna@cityofcamarillo.org

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COVID-19 UPDATE: Beginning Monday, December 14, 2020, Camarillo City Hall will close to walk-in traffic, and City services will be available online and over the phone only. City Hall business hours remain Monday through Friday from 8:00 a.m. to 5:00 p.m. For information about how to access services, please see the City's Frequently Asked Questions at www.cityofcamarillo.org/covid19. We thank you for your patience as we navigate this pandemic together, and for your understanding that these efforts are intended to minimize the spread of COVID-19.

Please note email correspondence with the City of Camarillo (and attachments, if any) are subject to the California Public Records Act which authorizes public disclosure (unless otherwise exempted from disclosure under the Act). The information contained in this email is intended only for the use of the named addressee(s). If you received this message in error, please notify the sender of its receipt by calling (805) 388-5300, and subsequently delete and/or destroy this document along with any attachments.

City of Camarillo

601 Carmen Drive • P.O. Box 248 • Camarillo, CA 93011-0248

Office of the City Manager
(805) 388-5307
FAX (805) 388-5318

January 15, 2021

Justin Bertoline, Permit Planner
Ventura County Government Center Administration Building - 3rd Floor
Resource Management Agency - Planning Division
800 S. Victoria Avenue
Ventura, CA 93009

SUBJECT: Draft EIR for Pacific Rock Quarry Expansion Project (Case No. LU10-0003) (SCH No. 2017081052)

Dear Mr. Bertoline:

We appreciate the opportunity to review and comment on the Draft Environmental Impact Report (DEIR) for the Pacific Rock Quarry Expansion Project proposed for the Quarry located at 1000 South Howard Road, just outside Camarillo city limits. We understand the project proposes to modify the Quarry's existing Conditional Use Permit (CUP) No. 3817-3 to: amend the current reclamation plan and to allow for the expansion of the existing mining area; extend the life of the permit for an additional 30-year period; extend the operational days from 6 to 7 days per week; 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.

The City of Camarillo does not support the project, as proposed, and believes the DEIR is inadequate unless the revisions recommended in the City's comments below are adequately addressed.

AESTHETIC/VISUAL RESOURCE IMPACTS
Comment: The DEIR concludes that the Project-specific aesthetic/visual resource impacts are significant and unavoidable. The DEIR should be revised to disclose that US 101, Lewis Road, and Pleasant Valley Road are designated scenic corridors and are identified as such in the City of Camarillo Community Design Element of the General Plan. The proposed expansion of the mining area will be visible from designated scenic corridors within the City of Camarillo, which is inconsistent with Section 10.9.2 - Scenic Corridor Design Guidelines, specifically with subsections 'c' and 'm,' which call for:

> "*c. Existing native vegetation should be retained and enhanced to the greatest extent possible, except to provide proper sight distance*," and

> "*m. Preserve distant views by discouraging development on ridge tops and encouraging landform grading*."

The DEIR fails to acknowledge that the project will result in a significant impact related to the project's inconsistency with the above-referenced scenic corridor design guidelines.

Recommendation: Include additional mitigation requiring the retention and enhancement of existing native vegetation and/or develop and approve a project alternative that discourages development of ridge tops and encourages landform grading.

NOISE

Comment: The Camarillo Municipal Code (CMC), Chapter 10.34 – Noise Regulations, identifies that the allowable dBA for residential properties between 9:00pm and 7:00am is 45 dBA. The proposed expanded operational hours will allow for trucks to pass along Pleasant Valley Road adjacent to residential properties as early as 5:30am and as late as 10:00pm. The DEIR indicates that additional truck trips may occur in the times inside of 9:00pm and 7:00am which may subject residential properties to noise levels beyond the allowable dBA and create a nuisance and a significant adverse noise impact.

Recommendation: The City of Camarillo objects to the proposed expansion of the hours of operation and recommends the DEIR acknowledge this potentially significant noise impact and be revised to include a mitigation measure requiring that operations, including non-emergency truck trips, be restricted to 7:00am to 9:00pm, and prohibiting non-emergency operations on Sundays or holidays.

The DEIR also states that 24-hour Project operations can be authorized by the Director under special circumstances, such as emergencies. However, special circumstances are not specifically defined in the EIR. The EIR should be revised to include a definition of special circumstances, including the duration and frequency, and to analyze the potential noise impacts of operations under such special conditions.

The DEIR indicates impacts to noise will result in significant and unavoidable impacts because exceeds allowable dBA for residentially zoned properties; the DEIR should be revised to specifically identify that impact.

AIR QUALITY

Comment: The DEIR section on Air Quality discusses the Airborne Toxic Control Measure (ATCM) adopted by CARB to limit heavy-duty diesel motor vehicle idling and reduce public exposure to diesel PM and other TACs (Title 13 California Code of Regulations [CCR], Section 2485), and identifies that diesel-fueled commercial vehicles with gross vehicle weight ratings greater than 10,000 pounds that are licensed to operate on highways, regardless of where they are registered, must not to idle for more than five minutes at any given time. However, the DEIR does not contain a mitigation measure or recommended condition of approval requiring the Project to restrict vehicle idling to no more than 5 minutes to mitigate potentially significant adverse air quality impacts. The DEIR does contain mitigation for noise impact NV-1 prohibiting onsite excavation and reclamation equipment from idling for more than 30 minutes.

Recommendation: For consistency, revise the mitigation for air quality impacts to restrict vehicle idling to no more than five minutes, and further, modify proposed mitigation measure MM NV-1 to reduce the idling allowed for excavation and reclamation equipment to no more than five minutes. The DEIR should also be revised to analyze Air Quality impacts from mining operations and truck exhaust to Camarillo residents, in addition to the County aggregate.

TRANSPORTATION

Comment: Regarding Section 3.9-Transportation and Circulation, and Appendix E-1, Transportation Impact Study, the Traffic Impact Study was completed by VRPA Technologies, Inc., and does acknowledge the City of Camarillo will tolerate brief periods of Level Of Service (LOS) "D" during the peak AM and PM traffic hours where improving to LOS "C" would be unreasonably costly. To further clarify, while the project may not be conditioned to construct mitigations, it must still pay Camarillo Traffic Impact Mitigation Fees (TIMF).

1. Adding the project to "Existing" conditions degrades the LOS on Pancho Road between Pleasant Valley Road and Calle Quetzal. The project degrades the LOS from "C" to "D" in the northbound AM peak period.

2. Adding the project to "Existing Plus Approved/Pending" conditions degrades the LOS on Pancho Road between Pleasant Valley Road and Calle Quetzal. The project degrades the LOS from "C" to "D" in the southbound PM peak period.

3. Adding the project to "Existing Plus Approved/Pending" conditions degrades the LOS on Pleasant Valley Road between Pancho Road and the US 101 Southbound Ramps. The project degrades the LOS "C" to "D" in the northbound AM peak.

In summary, while the DEIR may comply with SB 743 for the use of Vehicle Miles Traveled (VMT) as the methodology for analyzing traffic impacts; the project must nonetheless still pay the Camarillo TIMF.

If you have any questions about the comments contained within this letter, please contact Michelle Glueckert D'Anna, Community Relations Officer, at (805) 388-5370 or mdanna@cityofcamarillo.org. We look forward to continued coordination with the County of Ventura throughout the processing of this project.

Sincerely,

Greg Ramirez
City Manager

From: Iain Holt <IHolt@toaks.org>
Sent: Friday, January 15, 2021 11:55 PM
To: Bertoline, Justin <Justin.Bertoline@ventura.org>
Subject: Pacific Rock DEIR Comments Case Number LU10-0003

Hello Justin,

Please see the attached letter for the City of Thousand Oaks review comments for the Pacific Rock Quarry expansion.

Thank You,

Iain Holt, AICP
Senior Planner
Community Development Department
City of Thousand Oaks
(805) 449-2314



City of Thousand Oaks
Community Development Department
2100 Thousand Oaks Boulevard • Thousand Oaks, CA 91362
Planning Division • Phone 805/449.2323 • Fax 805/449.2350 • www.toaks.org
Building Division • Phone 805/449.2500 • Fax 805/449.2575 • www.toaks.org

Mark A. Towne
Community Development Director

January 15, 2021

Justin Bertoline
Commercial and Industrial Permit Section
Ventura County Resource Management Agency
Planning Division
800 S. Victoria Avenue, L# 1740
Ventura, CA 93009

Subject: Review of Pacific Rock Quarry Mine Expansion Project – Draft Environmental Impact Report (DEIR); County Case No. LU10-003
1000 South Howard Road, Camarillo CA 93012
Interagency Referral, City of Thousand Oaks No.: IRC 2017-70372

Dear Mr. Bertoline:

This letter is in response to the DEIR for the Pacific Rock Mine Expansion Project. The City of Thousand Oaks is interested in this project because it is located adjacent to the City boundary and has the potential to impact nearby residential properties in the City. Specifically, the proposed mining boundary extends several hundred feet upslope to the City limits of Thousand Oaks and downslope from homes in the Thousand Oaks neighborhood know as Dos Vientos Ranch.

The City of Thousand Oaks has the following comments for consideration for the Final EIR and future decision-making process:

- Visual Resources: The primary concern of the City of Thousand Oaks are the unavoidable impacts to visual resources from the residential and open space view sheds, thus requiring a Statement of Overriding Consideration (SOC). In regard to making the associated findings for the SOC, the DEIR provides general project objectives, but does not present data or analysis as a basis for findings under Section 15093(a). The significant expansion of surface area being mined, increase annual production to 468,000 tons and expanded hours of operations are not clearly justified by the information presented in the DEIR, especially when considering the impacts

associated with the project not only to the residents of Thousand Oaks, but to the County at large.

- Alternative B states that "The specific configuration of a reduced mine expansion area has not been developed for this EIR and is not required for a comparison of impacts of this alternative with the Project. Section 5.5.2 provides an analysis of the environmental effects of Alternative B as compared to the Project". The City of Thousand recommends that Alternative B needs further design information to effectively consider the merits of a less impactful project as part of the future evaluation and decision-making process.

- The configuration for Alternative B should include a design that reduces the amount of vertical scarring and benching on the slopes of the excavation area in order to reduce visual resource impacts and maintains more of the natural character of the hillside. The revised Alternative B would present an option the better informs the process of determining the need for a SOC and would be the preferred project from the standpoint of the City of Thousand Oaks. Specifically, this alternative plan would include grading plans, site sections and accompanying photo simulations from the identified vantage points in the visual analysis to inform further project evaluation.

- The noise analysis states that excavation and processing will not change as a result of the proposed expanded operations consisting of a daily production of 2,400 tons/day. Provide an explanation how the significant increase in volume and area of excavation does not present an increased degree of ground born vibration as a result of blasting closer to sensitive receptors, such as the open space trails and residential areas.

- Note that Figures, such as ES-2, shows the project area overlapping with the City of Thousand Oaks jurisdiction.

The City of Thousand Oaks appreciates the incorporation of information and analysis requested in our September 29, 2017 NOP response letter. Thank you for the opportunity to comment on the DEIR for this project.

Sincerely,

Iain Holt, AICP
Senior Planner

Copy:
Kelvin Parker – Director, Community Development Department

MOUNTAINS RECREATION & CONSERVATION AUTHORITY
King Gillette Ranch
26800 Mulholland Highway
Calabasas, California 91302
Phone (310) 589-3230 Fax (310) 589-3237

February 2, 2021

Justin Bertoline
Ventura County Resource Management Agency
Planning Division
800 South Victoria Avenue, L#1740
Ventura, California 93009
justin.bertoline@ventura.org

Draft Environmental Impact Report for Pacific Rock Mine Expansion Project (Case Number LU-10-0003)

Dear Mr. Bertoline:

The Mountains Recreation and Conservation Authority (MRCA) offers the following comments on the Draft Environmental Impact Report (DEIR) for the Pacific Rock Mine Project (Case Number LU-10-0003) that proposes to extend the Conditional Use Permit (CUP) No. 3817-3 for an additional 30-year period, increase operational days to from six to seven days per week, operate a concrete and asphalt recycling plant, and expand the mining area to more than triple the previously approved Project Area, among other requests.

The MRCA reiterates the comments provided to the Ventura County Planning Division by the Santa Monica Mountains Conservancy (Conservancy) on September 25, 2017. Specifically, the Conservancy requested that "DEIR alternatives include a permanently protected contiguous habitat area along the northern, eastern, and southern boundaries of the property." Upon review of the DEIR and alternatives, it appears that Mitigation Measure (MM) BIO-6(c) attempts to address the significant environmental impact to wildlife migration corridors by establishing an approximate 800-foot-wide north-south Wildlife Passage (WP) running along the easterly boundary of the proposed Project.

However, the MM BIO-6(c) proposed 800-foot-wide WP relies nearly exclusively on existing MRCA and Conejo Open Space Conservation Agency (COSCA) property. Based on DEIR Figure 2-3, the "Proposed Mine Area Boundary" approaches within 50 feet of the "Proposed CUP Boundary" along this same eastern property line. MM BIO-6(c) continues:

> A WP shall be provided to the east of the Project mine area and shall be a minimum of 800 feet in width between the Project disturbance area and the nearest developed residential property. 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 and only restoration of native plants as a component of reclamation shall be permitted within the WP area. Outdoor lighting on the Project site shall not illuminate the WP area.

Existing MRCA and COSCA protected open spaces already comprise most of the area MM BIO-6(c) appears to be offering for mitigation of DEIR-established significant environmental impacts. Thus, MM BIO-6(c) is inadequate and must be amended to provide *additional* buffer of protected open space to mitigate for the Project's proposed impacts to habitat connectivity and wildlife passage.

The MRCA supported Ventura County's 2019 adoption of the Habitat Connectivity and Wildlife Corridor Overlay Zone recognizing Critical Wildlife Passage Areas are necessary for the survival of several species including mountain lion (*Puma concolor*) in the Santa Monica Mountains. Conejo Mountain and the area between the proposed Project and the Dos Vientos neighborhood is the last remaining undeveloped connection in the western Santa Monica Mountains and the Santa Rosa Valley. The current width for WP through this choke point is approximately 980-feet with steep east-west trending slopes. Reducing this width to 720-feet (the distance from Proposed Mine Area Boundary to the fuel modification zone and light impact zone of the Dos Vientos neighborhood) results in an additional 25-percent loss of width to an already extremely constricted WP. No easterly expansion of mining operations should be contemplated or approved.

Since the California Fish and Game Commission accepted the southern and central coast mountain lion as a California Endangered Species Act (CESA) "candidate species" affording mountain lion in the Santa Monica Mountains full protection of a threatened species under CESA, MRCA recommends no loss of existing habitat east of the Existing Disturbance Area Boundary to preserve the remaining habitat in support of this protected species.

MRCA is also concerned with the apparent disregard for comments offered by the California Department of Fish and Wildlife (CDFW) in its October 2, 2017 letter the Notice of Preparation for the EIR as provided on page 3.5-1 of the DEIR:

> 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.

CDFW concerns regarding impacts to numerous ephemeral and intermittent streams within the Project area and habitat disturbances beyond the perimeter of the existing CUP should be of paramount concern for County staff to evaluate baseline conditions at the

time of NOP circulation. For the County to accept potentially unpermitted impacts as "not germane" because those impacts would be subsumed within the currently proposed Project impacts sets a bad precedent for future applicants. Unless the County and/or Project applicant can prove the impacts identified by CDFW were authorized under the appropriate jurisdictional authority, the County must analyze the Project as if those impacts have not yet occurred and factor those impacts into appropriate compensatory mitigation requirements.

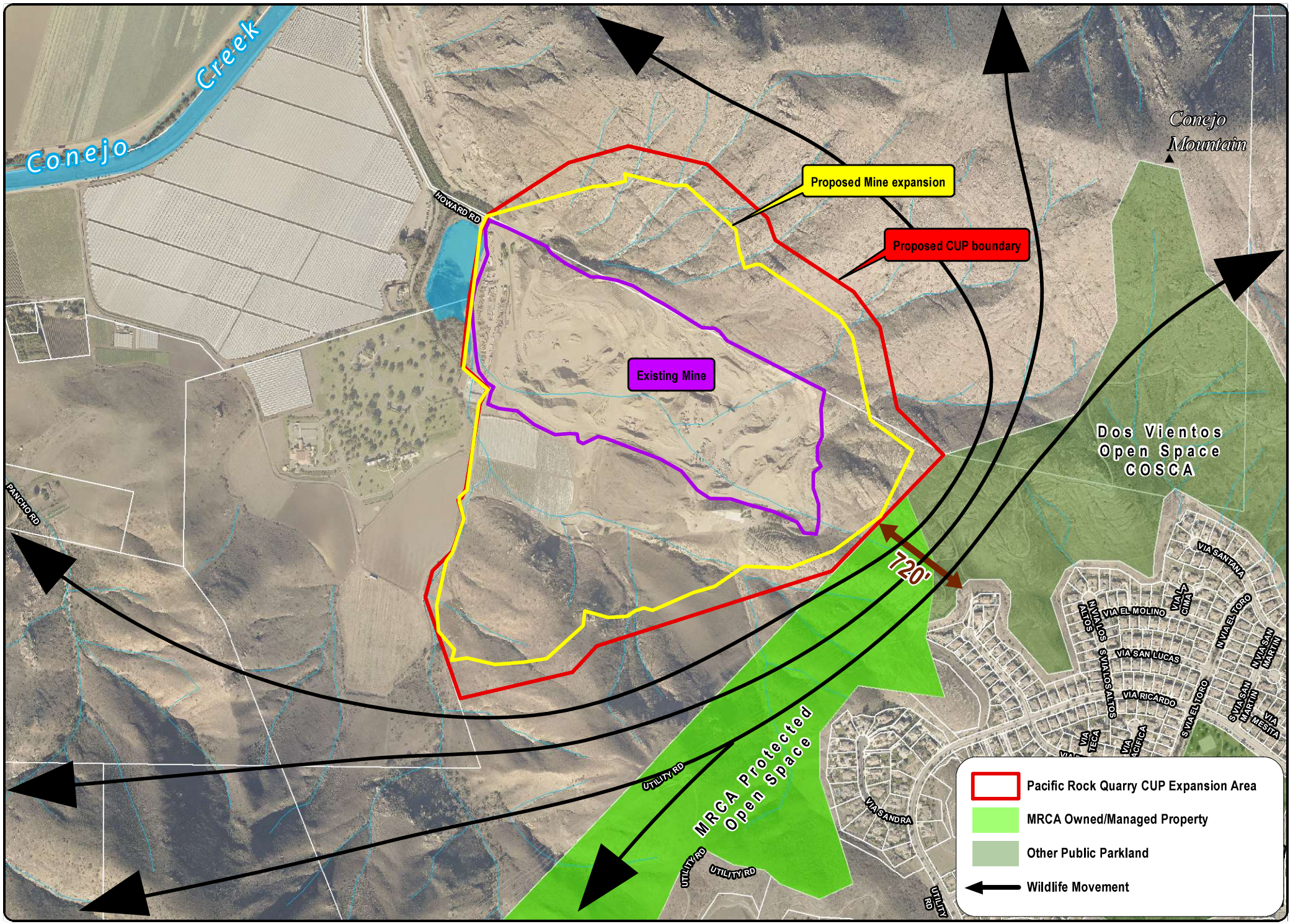
The MRCA has extensive experience performing habitat mitigation and restoration projects and questions the long-term success of the proposed grassland-pasture mine reclamation plan to support cattle grazing. While this proposed reclamation plan may be the most cost-efficient for the applicant, an alternative reclamation plan using native vegetation and natural slope contours must be required. If need be, a large bond or endowment sufficient to accrue interest in excess of inflation to ensure adequate reclamation is also recommended.

Please address any questions or future correspondence to me by phone at (310) 589-3200 ext. 128, by email at edelman@smmc.ca.gov, or at the above letterhead address.

Sincerely,



Paul Edelman
Chief of Natural Resources and Planning


Conejo Creek
Conejo Mountain
HOWARD RD
Proposed Mine expansion
Proposed CUP boundary
Existing Mine
PANCHO RD
Dos Vientos Open Space COSCA
720'
MRCA Protected Open Space
UTILITY RD
VIA SANDRA
VIA SANTANA
VIA EL MOLINO
VIA SAN LUCAS
VIA RICARDO
VIA TECA
VIA MESITA
Pacific Rock Quarry CUP Expansion Area
MRCA Owned/Managed Property
Other Public Parkland
Wildlife Movement
Date: 2/2/2021
0 150 300 Feet
RANCHO SIMI RECREATION AND PARK DISTRICT

From: Conejo Oak Tree Advocates <conejooaktreeadvocates@gmail.com>
Date: January 15, 2021 at 4:16:27 PM PST
To: "Ward, Dave" <Dave.Ward@ventura.org>
Subject: Case No. LU10-0003 Pacific Rock Mine

Dear Mr. Ward,

Attached is a letter from Conejo Oak Tree Advocates in connection with the Environmental Impact Report for Pacific Rock Mine.

Thank you for incorporating our comments.

~Janet Miller Wall
for Conejo Oak Tree Advocates

CONEJO OAK TREE ADVOCATES

conejooaktreeadvocates@gmail.com

January 12, 2021

Dave Ward, AICP, Director Ventura County Planning Division
County of Ventura Resource Management Agency
Planning Division
800 South Victoria Avenue
Ventura, CA 93009

Re: Pacific Rock Expansion, Case No. LU10-0003

Dear Mr. Ward,

Conejo Oak Tree Advocates is a local citizen group which advocates for the protection of California native trees, fauna and wildlife corridors located within valuable, undisturbed areas of our local community. The Pacific Rock Mine expansion project is just such an area.

Please consider our comments regarding the EIR for the mining expansion:

1. Coast Live Oak trees and California Black Walnut removals. The massive scale of the project over 30 years does not take into consideration impacts to trees that are not yet of protected size. An alternative should include a project that encompasses a time period of 5 or 10 years so that damage to the species is assessed regularly instead of destruction in one fell swoop.
2. Tree Mitigation Plan Is Inadequate: Oak and walnut tree mitigation is inadequate because it does not include Ventura County's Tree Protection Guidelines. In addition, a two year monitoring period is a very short period of time for native trees to be established and per the Public Resources Code should be extended to 7 years to ensure tree replacements survive.
3. PC-1 Laurel Sumac Scrub Plant Community. This area encompasses the largest region where blasting and construction will occur and contains the greatest number of rare species. In addition, the EIR notes the acreage has burned in several fires. Conejo Buckwheat/*Eriogonum crocatum* and endangered Verity's Dudleya mitigation may not be adequately addressed in the EIR if plants have not yet reestablished. A more current survey is necessary as is the locations where plant mitigation will occur.
4. Wildlife Corridor. Ventura County has adopted an ordinance to protect habitat connectivity and wildlife movement corridors for mountain lions and other species. The EIR does not adequately address impacts to this species on the project site.

Thank you for considering our recommendations.

Sincerely,
Gail Bianchino, Bonnie Clarfield-Bylin, Marilyn Carpenter, Tina Frugoli, Joan Edwards, Janet Wall and Silvana Zucca

From: Tiffany Yap <TYap@biologicaldiversity.org>
Sent: Friday, January 15, 2021 3:55 PM
To: Bertoline, Justin <Justin.Bertoline@ventura.org>
Subject: Comments on the Draft Environmental Impact Report for the Proposed Pacific Rock Mine Project (Case Number LU10-0003)

Dear Mr. Bertoline,

On behalf of the Center for Biological Diversity, California Wildlife Foundation, and California Native Plant Society, I am submitting these comments on the Draft Environmental Impact Report for the Proposed Pacific Rock Mine Project (Case Number LU10-0003).

Here is a link to the references cited:
https://centerforbiologicald-my.sharepoint.com/:f:/g/personal/tyap_biologicaldiversity_org/EkONQRiKsN5LhWS_qr7l1YQBL6lEOFJCWAxWGZrTVInAEw?e=7E74ut

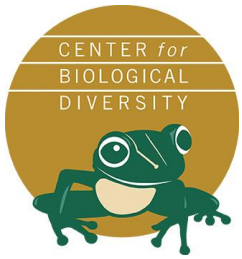
Please confirm that you have received these comments and are able to access the references.

Thank you for the opportunity to provide comments. Please let me know if you have any questions.

Warmly,

Tiffany

Tiffany Yap, D.Env/PhD *(she, her)*
Senior Scientist, Wildlife Corridor Advocate
Urban Wildlands Program
Center for Biological Diversity - Oakland
510.847.5838
www.biologicaldiversity.org







January 15, 2021

Sent via email

Justin Bertoline
Planning Division
Ventura County Government Center
Administration Building - 3rd Floor
800 S. Victoria Avenue
Ventura, CA 93009
justin.bertoline@ventura.org

Re: Comments on the Draft Environmental Impact Report for the Proposed Pacific Rock Mine Project (Case Number LU10-0003)

Dear Mr. Bertoline,

On behalf of the Center for Biological Diversity ("Center"), the California Native Plant Society ("CNPS") and the California Wildlife Foundation ("CWF"), we are submitting comments on the Draft Environmental Impact Report (DEIR) for the proposed Pacific Rock Mine Project ("Project"). After reviewing the DEIR, the environmental organizations are concerned about the Project's impacts to special-status animals and plants, including mountain lions (*Puma concolor*) and Conejo buckwheat (*Eriogonum crocatum*), wildlife connectivity, and sensitive habitats. Such a project, located within the Sierra Madre-Castaic Connection and in Ventura County's habitat connectivity overlay zone, constrains one of the last remaining natural corridors between the Santa Monica Mountains and the Sierra Madre Mountains. Increased habitat loss, degradation, and fragmentation will lead to significant impacts to mountain lions as well as many other special-status animals and plants that occur in and adjacent to the Project area. The DEIR fails to adequately assess and mitigate impacts to the area's natural resources.

I. Background on the Environmental Organizations

The Center for Biological Diversity ("Center") is a non-profit, public interest environmental organization dedicated to the protection of native species and their habitats through science, policy, and environmental law. The Center has over 1.7 million members and online activists throughout California and the United States. The Center and its members have worked for many years to protect imperiled plants and wildlife, open space, air and water quality, and overall quality of life for people in Ventura County and Southern California.

The California Native Plant Society ("CNPS") is a non-profit environmental organization with over 10,000 members. CNPS' mission is to protect California's native plant heritage and preserve it for future generations through application of science, research, education, and conservation. CNPS works closely with decision-makers, scientists, and local planners to advocate for well-informed and environmentally friendly policies, regulations, and land management practices.

The California Wildlife Foundation ("CWF") is committed to conserving, restoring, and maintaining habitats and corridor linkages throughout the state in order to ensure the biological diversity of species over time. The California Oaks program of California Wildlife Foundation works to conserve oak ecosystems because of their critical role in sequestering carbon, maintaining healthy watersheds, providing habitat, and sustaining cultural values.

II. The DEIR fails to adequately assess and mitigate impacts to mountain lions to less than significant.

A. Inadequate assessment of impacts to mountain lions

The DEIR falsely and inappropriately concludes that mountain lions (*Puma concolor*), a candidate species under the California Endangered Species Act, have a "moderate" potential to occur within or adjacent to the Project site (DEIR at 3.5-18), when in fact they should be categorized as "Present." The Project site is located in high quality mountain lion habitat within one of the last remaining corridors between the Santa Monica Mountains and the Sierra Madre (Penrod et al. 2006) and there is a wealth of data from the National Park Service (NPS) that demonstrates their presence in and adjacent to the Project area. Maps of the NPS data are publicly available at www.flickr.com, and they clearly show that the area is used by mountain lions. Figure 1 shows NPS telemetry locations for lions P-1 through P-22 from 2002 to 2013 (from GPS collars on individuals), and numerous individuals were documented in and adjacent to the Project site. Similarly, Figure 2 shows the home ranges of several mountain lions encompassing the Project area. Figure 3 shows predation sites where collared mountain lions fed on mule deer, some of which are located in and adjacent to the Project area (Benson et al. 2016b). This clearly shows that the DEIR fails to adequately assess the Project's impacts to mountain lions, as they provide a false representation of the likelihood of mountain lions being present, using, and moving through habitat in and near the Project area. Mountain lions should be considered "Present" in and adjacent to the Project site.

In failing to adequately determine the presence of mountain lions in and near the Project site, the DEIR fails to adequately assess impacts to mountain lions. The Project would have insurmountable impacts on struggling local mountain lions. Local mountain lions are at risk of extinction as their genetic health deteriorates due to inbreeding caused by roads and development slicing through their habitat and isolating populations (Ernest et al. 2014; Riley et al. 2014; Vickers et al. 2015; Gustafson et al. 2018; Benson et al. 2019). Low genetic diversity combined with high human-caused mortalities (*e.g.*, from car strikes, depredation kills, rodenticide poisoning, and poaching) threaten the long-term survival of several populations. Mountain lions in the Santa Monica Mountains are especially imperiled, as abnormalities linked with inbreeding depression was recently observed.[1] Should inbreeding depression occur, scientists predict there is a >99% chance of extinction, which could occur within as little as 15 years (Benson et al. 2019). Therefore, high quality habitat that is being used by mountain lions within one of the last remaining natural corridors between the Santa Monica Mountains and the Sierra Madre is critical for the population's long-term survival. The DEIR fails to adequately assess the severely low genetic diversity of the Santa Monica Mountains puma population that is driven by isolation and the significant impacts the Project will have on this population by eliminating portions of the corridor and degrading connectivity in the area.

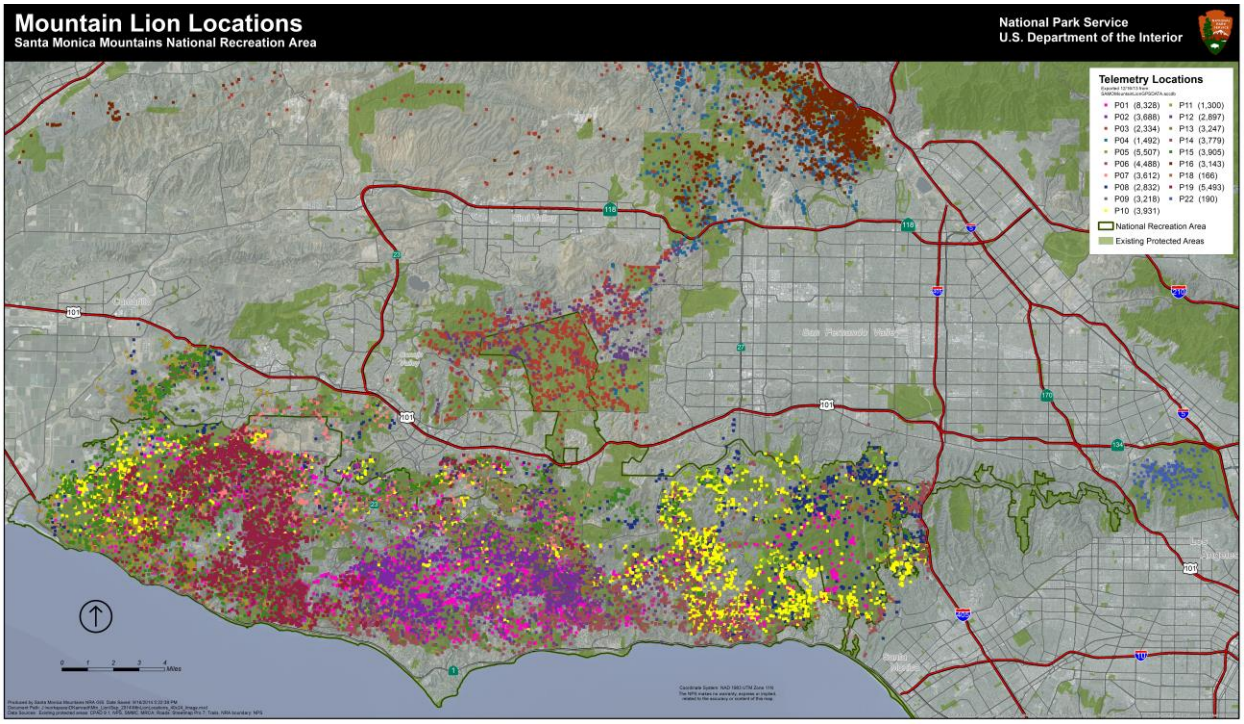


Figure 1: Mountain Lion GPS Data Points of lions P-1 through P-22 from 2002 through 2013 (NPS 2015).

[1] News Release: NPS Biologists Report First Abnormalities Linked to Inbreeding Depression in Mountain Lions P-81, a Subadult Male, Has Reproductive and Tail Defects. Available at: https://www.nps.gov/samo/learn/news/first-abnormalities-linked-to-inbreeding-depression.htm

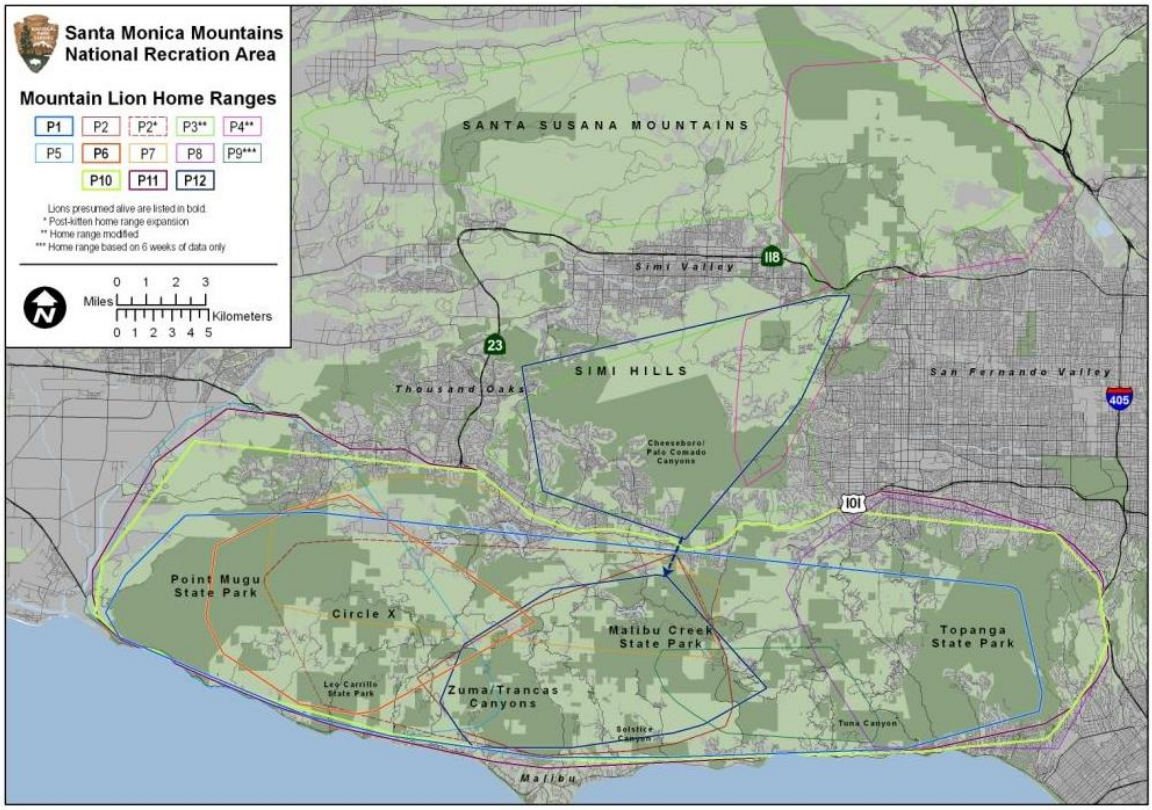


Figure 2: Home Range Map for Lions P-1 through P-12 (NPS 2013).

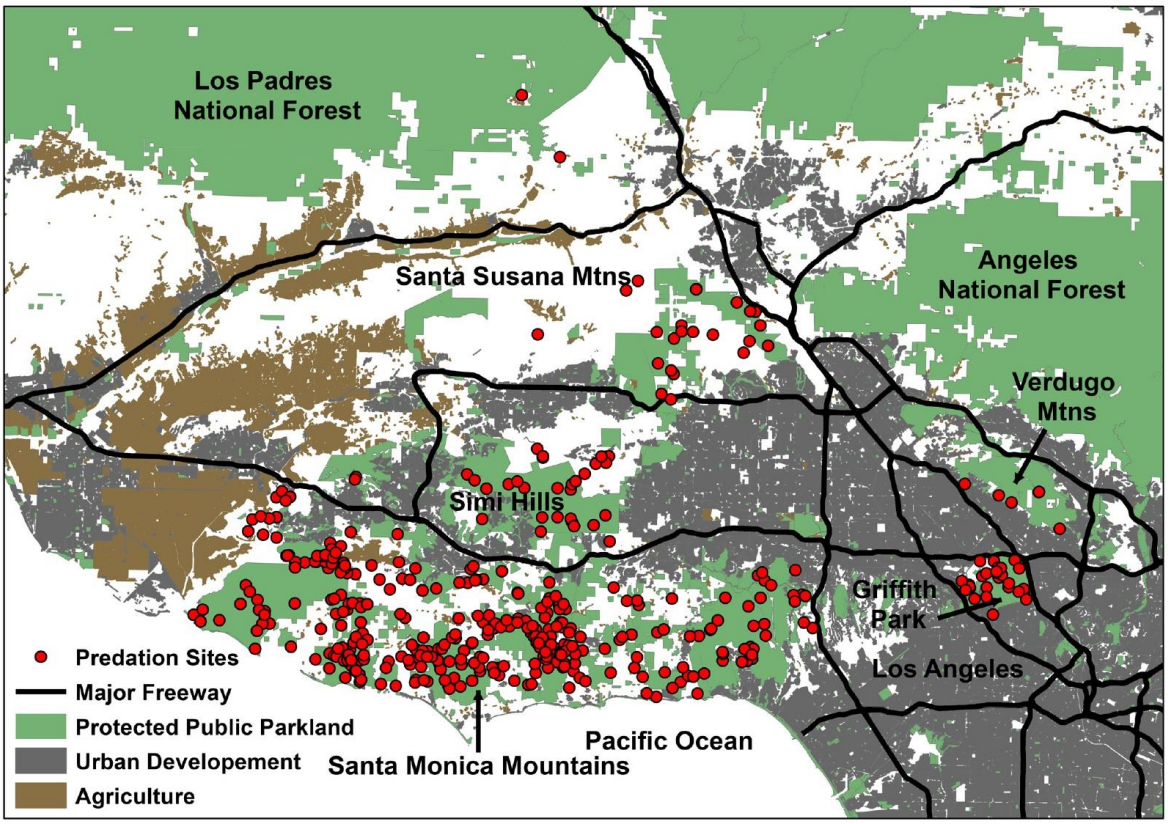


Figure 3: Predation sites where mountain lions fed on mule deer (Benson et al. 2016b).

The DEIR fails to adequately disclose how the Project could impact mountain lion movement, behavior, and long-term survival and therefore fails to adequately assess the impacts to mountain lions in and around the Project area. There are many scientific studies that provide insights on the profound impacts human activities and infrastructure have on mountain lion survival, and they emphasize the need to adequately assess and mitigate impacts to these California Endangered Species Act (CESA) candidate species in the Project area. There is cumulating scientific evidence that mountain lions require a habitat mosaic that provides sufficient room to roam away from human-disturbed areas and connected to expansive, intact, heterogeneous habitats (Beier et al. 1995; Dickson and Beier 2002; Dickson et al. 2005; Kertson et al. 2011; Zeller et al. 2017). Expanding the mining operation in the Conejo Mountain and Mountclef Ridge connection, an area identified as highly suitable mountain lion habitat and one of the last remaining natural corridors between the Santa Monica Mountains and the Sierra Madre Range (Penrod et al. 2006), will limit the lions' ability to move through the area, further isolate pumas in the Santa Monica Mountains, and drive them closer to extinction.

The DEIR only discusses blasting as a potential direct impact of the Project on mountain lions and fails to adequately assess the significance of other impacts on mountain lions due to the proposed Project. Expanding the area and operation of the mine would increase human activities in important mountain lion habitat, thereby increasing the chances of other direct impacts from things like vehicle strikes, rodenticide poisoning, increased fire ignitions, disease spread, poaching, etc. In addition, cutting the width of the existing natural corridor from 1,500 ft to 800 ft would significantly constrict mountain lion movement and connectivity, which would directly impact the mountain lion population in the Santa Monica Mountains by impeding gene flow. Edge effects of development and human activities could deter mountain lions from using a narrower corridor. The combination of low genetic diversity and added human-caused mortalities from the Project will drive the Santa Monica Mountains puma population closer to extinction.

The DEIR fails to consider the best available science regarding the Project's potential impacts to mountain lions. In a study conducted from 2002 to 2019 in the Santa Monica Mountains, Benson et al. (2020a) found high human-caused mortality rates in puma adults and high intraspecific mortalities among subadults. Most known causes of death among adults and subadults (14/20) were directly human-caused: vehicle strikes, rodenticide poisoning, poaching, and wildfire. The remaining six known causes of deaths were intraspecific killing (Benson et al. 2020a). And while intraspecific killings have been documented to naturally occur in mountain lion populations, they were likely exacerbated in the Santa Monica Mountains with the presence of significant movement barriers that prevent subadults from being able to adequately disperse, which likely led to increased conflicts with territorial males (Riley et al. 2014; Benson et al. 2020a). The Santa Monica Mountains puma population is relatively small, extremely isolated, and geographically limited. Demographic and environmental stochasticity and high mortality rates increase the risk of local extinction, particularly when combined with small population size, low density, female-biased sex ratios, and skewed male reproductive success (Ernest et al. 2014; Riley et al. 2014; Vickers et al. 2015; Benson et al. 2016a; Gustafson et al. 2018; Benson et al. 2019). Increased movement barriers and human-caused mortalities of adult males could lead to occasional male extinctions, which have been documented in the Santa Ana Mountains puma population (Beier and Barrett 1993). Lack of breeding males would disrupt reproduction and

could severely limit the short- and long-term viability of a population (Beier 1993; Benson et al. 2016; Benson et al. 2019; Benson et al. 2020a). This highlights the need to reduce human-caused mortalities, in part, by improving connectivity and stopping the use of anticoagulant rodenticides. The proposed Project would increase movement barriers of an already extremely isolated mountain lion population.

Numerous studies highlight the impacts of human activities on mountain lions. For example, Shilling et al. (2019) reported 299 observed roadkill mountain lions throughout the state from 2015 to 2018, but these deaths are likely underreported. CDFW biologist Justin Dellinger estimates there could be 200 puma deaths on roads every year (Price 2020). And a recent University of California (UC) Davis special report identified a 58% reduction in mountain lion road mortalities after a 71% decrease in road use due to COVID-19 pandemic "stay-at-home" orders (Nguyen et al. 2020). This report highlights how roads and traffic are deadly barriers to puma movement and gene flow. Therefore, vehicles traveling on roads used for the operation of the mine pose a threat to mountain lions in the area.

Human activities alter these large carnivores' behavior in ways that likely further impede important movement and gene flow that is important for their long-term survival. For example, Smith et al. (2017) found that mountain lions are so fearful of humans and noise generated by humans that they will abandon the carcass of a deer and forgo the feeding opportunity just to avoid humans.[2] The study concluded that even "non-consumptive forms of human disturbance may alter the ecological role of large carnivores by affecting the link between these top predators and their prey" (Smith et al. 2017). In addition, mountain lions have been found to respond fearfully upon hearing human vocalizations, avoiding the area and moving more cautiously when hearing humans (Smith et al. 2017; Suraci et al. 2019).

Other studies have demonstrated that mountain lion behavior is impacted when exposed to other evidence of human presence, such as noise, lighting, or vehicles/traffic (Wilmers et al. 2013; Smith et al. 2015; Wang et al. 2017). In addition, preliminary results from study by researchers at UC Davis and University of Southern California, as well as those by other researchers, suggest that the light, noise, and other aspects of roads can have negative impacts on wildlife numbers and diversity near the highways (Shilling 2020; Vickers 2020). Thus, roads, traffic, development, and other human activities have negative impacts on puma survival and behavior, which can reduce the genetic health of populations and ultimately diminish their chances of long-term survival.

Yovovich et al. (2020) documented the impacts of human activities on mountain lion communication and reproductive behaviors important for their survival. Males use scrapes to delineate territories as well as attract potential mates (Allen et al. 2015; Allen et al. 2016), and the males in the study preferred to use relatively flat areas away from human influence as scrape habitat (Yovovich et al. 2020). Similarly, when nursing females (with kittens less than 8 weeks old) shrank their home ranges to an average of 9 km^2 while their young were most vulnerable, they also selected undeveloped lands away from human disturbance, opting for habitat with

[2] *See also* Sean Greene, "How a fear of humans affects the lives of California's mountain lions," *Los Angeles Times* (June 27, 2017), available at https://www.latimes.com/science/sciencenow/la-sci-sn-pumas-human-noise-20170627-story.html.

protective cover and sufficient water and prey availability (Yovovich et al. 2020). The loss of adequate undisturbed communication and nursery habitat could disrupt important communication and reproductive behaviors that facilitate social structure and overall survival.

The DEIR fails to adequately assess the impacts of increased wildfire ignitions due to the Project on mountain lions. Most wildfires in California are caused by human ignitions, like power lines, arson, improperly disposed cigarette butts, debris burning, fireworks, campfires, or sparks from cars or equipment (Keeley and Syphard 2018). In fact, almost all (95-97%) contemporary wildfires in California are caused by humans and human infrastructure (Syphard et al. 2007; Balch et al. 2017; Keeley and Syphard 2018; Radeloff et al. 2018; Syphard and Keeley 2019; Keeley and Syphard 2020; Syphard and Keeley 2020). In the Santa Monica Mountains, fires from 1978-2017 were often ignited near roads and other human infrastructure (Figure 4).

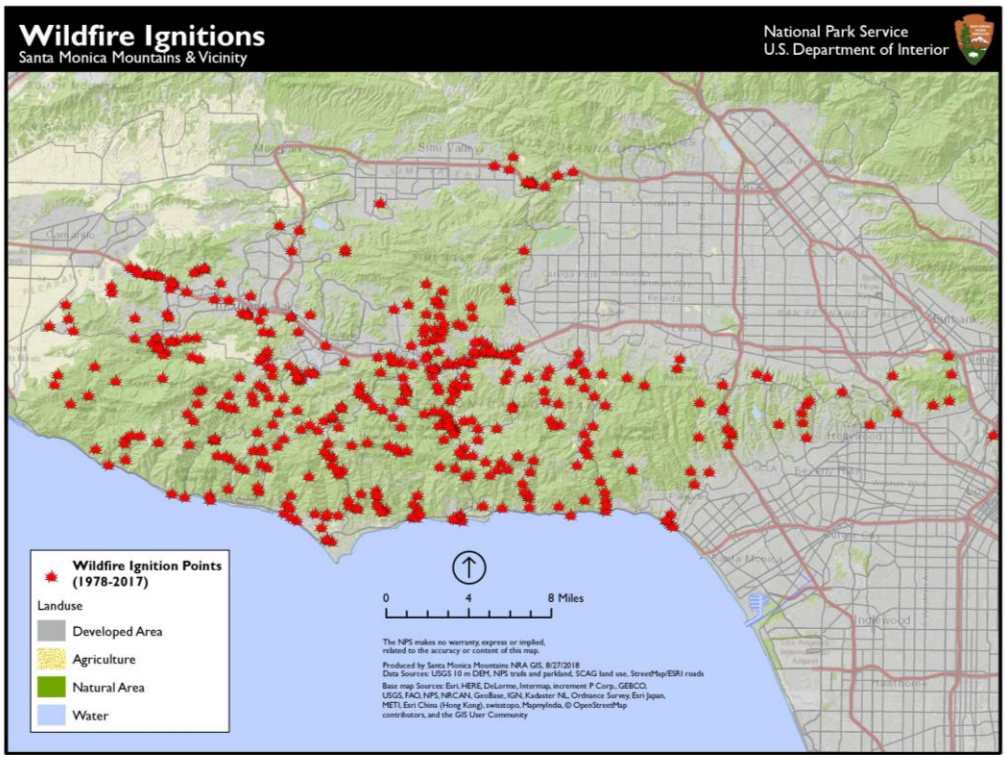


Figure 4: Wildfire Ignition Points in the Santa Monica Mountains and Vicinity (NPS 2018).

The Project would place more people and infrastructure and more human activity in high fire-prone areas, which would increase wildfire risk and threaten humans and nearby neighborhoods as well as mountain lions. Although mountain lions are highly mobile and generally able to move away from wildfires, in severe weather conditions wind-driven fires can spread quickly. The 2018 Hill Fire in Ventura County, which occurred just north of the Project site, spread three miles in 15 minutes (County of Los Angeles 2019). If mountain lion movement is constrained by roads and development and the lions are unable to access escape routes, then their chances of surviving wildfires are greatly reduced. Two NPS-collared mountain lions, P-64 and P-74, were killed in the 2018 Woolsey Fire. Such stochastic events (*e.g.*, wildfires, flooding) could destabilize small mountain lion populations and make them more vulnerable to extinction

(Benson et al. 2016a; Benson et al. 2019). The DEIR fails to consider and assess impacts of increased wildfire ignitions to mountain lions.

Mountain lions are a key indicator species of wildlife connectivity and healthy ecosystems. As the last remaining wide-ranging large carnivore in the region, the ability to move through large swaths of interconnected habitat is vital for genetic connectivity and their long-term survival. Local extinction of mountain lions in the region could have severe ecological consequences. Many scavengers, including many raptors, foxes, and numerous insects, would lose a reliable food source (Ruth and Elbroch 2014; Elbroch et al. 2017; Barry et al. 2019). Fish, birds, amphibians, reptiles, rare native plants, and butterflies could potentially diminish if this apex predator were lost (Ripple and Beschta 2006; Ripple and Beschta 2008; Ripple et al. 2014). Loss of this ecosystem engineer and important predator-prey dynamics could have cascading effects on other plant and animal species, potentially leading to a decrease in biodiversity and diminished overall ecosystem function (Ripple et al. 2014; Elbroch et al. 2017; Barry et al. 2019; Benson et al. 2020b).

B. Mitigation Measures do not minimize impacts to mountain lions to less than significant

The DEIR fails to mitigate impacts to mountain lions to less than significant. MM BIO-3(j)(2) states that a biologist will conduct mountain lion surveys prior to vegetation clearing or ground disturbance, including drilling and blasting, and "provide direction for such activities as deemed appropriate…to avoid take or other adverse effects to mountain lions" (DEIR at 3.5-48). This mitigation measure is vague and lacks any explanation or scientific-based methods of how it would actually minimize impacts to mountain lions. What would the surveys entail? How large would the survey area be? At what distance from any blasting would a mountain lion be considered unimpacted? When would the surveys be conducted in relation to the ground disturbance – that morning, a few days before, that year? How will they determine if there is a den with kittens in or near the ground disturbance zone? What will be the course of action if there is a den with kittens in or near the ground disturbance zone? If a predation site is found and it is possible the lion is nearby and still visiting the site, how will they ensure that the animal is not in the ground disturbance zone when blasting occurs? If the blast zone is within the home range of a mountain lion, what kind of "direction" would the biologist provide to make the blasting "appropriate"? The mitigation measure provided has insufficient detail with no evidence of it actually mitigating impacts from ground disturbance to mountain lions. The DEIR fails to provide the public and decisionmakers sufficient information needed to understand if/how impacts will be mitigated. As currently written, MM BIO-3(j)(2) does not mitigate impacts to mountain lions to less than significant.

Mountain lions are nocturnal, elusive creatures that are difficult to find in the wild. They are so stealthy and secretive that lion sightings are rare despite the high numbers of outdoor recreationists in mountain lion habitat. They occur in low densities and have large home ranges. In California, resident adult and total population densities have been found to be 1.1 and 3.6 per 100 km^2, respectively (Pierce and Bleich 2003). Riley et al. (2014) found that mountain lions in the Santa Monica Mountains have home ranges of 100-200 km^2 for females and 300-500 km^2 for males. If one does not see a mountain lion or evidence of a mountain lion in the area, a lion could

still be there using the site in some way. For example, a wildlife camera study conducted in the Northlake project area found no trace of mountain lions on the site, yet in November 2020 a mountain lion was recorded on a wildlife camera using a culvert adjacent to the site (Exhibit 1). Kitten dens are very well hidden in rocky outcrops or dense vegetation. Experts often find them because the mother has a GPS collar, and her behavior (*e.g.*, having a smaller home range, staying in one location frequently) can signal she has had kittens. Such dens could be easily missed during surveys, which could result in kittens being killed or orphaned if the mother is deterred by the blasting and abandons them. Simply conducting mountain lion surveys (with undisclosed protocols) is insufficient and inadequate mitigation.

More appropriate mitigation would be to work closely with mountain lion experts at NPS, who have been studying mountain lions in the area for almost 20 years, to determine if collared or tagged mountain lions are in the vicinity or using the area when vegetation clearing and ground disturbance is planned. Although they have not collared all mountain lions in the area, they have the most on-the-ground data, knowledge, and experience regarding this mountain lion population, they have a critical understanding of both collared and uncollared lions in the area, and they would be able to provide the best science-based guidance to minimize impacts to mountain lions.

See Section III(B) for comments regarding MM BIO-6.

III. The DEIR fails to adequately assess and mitigate impacts to wildlife movement and habitat connectivity to less than significant.

A. Inadequate assessment of impacts to wildlife movement and habitat connectivity

Roads and development create barriers that lead to habitat loss and fragmentation, which harms native wildlife, plants, and people. As barriers to wildlife movement, poorly-planned development and roads can affect an animal's behavior, movement patterns, reproductive success, and physiological state, which can lead to significant impacts on individual wildlife, populations, communities, landscapes, and ecosystem function (Mitsch and Wilson 1996; Trombulak and Frissell 2000; van der Ree et al. 2011; Haddad et al. 2015; Marsh and Jaeger 2015; Ceia-Hasse et al. 2018). For example, habitat fragmentation from roads and development has been shown to cause mortalities and harmful genetic isolation in mountain lions in southern California (Ernest et al. 2014; Riley et al. 2014; Vickers et al. 2015), increase local extinction risk in amphibians and reptiles (Cushman 2006; Brehme et al. 2018), cause high levels of avoidance behavior and mortality in birds and insects (Benítez-López et al. 2010; Loss et al. 2014; Kantola et al. 2019), and alter pollinator behavior and degrade habitats (Trombulak and Frissell 2000; Goverde et al. 2002; Aguilar et al. 2008). Habitat fragmentation also severely impacts plant communities. An 18-year study found that reconnected landscapes had nearly 14% more plant species compared to fragmented habitats, and that number is likely to continue to rise as time passes (Damschen et al. 2019). The authors conclude that efforts to preserve and enhance connectivity will pay off over the long-term (Damschen et al. 2019). In addition, connectivity between high quality habitat areas in heterogeneous landscapes is important to allow for range shifts and species migrations as climate changes (Heller and Zavaleta 2009; Cushman et al.

2013; Krosby et al. 2018). Loss of wildlife connectivity decreases biodiversity and degrades ecosystems.

The DEIR fails to adequately describe the Project area's importance in wildlife connectivity. Although the DEIR acknowledges that the Project site is located in the Santa Monica-Sierra Madre Connection and within a Ventura County habitat connectivity and wildlife corridor overlay zone, the DEIR states that the Project is "not expected to significantly affect wildlife movement through the area compared to baseline conditions" (DEIR at 3.5-53). This is pure conjecture not based on any scientific evidence or understanding.

The proposed development will increase human activities in open space and further fragment the landscape, which could affect the diverse animals and plants in the area. For instance, field observations and controlled laboratory experiments have shown that traffic noise can significantly degrade habitat value for migrating songbirds (Ware et al. 2015). Subjects exposed to 55 and 61 dBA (simulated traffic noise) exhibited decreased feeding behavior and duration, as well as increased vigilance behavior (Ware et al. 2015). Such behavioral shifts increase the risk of starvation, thus decreasing survival rates. Another study also highlighted the detrimental impacts of siting development near areas protected for wildlife. The study noted that "Anthropogenic noise 3 and 10 dB above natural sound levels . . . has documented effects on wildlife species richness, abundance, reproductive success, behavior, and physiology" (Buxton et al. 2017). The study further noted that "there is evidence of impacts across a wide range of species [] regardless of hearing sensitivity, including direct effects on invertebrates that lack ears and indirect effects on plants and entire ecological communities (*e.g.*, reduced seedling recruitment due to altered behavior of seed distributors)" (Buxton et al. 2017). Moreover, human transportation networks and development resulted in high noise exceedances in protected areas (Buxton et al. 2017). Blasting and other ground disturbance as well as mine operation could impact species and species movement in the area. The DEIR fails to adequately assess such impacts.

In addition, preliminary results from studies underway by researchers at UC Davis and University of Southern California, as well as those by other researchers, suggest that the light, noise, and other aspects of roads can have negative impacts on wildlife numbers and diversity near the roadways (Shilling 2020; Vickers 2020). The researchers found a significant difference between species richness and species type, with lower richness and fewer species at along roadsides compared to background areas 1 km away from the roads (Shilling 2020). They also found that as traffic noises surpassed 60 dBC, the number of visits by small to large mammals decreased, and most of the species in their study avoid traffic noise (Shilling 2020). It is clear that different species have variable sensitivities to noise and light associated with development and transportation infrastructure; this can lead to changes in species distributions and population health and survival, which can have ecosystem-level impacts (*e.g.*, Suraci et al. 2019). Again, the DEIR fails to adequately assess and mitigate impacts of edge effects on functional connectivity.

The Project would result in shrinking the width of the corridor from 1,500 feet to 800 feet, which would result in habitat loss and degradation due to edge effects. Negative edge effects from human activity, traffic, lighting, noise, pollutants, invasive weeds, and increased fire frequency have been found to be biologically significant up to 300 meters (~1000 feet) away

from development in terrestrial systems (Environmental Law Institute 2003). By reducing the corridor width to 800 feet, the Project would diminish the functionality of one of the last remaining natural corridors between the Santa Monica Mountains and the Sierra Madre.

The Project's placement will subject the limited surrounding open space to development edge effects and will likely impact key, wide-ranging predators, such as mountain lions and bobcats (Crooks 2002; Riley et al. 2006; Delaney et al. 2010; Lee et al. 2012; Vickers et al. 2015), as well as smaller species with poor dispersal abilities, such as song birds, small mammals, and herpetofauna (Cushman 2006; Benítez-López et al. 2010; Kociolek et al. 2011). Limiting movement and dispersal can affect species' ability to find food, shelter, mates, and refugia after disturbances like fires or floods. Individuals can die off, populations can become isolated, sensitive species can become locally extinct, and important ecological processes like plant pollination and nutrient cycling can be lost. In addition, linkages and corridors between major core habitat areas are important to allow for range shifts and species migrations as climate changes. Therefore, it is imperative that thorough analyses are conducted to determine if Project activities will affect species movement. The DEIR fails to provide sufficient details and analyses to warrant their conclusion that Project impacts on habitat connectivity and wildlife movement would be mitigated to less than significant.

The DEIR fails to consider the need for corridor redundancy (*i.e*. the availability of alternative pathways for movement), or in this case, a wider corridor. Wider corridors provide a level of corridor redundancy in that they help to ensure that appropriate habitat is available for numerous species. Corridor redundancy is important because it allows for improved functional connectivity and resilience. Compared to a single or narrow pathway, multiple or wider connections between habitat patches increase the probability of movement across landscapes by a wider variety of species, and they provide more habitat for low-mobility species while still allowing for their dispersal (Mcrae et al., 2012; Olson & Burnett, 2008; Pinto & Keitt, 2008). In addition, corridor redundancy provides resilience to uncertainty, impacts of climate change, and extreme events, like flooding or wildfires, by providing alternate escape routes or refugia for animals seeking safety (Cushman et al., 2013; Mcrae et al., 2008; Mcrae et al., 2012; Olson & Burnett, 2008; Pinto & Keitt, 2008).

Corridor redundancy is critical when considering the impacts of climate change on wildlife movement and habitat connectivity. Climate change is increasing stress on species and ecosystems, causing changes in distribution, phenology, physiology, vital rates, genetics, ecosystem structure and processes, and increasing species extinction risk (Warren et al. 2011). A 2016 analysis found that climate-related local extinctions are already widespread and have occurred in hundreds of species, including almost half of the 976 species surveyed (Wiens 2016). A separate study estimated that nearly half of terrestrial non-flying threatened mammals and nearly one-quarter of threatened birds may have already been negatively impacted by climate change in at least part of their distribution (Pacifici et al. 2017). A 2016 meta-analysis reported that climate change is already impacting 82 percent of key ecological processes that form the foundation of healthy ecosystems and on which humans depend for basic needs (Scheffers et al. 2016). Genes are changing, species' physiology and physical features such as body size are changing, species are moving to try to keep pace with suitable climate space, species are shifting their timing of breeding and migration, and entire ecosystems are under stress (Parmesan and

Yohe 2003; Root et al. 2003; Parmesan 2006; Chen et al. 2011; Maclean and Wilson 2011; Warren et al. 2011; Cahill et al. 2012). Therefore, functional habitat connectivity is critical for many animals and plants to adapt to climate change. Again, the DEIR fails to use the best available science and adequately assess and mitigate impacts to wildlife movement and functional connectivity.

B. Mitigation Measures do not minimize impacts to wildlife movement and habitat connectivity to less than significant

MM BIO-6 is insufficient to mitigate impacts to habitat connectivity and wildlife movement to less than significant. Although the DEIR states the Project will comply with County zoning code requirements associated with development and activities in wildlife corridor areas that modifies lighting (MM BIO-6(a)) and fencing (MM BIO-6(b)) to minimize impacts to wildlife movement, such measures do not negate the impacts of the Project extending 700 feet into one of the last remaining corridors between the Santa Monica Mountains and Sierra Madre. Even with reduced lighting and wildlife-friendly fencing, increased human activities extending into an already tenuous corridor will also increase noise, vehicles/traffic, and the chances of fire ignitions, for which the DEIR does not provide sufficient mitigation.

The Project will degrade the existing corridor, inhibit wildlife movement, and directly and indirectly impact special-status species like mountain lions. As mentioned previously, local mountain lions are facing an extinction vortex largely driven by lack of connectivity and human-caused mortalities. Encroaching on this corridor will further isolate the Santa Monica Mountains puma population and drive them closer to local extinction. The DEIR fails to adequately mitigate impacts to wildlife movement and habitat connectivity to less than significant.

MM BIO-6(c) mentions the establishment and maintenance of a wildlife passage where development is prohibited, but the DEIR improperly defers mitigation by not providing acreage or a map of the wildlife passage areas being proposed. As written, it appears the wildlife passage areas they are referring to are simply outside the Project boundary. The DEIR refers to "restoration of native plants as a component of reclamation" as the only permitted activity within the wildlife passage areas, but there is no native plant restoration plan provided for the public or decisionmakers to review. This amounts to improperly deferred mitigation. Mitigation measures for the Project must be considered in the DEIR so that the proper environmental analysis can take place. (See *Sundstrom v. Co. of Mendocino* (1988) 202 Cal.App.3d 296.). The amount and location of the land to be set aside for wildlife passage and a restoration plan need to be included in the DEIR to enable the public and decisionmakers to evaluate the effectiveness of the mitigation measures to minimize impacts to wildlife movement and habitat connectivity. Such wildlife passage areas should also be conserved, restored, and adaptively managed with measurable success criteria in perpetuity.

IV. The DEIR fails to adequately assess and mitigate impacts to oaks and oak woodlands to less than significant.

A. Impacts to all oaks of 5 inches or greater in diameter must be assessed and mitigated.

California Public Resources Code §21083.4 (2004, Senate Bill 1334) requires that when a county is determining the applicability of the 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 for the removal of oaks that are not commercial species, which are five (5) inches or more in diameter as measured at a point 4.5 feet (breast height) above natural grade level. The DEIR summarizes California Public Resources Code §21083.4, but it is not clear that that the analysis includes all oaks of 5-inches or greater that would be impacted by the project, or if the DEIR instead simply assesses project impacts to oak trees that are encompassed by Ventura County's tree protections.

California Fish and Game Code §1361, enacted with the passage of the Oak Woodland Conservation Act (2001, Assembly Bill 242), defines oak woodlands: "*Oak woodlands* means an oak stand with a greater than 10 percent canopy cover or that may have historically supported greater than 10 percent canopy cover." The DEIR and its appendices designate a section of the property as Coast Live Oak Woodland and include photographs that suggest the presence of a greater number of oaks than the 13 described in the DEIR.

B. Impacts on oaks proximate to the construction footprint must be assessed and mitigated.

The Protected Trees Map presented on page 27 of Appendix C-1 identifies a number of protected trees within the project impact area (T1 – T6) and others that are proximate to the impact area (T7-T16). Given the scope and scale of the proposed project, what basis is used to determine that proximate trees, especially trees T8-T10, are not subject to project impacts? Further, as noted in IV(A), above, other oak trees of five-inches in diameter or greater that subject to impacts from the construction or operation of the proposed project must be included in the DEIR's analysis and mitigation sections.

Ventura County's *Arborist Verification of Tree Protection Measures* provides guidance on steps to assess project impacts on protected trees. Specifically it requires:

> …The area within the dripline of protected trees, called the tree protection zone (TPZ), be protected from any encroachment (or intrusion) that could cause soil compaction, injury to lower limbs, grade changes, contamination of soil, or damage to the root system… If development or other disturbance will occur near a protected tree, certain measures, such as temporary protective fencing around the TPZ, must be in place first to protect the tree. Arborist Verifications of Tree Protection Measurers provide the Planning Division with confirmation that such required protective measures are in place. The final approved tree protection measures shall be shown on the final construction plans for the project. Verification that these protection measures were in place throughout the time of

construction may be requested by the Planning Division. Written confirmation or photos may be requested.

Ventura County defines the tree protection zone (See Performance Standards for Ministerial Tree Permits) as: "The TPZ extends out from the trunk to 5 feet beyond the dripline, **or** a minimum of 15 feet from the trunk—whichever is greater." California Wildlife Foundation/California Oaks finds the TPZ area to be insufficiently protective and instead recommends no disturbance within the root protection zone for oaks. The root protection zone is the area that is half as large again as the area from the dripline—the area directly below the outer canopy—to the trunk. That area is the most critical to oaks. Many problems are initiated by disturbance within this zone. Additional information can be found at: http://californiaoaks.org/wp-content/uploads/2016/05/CareOfCAsNativeOaks.pdf.

Further, the potential mitigation areas map presented on page 49 of Appendix C-1 shows mitigation zones that are also proximate to the construction footprint. Again, it is unclear that these areas will not be subject to impacts from the construction or operation of the project. Nor is it clear that these areas have been assessed as viable oak habitat, including whether there is a sufficiency of surface and groundwater to sustain oaks after the seven-year establishment period.

C. Habitat connectivity impacts of oak removals must be fully assessed in the DEIR.

The DEIR does not provide information on how habitat connectivity would be maintained during the period after oak habitat is destroyed and before restored oak habitat near the project site again provides ecosystem services. Ventura County's Oak Woodland Management Plan articulates the importance of mitigation that addresses habitat value (p. 24-25):

> ….[R]eplacing a century-old tree with 1, 3, or 10 one-year-old seedlings does not adequately replace the lost habitat value of large trees. It has become evident that simply focusing on mitigation planting based on a tree to seedling ratio is not a sufficient strategy to ensure the viability of oak woodlands...there is broad recognition that it is critical to conserve the inherent values that exist in mature oak forests wherever possible.[3]
>
> Additional studies have noted that many important habitat elements, such as understory, cavities, acorns, and snags, will not be mitigated through a tree planting strategy alone.

The county's oak woodland management plan provides further guidance on the analysis necessary to fully assess proposed oak ecosystem impacts (p. 24):

> …A wide range of tree densities and site characteristics can sustain functional woodlands. In addition, different oak species have different natural canopy cover densities. For example, both coastal oak and valley oak woodlands can vary from open savannahs to closed canopy forests. Density variation can also promote greater biodiversity of animal species, as some species prefer closed canopy

[3] A Planners Guide for Oak Woodlands, Second Edition, University of California, Agriculture and Natural Resources, 2005.

> woodlands, while others use openings within the woodlands or edges between woodlands and other habitat types.
>
> ...Given that oak size ("WHR size") data available for Ventura County indicates potential oak regeneration problems, protecting seedlings and sapling trees is crucial for maintaining future oak woodland viability. Therefore, the County should include an evaluation of oak seedlings/saplings during an Initial Study Assessment for a given project.

Given that Section 3.5.1.4 of the DEIR, ***Habitat Connectivity and Wildlife Corridors***, notes "the entirety of the existing and proposed CUP areas are designated as a habitat connectivity and wildlife corridor area" Ventura County should consider the no project alternative.

D. The DEIR's oak mitigation plan is inadequate.

A number of Ventura County and California Public Resources Code §21083.4 oak mitigation requirements are missing from the DEIR:

1. The DEIR lacks language about restrictive covenants from pages 8 and 9 of *Content Requirements for Tree Protection Plans,* which is reproduced in Exhibit 2.
2. The DEIR's formula for mitigation plantings (from page 44 of Appendix C-1 MM4: Oak Trees) does not incorporate Ventura County's Tree Protection Guidelines specifications for replacement (p.4):
   Section 8107-25.10 of the Ventura County Zoning Ordinance Code (Tree Protection Regulations) states tree replacement shall be on a "Cross-sectional" basis. This basis is defined as the aggregate areas of the cross sections of the replacement trees must be equal to or greater than the cross sectional areas of the altered elements of a tree (e.g., trunks, limbs, or roots)… Use the resulting circumference, divide by pi (3.14) to get the diameter. Divide the diameter by 2 to get the radius (or use the chart on next page). The radius squared (times itself) multiplied by pi is the cross sectional area. (r^2x 3.14 = Area) As long as the aggregate areas of the replacement trees equal or exceed the lost tree elements, any number of trees can be used. Trees below one inch in area cannot be used.
3. Public Resources Code requires a seven-year rather than the two-year establishment period presented in Appendix C-1 MM4: Oak Trees.

E. Greenhouse Gas impacts of vegetation removal must be assessed.

Section 3.4, ***Air Quality and Greenhouse Gases***, of the DEIR does not analyze the greenhouse gas (GHG) impacts of tree or other native vegetation removal, which is in violation of California law. CEQA's sole GHG focus is "the mitigation of greenhouse gas emissions or the effects of greenhouse gas emissions." Net present value of GHG emissions forms the foundation of the state's greenhouse reduction objectives, as well as the California Forest Protocol preservation standards. Every ton of carbon dioxide (CO_2) released into the atmosphere by oak woodland or forest conversion represents a measurable potential adverse environmental effect, which is covered by CEQA. Thus California requires the analysis and mitigation of greenhouse gas emissions associated with proposed oak woodland or forest conversions.

Similarly, the removal and degradation of the Project area's chaparral- and sage scrub-dominated landscapes would also result in high amounts of carbon release. Above-ground biomass of these shrub communities were found to be as high as 3461 g/m^2, with the amount of carbon stored increasing with the age of the stand (Bohlman et al. 2018). In addition, a substantial amount of carbon may be stored belowground in their roots and in the microbial communities and symbiotic fungi that are associated with the roots (Bohlman et al. 2018; Kravchenko et al. 2019; Soudzilovskaia et al. 2019). The removal and degradation of these systems have been found to result in the loss of both above- and below-ground carbon storage (*e.g.*, Austreng 2012). And although these systems are often overlooked in the fight against climate change, they are adapted to hot and dry weather conditions and have been found to be resilient to drought (Luo et al. 2007; Vicente-Serrano et al. 2013), which makes them an untapped opportunity to sequester more carbon as the climate crisis becomes exceedingly urgent. Therefore, the DEIR fails to adequately analyze and mitigate GHG emissions from the removal and degradation of native ecosystems.

V. Impacts to Rare Plants

A. An Incidental Take Permit (ITP) for Conejo Buckwheat Is Required.

Surveys in 2010, 2016, and 2018 documented individuals of Conejo buckwheat (*Eriogonum crocatum*) on the project site. This globally rare species is endemic to Ventura County, is known only from 13 occurrences, and is restricted to volcanic rock substrates in the Conejo Grade area. As a result, any impacts to this species are likely to be significant and must be mitigated fully.

Conejo buckwheat is listed as Rare under California's Native Plant Protection Act. 14 Cal. Code Reg. § 670.2(c)(21)(C). As indicated in scoping comments submitted by the California Department of Fish and Wildlife (CDFW) in 2017 (DEIR Appendix A-2, pg. 52-60), impacts to this species may only take place following the issuance of an Incidental Take Permit (ITP) by CDFW. 14 Cal. Code Reg. § 786.9. An application for such a permit requires the applicant to analyze the impacts of the proposed taking on the species, propose measures to minimize and *fully mitigate* the impacts of the proposed taking, and propose a plan to monitor compliance with the minimization and mitigation measures and the effectiveness of the measures. 14 Cal. Code Reg. § 783.2(a) (emphasis added). The ITP will only be issued if CDFW finds that the applicant will minimize and fully mitigate the impacts of the take authorized under the permit. 14 Cal. Code Reg. § 783.4(a)(2). The DEIR (Vol. 1, 2-22) makes no reference to the need to obtain an ITP for impacts to State Rare species, and the analysis and proposed mitigation plan required for the ITP pursuant to Section 783.2 of the California Code of Regulations has not been provided. This oversight must be corrected and the process of obtaining this necessary permit should be commenced.

B. Negative Survey Results for Federally-Listed Species of Dudleya

Surveys in 2010 located individuals of the federally-listed Conejo dudleya (*Dudleya parva*) and Verity's dudleya (*Dudleya verityi*). Yet, surveys in 2016 and 2018 failed to locate

either of these species, despite the fact that the 2018 surveys were timed correctly, and botanists visited nearby reference sites to ensure that both species were detectable. Regardless of the negative results, the DEIR correctly considers both of these species to be present on the site. (DEIR Volume 1, 3.5-13-14). We concur with this assessment given that plant species, even though not detected in a given year, may be dormant or could exist solely in the soil seedbank. These species of dudleya should be treated as present and mitigated accordingly.

The county should also consider and disclose factors that may have influenced the negative results. Did botanists visit the exact locations where these species were located in 2010, possibly aided by survey maps from prior surveys? If so, had conditions on the site changed between 2010 and 2016/2018, such that the negative survey results are explainable? In short, the EIR should explain the possible reasons for the negative survey results for both Conejo dudleya and Verity's dudleya in 2016 and 2018.

Additionally, since the project has a potential federal nexus due to its impacts to wetlands and the potential for the presence of least bell's vireo, California gnatcatcher, and dudleya in the project area, the project may require Section 7 consultation with the U.S. Fish and Wildlife Service (USFWS) and the subsequent issuance of a Biological Assessment and Biological Opinion. These processes are necessary to ensure that the project does not result in jeopardy for listed species. Has the project applicant initiated consultation with the USFWS?

C. Inadequate Quantification of Impacts to All Rare Species

The DEIR fails to include an accounting of the level of impacts to rare species, and thus fails as an informational document for the public and decision makers. Pub. Resources Code § 21061 states that, "The purpose of an environmental impact report is to provide public agencies and the public in general with detailed information about the effect which a proposed project is likely to have on the environment; to list ways in which the significant effects of such a project might be minimized; and to indicate alternatives to such a project." An EIR that merely states that a species is present or absent on the site does not provide enough information for the public to understand the gravity of impact to those species. EIRs should, at the very least, disclose the acres and/or number of individuals of each species that will be impacted directly or indirectly by the project in order to fulfill their purpose as an informational document. *See Lotus v. Dep't of Transp.*, 223 Cal.App.4th 645, 658 (2014) (an EIR did not comply with CEQA because it failed to evaluate the significance of a project's impact on the root systems of old growth redwood trees, "preclud[ing] both identification of potential environmental consequences arising from the project and also thoughtful analysis of the sufficiency of measures to mitigate those consequences"). Not only is this level of information necessary for the EIR to satisfy its purpose as a public disclosure document, these data are also necessary to assess a project's level of impact.

This information is also crucial to the development of mitigation measures and to inform CEQA findings of significance. Yet, the EIR concludes that impacts to rare plant species is less than significant with mitigation. What data and rationale did the county apply to arrive at this conclusion? At a minimum, the EIR should be revised to include an accounting of the quantitative impacts to each rare species that is present on the site. Lastly, the fact that Conejo

dudleya and Verity's dudleya are listed as present on the site but were not located during surveys in recent years makes it impossible to adequately assess levels of impact to these species and to adopt appropriate mitigation measures.

D. Mitigation Measures for Rare Species Are Inadequate

Mitigation measure BIO-2 refers to the possibility of conferring with CDFW for concurrence on the mitigation plan prior to project approval. Yet, this mitigation measure makes no reference to the need to obtain legally mandated permits for the loss of State Rare species (ITP issued by CDFW), and possibly also federally-listed plant species (Biological Opinion issued by the USFWS). Mitigation Measure BIO-2 requires that all impacts to rare species be mitigated at a ratio of 1:1 at a site where "no future disturbance will occur." The EIR fails to disclose the standard used to conclude that this mitigation ratio is sufficient to adequately mitigate impacts to rare plants to less than significant. The lack of information and specificity in this mitigation measure renders it vague, uninformative, and speculative. *See Berkeley Keep Jets Over the Bay Committee v. Board of Port Commissioners*, 91 Cal.App.4th 1344, 1371 (2001) (failure to support an EIR's conclusory statements with scientific or objective data is a violation of CEQA); *California Clean Energy Committee v. City of Woodland* (2014) 225 Cal.App.4th 173, 205 (an EIR must "disclose the analytic route the agency traveled from evidence to action" (internal quotations omitted)). CEQA requires the lead agency to present mitigation measures that have a reasonable likelihood of adequately compensating for a project's impact. Impacts to Conejo buckwheat, for example, must be fully mitigated in order to meet the requirements for a take permit under Section 783 *et seq.* Yet, the EIR does not contain an analysis supporting the conclusion that a 1:1 mitigation ratio is sufficient to fully mitigate impacts to this species. The lack of information in the EIR renders it impossible for the county or the public to assess if the proposed mitigation is even feasible, not to mention sufficient to fully mitigate impacts. For example, the EIR relies solely on the securing of offsite mitigation lands, when the availability of potential mitigation lands for each impacted species has not been identified. Has the county identified land that is available for the purchase of conservation easements for each of the rare species that have been documented on the project site? The EIR should disclose whether offsite mitigation credits have been secured, and if so, identify the locations.

VI. Impacts to Plant Communities

A. Documentation of Impacts to Sensitive Plant Communities

The County's "Summary of Biological Resource Regulations" states that EIRs must document impacts to plant communities that have been assigned a NatureServe rank of G/S1 thorough G/S3, in order to make "CEQA findings of significance." Remarkably, table ES-1, the "Summary of Project Impacts and Mitigation Measures" does not even address the need to account for impacts to sensitive plant communities. The Initial Study documents at least two plant communities, Red Willow Thicket (G3/S3) and Giant Wild Rye Grasslands (G5/S3), which meet the county's definition of sensitive plant communities. However, in contrast to the sparse analysis of impacts to rare plants, the DEIR Table 3.5-7 quantifies the acreage of impact to plant communities. This table confirms that 1.5 acres of Giant Wild Rye Grasslands (75% of the

acreage on the site) will be eliminated by the project. The loss of these 1.5 acres is a significant impact and the DEIR should contain mitigation measures to address this impact.

B. Lack of analysis and mitigation for impacts to plant communities

While the Initial Study details the distribution and abundance of plant communities on the site, it concludes that "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." (DEIR Appendix C-1, pg. 2). Subsequently, in conflict with the county's own regulations, the EIR fails to make CEQA findings of significance for impacts to sensitive plant communities. Instead, the EIR states that the following impacts to sensitive plant communities 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." (DEIR Vol. 1, 3-5-33). This vague assessment does not provide decision makers or the public with enough information to determine the extent to which these resources will be impacted by the project. Consistent with this omission is the failure to adopt mitigation measures to compensate for the loss of plant communities.

VII. The County Should Require Stronger Air Quality Mitigation Measures.

A. Air Pollution is a Public Health Crisis.

According to a recent Stanford University study, poor air quality cost the U.S. seven hundred and ninety billion dollars in 2014.[4] The study noted that air quality has improved over the last ten years but still cost the U.S. about five percent of the yearly GDP in 2014.[5] The study indicated that air pollution near urban centers has a higher impact because of the proximately to people.[6] Additionally, a recent study found that someone who lives for decades in a county with high levels of fine particulate pollution is 8% more likely to die from COVID-19 than someone who lives in a region with just one unit less of such pollution.[7]

In addition to public health, many plants and trees, including agricultural crops, are injured by air pollutants. This damage ranges from decreases in productivity, a weakened ability to survive drought and pests to direct mortality. (VCAQR) Wildlife is also impacted by air pollution because the plants and trees that comprise their habitats are weakened or killed (yet the DEIR contains no analysis of the impacts of air pollution on crops, native plants, or wildlife). Greenhouse gases, such as the air pollutant carbon dioxide released by fossil fuel combustion, contribute directly to human-induced climate change.[8] In this feedback loop, poor air quality that

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[4] Ellis Robinson, *How Much Does Air Pollution Cost the U.S.?* Stanford Earth (Sept 19, 2019).
[5] *Id.*
[6] *Id.*
[7] Xiao Wu, Rachel C. Nethery, Benjamin M. Sabath, Danielle Braun, Francesca Dominici, *Air pollution and COVID-19 mortality in the United States: Strengths and Limitations of an Ecological Regression Analysis*, *Science advances*, 6(45) (2020) https://doi.org/10.1101/2020.04.05.20054502.
[8] EPA, *Causes of Climate Change*, Webpage https://19january2017snapshot.epa.gov/climate-change-science/causes-climate-change_.html (last update 12/26/2016)

contributed to climate change will, in turn, worsen the impacts of climate change and attendant air pollution problems.[9]

Although there are many different types of air pollution, Ozone, Fine Particulate Matter, and Toxic Air Contaminants are the most significant concern in urban areas, particularly in Southern California. These three air pollutants have been linked to an increased incidence and risk of cancer, congenital disabilities, low birth weights, and premature death, in addition to a variety of cardiac and lung diseases such as asthma, COPD, stroke, and heart attack.[10] Ozone, also commonly referred to as smog, is created by the atmospheric mixing of gases from fossil fuel combustion and other volatile organic compounds and sunlight. Although it is invisible, ozone poses one of the greatest health risks, prompting the EPA to strengthen its National Ambient Air Quality Standard for Ozone in 2015.[11] Fine Particulate Matter is generally found in urban areas due to vehicle exhaust emissions, and these microscopic particles contribute to visible air pollution. These tiny participles are dangerous because they are small enough to escape our body's natural defenses and enter the bloodstream. Fugitive dust is a term used for fine particulate matter that results from disturbance by human activity such as construction and road-building operations. Toxic Air Contaminants are released from vehicle fuels, especially diesel, which accounts for over 50% of the cancer risk from TACs.[12] This is especially relevant for Southern California with its abundance of diesel shipping traffic.[13]

The DEIR analyzes the air pollutants' health impacts and finds that only NOx needs mitigation as required by the Clean Air Act standards. Yet the DEIR states the air quality monitoring sites near the project are at times out of attainment for ozone, while PM 10 and PM 2.5 frequently exceed the Federal 24-hour standard.[14] The DEIR believes that the increased diesel trucks and fugitive dust are not harmful enough to warrant mitigation despite the detrimental effects of these pollutants, as discussed above.[15] Additionally, the majority of pollution from the project comes from diesel fumes from transporting mined materials, and the DEIR citing the California Air Resources Control Board states that seventy percent of the cancer risk the average Californian faces from breathing TACs stems from diesel exhaust particles, which is up from fifty percent in 2016.[16]

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[9] Bay Area Air Quality Management District (BAAQMD), *Planning Healthy Places: a guidebook for addressing local sources of air pollutants in community planning* (2016).

[10] American Lung Association (ALA), *State of the Air 2016;* Laurent, O. et al., *Low birth weight and air pollution in California: which sources and components drive the risk?*, Environment International 92-93:471-477 (2016).

[11] American Lung Association (ALA), *State of the Air 2016.*

[12] Bay Area Air Quality Management District (BAAQMD), *Planning Healthy Places: a guidebook for addressing local sources of air pollutants in community planning* (2016).

[13] Betancourt, S. and Mark Vallianatos, *Storing harm: the health and community impacts of goods movement warehousing and logistics*, THE Impact Project (2012); Bailey, D., et al., *Clean cargo: a guide to reducing diesel air pollution from the freight industry in your community*, NRDC.

[14] DEIR 3.4-5.

[15] DEIR 3.4-24-25.

[16] DEIR 3.4-4.

B. The Air Pollution Mitigation is Inadequate Under CEQA

The California Environmental Quality Act (CEQA) mandates that significant environmental damage be avoided or substantially lessened where feasible.[17] Moreover, although "an EIR need not consider every conceivable alternative to a project . . . it must consider a reasonable range of potentially feasible alternatives that will foster informed decision decision-making and public participation."[18] Additionally, the "key to the selection of the range of alternatives is to identify alternatives that meet most of the project's objectives but have a reduced level of environmental impacts."[19]Accordingly, a rigorous analysis of reasonable alternatives to the project must be provided to comply with this strict mandate.

CEQA requires all feasible mitigation measures, yet the DEIR does not discuss what is feasible. Instead, it discusses what would be minimally required by the Federal and California Clean Air Acts. Ventura County should require a higher standard for the project; Table 3.4-2 shows that the El Rio Monitoring station exceeded CAAQS and NAAQS NOx standard 180 and 100 days, respectively, during 2016 and 2018.[20] Thus the County must, at a minimum, require the DEIR to analyze whether further mitigation could allow the County to meet the minimum air quality standards. As this DEIR stands, the County will continue to exceed NOx emissions because this project is only maintaining the polluted status quo. The DEIR suggests mitigation that will allow NOx to double its current levels as its mitigated response.[21] The standard the DEIR uses requires no more than 25 additional NOx emissions by a project, but since the project currently emits 25 NOx, the NOx will double from this project site by allowing the expansion.[22] CEQA does not just require the bare minimum meeting of state and federal requirements but all feasible mitigation of significant environmental impacts. Here, doubling NOx after the proposed mitigation is still significant. The DEIR should discuss further mitigation to allow knowledgeable participation by decision-makers and the public regarding this project's impacts. This project proposes moving much closer to residential areas, which will increase the health impacts residents' experience.[23] Unless the project can further mitigate its increased air pollution, the County should not expand the project closer to residential areas.

Additionally, ozone and PM10 and PM2.5 are not meeting attainment levels, and this project plans to increase these pollutants with no mitigation efforts. This is especially troubling since the project will expand closer to residential and agricultural zones. Thus residents will be impacted by both increased air pollution and through closer vicinity to these dangerous pollutants. Ozone is a very toxic substance that endangers public health, increases climate change impacts, and can decrease crop yields.[24] By reclassifying agricultural lands to allowing nearby mining activities, the County would go against the general plan requirement to not endanger agricultural lands and hurt nearby farmers.[25]

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[17] Pub. Res. Code § 21002; Guidelines §§ 15002(a)(3), 15021(a)(2), 15126(d).
[18] CEQA Guidelines § 15126.6(a).
[19] *Watsonville Pilots Assn. v. City of Watsonville* (2010) 183 Cal.App.4th 1059, 1089.
[20] DEIR 3.4-17.
[21] DEIR 3.4-24.
[22] DEIR 3.4-25.
[23] DEIR 3.4-23.
[24] DEIR 3.4-26.
[25] *Id.*

Instead of the EIR proposals, this project could decrease air pollution in this area by requiring more innovative renewable requirements. Electric trucks or solar electrical generation on the property would reduce the air pollutants this project emits. Yet, the DEIR did not consider any renewable options; instead, the EIR focuses solely on mitigation through emission reduction technology and reduction of use. As it currently stands, the DEIR does not discuss all feasible mitigation measures, instead only focusing on required mitigations under the Clean Air Act, ignoring CEQA's added mitigation requirements. CEQA and the residents near this project deserve more to protect their health and welfare.

VIII. The DEIR Lacks GHG Mitigation Measures.

A. Climate Change Is a Catastrophic and Pressing Threat to California.

A strong, international scientific consensus has established that human-caused climate change is causing widespread harm to human society and natural systems. The threats from climate change are becoming increasingly dangerous. The Intergovernmental Panel on Climate Change ("IPCC"), the leading international scientific body for the assessment of climate change, concluded in its 2014 Fifth Assessment Report that: "[w]arming of the climate system is unequivocal, and since the 1950s, many of the observed changes are unprecedented over decades to millennia. The atmosphere and ocean have warmed, the amounts of snow and ice have diminished, and sea level has risen," and further that "[r]ecent climate changes have had widespread impacts on human and natural systems."[26] These findings were echoed in the United States' own 2014 Third National Climate Assessment and 2017 Climate Science Special Report, prepared by scientific experts and reviewed by the National Academy of Sciences and multiple federal agencies. The Third National Climate Assessment concluded that "[m]ultiple lines of independent evidence confirm that human activities are the primary cause of the global warming of the past 50 years"[27] and "[i]mpacts related to climate change are already evident in many regions and are expected to become increasingly disruptive across the nation throughout this century and beyond."[28] The 2017 Climate Science Special Report similarly concluded:

> [B]ased on extensive evidence,…it is extremely likely that human activities, especially emissions of greenhouse gases, are the dominant cause of the observed warming since the mid-20th century. For the warming over the last century, there is no convincing alternative explanation supported by the extent of the observational evidence.
> In addition to warming, many other aspects of global climate are changing, primarily in response to human activities. Thousands of studies conducted by researchers worldwide have documented changes in surface, atmospheric, and oceanic temperatures; melting glaciers; diminishing snow cover; shrinking sea

[26] IPCC [Intergovernmental Panel on Climate Change]. (2014). Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change, [Core Writing Team, R.K. Pachauri & L.A. Meyer (eds.)]. 2, Available at: http://www.ipcc.ch/pdf/assessment-report/ar5/syr/SYR_AR5_FINAL_full_wcover.pdf.

[27] Melillo, Jerry M, Terese (T.C.) Richmond & Gary W. Yohe (eds.). (2014). Climate Change Impacts in the United States: The Third National Climate Assessment, U.S. Global Change Research Program. 7, Available at: http://nca2014.globalchange.gov/downloads.

[28] *Id.* at 10.

ice; rising sea levels; ocean acidification; and increasing atmospheric water vapor.[29]

The U.S. National Research Council concluded that "[c]limate change is occurring, is caused largely by human activities, and poses significant risks for—and in many cases is already affecting—a broad range of human and natural systems."[30] Based on observed and expected harms from climate change, in 2009, the U.S. Environmental Protection Agency found that greenhouse gas pollution endangers the health and welfare of current and future generations.[31]

These authoritative climate assessments decisively establish the dominant role of anthropogenic GHG emissions in driving climate change. As the Third National Climate Assessment explains: "observations unequivocally show that climate is changing and that the warming of the past 50 years is primarily due to human-induced emissions of heat-trapping gases."[32] The Assessment makes clear that "reduc[ing] the risks of some of the worst impacts of climate change" will require "aggressive and sustained greenhouse gas emission reductions" over the course of this century.[33]

The impacts of climate change will be felt by humans and wildlife. Climate change is increasing stress on species and ecosystems—causing changes in distribution, phenology, physiology, vital rates, genetics, ecosystem structure, and processes—in addition to increasing species extinction risk.[34] Climate-change-related local extinctions are already widespread and have occurred in hundreds of species.[35] Catastrophic numbers of species extinctions are projected to occur during this century if climate change continues unabated.[36] In California, climate change will transform our climate, resulting in impacts including, but not limited to, increased temperatures and wildfires and a reduction in snowpack and precipitation levels and water availability.

Therefore, immediate and aggressive greenhouse gas emissions reductions are necessary to keep warming well below 2°C above pre-industrial levels. The IPCC Fifth Assessment Report and other expert assessments have established global carbon budgets, or the total amount of carbon that can be burned while maintaining some probability of staying below a given

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[29] USGCRP [U.S. Global Change Research Program]. (2017). Climate Science Special Report: Fourth National Climate Assessment, Volume I [Wuebbles, D.J. et al. (eds.)], U.S. Global Change Research Program, 10. Available at: https://science2017.globalchange.gov/.

[30] NRC [National Research Council]. (2010). Advancing the Science of Climate Change, 2.

[31] 74 Fed. Reg. 66496 (December 15, 2009) [U.S. EPA, Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act; Final Rule].

[32] Melillo et al. 2014, p. 2; *see also id.* at 15 [Finding 1: "The global warming of the past 50 years is primarily due to human activities, predominantly the burning of fossil fuels."].

[33] Id. at 13-14, 649; *see also id.* at 15 [Finding 3: "Human-induced climate change is projected to continue, and it will accelerate significantly if global emissions of heat-trapping gases continue to increase."].

[34] Warren, Rachel et al.. (2011). Increasing impacts of climate change upon ecosystems with increasing global mean temperature rise, 106 *Climatic Change* 141.

[35] Wiens, John J. (2016). Climate-related local extinctions are already widespread among plant and animal species, 14 *PLoS Biology* e2001104.

[36] Thomas, Chris. D. et al. (2004). Extinction risk from climate change, 427 *Nature* 145; Maclean, Ilya M. D. & Robert J. Wilson. (2011). Recent ecological responses to climate change support predictions of high extinction risk, 108 *PNAS* 12337; Urban, Mark C. (2015). Accelerating extinction risk from climate change, 348 *Science* 571.

temperature target. According to the IPCC, total cumulative anthropogenic emissions of CO_2 must remain below about 1,000 $GtCO_2$ from 2011 onward for a 66 percent probability of limiting warming to 2°C above pre-industrial levels, and to 400 $GtCO_2$ from 2011 onward for a 66 percent probability of limiting warming to 1.5°C.[37] These carbon budgets have been reduced to 850 $GtCO_2$ and 240 $GtCO_2$, respectively, from 2015 onward.[38]

Given that global CO_2 emissions in 2016 alone totaled 36 $GtCO_2$,[39] humanity is rapidly consuming the remaining carbon budget needed to avoid the worst impacts of climate change. As of early 2018, climate policies by the world's countries would lead to an estimated 3.4°C of warming, and possibly up to 4.7°C of warming, well above the level needed to avoid the worst dangers of climate change.[40]

The United States has contributed more to climate change than any other country. The U.S. is the world's biggest cumulative emitter of GHGs, responsible for 27 percent of cumulative global CO_2 emissions since 1850, and the U.S. is the world's second-highest emitter on an annual and per capita basis.[41] Nonetheless, U.S. climate policy is wholly inadequate to meet the international climate target to hold global average temperature rise to well below 2°C above pre-industrial levels to avoid the worst dangers of climate change. Current U.S. climate policy has been ranked as "critically insufficient" by an international team of climate policy experts and climate scientists.[42]

In response to inadequate action on the national level, California has taken steps through legislation and regulation to fight climate change and reduce statewide GHG emissions. Enforcement of and compliance with these measures is essential to help stabilize the climate and avoid catastrophic impacts to our environment. AB 32 mandates that California reach 1990 levels of GHG emissions by the year 2020, equivalent to approximately a 15 percent reduction from a business-as-usual projection.[43] Based on the warning of the IPPC and leading climate scientists, Governor Brown issued an executive order in April 2015 requiring GHG emissions reductions to 40 percent below 1990 levels by 2030.[44] The Executive Order is in line with a previous Executive Order mandating the state reduce emission levels to 80 percent below 1990 levels by 2050 in order to minimize significant climate change impacts.[45] In enacting SB 375, the

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[37] IPCC [Intergovernmental Panel on Climate Change]. (2013) 2013: Summary for Policymakers. In: Climate Change 2013: The Physical Science Basis, Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Stocker, T.F. et al. (eds.)], Cambridge University Press, 25; IPCC [Intergovernmental Panel on Climate Change]. (2014). Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change, [Core Writing Team, R.K. Pachauri & L.A. Meyer (eds.)], 63-64 Table 2.2. Available at: http://www.ipcc.ch/pdf/assessment-report/ar5/syr/SYR_AR5_FINAL_full_wcover.pdf.

[38] Rogelj, Joeri et al. (2016). Differences between carbon budget estimates unraveled, 6 *Nature Climate Change* 245, Table 2.

[39] Le Quéré, Corrine, et al. (2017). Global Carbon Budget 2017, *Earth Syst. Sci. Data Discuss.*, https://doi.org/10.5194/essd-2017-123. Available at: http://www.globalcarbonproject.org/carbonbudget/17/data.htm.

[40] Climate Action Tracker. (November 2017). Improvement in warming outlook at India and China move ahead, but Paris Agreement gap still looms large. Available at: http://climateactiontracker.org/publications/briefing/288/Improvement-in-warming-outlook-as-India-and-China-move-ahead-but-Paris-Agreement-gap-still-looms-large.html.

[41] World Resources Institute. (November 25, 2014). 6 Graphs Explain the World's Top 10 Emitters.

[42] Climate Action Tracker, USA (last updated November 29, 2018). Available at: http://climateactiontracker.org/countries/usa.

[43] Health & Saf. Code § 38550.

[44] Executive Order B-30-15 (2015).

[45] Executive Order S-3-05 (2005).

legislature has also recognized the critical role that land use planning plays in achieving greenhouse gas emission reductions in California.

The legislature has found that failure to achieve GHG emissions reductions would be "detrimental" to California's economy.[46] In 2018, Governor Brown issued Executive Order B-55-18, in which he declared it to be a statewide goal to "achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter."

Governor Newsom continued this zero-emissions mandate in September 2020, signing an executive order to require all new passenger cars and trucks be zero-emission vehicles by 2035.[47] The California Air Resources Control Board voted in June 2020 to "require Manufacturers who certify Class 2b-8 chassis or complete vehicles with combustion engines to sell zero-emission trucks as an increasing percentage of their annual California sales from 2024 to 2035."[48] By 2035, zero-emission truck/chassis sales would need to be 55% of Class 2b – 3 truck sales, 75% of Class 4 – 8 straight truck sales, and 40% truck tractor sales.[49] CARB states that there are seventy zero-emission buses, vans, and trucks currently commercially available. Most major truck manufacturers plan to phase zero-emission trucks into their inventory in the future as well.[50]

Although some GHG emissions sources may appear insignificant in isolation, climate change is a problem with cumulative impacts and effects.[51] One source or one small project may not appear to have a significant effect on climate change, but the combined impacts of many sources can drastically damage California's climate as a whole. Therefore, project-specific GHG emissions disclosure, analysis, and mitigation are vital to California meeting its climate goals and maintaining our climate.

B. The DEIR Should Include an Analysis of GHG Mitigation Alternatives.

Here, the DEIR concludes that the GHG increases from the project are not significant. The DEIR came to this conclusion by reviewing the Wayne J Sand and Gravel Re-circulated Draft EIR (March 2015), which found its GHG emission standard from the Ventura County Greenhouse Gas Thresholds of Significance Options for Land Use Development Projects in Ventura County (VCAPCD, 11/8/2011). 2011 is a very old standard in climate change terms, especially since California has added numerous GHG reduction requirements in the last ten years, as discussed above.[52] CARB has recently approved expanding the phase-in of medium and heavy-duty truck zero-emission standards, which shows that although the VCAPOD may be the

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[46] Health & Saf. Code § 38501(b).

[47] Office of Governor Gavin Newsom, Governor Newsom Announces California Will Phase Out Gasoline-Powered Cars & Drastically Reduce Demand for Fossil Fuel in California's Fight Against Climate Change, (Sept 23, 2020) Available at: https://www.gov.ca.gov/2020/09/23/governor-newsom-announces-california-will-phase-out-gasoline-powered-cars-drastically-reduce-demand-for-fossil-fuel-in-californias-fight-against-climate-change/.

[48] California Air Resource Control Board, *Advanced Clean Trucks Fact Sheet* (June 25, 2020) Available at: https://ww2.arb.ca.gov/resources/fact-sheets/advanced-clean-trucks-fact-sheet.

[49] *Id.*

[50] *Id.*

[51] *Ctr. for Biological Diversity v. Nat'l Highway Traffic Safety Admin.*, (9th Cir. 2008) 538 F.3d 1172, 1217 ["the impact of greenhouse gas emissions on climate change is precisely the kind of cumulative impacts analysis" that agencies must conduct].

[52] See DEIR Appendix B-1 *Air Quality, Health Risk, and Climate Change Impact Assessment*, (Sespe 2019b).

most recent standard published in Ventura County, the DEIR could and should consider further GHG emission mitigations. This project will raise the CO_2 from approximately 155.3 tons to 3466.6 tons.[53] This increase is twenty-two times higher than the current project. The DEIR states that since the CO_2 will not exceed ten thousand, then it is not significant. But climate change is too important not to discuss mitigation when a twenty-two level increase occurs; particularly when CEQA mandates feasible mitigation to environmental damage, and climate change is our most pressing environmental concern. The County should not approve a project that will increase GHG emissions without even considering GHG mitigation options. There are zero-emission trucks on the market and although there is a higher upfront cost, CARB states that the fuel costs are less than traditional trucks, which offsets the upfront costs. [54] Additionally, on-site solar generation or even purchasing carbon offsets could all reduce the GHG impacts of this project.

The DEIR claims that mitigation is not required because the state requires RPS increases from Southern California Edison, which will decrease the project's reliance on GHG electrical generation.[55] Additionally, the California Low-Carbon Fuel Standard will reduce diesel fuel GHG emissions by raising the standard.[56] But these statements are just riding the coattails of others and the project should also be committing to GHG reductions to further mitigate climate impacts from occurring now when the project is proposing greatly increasing its GHG emissions.

Lastly, the DEIR cites Berck as proof that GHG impacts from VMT will be less because otherwise, mining materials will come from farther away.[57] But the DEIR does not analyze competing mine locations and whether this expansion will allow the project to expand its service area and thus its VMTs. The County states that it does not have the expertise or time to determine a different site for an alternative mine because of the numerous factors involved in mine siting.[58] This determination might be reasonable, but claiming that VMT will decrease by allowing expansion without further verification of this fact is inadequate.

IX. The DEIR should have considered a wider range of alternatives, including those with a significantly smaller development footprint.

The DEIR should have analyzed a wider range of alternatives. As courts have made clear, "[a] potential alternative should not be excluded from consideration merely because it would impede to some degree the attainment of the project objectives, or would be more costly."[59] The DEIR should have included a more extensive range of alternatives from which decision-makers could choose.

The DEIR does not consider any alternatives that would allow the project but take wildlife and endangered plants into account or significantly lower the project's GHG impacts besides the no project alternative or the no increased expansion alternative. These may seem

[53] DEIR 3.4-31 Table 3.4-9.
[54] California Air Resource Control Board, *Advanced Clean Trucks Fact Sheet* (June 25, 2020) Available at: https://ww2.arb.ca.gov/resources/fact-sheets/advanced-clean-trucks-fact-sheet.
[55] DEIR 3.4-31.
[56] DEIR 3.4-31.
[57] DEIR 3.9-9.
[58] DEIR 5.3-1.
[59] *Save Round Valley Alliance v. County of Inyo* (2007) 157 Cal. App. 4th 1437, 1456-57 (quotations omitted).

adequate, but both are alternatives to bar the project and one alternative is to approve the project. There is no middle ground with a project that needs to incorporate further mitigation, which may cost more for the applicant but still allow the project. The DEIR does not state that a middle ground alternative would be infeasible because it does not consider this option. For an informed decision to occur, the decision-makers should have an alternative that works to meet the project goals while lessening environmental impacts.

By refusing to include any alternatives that provide for a moderately reduced project size, the DEIR sets up a false "all or nothing" decision for the County and prohibits the County from considering or approving a smaller version of the project that does not have such profound environmental impacts on California's wildlife corridors, air quality, and carbon footprint. CEQA's mandate that a reasonable range of alternatives be considered is violated by a DEIR that fails to include any alternatives with a moderately reduced footprint.

The project could be considerably down-sized or mitigated and still be considered feasible. Whether a project is economically unfeasible "is not measured by increased cost or lost profit, but upon whether the effect of the proposed mitigation is such that the project is rendered impractical."[60] In *Citizens of Goleta Valley v. Board of Supervisors* (1988) 197 Cal.App.3d 1167, 1180, the Court agreed with the trial court that the administrative record did not contain an analysis of the project alternatives in terms of comparative costs, comparative profit or losses, or comparative economic benefit to the project proponent or the community at large. Here, the EIR does not include feasibility of the project alternatives based on the projects expected costs and profits and losses, leaving it impossible to assess the viability of the alternatives. This is an inadequate under CEQA and the EIR should be required to include additional environmentally conservative alternatives and their feasibility.

[60] *Uphold Our Heritage v. Town of Woodside* (2007) 147 Cal.App.4th 587, 600 (internal citation omitted).

X. Conclusion.

Thank you for the opportunity to submit comments on the proposed Pacific Rock Mine Project. Please include the undersigned environmental organizations on your notice list for all future updates to the project and do not hesitate to contact us with any questions at the email listed below.

Sincerely,





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(*Provided via OneDrive*)

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Exhibit 1

December 22, 2020

Sent via email

Los Angeles County Board of Supervisors
c/o Ms. Celia Zavala
Executive Officer
500 West Temple Street
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executiveoffice@bos.lacounty.gov

Re: Supplemental EIR for the Northlake Specific Plan

Dear Supervisors Mitchell, Kuehl, Solis, Hahn, and Barger:

We are writing to urge you to direct staff at the Los Angeles County Department of Regional Planning to prepare a supplemental environmental impact report ("EIR") for the Northlake Specific Plan ("Northlake Development"). The Northlake Development is a 1,300-acre housing development proposed on fire-prone wildlands adjacent to Castaic Lake State Recreation Area approved by the Board in April 2019. Even though the Northlake Development sits within a wildlife connectivity linkage known as the Sierra Madre-Castaic Connection, County staff did not require enforceable or adequate measures to address wildlife connectivity because the project proponent claimed mountain lions do not use the crossings in the area. **We are submitting evidence showing these claims are incorrect: the Mountains Recreation and Conservation Authority recently captured photographic evidence of a mountain lion using the crossing immediately adjacent to the development site.**

Background on the Conservation Groups

The Center for Biological Diversity ("Center") is a non-profit, public interest environmental organization dedicated to the protection of native species and their habitats through science, policy, and environmental law. The Center has over 1.7 million members and online activists throughout California and the United States. The Center and its members have

worked for many years to protect imperiled plants and wildlife, open space, air and water quality, and overall quality of life for people in Los Angeles.

Endangered Habitats League (EHL) is a non-profit, public interest conservation group for Southern California. It is dedicated to ecosystem protection and sustainable land use for all the region's inhabitants. EHL is and has been a stakeholder in several County of Los Angeles planning and environmental initiatives.

Photographic Evidence from the Mountains Recreation and Conservation Authority Confirms that Mountain Lions Use the Crossing Adjacent to the Northlake Development Site

We are submitting photos to you which were taken by staff at the Mountains Recreation and Conservation Authority ("MRCA") which demonstrate that mountain lions use the culverts under the I-5 freeway immediately next to the Project site. In particular, the attached photos (which we received from MRCA and are authenticated by the attached declaration from Chad Christensen) depict a mountain lion crossing from the east side of the southbound direction of the separated I-5 freeway from Grasshopper Canyon and westerly into the Marple Canyon on November 5, 2020 approximately between 2:49 a.m. and 2:59 a.m. (the "Mountain Lion Photos"). The single-lane box culvert for the Marple Canyon access road that crosses under this southbound section of I-5 is identified as "Tunnel 2" and "Underpass 2" in Santa Monica Mountains Conservancy's April 17, 2018 letter on the Northlake Development. Underpass 2 is one of two freeway crossing structures along a ten-mile section of I-5 between Templin Highway and Castaic Creek. The MRCA owns 245 acres of Marple Canyon west of Underpass 2 between the separated north-/southbound sections of I-5 and six acres east of Underpass 2 that connect with Grasshopper Canyon. The Mountain Lion Photos were taken by a camera placed on MRCA conservation lands by Mr. Christensen for the MRCA's Marple Canyon I-5 Wildlife Crossing Enhancement Project.

While the EIR for the Northlake Project does generally acknowledge that mountain lions may use the Project area (Final EIR at 2-136), County counsel joined the project proponents (which include Northlake Associates, LLC, which is controlled by NLDP Associates, LLC, Castaic Development Partners, LLC, and Michael Rosenfeld of Woodridge Capital Partners, LLC) in representing in court proceedings that "mountain lions will not be impacted by the Project" and "mountain lions are not using Project site crossings as confirmed by expert studies, including a wildlife camera study . . . ." (Respondents' and Real Parties in Interest's Joint Opposition Trial Brief at pp. 8 & 16-17.) **The Mountain Lion Photos demonstrate that these claims (which were based on a developer-commissioned study) are incorrect.**[1]

We further note that the County's own staff biologist, Joseph Decruyenaere, urged the developer's EIR drafters not to minimize the connectivity value of the existing culverts under the

[1] On December 17, 2020, the Conservation Groups requested judicial notice of these photos in Los Angeles County Superior Court case *Center for Biological Diversity et al. v. County of Los Angeles et al*., Case No. 19STCP01610, and the County and developer submitted a brief opposing the request for judicial notice.

I-5, which are far from perfect but are the only available means for mountain lions to cross the I-5 in the area. Mr. Decruyenaere wrote that the EIR language prepared by the developer's consultant:

> unduly minimizes the value of compromised movement opportunities. Nowhere else in biological conservation would you want to argue that because a resource is rare it's less than valuable. The fact that the use of a highly constrained opportunity for movement between natural areas might be made more difficult should always be considered a potentially significant impact unless there simply aren't any wildlife around to use the crossing. If a movement opportunity lacks a vegetated approach or some other feature that would seem to make it work better, that doesn't mean it doesn't pose an opportunity for movement. It just suggests that an animal might be less inclined to use it in the imaginary scenario that they have a better alternative. **However, in the real world, and in the highly fragmented, difficult to navigate landscapes that wildlife are consigned to, compromised movement opportunities may be the only opportunities available.** Revise the discussion to acknowledge the value of the crossings and instead of devaluing them, talk about how the project might change the potential for their use.[2]

Mr. Decruyenaere also wrote that the developer's consultant relies "chiefly on the idea that existing crossing features are not ideal but [they] neglect[] to provide conclusions as to how overall wildlife movement on the site and through the crossing features may actually change with buildout of the project."[3]

The Mountain Lion Photos confirm that mountain lions are using the culverts adjacent to the Project site even if they could be enhanced to be more friendly for wildlife. If built as proposed, the Northlake Development would permanently block these crossings and further constrain the already-limited movement opportunities for mountain lions.

We are submitting this evidence to the Board so the County can prepare an EIR for the Project that accurately discloses the impacts of this Project on the Central Coast South mountain lions. With an accurate EIR the Board can determine whether to reconsider the Project or require mitigation measures or project modifications to ensure the Northlake Development does not harm these mountain lions.

The County Must Prepare A Supplemental EIR for the Northlake Development

Relevant authorities require preparation of a subsequent or supplemental EIR in these circumstances. The California Environmental Quality Act ("CEQA") states that a subsequent or supplemental EIR may be required when either (1) substantial changes occur with respect to the

[2] Mr. Decruyenaere's comments were attached to an email sent by County Planner Jodie Sackett on February 18, 2018 and are accessible in the administrative record ("AR") of the Los Angeles County Superior Court case *Center for Biological Diversity et al. v. County of Los Angeles et al*., Case No. 19STCP01610 at AR025874 (and Mr. Sackett's email is located at AR025825-26).
[3] Mr. Decruyenaere's comments are included in an email sent on February 12, 2018, and is available at AR025822-23.

circumstances under which the project is being undertaken which will require major revisions in the environmental impact report or (2) new information, which was not known and could not have been known at the time the environmental impact report was certified as complete, becomes available. (Pub. Res. Code § 21166.)

The Mountain Lion Photos qualify as either (or both) of these two categories. Mountain lions in the Project area are part of the Central Coast South population, which were granted "candidacy status" under the California Endangered Species Act ("CESA") in April 2020, such that they are afforded the same protections as other CESA-listed species. CEQA requires a "mandatory finding of significance" when a project has the potential to impact a CESA-listed species. (CEQA Guidelines § 15065(a)(1); *Endangered Habitats League, Inc. v. County of Orange* (2005) 131 Cal.App.4th 777, 792 fn. 12.) And such a finding triggers a duty to consider and adopt all feasible alternatives or mitigation measures to reduce such impacts. (Pub. Res. Code § 21002.)

We Urge The Board Not To Drive Struggling Mountain Lions Closer to Local Extinction

Prior to the Board's approval of the Northlake Development last year, we submitted a letter to the Board on April 1, 2019 which included multiple peer-reviewed studies showing that Southern California's mountain lions are facing an extinction vortex due primarily to a loss of habitat connectivity. The Central Coast South population is particularly at risk with studies noting that a subset of the Central Coast South population in the Santa Monica mountains has "extremely low genetic diversity" while diversity of broader Central Coast South population is only "slightly higher."[4]

As currently proposed, the Northlake Development would permanently block connectivity over a significant portion of the Sierra Madre-Castaic Connection, which is a linkage critical to the survival of the Central Coast South mountain lions. Numerous expert agencies including the Santa Monica Mountains Conservancy ("SMMC") and California Department of Fish and Wildlife have raised serious concerns about the Northlake Development's permanent impacts on wildlife connectivity, with SMMC even filing an administrative appeal asking the Board to reconsider the Planning Commission's approval of the Project.

[4] Gustafson KD, Gagne RB, Vickers TW, Riley SPD, Wilmers CC, Bleich VC, Pierce BM, Kenyon M, Drazenovich TL, Sikich JA, Boyce WM, Ernest HB (2018) Genetic source–sink dynamics among naturally structured and anthropogenically fragmented puma populations. Conserv Genet 1–13 . doi: 10.1007/s10592-018-1125-0

Ensuring regional wildlife connectivity and protecting local mountain lions will require cooperation from conservation groups and state and local officials. We ask the Board to be part of the solution – and not part of the problem – by re-assessing the impacts of this development proposal.

Sincerely,

J.P. Rose
Staff Attorney
Center for Biological Diversity
660 S. Figueroa Street, Suite 1000
Los Angeles, California 90017
jrose@biologicaldiversity.org

Tiffany Yap, D.Env/PhD
Wildlife Corridor Advocate
Center for Biological Diversity
1212 Broadway, Suite #800
Oakland, California 94612
tyap@biologicaldiversity.org

Dan Silver
Chief Executive Officer
Endangered Habitats League
dsilverla@me.com

Cc:

Ms. Hilda Solis
LA County Supervisor, First District
856 Kenneth Hahn Hall of Administration
500 West Temple Street
Los Angeles, CA 90012
firstdistrict@bos.lacounty.gov

Ms. Holly J. Mitchell
LA County Supervisor, Second District
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Sheila@bos.lacounty.gov

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Ms. Lisa Jacobs
Deputy Counsel Counsel
Office of County Counsel
500 West Temple Street
Los Angeles, CA 90012
ljacobs@counsel.lacounty.gov

Declaration of Chad Christensen

I, Chad Christensen, hereby declare as follows:

1. The facts set forth in this declaration are based on my personal knowledge. If called as a witness, I could and would testify competently to these facts. As to those matters which reflect an opinion, they reflect my personal opinion and judgment on the matter.

2. I am the Deputy Chief of Natural Resources and Planning for the Mountains Recreation and Conservation Authority (MRCA) and have been in this position since April 2020. Previously I was a Project Analyst hired in February 2017.

3. Attached are true and correct copies of photos taken on November 5, 2020 approximately between 2:49 a.m. and 2:59 a.m. of a mountain lion crossing from the east side of the southbound direction of the separated I-5 freeway from Grasshopper Canyon and westerly into the Marple Canyon. The single-lane box culvert for the Marple Canyon access road that crosses under this southbound section of I-5 is identified as "Tunnel 2" and "Underpass 2" in Santa Monica Mountains Conservancy's April 17, 2018 letter on the Northlake Project (AR010051-59). Underpass 2 is one of two freeway crossing structures along a ten-mile section of I-5 between Templin Highway and Castaic Creek. The MRCA owns 245 acres of Marple Canyon west of Underpass 2 between the separated north-/southbound sections of I-5 and six acres east of Underpass 2 that connect with Grasshopper Canyon.

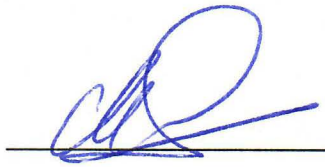
4. These photos were taken by a wildlife camera that I placed on MRCA conservation lands on June 9, 2020 in my official capacity as Deputy Chief of Natural Resources and Planning and as Project Manager for the MRCA's Marple Canyon I-5 Wildlife Crossing Enhancement Project (Project).

5. The Project was awarded Wildlife Conservation Board (WCB) funding in 2020 to enhance 2.75 acres of habitat on the west and east approaches to Underpass 2 in order to promote wildlife movement between Marple and Grasshopper Canyons. On March 27, 2020, I received a Caltrans Encroachment Permit No. 07-20-N-SV-0894 to install the wildlife cameras within the freeway right-of-way as an MRCA in-kind contribution towards the Project. The

Project Area and Underpass 2 are part of the South Coast Wildland's *Castaic – Sierra Madre Connection.*

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Executed this 15th of December 2020,



Chad Christensen

Ventura, California


28.32 inHg - 68°F 11/05/2020 02:49AM MARPLE1


28.32 inHg - 68°F 11/05/2020 02:49AM MARPLE1


28.32 inHg - 68°F 11/05/2020 02:49AM MARPLE1


28.38 inHg - 73°F 11/05/2020 02:59AM MARPLE2


28.38 inHg - 73°F 11/05/2020 02:59AM MARPLE2


28.38 inHg - 73°F 11/05/2020 02:59AM MARPLE2

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Exhibit 2

10. Restrictive Covenants to Guarantee Protected Tree Offsets/Mitigation

In order to ensure the success of trees planted or transplanted as offsets for impacts, and that any future landowners are notified about requirements for protection and maintenance of these trees, a restrictive covenant must be recorded. The following language must be included in Tree Protection Plans (TPP).

If protected trees are damaged and require offsets/mitigation and planting new trees onsite is the approved offset/mitigation measure, the Permittee shall record against the parcel(s) governed by this permit a restrictive covenant indicating that the Planning Division has authorized development on the subject property subject to terms and conditions that restrict the use of that property.

The restrictive covenant shall be recorded by the Permittee on a form provided by the Planning Division and shall conform to the requirements outlined in the County's *Content Requirements for Tree Protection Plans* document. The restrictive covenant shall include the planting instructions and performance targets required by the TPP for tree replacement planting and shall be imposed as covenants and restrictions on the use of the property. The term of the restriction shall be (5 or 7) years as indicated in the TPP. The restrictive covenant shall include a legal description of the parcel(s) governed by this permit. In addition, the restrictive covenant shall:

a) Prohibit removal or transplanting of replacement or transplanted trees without a permit modification;

b) Restrict activities within the tree protection zone of replacement or transplanted trees;

c) Require appropriate care of replacement or transplanted trees;

d) Commit any future landowners to the tree protection conditions of this permit, including posting of financial assurances, tree monitoring and reporting; and

e) Designate the County of Ventura as a beneficiary of the restrictive covenant in order to allow court action by the County if necessary.

11. Attachments

Arborist Report. The Arborist Report submitted with the project's application should be included as an attachment.

Tree Appraisals. If tree appraisals were not included in the Arborist Report and are needed for offsets, they must be included in the TPP. Appraisals must be done of all trees that require tree protection fencing, on those that will be felled and offset by replacement trees, and on all trees that will be transplanted as offsets. Appraisals shall be done using the most current edition of the Guide for Plant Appraisal (as it applies to Ventura County), published by the Council of Tree and Landscape Appraisers.

From: PALERMO MAINTENANCE CORP <palermo@cpm1.com>
Sent: Thursday, January 14, 2021 6:18 PM
To: Bertoline, Justin <Justin.Bertoline@ventura.org>; justine.bertoline@ventura.org
Subject: Pacific Rock Quarry Expansion Project Draft Environmental Impact Report

CAUTION: If this email looks suspicious, DO NOT click. Forward to Spam.Manager@ventura.org

Please find attached response by Palermo Maintenance Corporation to the draft EIR.

Regards,

Kerri Brown |Community Manager |
|Community Property Management|
751 East Daily Drive|Suite 300|Camarillo|CA|93010|
(O) 805.987.8945|(F) 805.987.7906|www.cpm1.com

Our office will be closed on Monday, January 18, 2021 for the Martin Luther King Jr. Holiday.

The CPM team is here working hard for you and your Community. However, due to the current pandemic, for the safety of our staff our offitrce is closed to the public. Our meeting rooms are also closed. We apologize for any inconvenience and do appreciate your understanding.

Palermo Maintenance Corporation

Newbury Park, CA 91320

Justine Bertoline
Case Planner
County of Ventura Resource Management Agency Planning Division
8005 Victoria Avenue, Ventura, CA 93009 - 1740

Case Number LU10-0003
Pacific Rock, Inc., Applicant
Draft Environmental Report ("EIR")

By email to: Justin.Bertoline@ventura.org

January 14, 2021

Dear Ms. Bertoline

Palermo Maintenance Corporation ("Palermo") is the homeowners' association for the development known as Palermo and which comprises 71 homes on
Via Sandra
Via Olas
Via Nicola and
Via Mira Flores
in the Dos Vientos development in Newbury Park.

The Palermo Board of Directors has the following comments on the draft EIR.

Term

Section 2.1 says that the Project would extend the life of the existing permitted operations for an additional 30 years.
It is unclear to us how the application went to 30 years from the 25 years in the 2017 Notice of Preparation regarding Pacific Rock Quarry Mine Expansion Project. We have not seen anything recording that, so how did it occur and how and when was it publicized?

The existing permit was due to have expired on July 17, 2010, which is now 11 ½ years ago. **So the Project Proposal would effectively be in excess of a 40 year**

extension and would allow the quarry owner to benefit from the long delay which has occurred in getting to the point of approval and during which the quarry has been permitted to continue operating.
Whether the term is 30 years from the date of the original application or the date of approval, it is far too long considering:
The proximity of the operation to Dos Vientos, the funeral home and the surrounding community
The fact that this exceeds the original application extension and
On the occasion of the last extension, March 25, 1999, the Ventura County Planning Commission approved only a 10-year permit extension (CUP 3817-2).

We therefore consider that the term of the extension should be limited to 10 years from the date of approval. That would still mean an extension of over 20 years from the expiry of the existing approval.

Operating Hours

The Project would expand the hours of operations and operating days per week. Operational hours for equipment maintenance and aggregate hauling would be expanded to 5:30 AM to 10:00 PM. The project would also allow for 24-hour operations to accommodate special circumstances up to 60 days per year to accommodate County Public Works Agency projects, California Department of Transportation projects, Ventura County Resource Management Agency and other special projects that require nighttime deliveries. Weekly operations would be expanded to include Sundays for equipment maintenance and aggregate hauling.

Although the operating schedule for mining excavation and processing would not change, **we see no justification for any equipment maintenance or aggregate hauling activity (and associated lighting) being permitted**

a) 7 days a week

b) from 5:30 a.m. to 10:00 p.m. (that is, 16 1/2 hours a day)

We consider that, as in the existing CUP-3817 -3, operations outside the specified hours should not be permitted without specific prior written approval from the Ventura County Planning Director, should be limited to emergency situations and should not be a matter for any of the other agencies or the quarry owner to decide for themselves.

Recycling Plant

Section 2.6.6 says that the Applicant proposes the use of a "portable recycling plant to crush and process recycled concrete and asphalt at the site, to be located as shown on Figure 2-5, "Existing and Proposed Structures and Equipment."

"The recycle plant would utilize conveyors, a crusher, and screen to recycle materials. The plant would be approximately 133 feet in length, 115 feet wide, and 30 feet high. Up to 30,000 cubic yards per year of concrete and asphalt debris would be received, crushed, and sold as base material. Material received and shipped would be considered in the operation's 60 loads per day truck trip limit. See site plan and attachments for details on the plant and location on the site."

We cannot see the location of the recycling plant on Fig 2.5, as suggested. That should be corrected in the final EIR. The location is shown on Figure 3.8.1 but not in a precise manner.

We are concerned that recycling plant is described as portable. The plant is very large.

We consider that, if the recycling plant is permitted (please see under Alternatives, below), its location and all associated lighting should be required to be, and to remain, out of line of sight of all yards and of all stories of the houses on all Palermo streets (and Via Pisa, which is not in Palermo but is in Dos Vientos) and that once the initial, precise, location has been approved any change should also require prior approval.

Fugitive Dust Reduction Measures

It is, in our view, essential that fugitive dust reduction measures be employed for all aspects of the operation including but not limited to use of water sprays and that all existing requirements referenced in section 3.4-24 should remain in force.

Visual Resources

Section 3.2.1.3 says that the assessment did not include reconnaissance of views from within private residential properties but that the analysis recognizes that portions of the Project site may be visible from yards or interior areas of residential

properties nearest the southeastern site of the site. That is what we found in our enquiries of the homeowners, the results of which we supplied to the Planning Division.

Then, under Simulation of Views from Areas North, East, and South of the Site Section 3.2.2.2 says that:

"This disturbance and the uniform, angular benched and pad areas created by mining would be inconsistent with the visual character of surrounding hillside areas and would substantially modify the existing character of the viewshed. The additional mined areas would be dominant within the overall scale of the view down the slopes below this viewpoint and views toward Conejo Mountain."

".....the visibility of the additional mined areas and their dominance in the viewshed is considered to be a high degree of adverse visual change to the existing character of views from these areas. Revegetation of pad areas would reduce the visual effects of mining as vegetation becomes established over time. However, the disturbance and angular features created by mining and the substantially reduced vegetation density and cover as compared to existing conditions and adjacent areas would result in a permanent substantial reduction in the visual quality of the viewshed. While views from the areas represented by Viewpoint 4 vary depending on the viewer location in areas north, east, and south of the site, the general overall effect of expanded mining would be similar to that demonstrated by Viewpoint 4. The changes in the visual character of the Project site resulting from the proposed mine expansion would represent a high degree of adverse change in visual quality."

"Impact VIS-1 is therefore considered significant and unavoidable for the purposes of the analysis in this EIR. (Note that Chapter 4 of this EIR evaluates alternatives to the proposed Project and that evaluation considers an alternative that would reduce the mine area as compared to the proposed Project. As discussed in Chapter 4, a reduced mine area would reduce the visual impact of the proposed Project.)" The simulated photos, especially Fig. 3.2-7, vividly show how the expanded mining area would blight the view from Via Sandra and elsewhere, including trails.

We therefore recommend an alternative project with reduced mining area. Please see below.

Palermo Maintenance Corporation

Newbury Park, CA 91320

Noise

The draft EIR suggests in Section 3.8.2.2 MM NV-1 that

"the Permittee shall cause a qualified acoustician to conduct noise measurements at R1 or R2-B. If measured noise levels exceed 55 dBA at R1 or R2-B, activities within the line-of-site of the respective receptor shall cease and shall not resume unless and until such time as the Permittee identifies additional noise control measures with analysis indicating that such measures are sufficient to avoid operational noise in excess of 55 dBA at the respective receptor and until receiving written authorization by the County that such operations may resume. The Permittee shall comply with the requirements of this measure for any subsequent resumed or newly initiated Project-related operations within line-of-sight of receptor R1 or R2-B."

We support that requirement but it is important that:
It applies to all activities, including the recycling plant
The final EIR specifies how frequently the activities are to be measured and to whom the analysis and proposed mitigation techniques are to be submitted
The acoustician is one approved by the County and
The requirement is actively enforced.

We also think it is essential that the proposed mitigation requirements, such as reducing the hours of operation and prohibiting the aggregate plant and the recycling plant from operating concurrently, are monitored and enforced.

Blasting

Although the draft EIR concludes that "project-related groundborne vibration impacts associated with blasting would be less than significant", our own survey of Via Sandra homeowners showed that the owners of 5 lots considered that the blasting ranged from strongly perceptible to intolerable.

Section 2.6.3 says that primary blasts are conducted approximately twice a year. Smaller blasts are performed up to twice per week and include up to about 10 holes per blast.

However, Section 2.6.2 says that the Applicant requests an increase in permitted annual production and sales from the existing 86,000 tons per year to 468,000 tons per year.
If production is expanded by a factor of 5½, blasting will presumably have to be either much more frequent or involve much bigger blasts or both. **That consequence does not appear to be addressed in the draft EIR, but it should be.**

Also, we previously suggested that the quarry should be required to observe the same requirements as the City of Thousand Oaks has, for residential developments, for notifying affected residents in advance each time blasting is to occur. That does not seem to be reflected in the draft EIR. **It should be made a requirement of any approval of the Project that, not less than 24 hours before any blasting, an email notification be sent to all residents on all the Palermo Streets who supply an email address for that purpose and that the notification specify the time and duration of the blasting. That is all the more important if the frequency and/or size of blasts is increased.**

Alternatives

Of the alternatives addressed in 5.4, we would prefer Alternative A—No Project.
However, we recognize that the County is unlikely to approve that alternative as it has an interest in preserving a local source of road and other materials and there is presumably a risk that, if alternative A were to be approved, the quarry owner would seek to pursue the vested interest claim which it previously made and then, we assume, withdrew under the Compliance Agreement of October 19, 2015. As the Compliance Agreement states that it does not constitute an enforceable contract, we assume that the claim has not been abandoned in any legally binding way, although we are not in a position to assess whether the claim to a vested interest has any merit.

We consider that the next best alternative <u>of those proposed</u> would be Alternative C.

However, that alternative would allow the mining area to be increased.

We consider that a further alternative should be presented; the same as alternative C (no asphalt and concrete recycling operations, no installation of a security trailer and no operations on Sundays or outside of the currently permitted hours of 7:00 a.m. to 4:00 pm) <u>but with mining only allowed to continue within the existing CUP area</u>, of which a considerable part has not yet been quarried, according to Fig 2-3. **The duration should, however, be limited in time as recommended above.**

We therefore consider that the EIR is incomplete in that respect and does not meet the CEQUA standard that:

"An EIR should be prepared with a sufficient degree of analysis to provide decision-makers with information which enables them to make a decision which intelligently takes account of environmental consequences."
We imagine that the Resource Management Agency already has all the information needed to analyze and present that further alternative.

Other Matters

A. We refer above to the quarry owner's claim to vested rights.

Whatever the merits or demerits of that claim, **the owner should be required, as a pre-condition of any approval, to surrender in a binding and permanent manner, any such rights as it may have, in order to preclude it from reviving that claim on any future occasion.**

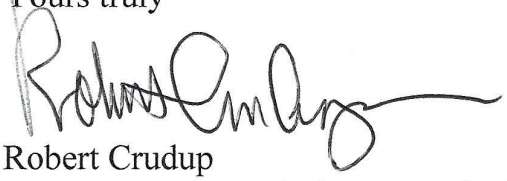
B. Section 1.4 says that "The request includes expansion of the mining area to the east to address slope conditions at the northerly and northeasterly side of the quarry and expansion onto recently acquired adjacent land."

That is an area which is close to Via Sandra and Via Pisa and to the Powerline Trail and further mining of which would reduce the width of an already narrow wildlife corridor.

The slope conditions referred to are presumably the over-steepening of the slope which we understand was effected in breach of the existing CUP. The quarry owner (and/or its predecessor) will already have profited from that mining. It is, in our view, wrong that that breach should be further rewarded by permission for

additional mining in, and revenue from, that area. **We therefore consider that the owner should be required to correct the over-steepening by infill and should not be permitted to expand that mining area.**

Yours truly



Robert Crudup
President, on behalf of the Board of Directors
Palermo Maintenance Corporation
c/o Community Property Management, attn. Kerri Brown
751 East Daily Drive, Suite 300, Camarillo, CA 93011-2817
Email: palermo@cpm1.com

From: Randy Denning <denningemail@gmail.com>
Sent: Thursday, January 14, 2021 5:39 PM
To: Bertoline, Justin <Justin.Bertoline@ventura.org>
Subject: Homeowner Comments Regarding Case Number LUl0-0003 - Pacific Rock Mine

Case Number: LUl0-0003
Project Name: Pacific Rock Mine
Applicant: Pacific Rock, Inc.
State Clearinghouse Number: 2017081052
Location: 1000 South Howard Road, Camarillo
Assessor Parcel Nos: 234-0-060-220 and 234-0-060-190 Date Application Filed: December 16, 2016

Dear Mr. Bertoline,

This email is intended to provide my comments to the draft EIR for Case Number LUl0-0003 regarding the expansion of the Pacific Rock Mine. I am a homeowner in Palermo Homeowners Association, and my home is one of a few on Via Sandra that sits almost directly above the quarry. We therefore have a direct view of the quarry, and I'm subject to the dust and noise that it currently generates. When my wife and I purchased the home we obviously were aware of the existence of the quarry and its issues, and we judged them to be acceptable. However, at the time that we made the purchase we couldn't have imagined the current changes that are being considered. The increase in dust, noise, light and visual pollution that we would be subjected to is unfathomable. The expansion of the quarry as currently written would certainly diminish our enjoyment of our home and yard, and reduce our property value and our ability to sell our home when we decide to do so.

I will not attempt to address the EIR in detail, I instead refer you to the letter provided by my HOA; the Palermo Maintenance Corporation, dated January 14, 2020. I will however address three of the most egregious elements of the requested expansion. The first is the requested extension of the operational days from 6 to 7 days per week. Obviously this would greatly impact the enjoyment and value of our property, and I frankly don't know how operation of the quarry on Sundays can even be considered for approval. Secondly, the additional noise and dust from the operation of a concrete and asphalt recycling plant would be an eyesore, the noise and dust would be intolerable, and I fear that it would greatly reduce our enjoyment of our property. Lastly, the requested increase of the Hours of Operation (Water Truck Use, Equipment Fueling; Arrivals and Departures of Aggregate, Recycle, and Soil Hauling) is unreasonable in a residential area, and would also contribute to diminishing our enjoyment of our home and yard, and reducing our property value.

In closing, I refer you to the Notice of Availability: "**Based on the analysis presented in the DEIR, the project would result in potentially significant but mitigable impacts to Air Quality, Greenhouse Gasses, Biological Resources, Cultural Res*ources, Geology and Soils, Noise, Water Resources, Hazards and Public Safety, Land Use and Planning and potentially significant but unavoidable impacts to Visual Resources.*** Given the issues called out in the EIR, I don't know why most of the requested items requested by the Quarry are even under consideration. I strongly encourage that the proposed changes be limited by not allowing for the expansion of the days and hours of operation, and not allowing the operation of a concrete and asphalt recycling plant which is better suited to an industrial area and not adjacent to homes.

Thanks very much for your time.
Randy and Kathy Denning
151 Via Sandra
Newbury Park, CA 91320

From: Dan Fish <fishd8@gmail.com>
Sent: Thursday, January 14, 2021 8:22 PM
To: Bertoline, Justin <Justin.Bertoline@ventura.org>
Subject: Case LUl0-0003, Pacific Rock Mine

Dear Ventura County Resource Management Agency, Planning Division,

I am writing as a concerned citizen and resident of Palermo Neighborhood, in Dos Vientos, in objection to Pacific Rock's application to extend operating days/hours and expand operations of the Pacific Rock Quarry in Camarillo. As a resident living on Via Sandra, my specific concerns include:

1.) Increased noise from incremental heavy equipment operation and use of explosives (causing shock and vibration)

2.) Increases in the generation of dust from the expansion and extension of operating hours, days, and inclusion of concrete/asphalt recycling operations

3.) Light pollution and nuisance caused by the operation of incremental light plants for extend period of time and days

4.) Potential destabilization of the hillside caused by the expansion

Thank you for taking this into consideration in the permitting process, and for preserving the quality of life for residents in the surrounding area.

Regards,

Dan Fish

From: james crawford <jimmy.crawford@yahoo.com>
Sent: Thursday, January 14, 2021 6:43 AM
To: Bertoline, Justin <Justin.Bertoline@ventura.org>
Subject: Pacific Rock Quarry

Good morning Justin,

My name is James D. Crawford Jr. and I live in the Palermo track of Dos Vientos, specifically 127 Via Sandra.

I am 100% opposed to any and all proposed expansion of the Pacific Rock Quarry that is directly below me.

Conditional use permit 3817-3

Thank you.

James D. Crawford, Jr.
805-390-3779
805-499-9778

From: Mark Cotone <nylany@me.com>
Sent: Thursday, January 14, 2021 8:28 AM
To: Bertoline, Justin <Justin.Bertoline@ventura.org>
Cc: Mark Cotone <nylany@roadrunner.com>
Subject: Re: Pacific Rock Quarry

Hello Justin,

My name is Mark Cotone, and my family and I live at 139 Via Sandra, in a home in the Palermo track of Dos Vientos situated right above the Pacific Rock Quarry.

As it stands now, in it's current state, the quarry is an unwelcome eyesore, whose noise pollution and occasional building-shaking explosions are a known nuisance and - now I'm learning - a potential health hazard as well. I am unreservedly opposed to any and all proposed expansions of operational scope at the Quarry in conjunction with their submitted modification of existing Conditional Use Permit No. 3817-3.

The fact that any company would even consider impacting the quality of life and risking the health for so many community residence in their pursuit of monetary profit is unconscionable. Twenty-four hour operation seven days a week for thirty years? How can this even be considered. And when I review the corporate history of this company, the multiple citations for Clean Water Act violations and numerous fines for illegal dumping make it obvious that we're dealing with an unscrupulous entity.

Again, a hard "no" to all proposed expansions.
This company should be shut down, not rewarded with the opportunity to continue their unethical practice.

Thanks for your time,
Mark Cotone

From: Ferruh Unlu <ferruhunlu@yahoo.com>
Sent: Thursday, January 14, 2021 9:23 PM
To: Bertoline, Justin <Justin.Bertoline@ventura.org>
Cc: Derya Unlu <derya_unlu@yahoo.com>
Subject: Case Number LU10-0003 - Pacific Rock, Inc., Applicant

Hello Mr. Bertoline,
I am writing to you in support of my community, Dos Vientos in Newbury Park, CA which is close to the mine operated by Pacific Rock. I was concerned about this mine from the first day we have seen during our hiking adventure when we had moved to the community in 2012. We, as a family, had been very upset by the fact that there was this mine very close to our community and horrible impact on the beautiful mountain behind our house. It was extremely concerning why a company would destroy it to make financial gains despite all the facts happening around the globe. We all are responsible for what has been and will be happening to our beautiful planet and things are getting worse and worse every day, which I am sure you are also aware. Just because some company X, in this case Pacific Rock, wants to take advantage of this to make some financial gains without hesitating to destroy it doesn't mean should be allowed to participate in this irresponsible act. To them, it doesn't matter what they leave behind as long as they can dig and continue to destroy our planet piece by piece every day without feeling any guilt with it. I am hoping that you are on our side and will not let this happen. We all need to do what we should do to save our planet for our next generations to keep at least what we have for them to live, which we have been lucky for many years for this. It is still not too late to slow down the damage or even reverse it, in my opinion.

Thank your kind consideration and hoping that the permit will not be given in the name of saving our planet piece by piece instead of destroying and/or letting the other to destroy.

Ferruh & Derya Unlu
5341 Via Pisa
Newbury Park, CA 91320

Phone: 805.701.3239

From: Casey, Thomas <Thomas.Casey@molex.com>
Sent: Friday, January 15, 2021 8:52 AM
To: Bertoline, Justin <Justin.Bertoline@ventura.org>
Cc: kc.kericasey@gmail.com
Subject: Expansion of Mine / Quarry

Justin,

Just wanted to express my concern over the considered modification to the existing Conditional Use Permit (CUP) No. 3817-3 to expand the use of the of existing mining area. I want to take special exception to the idea of recycling concrete and asphalt and allowing imported material to be used for reclamation fill. We live in the Dos Ventos neighborhood, which borders the mine, and we are very concerned about the impact to our health.

- Recycling concrete and asphalt can contain asbestos and other harmful materials, which have known deleterious effects on the health of humans, especially children.
- The prevailing winds, due to the coastal climate, travel westerly from Camarillo to Newbury Park (thus the Spanish Name of the neighborhood Dos Vientos, "Two Winds"), which brings particulate and pollutants from the mine straight into the Dos Vientos neighborhood.

Please consider the health and welfare of the family oriented neighborhood and reject the expansion of the use of the mine. Thank you.

Best regards,

Tom & Keri Casey
Email: thomas.casey@molex.com
Cell: +1-805-407-7992
210 Via Ricardo, Newbury Park

From: dan ritt <danritt@hotmail.com>
Sent: Friday, January 15, 2021 3:54 PM
To: Bertoline, Justin <Justin.Bertoline@ventura.org>
Subject: Proposed Changes to the Pacific Rock Quarry Terms of Operation

To whom it may concern,

In regards to the notice of changes to the Pacific Rock Quarry Terms of Operation, I would like to take this opportunity to share my comments.

I have various concerns regarding the proposed changes as detailed below:

- Increase in dust particles coming from the quarry expansion
- Increase in noise pollution
- chemicals released by the asphalt recycling facility
- prevention of toxic particles released into the environment
- mitigation of significant impacts
- impact on property values
- what is the timeline for completion to full operation?

These are very real concerns that I would like to see addressed before any changes in operation.
Please keep me posted on any developments of this project.

Sincerely
Daniel M.Ritt
110 Via Sandra
Newbury Park
610-574-0077
danritt@hotmail.com

From: Sarah Epstein <sepstein25@gmail.com>
Sent: Friday, January 15, 2021 4:39 PM
To: Bertoline, Justin <Justin.Bertoline@ventura.org>
Subject: Rock Quarry

Hello.

My family and I live at 122 Via Sandra, Thousand Oaks, CA 91320. Our home is less than 2000 ft from the operations of Pacific Rock Quarry and yet, our neighborhood was never considered in the notification or study on the impact it would cause expanded operating hours of the quarry.

Our family STRONGLY objects to the 30 year contract being signed with the quarry to expand the area of the mining, the days it is allowed to operate and for additional buildings to be built.

First and foremost, we feel that the quality of life for the Via Sandra neighborhood, as well as the surrounding neighbors will be negatively impacted. This potential agreement will most definitely cause major disruption to the quality of life for our Via Sandra neighborhood, the property values of our homes and community, our beautiful trails, the quiet streets, and our beautiful views.

This is NOT the right thing to do, not just for our neighborhood community but for the environment and our county! We ask that you PLEASE REJECT the proposal from Pacific Rock Quarry!

Thank you,
The Epstein Family
Residents at 122 Via Sandra

From: Sharon Lin <sharonkaylin@yahoo.com>
Sent: Friday, January 15, 2021 11:16 AM
To: Bertoline, Justin <Justin.Bertoline@ventura.org>
Subject: Pacific Rock Quarry Terms

Hello Mr. Bertoline,

My family and I are the owners and residents of 152 Via Sandra. My home is less than 2000 feet from the operations of Pacific Rock Quarry, and yet, my neighborhood was never considered in the notification or study on the impact of the expanded operating hours of the quarry.

I strongly object to a 30 YEAR contract being signed with the quarry to expand the area of the mining, the days it is allowed to operate and for additional buildings to be built.

This agreement has the potential to negatively impact the quality of life for the residents of Via Sandra, Via Pisa and the surrounding neighborhoods for three decades. We face reduced property value from the loss of natural views from our homes and trails, noise every single day of the week and reduced air quality from particles generated from the activity.

This is not the right thing for our neighborhood, not the right thing for the environment and a terrible long term decision for the county. I ask you to please reject this proposal from Pacific Rock Quarry.

Thank you,

Sharon Lin
818 585 7073

APPENDIX I-2
COMMENTS ON PRDEIR

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State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
South Coast Region
3883 Ruffin Road
San Diego, CA 92123
(858) 467-4201
www.wildlife.ca.gov

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director

December 15, 2022

Ms. Mindy Fogg
Ventura County, Planning Division
800 South Victoria Avenue
Ventura, CA 93009
Mindy.Fogg@ventura.org

Subject: Pacific Rock Quarry Expansion Project, Recirculated Draft Environmental Impact Report, SCH #2017081052, Ventura County

Dear Ms. Fogg:

The California Department of Fish and Wildlife (CDFW) has reviewed Ventura County's (County; Lead Agency) Recirculated Draft Environmental Impact Report (RDEIR) for the Pacific Rock Quarry Expansion Project (Project).

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish and wildlife. Likewise, we appreciate the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under the Fish and Game Code.

CDFW's Role

CDFW is California's Trustee Agency for fish and wildlife resources and holds those resources in trust by statute for all the people of the State [Fish & Game Code, §§ 711.7, subdivision (a) & 1802; Pub. Resources Code, § 21070; California Environmental Quality Act (CEQA) Guidelines, [§ 15386, subdivision (a)]. CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species (Id., § 1802). Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect state fish and wildlife resources.

CDFW is also submitting comments as a Responsible Agency under CEQA (Public Resources Code, § 21069; CEQA Guidelines, § 15381). CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code, including lake and streambed alteration regulatory authority (Fish & Game Code, § 1600 *et seq*.). Likewise, to the extent implementation of the Project as proposed may result in "take", as defined by State law, of any species protected under the California Endangered Species Act (CESA) (Fish & Game Code, § 2050 *et seq.*), or CESA-listed rare plant pursuant to the Native Plant Protection Act (NPPA; Fish & Game Code, §1900 *et seq.*), CDFW recommends the Project proponent obtain appropriate authorization under the Fish and Game Code.

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Project Description and Summary

Objective: The County and Pacific Rock, Inc. (Applicant) are proposing the Project. The original and complete version of the DEIR was circulated in early 2021 The recirculated DEIR includes additional Biological Resources data and analysis. Additions to the document include the new appendix C-3 “Bat Habitat Assessment for Pacific Rock Quarry Expansion Project” within its Biological Resources Appendices and additional mitigation measures to reduce potential impacts to biological resources.

The existing facility is an active quarry that supplies large rock for the production of riprap and various sizes of crushed rock, aggregate materials to public works and private projects in Ventura County. The Applicant is requesting the approval of a Conditional Use Permit (CUP) modification to extend the life of the existing permitted operations for an additional 30 years. As part of the Project the CUP boundary would be extended from 115.5 acres to 204.5 acres, an increase of 89 acres. A significant expansion of the mining area is also proposed which will extend the area from 55 acres to 172.5 acres, an increase of 117.5 acres. The maximum depth of mining activities is 180 feet. The 172.5-acre excavation area will be subject to reclamation. Operational days will be extended from six days to seven days per week. Material hauling and load out would occur between the hours of 5:30am and 10pm on the additional day, Sunday. The Applicant is also proposing a limited number of extended 24-hour operations (60 days maximum per year), which can occur on any day of the week (Sunday-Saturday). New recycling operations are also included within the proposed CUP which would involve crushing and screening of concrete debris between the hours of 7am-4pm on Monday-Saturday. The proposed modification would allow for construction and mobile mining equipment to be staged in outdoor storage areas and allow for imported material to be used in reclamation fill. Finally, the existing onsite mobile home will be replaced to be used as a 24-hour security trailer.

The Applicant is requesting that the County approve a CUP modification to extend the life of the permit and continue to operate on property zoned Open Space (OS-160) and Agricultural Exclusive (AE-40). Both parcels occur within a Habitat Connectivity and Wildlife Corridor overlay zone, pursuant to Ventura County’s Zoning Ordinance. The request includes expansion of the mining area to the east and onto recently acquired adjacent land. Impacts to vegetation communities, individual rare plants, sensitive habitats, and wildlife corridors are anticipated. Approximately 1,110 rare plants may be impacted with the extension of the Project’s CUP boundary and an additional 60 rare plants were found within the 200-foot study area buffer which may still be impacted by “inadvertent disturbance”. CESA-listed Conejo Buckwheat is included in the list of special status plants to be impacted by the project. This species is endemic to Ventura County. According to the RDEIR of the 166.98 acres anticipated to be impacted, 74.42 acres are ranked vegetation communities. Temporal and permanent losses of ranked- and unranked-natural communities will result in the loss of habitat to a multitude of special status and common species.

The proposed Project is expected to impact 19 of the 23 unnamed on-site drainage features. No impacts are anticipated to the detention pond. Many of the 23 unnamed drainage features are hydrologically connected to Conejo Creek and emergent wetlands downstream. In total, over 18,000 linear feet of ephemeral streams within the Project footprint will be impacted. The acreage of impacts to streams and corresponding were not provided.

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The Applicant is also requesting approval of an amendment to the existing Reclamation Plan to account for the proposed expanded mine area and to amend specifications for reclaimed conditions at the site. The proposed Reclamation-Plan amendment specifies land uses as "open space" on the benched portions, and "agriculture" on the remaining areas, where grasses would be planted for cattle grazing. The proposed reclamation would also involve import and placement of fill material at the site.

Location: The Project is located within the westernmost portion of the Santa Monica Mountains and within the Santa Monica–Sierra Madre Connection (Connection). The Project 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. The physical address for the site is 1000 South Howard Road, Camarillo, California 93012. The existing quarry is located within Assessor's Parcel Number (APN) 234-0-060-220. Proposed expansion areas are within additional portions of APN 234-0-060-220 and a portion of APN 234-0-060-190.

Comments and Recommendations

CDFW previously commented on the proposed Project's NOP on October 2, 2017, and on the DEIR January 21, 2021. CDFW offers the comments and recommendations below to reassert our concerns and to assist the County in adequately identifying, avoiding, and/or mitigating the Project's significant, or potentially significant, direct, and indirect impacts on fish and wildlife (biological) resources.

Specific Comments

Comment #1: Impacts to Conejo Buckwheat (*Eriogonum crocatum*)

Issue: The Project will impact populations of Conejo buckwheat, an endemic CESA-listed and California Rare Plant Rank (CRPR) 1B.2 species. Conejo buckwheat also has a State and Global ranking of 1 (S1/G1).

Specific impacts: The Project as proposed could potentially remove 54 to 89 individual Conejo buckwheat plants. 54 individual plants are within the proposed expanded mining boundary and 34 are within 200 feet of the boundary.

Why impacts would occur: Conejo buckwheat is a CESA-listed species and is a CRPR 1B.2 that meets the definitions of CESA of the California Fish and Game Code (CEQA Guidelines §15125; (c) and §1538) and is afforded protections under state law. Although the project has included additional focus surveys, baseline surveys, flagging, seed collection, topsoil salvage, and other mitigation measures, the Project as proposed will still remove over 50 individual plants. Within the RDEIR it states, "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." In order for CDFW to issue an ITP it must be determined that adequate avoidance and minimization measures have been undertaken to fully mitigate potential impacts to the species. Conejo buckwheat is endemic to the Conejo Valley and surrounding regions in Ventura County (Calscape 2022). As an endemic species Conejo buckwheat has limited opportunities for occurrence. An S1 ranking indicates there are less than 6 occurrences of this community in existence in California (Sawyer et al. 2008). The removal of these populations may cause the local extirpation of the species from the

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area. As such, CDFW supports developing and selecting alternatives that reduce or completely avoid Conejo buckwheat.

Evidence impact would be significant: Impacts to special status plant species should be considered significant under CEQA unless they are clearly mitigated below a level of significance. Inadequate avoidance, minimization, and mitigation measures for impacts to special status plant species will result in the Project continuing to have a substantial adverse direct, indirect, and cumulative effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by CDFW or U.S. Fish and Wildlife Service (USFWS). Additionally, plants that have a California Native Plant Society (CNPS) California Rare Plant Rank (CRPR) of 1A, 1B, 2A, and 2B are rare throughout their range, endemic to California, and are seriously or moderately threatened in California. All plants constituting CRPR 1A, 1B, 2A, and 2B meet the definitions of CESA and are eligible for State listing. Impacts to these species or their habitat must be analyzed during preparation of environmental documents relating to CEQA, as they meet the definition of rare or endangered (CEQA Guidelines, § 15380). Please see CNPS Rare Plant Ranks page for additional rank definitions (CNPS 2022).

Recommended Potentially Feasible Mitigation Measure(s):

Mitigation Measure #1: Given the constraints of CESA permitting CDFW recommends the Applicant consider Project alternatives that avoid Conejo buckwheat given the rarity of the plant. Possible options include the adoption of Alternative B within the 2020 DEIR. Possible configurations could involve moving the proposed mining boundary back to avoid the large cluster of Conejo buckwheat on the northwest corner of the mine, closest to the entrance road.

Recommendation #1: Throughout the document Conejo buckwheat is often referred to as a rare plant, Conejo buckwheat is protected by law under CESA. As such, CDFW recommends that it is made more evident throughout the document so that readers do not minimize its value and rarity.

Comment #2: Impacts to Wildlife Corridors and Linkages

Issue: Expansion of the Project boundary will narrow the width of the Santa Monica-Sierra Madre wildlife corridor such that it may affect the function of the wildlife passage.

Specific impacts: Expansion of the disturbance boundary will directly impact the wildlife corridor by physically narrowing the passage to nearly half of its current width from 1,500 feet to 800 feet. Further, due to the nature of the Project, indirect impacts such as increased noise, light, dust, and human activity may further degrade the function of the corridor.

Why impacts would occur: The Project lies completely within the Santa Monica-Sierra Madre wildlife corridor overlay zone. This overlay zone is associated with the Ventura County ordinance to regulate development within habitat connectivity and wildlife corridors (Ventura 2019). The purpose of this ordinance is 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.” Implementation of the Project goes against the very purpose of the ordinance and the goals of the County to

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maintain functional connectivity of wildlife corridors by expanding the disturbance zone, removing acres of sensitive natural communities, and physically narrowing the corridor.

The Santa Monica-Sierra Madre wildlife corridor is especially important in terms of preservation as it is one of few coastal to inland connections remaining in the South Coast Ecoregion (South Coast Wildlands 2008). As stated within the EIR, “Mining in the proposed expansion areas east of the existing mining area would narrow the [Santa Monica-Sierra Madre] 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.” CDFW is concerned that 800 feet is not an appropriate amount of space to maintain the function of the corridor, especially for focal species such as mountain lion (see comment 2). Minimum corridor width varies based on the region-specific situation at minimum, given the present situation CDFW is of the opinion that the corridor should remain 1,000 feet wide to ensure continued use and to minimize edge effects (Bond 2003). As stated in CDFW’s 2017 comment letter, “[t]he proposed construction footprint extends close to the edge of the parcel boundary and adjoins protected open space on parcel 234-0-080-380 managed by the Mountains Recreation and Conservation Authority (MRCA) (103 acres). The MRCA-open-space parcel and adjacent wildlife habitats lie between the existing quarry footprint and the Dos Vientos residential housing tract; the habitat is about 1,000 feet wide at its narrowest under current conditions. This location represents a functioning wildlife movement area allowing plant and animal species to reside there and move spatially between Conejo Mountain and the western Santa Monica Mountains. Proposed quarry expansion would remove habitat in this area, further reducing the width of this movement corridor by 1/3 or more. The MRCA-open-space parcel would not be providing an effective buffer to neutralize adverse edge effects associated with the nearby mining.” CDFW is still of the opinion that these impacts will degrade the current wildlife values in this location. It is not clear if there are currently protections on the remaining adjacent parcels.

Within the RDEIR it also states, **“**[t]he 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.” CDFW does not agree with this statement. Impacts to the corridor will only be exacerbated given the nature of the work that will be performed. Mining includes loud noises from blasting, excavating, rock crushing, loading, and hauling out materials. Additionally, these operations will be conducted at hours that will most impact wildlife (dusk and dawn) and will be done seven days a week with the proposed extension of work hours into Sunday.

The RDEIR did include a noise study to assess noise generated by the Project. Implementation of noise reducing equipment was also offered; however, CDFW is still concerned with the cumulative noise generated by daily operations. The noise study conducted onsite aimed to assess noise within the remaining corridor and the Dos Vientos residential community. However, the noise receptor (R3) and all subsequent receptors along the passage were near the far edge of the corridor near the residentials and did not span across the width of the corridor. Likewise, potential project noise was generated towards the middle of the quarry, in the location of the existing aggregate plant. The proposed mining boundary extends far beyond this point. The aggregate plant is approximately 2,000 feet away from receptor R3 while the proposed mining boundary is only 390 feet away. Heavy machinery and noise generating activities will likely be conducted much closer to the corridor. Readings performed under the

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aforementioned conditions already yielded a cumulative noise level of 59.6 dBA. Substantial noise may adversely affect wildlife species in several ways as wildlife responses to noise can occur at exposure levels of only 55-60 dB (Barber et al. 2009). Noise can also affect predator-prey relationships as many nocturnal animals such as bats and owls primarily use auditory cures (i.e., hearing) to hunt, and have been found to have a high likelihood of occurrence in the area. Additionally, many prey species increase their vigilance behavior when exposed to noise because they need to rely more on visual detection of predators when auditory cues may be masked by noise (Rabin et al. 2006, Quinn et al. 2017). Moreover, although lighting design and features will follow guidelines outlined within Ventura County's wildlife corridor ordinance the expansion of the mining boundary will push wildlife closer to the residential tract where ambient light will be increase. Increased ambient lighting levels can increase predation risks and disorientation and disrupt normal behaviors of wildlife in adjacent feeding, breeding, and roosting habitat (Longcore and Rich 2004).

Further, the Santa Monica-Sierra Madre connection which stretches from the Santa Monica Mountains at the coast inland to the Santa Susana Mountains and the Sierra Madre Ranges of Los Padres National Forest includes substantial public ownership. Currently 34% (43,249 of 125,613 acres) of the connection is receiving some level of conservation protection that protects natural habitats from development (South Coast Wildlands 2008). Implementation of this Project will undermine the goals of these conservational efforts by creating a chokepoint to wildlife movement. Lands protected for the purposes of maintaining resources and movement corridors for wildlife species may not be as readily accessible to a multitude of species with the implementation of this Project. Future development may occur and further truncate the corridor. Finally, wildfires have occurred at higher frequency and severity within California. A wildfire that occurs within the corridor may burn and remove vegetation within the remaining segment, which could further hamper wildlife movement through the passage.

Evidence impact would be significant: On May 12, 2019, Ventura County established Ordnance number 4537, the non-coastal zoning ordinance to regulate development within the habitat connectivity and wildlife corridors, and the critical wildlife passage areas overlay zones. This ordinance was established 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." According to the ordinance the purpose of the ordinance is as follows:

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.

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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.

Recommended Potentially Feasible Mitigation Measure(s):

Mitigation Measure #1: CDFW recommends the Project fully avoid further encroaching into the Santa Monica-Sierra Madre wildlife corridor. CDFW recommends redesigning the project to avoid impacts to the wildlife corridor. Alternatives such as pit mining should be considered to avoid further encroachment. Under alternative B of the 2020 document the Project would reduce the mine expansion area.

Mitigation Measure #2: CDFW recommends the Applicant retain contiguous land parcels surrounding the corridor. APN numbers 234-0-080-790, 234-0-080-380, and undisturbed portions of 234-0-060-220 and 234-0-060-190 should be protected in perpetuity (if not already protected) from encroachment and development to ensure the preservation of the Santa Monica-Sierra Madre wildlife corridor. The mitigation lands should be protected in perpetuity under a conservation easement dedicated to a local land conservancy or other appropriate entity that has been approved to hold and manage mitigation lands pursuant to Assembly Bill 1094 (2012). Assembly Bill 1094 amended Government Code, sections 65965-65968. Under Government Code, section 65967(c), the lead agency must exercise due diligence in reviewing the qualifications of a governmental entity, special district, or nonprofit organization to effectively manage and steward land, water, or natural resources on mitigation lands it approves. An appropriate non-wasting endowment should be provided for the long-term management of mitigation lands. A conservation easement and endowment funds should be fully acquired, established, transferred, or otherwise executed prior to implementing Project-related ground-disturbing activities and prior to the County's issuance of grading permits.

Mitigation Measure #3: Due to the sensitive nature of the wildlife corridor, CDFW recommends the Applicant conduct an additional noise study. Receptors should be placed across the width of the corridor to assess noise more accurately throughout the corridor.

Mitigation Measure #4: CDFW recommends the Project restrict use of equipment and lighting to hours least likely to disrupt wildlife (e.g., not at dusk or in early morning before 9 am). In addition to the implementation of mitigation measure NV-1 CDFW recommends the Applicant maintain noise receptors and a written record of noise readings from sensitive noise receptors. These readings should be retained for one year and made available to the Ventura County Planning Division to ensure that noise generated from the project are within appropriate thresholds for wildlife. Noise levels should not exceed 55 dBA at sensitive receptors. If readings do exceed these thresholds further measures should be implemented to reduce impacts from noise such as sound barriers.

Recommendation #1: CDFW recommends that Project's hours of operation not be extended, nor should operations extend into Sunday. The proposed hours of operation will occur both at dusk and dawn when wildlife is most active and have the potential to change behavior in wildlife, including special status species. Likewise, the absence of noise one day out of the week may give wildlife an opportunity to move more freely within the wildlife corridor.

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Comment #3: Impacts to Mountain Lion (*Puma concolor*)

Issue: CDFW acknowledges and appreciates the Applicant's efforts in reducing impacts to mountain lion in the RDEIR. However, even with the implementation of natal den surveys and pre-disturbance surveys CDFW is still concerned that significant impacts will still occur as a result of narrowing of the wildlife corridor and removal of mountain lion habitat due to Project implementation.

Specific impacts: Narrowing of the Santa Monica-Sierra Madre wildlife corridor may affect the functionality of the passage to CESA-candidate mountain lion. The RDEIR also did not disclose the acreage of habitat potentially impacted due to Project activities. Project implementation would directly impact mountain lion habitat through vegetation removal, grading, and extension of the disturbance area. Indirect impacts include increased levels of noise, vibration, sound, and human activity in the area.

Why Impacts will occur: The Santa Monica-Sierra Madre wildlife corridor which connects patches of habitat blocks in the area will be narrowed. The Applicant has only provided mitigation measures that will aid in the detection and avoidance of mountain lion dens. Other measures offered included mitigation to lessen impacts from noise and light.

Project implementation would reduce the width of the Santa Monica-Sierra Madre corridor from 1,500 feet to 800 feet. CDFW is concerned that narrowing the corridor to 800 feet will impact mountain lion movement and make blocks of surrounding habitat less accessible. Based on literature available, it is not concretely known as to how wide a corridor should be to facilitate movement and long-term gene flow between species. However, absent of this data a general rule of thumb should be applied according to Beier in a 2018 report, *A rule of thumb for widths of conservation corridors*. "A corridor should be at least 2 km wide, except at unavoidable bottlenecks such as freeway crossing structures (Beier 2018)." The corridor is already far narrower than the recommended 2 km (6,562 feet). The effectiveness of a corridor is further affected by the type and extent of human activities and land use practices within and adjacent to the corridor (Harrison 1992). In a more recent study, it was found that "…most species' movement in corridors less than 400 m wide will be negatively influenced by the presence of people along the edge of the corridor. Corridor widths need to be even greater if residential development, trails, or human activity are permitted within the boundaries of the designated wildlife corridor." The impacted portion of the Santa Monica-Sierra Madre corridor is flanked by the Project's mining operation and residential communities. Both contribute to increased noise, light, and human activity. Further, the Powerline trail cuts parallel through the impacted section of the corridor, increasing the likelihood of human-wildlife interactions. These elements increase levels of disturbance in the corridor, thus CDFW is of the opinion that 800 feet is not an appropriate width. These cumulative elements coupled and ecological importance of this segment of the corridor necessitate a greater minimum width to minimize potential impacts to mountain lion movement.

With the extension of the Project's CUP boundary, acres of suitable hunting and denning habitat will also be lost due to grading and vegetation removal or become less viable due to increased noise, light, and human activity. As such, replacement habitat should be provided for mountain lion to minimize impacts. Within the RDEIR is a table that discloses acreage of suitable habitat of special status species impacted within Appendix C-1. Mountain lion was not included on this table although it is a CESA-candidate with a high probability of occurrence. Conserving and

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restoring suitable habitat and connectivity areas and corridors is essential for mitigating impacts to mountain lions. Loss of this species from Southern California, and from the Sierra Madre-Santa Monica Mountains region in particular would run counter to extensive public investments in parks and open spaces designed to protect biodiversity for future generations (Penrod 2006). Mitigation for habitat removed is especially critical in the face of climate change driven habitat loss and increased frequency of fires (Yap 2019). Much of the chaparral habitat in southern California that provide habitat for mountain lions may be climactically highly stressed by the year 2070 (Thorne 2016).

Evidence impact would be significant: Mountain lion is a specially protected mammal in the State (Fish and Game Code, § 4800). In addition, on April 21, 2020, the California Fish and Game Commission accepted a petition to list an evolutionarily significant unit (ESU) of mountain lion in southern and central coastal California as threatened under CESA (CDFW 2020a). As a CESA-candidate species, the mountain lion in southern California is granted full protection of a threatened species under CESA.

Recommended Potentially Feasible Mitigation Measure(s):

Mitigation Measure #1: CDFW recommends the Project fully avoid further encroaching into the Santa Monica-Sierra Madre wildlife corridor (see comment 2, MM 1).

Mitigation Measure #2: If avoidance is not possible CDFW recommends moving the proposed boundary such that the wildlife corridor remains at least 1,000 feet wide in areas that are most narrow. This would require the Project to move the boundary back by 200 feet in applicable segments. Maintaining a 1,000-foot minimum buffer will help deter impacts from edge effects and maintain function of the passage.

Mitigation Measure #3: If impacts cannot be avoided, habitat should be replaced to compensate for the temporal or permanent loss of habitat. As stated within CDFW's 2021 comment letter to the Applicant, CDFW recommends setting aside a minimum of 110.3 acres of replacement habitat. CDFW recommends the replacement habitat be located adjacent to the County's Wildlife Linkage and Corridor in order to widen the corridor at locations where the corridor is less than one mile. There should be no net loss of suitable habitat for mountain lions. The County should consult and collaborate with CDFW to conserve areas beneficial to the southern California mountain lion population that may improve chances of survival and reproduction of mountain lions in the face of climate change. The mitigation lands should be protected in perpetuity under a conservation easement dedicated to a local land conservancy or other appropriate entity that has been approved to hold and manage mitigation lands pursuant to Assembly Bill 1094 (2012). Assembly Bill 1094 amended Government Code, sections 65965-65968. Under Government Code, section 65967(c), the lead agency must exercise due diligence in reviewing the qualifications of a governmental entity, special district, or nonprofit organization to effectively manage and steward land, water, or natural resources on mitigation lands it approves. An appropriate non-wasting endowment should be provided for the long-term management of mitigation lands. A conservation easement and endowment funds should be fully acquired, established, transferred, or otherwise executed prior to implementing Project-related ground-disturbing activities and prior to the County's issuance of grading permits.

Mitigation Measure #4: If impacts to movement corridors occur the Project may also include plans to implement or help fund wildlife crossing structures or passages with directional wildlife

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fencing to mitigate impacts to mountain lion. The Applicant should provide minimum criterion for design features, dimensions, and locations of potential crossings and associated fencing.

Recommendation #1: CDFW recommends providing habitat impact acreage for mountain lion within the Observed and Potentially Occurring Special-Status Species table (Appendix C-1 Pages 29-36) as it is a species with high probability of occurrence and affords protections under CESA as a CESA-candidate (see Comment 5).

Comment #4: Lake and Streambed Alteration Agreement (LSAA), impacts to streams and associated habitat

Issue: The Project would impact 18,686 linear feet of streams protected by the State.

Specific impacts: The Project includes the modification of 19 unnamed ephemeral streams. Although a Stream delineation surveys were recommended as part of CDFW's January 2021 comment letter a formal delineation was not included in the RDEIR to quantify acreage of impacts to streams and associated habitat. The PDEIR did not include a plan to mitigate for loss of streambed and associated riparian habitats as a result of the Project.

Why Impacts will occur: As previously stated in CDFW's 2017 and 2021 comment letters, CDFW is still concerned about impacts to streams. The only mitigation proposed for streams within the RDEIR is a future delineation associated with an LSA notification (BIO-5) and measures that would reduce impacts to water quality (BIO-2(h), WR-2(a), WR-2(b), and WR-2(c)). Within the RDEIR, the Project anticipates impacts to 19 of the 24 on-site water features (W1-W24) that are subject to Fish and Game Code, section 1600 *et seq*. Water features W6, W11, W18, and W24 (detention pond) are not expected to be impacted. However, this would still result in impacts to approximately 18,686 linear feet of streambed and an undisclosed acreage of associated riparian habitat. Modification of these features may result in the loss of streams, associated watershed function, and biological diversity. Replacement of streambed acreage and riparian habitat will be necessary to reduce impacts to less than significant. Within CDFW's January 2021 comment letter staff provided this statement, "Please provide CDFW with the updated information, including any information regarding jurisdictional delineations of State waters, for review. Upon review, CDFW may provide additional comments, as necessary." The Applicant has still not provided this updated information. Thus, CDFW is not able to provide the most appropriate mitigation for the Project nor adequately assess the feasibility of proposed mitigation. Collectively, this would result in the potential loss of several acres of natural drainage patterns, soils, and associated vegetation.

Additionally, within the recirculated biological section of the EIR it states, "[h]owever, 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." Therefore, altering these drainage features will also alter natural hydrologic and geomorphic processes and likely diminish on-site and downstream water quality in Conejo Creek and emergent wetlands. It is also unclear whether the detention pond will be able to store a higher volume of water, the modification of these water features may cause more frequent overflow events into Conejo Creek.

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Evidence impact would be significant: The Project may impact streams and associated riparian habitats. CDFW exercises its regulatory authority (Fish and Game Code, section 1600 *et seq*.) to conserve fish and wildlife resources which includes rivers, streams, or lakes and associated natural communities. Fish and Game Code, section 1602 requires any person, state or local governmental agency, or public utility to notify CDFW prior to beginning any activity that may do one or more of the following:

- Divert or obstruct the natural flow of any river, stream, or lake;
- Change the bed, channel, or bank of any river, stream, or lake;
- Use material from any river, stream, or lake; or,
- Deposit or dispose of material into any river, stream, or lake.

CDFW requires a Lake and Streambed Alteration Agreement (LSA) Agreement when a project activity may substantially adversely affect fish and wildlife resources.

For reasons discussed above, the Project continues to have a substantial adverse effect on streams and associated riparian habitat through direct removal, filling, hydrological interruption, or other means.

Recommended Potentially Feasible Mitigation Measure(s):

Mitigation Measure #1: The Project applicant (or "entity") should provide written notification to CDFW pursuant to Fish and Game Code, section 1600 *et seq.* The Project should notify CDFW prior to any Project construction or activities. Based on this notification and other information, CDFW determines whether a LSA with the applicant is required prior to conducting the proposed activities. Please visit the Lake and Streambed Alteration Program webpage to obtain a notification package for an LSA (CDFW 2021b).

CDFW's issuance of an LSA for a Project that is subject to CEQA will require CEQA compliance actions by CDFW as a Responsible Agency. As a Responsible Agency, CDFW may consider the CEQA document from the Lead Agency for the Project. To minimize additional requirements by CDFW pursuant to Fish and Game Code, section 1600 *et seq.* and/or under CEQA, the CEQA document should fully identify the potential impacts to the streams or riparian resources and provide adequate avoidance, mitigation, monitoring, and reporting commitments for issuance of the LSA.

Mitigation Measure #2: Any LSA Agreement issued for the Project by CDFW may include additional measures protective of streambeds on and downstream of the Project such as additional erosion and pollution control measures. To compensate for any on-site and off-site impacts to riparian resources, additional mitigation conditioned in any LSA Agreement may include the following: avoidance of resources, on-site or off-site creation, enhancement, or restoration, and/or protection and management of mitigation lands in perpetuity.

Mitigation Measure #3: CDFW recommends fully avoiding impacts to waters and riparian/wetland vegetation communities. If feasible, CDFW recommends redesigning the Project to avoid impacts to the existing drainage features that support sensitive vegetation communities. CDFW also recommends the County consider Project alternatives that could incorporate the unnamed streams into the planned development. Design alternatives should

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attempt to retain as much surface flow and natural hydrologic processes as possible. CDFW recommends taking an inter-disciplinary approach to involve landscape architects, engineers, and wildlife biologists, and hydrologists to develop design alternatives that could fully avoid or lessen impacts to waters and riparian/wetland vegetation communities.

Mitigation Measure #4: If impacts to streams are unavoidable, CDFW recommends that mitigation occur at a CDFW-approved bank. Mitigation bank credits should be purchased, approved, or otherwise fully executed prior to implementing Project-related ground-disturbing activities and prior to the County's issuance of grading permits.

Mitigation Measure #5: If credits at a CDFW-approved mitigation bank are not available, CDFW recommends setting aside replacement habitat to be protected in perpetuity under a conservation easement dedicated to a local land conservancy or other appropriate entity that has been approved to hold and manage mitigation lands. Mitigation lands should be in the same watershed as the Project site and support in-kind vegetation. An appropriate non-wasting endowment should be provided for the long-term management of mitigation lands. A conservation easement and endowment funds should be fully acquired, established, transferred, or otherwise executed prior to implementing Project-related ground-disturbing activities prior to the County's issuance of grading permits.

Mitigation Measure #6: The Applicant has not disclosed the acreage of associated habitat through a formal delineation. As previously stated within CDFW's 2021 comment letter to the Applicant, the LSA should be conditioned such that potential impacts to riparian habitat, such as arroyo willow thicket, mulefat thicket, and cattail marshes be mitigated at no less than 3:1 if avoidance is not feasible. Mitigation ratios should increase if on-site mitigation is not possible. CDFW recommends that an on-site Habitat Mitigation and Monitoring Plan (HMMP) be developed. An HMMP should provide specific, detailed, and enforceable measures.

Mitigation Measure #7: CDFW recommends that all on-site mitigation sites for impacts to waters and riparian/wetland vegetation communities be protected in perpetuity from public encroachment and structural intrusion. This should include all water features on site, including ephemeral and perennial bodies.

As stated within CDFW's 2021 comment letter, CDFW recommends the County fund a minimum of 10 years of initial restoration and maintenance. If applicable, mitigation lands (unnamed creeks, surrounding natural areas) should be protected in perpetuity under a conservation easement dedicated to a local land conservancy or other appropriate entity that has been approved to hold and manage mitigation lands. An appropriate non-wasting endowment should be provided for the long-term management of mitigation lands. A conservation easement and endowment funds should be fully acquired, established, transferred, or otherwise executed prior to implementing Project-related ground-disturbing activities and prior to the County's issuance of grading permits.

Recommendation #1: As part of the LSAA Notification process, CDFW requests a map showing features potentially subject to CDFW's broad regulatory authority over streams. CDFW also requests a hydrological evaluation of the 200, 100, 50, 25, 10, 5, and 2-year frequency storm event for existing and proposed conditions.

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Comment #5: Habitat loss for Special Status Wildlife Species

Issue: CDFW acknowledges the efforts of the Applicant in including additional surveys and measures to reduce impact to special status species, however a significant amount of habitat will be lost or inaccessible to wildlife as part of the Project.

Specific impacts: The Project as proposed may impact a multitude of species and their habitats including but not limited to:

Table 1. Acreage of habitat potentially impacted for wildlife species as noted by the Project.

Wildlife Species	Protection Status	Suitable Habitat Acreage Impacted
Burrowing owl	SSC	72.53
Coastal California gnatcatcher	ESA-Listed; SSC	72.25
Coastal whiptail	SSC	85.5
Crotch bumblebee	CESA-candidate	85.26
San Diego desert woodrat	SSC	84
Loggerheaded shrike	SSC	72.25
Santa Monica grasshopper	G1/S1	85.5
Golden eagle	FP, WL	71.02
Sharp-shinned hawk	WL	71.02
Burrowing owl	SSC	72.53
Bat Species (Combined)	SSC	69.52

**Table composed based on information provided on "Observed and Potentially Occurring Special-Status Species table (Appendix C-1 Pages 29-36) and Bat Habitat Types and Acreages within study area table (Appendix C-3) within the RDEIR. Key: Endangered Species Act (ESA) listed, California Endangered Species Act (CESA) listed, Species of Special Concern (SSC), Fully Protected (FP), Watch List (WL).

Why impacts would occur: Although the Applicant has provided new information and mitigation measures regarding biological resources the document lacked measures to replace habitat temporarily or permanently lost due to Project implementation. Although extension of the disturbance area will be done incrementally, undisturbed habitat within the proposed mining boundary may be less accessible to wildlife. Likewise, restoration and reclamation activities performed in areas no longer utilized will take time to restore resources and function. Replacement habitat should be provided to reduce impacts to special status species to less than significant.

Evidence impact would be significant: CEQA provides protection not only for Endangered Species Act (ESA-) and CESA-listed species, but for any species including but not limited to Species of Special Concern (SSC) which can be shown to meet the criteria for State listing. SSC meet the CEQA definition of rare, threatened, or endangered species (CEQA Guidelines, § 15380). Take of CESA protected species could require a mandatory finding of significance (CEQA Guidelines, § 15065).

Take under the ESA is more broadly defined than CESA. Take under ESA also includes significant habitat modification or degradation that could result in death or injury to a listed species by interfering with essential behavioral patterns such as breeding, foraging, or nesting. Take of any endangered, threatened, candidate species that results from the Project is prohibited, except as authorized by State law (Fish & G. Code, §§ 86, 2062, 2067, 2068, 2080, 2085; Cal. Code Regs., tit. 14, § 786.9).

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Impacts to any sensitive or special status species should be considered significant under CEQA unless they are clearly mitigated, through appropriate disclosure of the proposed mitigation measures, below a level of significance. The RDEIR has yet to provide mitigation for the Project's potential impact on habitat of special status species. Accordingly, the Project continues to have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or U.S. Fish and Wildlife Service (USFWS).

Recommended Potentially Feasible Mitigation Measure(s):

Mitigation Measure #1: CDFW recommends first avoiding any potential impacts to habitat utilized by special status species. If avoidance is not possible the Applicant should replace habitat at a ratio appropriate to maintain a no net loss of habitat values, acreage, and function. CDFW recommends setting aside replacement habitat to be protected in perpetuity under a conservation easement. CDFW highly recommends protecting the adjacent land parcels held under ownership of the Applicant. By protecting the adjacent parcels similar habitat lost due to project implementation would be preserved and the Santa Monica-Sierra Madre corridor would not be further truncated. Conservation easements should be dedicated to a local land conservancy or other appropriate entity that has been approved to hold and manage mitigation lands pursuant to Assembly Bill 1094 (2012), which amended Government Code sections 65965-65968. Under Government Code section 65967(c), the lead agency must exercise due diligence in reviewing the qualifications of a governmental entity, special district, or nonprofit organization to effectively manage and steward land, water, or natural resources on mitigation lands it approves. An appropriate non-wasting endowment should be provided for the long-term management of mitigation lands. A mitigation land should include measures to protect the targeted habitat values in perpetuity from direct and indirect negative impacts. Issues that should be addressed include, but are not limited to, restrictions on access; proposed land dedications; control of illegal dumping; water pollution; and increased human intrusion. A conservation easement and endowment funds should be fully acquired, established, transferred, or otherwise executed prior to implementing Project related ground disturbing activities.

Mitigation Measure #2: If protecting the adjacent parcels is not feasible, CDFW recommends participation in a mitigation bank. Off-site mitigation should increase replacement ratios to achieve a no net loss of habitat values and function. CDFW recommends that mitigation occur at a state-approved bank. Mitigation bank credits should be purchased, approved, or otherwise fully executed prior to implementing Project related ground disturbing activities. Mitigation credits purchased must be appropriate for the above impacts.

Comment #6: Alliance Characterization of Sensitive Natural Communities

Issue: Characterization of vegetation communities within the RDEIR were not identified according to alliances outlined within the Manual of California Vegetation Communities (MCV).

Specific Impact: Within the RDEIR natural communities identified include laurel sumac scrub, California sage brush scrub, giant wild rye grasslands, mountain mahogany scrub, and disturbed chamise/ceanothus chapparal. These communities are not characterized to the alliance level. To characterize vegetation to the alliance level the community must adhere to criteria included within the MCV. Thus, current community characterizations do not provide the level of detail necessary to assess mitigation measures provided.

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Why impacts would occur: The vegetation communities within the RDEIR do not categorize vegetation communities consistent with the MCV. Plant communities present should be identified and described based on their alliances and association as described in the MCV to accurately identify the biological resources onsite and potential impacts from the Project. Without accurate characterization of a plant community to the alliance level CDFW is unable to clearly determine the effectiveness of proposed mitigation including revegetation and reclamation activities. Plant community alliances have specific membership rules for identification, either a community meets this criterion or doesn't. Vegetation alliances differ in canopy, shrub layer, and understory layer composition. To properly replace alliance communities lost due to Project implementation revegetation Plans should adhere to the specific membership rules of the alliance. Within the RDEIR it states, "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." The seed mix proposed within Table 3.5-9 is not appropriate for blanket use, as previously stated revegetation of plant alliance should adhere to membership rules to replicate composition and function. It is also unclear where these mixes will be sourced from. If seed mixes must be used, seeds should be from the same geographical area and be genetically similar to the surrounding vegetation.

Evidence impact will be significant: Collectively, Upland Scrub and Grassland habitats currently support or provide suitable habitat for plants and wildlife, including rare plants and wildlife.

Pursuant under CEQA Guidelines, section 15125(c), CDFW considers southern California coastal sage scrub habitats as locally significant. The absence of mitigation for many of the habitats listed above will result in significant loss of viable and valuable habitat. As a result, the Project may continue to have a significant change on the environment absent appropriate mitigation for the unavoidable direct and indirect, permanent or temporal losses, of native and undisturbed vegetation and habitat (CEQA Guidelines, § 15382). Inadequate avoidance, minimization, and mitigation measures for impacts will result in a Project(s) continuing to have a substantial adverse direct, indirect, and cumulative effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS.

Recommended Potentially Feasible Mitigation Measure(s):

Mitigation Measure #1: To determine the rarity ranking of vegetation communities on a specific Project site(s), CDFW utilizes vegetation descriptions found in the MCV. The MCV alliance/association community names should be provided as CDFW only tracks rare natural communities using this classification system (found online at http://vegetation.cnps.org/).

Mitigation Measure #2: The Applicant should develop alliance-specific revegetation plans for alliances impacted. Plans should be based on membership criteria of each specific alliance. Revegetation Plans should include each species layer and include at least 70% of diversity by layer. Each alliance-specific mitigation plan should adopt an ecosystem-based approach and be of sufficient detail and resolution to describe the following at a minimum:

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1) identify the impact and level of impact (e.g., acres or individual plants/habitat impacted);
2) location of on-site mitigation and adequacy of the location(s) to serve as mitigation;
3) assessment of appropriate reference sites;
4) scientific [genus and species (subspecies/variety if applicable)] of plants being used for restoration;
5) location(s) of propagule source;
6) species-specific planting methods (i.e., container or seed);
7) measurable goals and success criteria for establishing self-sustaining populations (e.g., percent survival rate, absolute cover);
8) long-term monitoring, and;
9) adaptive management techniques.

Mitigation Measure #3: Success criteria should be based on the specific composition of the vegetation communities being impacted. Success should not be determined until the site has been irrigation-free for at least 5 years and the metrics for success have remained stable (no negative trend for richness/diversity/abundance/cover and no positive trend for invasive/non-native cover for each vegetation layer) for at least 5 years. In the revegetation plan, the success criteria should be compared against an appropriate reference site, with the same vegetation alliance, with as good or better-quality habitat. The success criteria should include percent cover (both basal and vegetative), species diversity, density, abundance, and any other measures of success deemed appropriate by CDFW. Success criteria should be separated into vegetative layers (tree, shrub, grass, and forb) for each alliance being mitigated, and each layer should be compared to the success criteria of the reference site, as well as the alliance criteria in the MCV ensuring one species or layer does not disproportionally dominate a site but conditions mimic the reference site and meets the alliance membership requirements.

Recommendation #1: CDFW highly encourages the collection of on-site seed over the use of nursery sourced seed mix. Seed collection should include each species layer.

Comment #7: Impacts to Sensitive Natural Communities and Rare Plants

Issue: CDFW is concerned that replacement ratios provided within the RDEIR are insufficient to reduce impacts to less than significant for sensitive natural communities and rare plants.

Specific Impact: Direct impacts to rare plants that occur onsite or within the immediate vicinity of the Project are likely to occur. This may result in mortality, reduced reproductive capacity, population declines, or local extirpation of a sensitive or special status plants. Within the RDEIR minimum replacement ratios were offered at 1:1 for sensitive natural communities and individual rare plants. CDFW is concerned that ratios provided are not sufficient for the rarity and ecological value of these resources.

Why impacts would occur: The proposed 1:1 ratio may not be sufficient in replacing the acreage, value, or function of communities and individual rare plants removed by the Project. Within the RDEIR it states, “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.” Although the characterization of the plant communities identified within the RDEIR is in question the following communities will be impacted through Project implementation:

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- 71.02 acres of laurel sumac scrub (S4/G4; Locally important)
- 0.14 acres California sage brush scrub (S5/G5; Locally important)
- 1.50 acres giant wild rye grasslands (S3/G3; Locally important)
- 0.19 acres cattail marsh (S5/G5)
- 0.23 acres mountain mahogany scrub (S4/G5; Locally important)
- 1.34 acres disturbed chamise/ceanothus chapparal (S5/G5; Locally important)

Replacement ratios were not provided for cattail marsh. Within the RDEIR it states, “Protection of sensitive upland scrub vegetation communities and special-status plant species should 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.” Although this is a tentative minimum replacement ratio pending the composition of the Upland scrub and Special Status Plant Species Monitoring Plan, CDFW recommends increasing minimum replacement ratios within the future Monitoring Plan to reflect the ecological value and rarity of each community and/or rare plant population. The majority of the alliances are S4/S5 are of local importance and should necessitate a higher replacement ratio. Additionally, if mitigation is performed offsite then proposed replacement ratios should be increased. Within the RDEIR it states, “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 should include an appropriate offsite alternative for mitigation.” The Applicant should provide potential replacement ratios for offsite mitigation. Likewise, replacement ratios should have been provided for cattail marsh at it is a riparian vegetation community. Only five to 10 percent of California's original riparian habitat (which includes cattail marsh) exists today and much of the remaining habitat is in a degraded condition.

According to the October 23, 2018, memorandum within the RDEIR approximately 1,110 rare plants may be impacted with the extension of the Project’s CUP boundary. An additional 60 rare plants were found within the 200-foot study area buffer and may be affected by edge effect or “inadvertent disturbance”. Within the RDEIR it states, “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...” The Project also provided a 1:1 replacement ratio for these rare plants. CDFW is of the opinion that this ratio is insufficient to reduce Project impacts. Rare plants are habitat specialists that require specific conditions to persist such as vegetation composition (species abundance, diversity, cover), soils, substrate, slope, hydrology, and pollinators. Accordingly, mitigation for impacts to rare plants should also include habitat.

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Table 2. Number of individual special status plants within the proposed CUP boundary and study area provided within the RDEIR.

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	

Evidence impact will be significant: Impacts to special status plant species should be considered significant under CEQA unless they are clearly mitigated below a level of significance. CDFW considers plant communities, alliances, and associations with a statewide ranking of S1, S2, S3, and S4 as sensitive and declining at the local and regional level (Sawyer 2009). Additionally, plants that have a California Native Plant Society (CNPS) California Rare Plant Rank (CRPR) of 1A, 1B, 2A, and 2B are rare throughout their range, endemic to California, and are seriously or moderately threatened in California. All plants constituting CRPR 1A, 1B, 2A, and 2B meet the definitions of CESA and are eligible for State listing. Impacts to these species or their habitat must be analyzed during preparation of environmental documents relating to CEQA, as they meet the definition of rare or endangered (CEQA Guidelines, § 15380). Please see CNPS Rare Plant Ranks (CNPS 2022) page for additional rank definitions.

Table 3. Acreage of suitable habitat impacted by Project implementation.

Species	Status	Suitable Habitat Acreage Impacted
Catalina mariposa-lily	CRPR 4.2	72.15
Plummer's mariposa-lily	LIS, CRPR 4.2	72.5
Blochman's dudleya	CRPR 1B.1, G3, S2	72.36
Conejo dudleya	FT, LIS, CRPR 1B.2, GT, S1	71.02
Verity's dudleya	FT, LIS, CRPR 1B.1, G1, S1	71.02
Conejo buckwheat	SR, LIS, CRPR 1B.2, G1, S1	83.86
Ojai navarretia	CRPR 1B.1, G2, S2	72.36
Lyon's petachaeta	FE, SE, CRPR, 1B.1, G1, S1	72.52
Woven-spored lichen	CRPR 3, G3, S1	1.34
Southern California black walnut	CPR 4.2, G3, S3	11.69

**Table generated from information provided within the RDEIR on “Observed and Potentially Occurring Special-Status Species table (Appendix C-1 Pages 29-36).

Inadequate avoidance, minimization, and mitigation measures for impacts to these CEQA locally sensitive vegetation communities will result in the Project continuing to have a substantial adverse direct, indirect, and cumulative effect, either directly or through habitat modifications, on

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any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS. Thus, the Project will continue to have impacts on rare plants and natural communities for the above reasons.

Recommended Potentially Feasible Mitigation Measure(s):

Mitigation Measure #1: CDFW recommends the environmental document provide measures to fully mitigate the loss of individual ESA- and CESA-listed plants and habitat. In addition to the mitigation measures provided for sensitive natural communities and rare plants within the RDEIR CDFW recommends the project raise minimum replacement ratios for communities and rare plants when developing revegetation Plans. The Applicant should mitigate at a ratio sufficient to achieve a no-net loss for impacts to special status plant species and their associated habitat. This should be for the number of plants replaced to number impacted, including acres of habitat created to acres of habitat impacted.

Additional Recommendations

Long Term Weed Management Plan. Non-native plants, including noxious weeds (as listed by the California Invasive Plant Council) (CALIPC 2022), should be prevented from establishing in disturbed areas, either by hand-weeding or selective application of herbicide. The Plan should include a weed monitoring program with regular inspection (weekly/monthly) of any area that was cleared of vegetation until it is reclaimed/revegetated and vegetation meets success criteria. CDFW also recommends that any irrigation proposed by the Project monitor for the introduction of invasive Argentine ants.

Mitigation and Monitoring Reporting Plan. Per Public Resources Code section 21081.6(a)(1), CDFW has provided the County with a summary of our suggested mitigation measures and recommendations in the form of an attached Draft Mitigation and Monitoring Reporting Plan (MMRP; Attachment A). A final MMRP shall reflect results following additional plant and wildlife surveys and the Project's final on and/or off-site mitigation plans.

Filing Fees

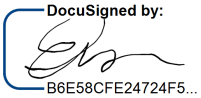
The Project, as proposed, would have an impact on fish and/or wildlife, and assessment of filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the County and serve to help defray the cost of environmental review by CDFW. Payment of the fee is required for the underlying Project approval to be operative, vested, and final (Cal. Code Regs., tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089).

Conclusion

We appreciate the opportunity to comment on the Project to assist the County in adequately analyzing and minimizing/mitigating impacts to biological resources. CDFW requests an opportunity to review and comment on any response that the County has to our comments and to receive notification of any forthcoming hearing date(s) for the Project [CEQA Guidelines, § 15073(e)]. If you have any questions or comments regarding this letter, please contact Angela Castanon, Environmental Scientist, at Angela.castanon@wildlife.ca.gov or at 626-513-6308.

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Sincerely,



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GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director

Attachment A: Draft Mitigation and Monitoring Reporting Plan

CDFW recommends the following language to be incorporated into a future environmental document for the Project. A final MMRP shall reflect results following additional plant and wildlife surveys and the Project's final on and/or off-site mitigation plans.

Biological Resources (BIO)			
Mitigation Measure (MM) or Recommendation (REC)		**Timing**	**Responsible Party**
MM-BIO-1-Conejo Buckwheat – Alternatives	Given the constraints of CESA permitting CDFW recommends the Applicant consider Project alternatives that avoid Conejo buckwheat given the rarity of the plant. Possible options include the adoption of Alternative B within the 2020 DEIR. Possible configurations could involve moving the proposed mining boundary back to avoid the large cluster of Conejo buckwheat on the northwest corner of the mine, closest to the entrance road.	Prior to Project construction and activities	Ventura County/ Applicant
MM-BIO-2-Impacts to Wildlife Corridors – Avoidance	CDFW recommends the Project fully avoid further encroaching into the Santa Monica-Sierra Madre wildlife corridor. CDFW recommends redesigning the project to avoid impacts to the wildlife corridor. Alternatives such as pit mining should be considered to avoid further encroachment. Under alternative B of the 2020 document the Project would reduce the mine expansion area.	Prior to Project construction and activities	Ventura County/ Applicant
MM-BIO-3-Impacts to Wildlife Corridors – Easements	CDFW recommends the Applicant retain contiguous land parcels surrounding the corridor. APN numbers 234-0-080-790, 234-0-080-380, and undisturbed portions of 234-0-060-220 and 234-0-060-190 shall be protected in perpetuity (if not already protected) from encroachment and development to ensure the preservation of the Santa Monica-Sierra Madre wildlife corridor. The mitigation lands shall be protected in perpetuity under a conservation easement	Prior to Project construction and activities	Ventura County/ Applicant

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	dedicated to a local land conservancy or other appropriate entity that has been approved to hold and manage mitigation lands pursuant to Assembly Bill 1094 (2012). Assembly Bill 1094 amended Government Code, sections 65965-65968. Under Government Code, section 65967(c), the lead agency must exercise due diligence in reviewing the qualifications of a governmental entity, special district, or nonprofit organization to effectively manage and steward land, water, or natural resources on mitigation lands it approves. An appropriate non-wasting endowment shall be provided for the long-term management of mitigation lands. A conservation easement and endowment funds shall be fully acquired, established, transferred, or otherwise executed prior to implementing Project-related ground-disturbing activities and prior to the County's issuance of grading permits.		
MM-BIO-4- Impacts to Wildlife Corridors – Noise and Light	Due to the sensitive nature of the wildlife corridor, CDFW recommends the Applicant conduct an additional noise study. Receptors shall be placed across the width of the corridor to assess noise more accurately throughout the corridor.	Prior to Project construction and activities	Ventura County/ Applicant
MM-BIO-5- Impacts to Wildlife Corridors – Noise and Light	CDFW recommends the Project restrict use of equipment and lighting to hours least likely to disrupt wildlife (e.g., not at dusk or in early morning before 9 am). In addition to the implementation of mitigation measure NV-1 CDFW recommends the Applicant maintain noise receptors and a written record of noise readings from sensitive noise receptors. These readings shall be retained for one year and made available to the Ventura County Planning Division to ensure that noise generated from the project are within appropriate thresholds for wildlife. Noise levels shall not exceed 55 dBA at sensitive receptors. If readings do exceed these thresholds further measures shall be implemented to reduce impacts from noise such as sound barriers.	Prior to Project construction and activities	Ventura County/ Applicant
MM-BIO-6- Impacts to	CDFW recommends the Project fully avoid further encroaching into the Santa Monica-Sierra Madre wildlife corridor (see comment 2, MM 1).	Prior to Project	Ventura County/ Applicant

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Mountain Lion – Movement		construction and activities	
MM-BIO-7- Impacts to Mountain Lion – Mining Boundary	If avoidance is not possible CDFW recommends moving the proposed boundary such that the wildlife corridor remains at least 1,000 feet wide in areas that are most narrow. This would require the Project to move the boundary back by 200 feet in applicable segments. Maintaining a 1,000-foot minimum buffer will help deter impacts from edge effects and maintain function of the passage.	Prior to Project construction and activities	Ventura County/ Applicant
MM-BIO-8- Impacts to Mountain Lion – Habitat Replacement	As stated within CDFW's 2021 comment letter to the Applicant, CDFW recommends setting aside a minimum of 110.3 acres of replacement habitat. CDFW recommends the replacement habitat be located adjacent to the County's Wildlife Linkage and Corridor in order to widen the corridor at locations where the corridor is less than one mile. There shall be no net loss of suitable habitat for mountain lions. The County shall consult and collaborate with CDFW to conserve areas beneficial to the southern California mountain lion population that may improve chances of survival and reproduction of mountain lions in the face of climate change. The mitigation lands shall be protected in perpetuity under a conservation easement dedicated to a local land conservancy or other appropriate entity that has been approved to hold and manage mitigation lands pursuant to Assembly Bill 1094 (2012). Assembly Bill 1094 amended Government Code, sections 65965-65968. Under Government Code, section 65967(c), the lead agency must exercise due diligence in reviewing the qualifications of a governmental entity, special district, or nonprofit organization to effectively manage and steward land, water, or natural resources on mitigation lands it approves. An appropriate non-wasting endowment shall be provided for the long-term management of mitigation lands. A conservation easement and endowment funds shall be fully acquired, established, transferred, or otherwise executed prior to implementing Project-related	Prior to Project construction and activities	Ventura County/ Applicant

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	ground-disturbing activities and prior to the County's issuance of grading permits.		
MM-BIO-9- Impacts to Mountain Lion – Crossing Structures	If impacts to movement corridors occur the Project may also include plans to implement or help fund wildlife crossing structures or passages with directional wildlife fencing to mitigate impacts to mountain lion. The Applicant shall provide minimum criterion for design features, dimensions, and locations of potential crossings and associated fencing.	Prior to Project construction and activities	Ventura County/ Applicant
MM-BIO-10- LSA – Notification	The Project applicant (or "entity") shall provide written notification to CDFW pursuant to Fish and Game Code, section 1600 *et seq.* The Project shall notify CDFW prior to any Project construction or activities. Based on this notification and other information, CDFW determines whether a LSA with the applicant is required prior to conducting the proposed activities. Please visit the Lake and Streambed Alteration Program (https://wildlife.ca.gov/Conservation/Environmental-Review/LSA) webpage to obtain a notification package for an LSA. CDFW's issuance of an LSA for a Project that is subject to CEQA will require CEQA compliance actions by CDFW as a Responsible Agency. As a Responsible Agency, CDFW may consider the CEQA document from the Lead Agency for the Project. To minimize additional requirements by CDFW pursuant to Fish and Game Code, section 1600 *et seq.* and/or under CEQA, the CEQA document shall fully identify the potential impacts to the streams or riparian resources and provide adequate avoidance, mitigation, monitoring, and reporting commitments for issuance of the LSA.	Prior to Project construction and activities	Ventura County/ Applicant

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MM-BIO-11- LSA – Conditions	Any LSA Agreement issued for the Project by CDFW may include additional measures protective of streambeds on and downstream of the Project such as additional erosion and pollution control measures. To compensate for any on-site and off-site impacts to riparian resources, additional mitigation conditioned in any LSA Agreement may include the following: avoidance of resources, on-site or off-site creation, enhancement, or restoration, and/or protection and management of mitigation lands in perpetuity.	Prior to Project construction and activities	Ventura County/ Applicant
MM-BIO-12- LSA – Avoidance and Alternatives	CDFW recommends fully avoiding impacts to waters and riparian/wetland vegetation communities. If feasible, CDFW recommends redesigning the Project to avoid impacts to the existing drainage features that support sensitive vegetation communities. CDFW also recommends the County consider Project alternatives that could incorporate the unnamed streams into the planned development. Design alternatives shall attempt to retain as much surface flow and natural hydrologic processes as possible. CDFW recommends taking an inter-disciplinary approach to involve landscape architects, engineers, and wildlife biologists, and hydrologists to develop design alternatives that could fully avoid or lessen impacts to waters and riparian/wetland vegetation communities.	Prior to Project construction and activities	Ventura County/ Applicant
MM-BIO-13- LSA – Mitigation Banking	If impacts to streams are unavoidable, CDFW recommends that mitigation occur at a CDFW-approved bank. Mitigation bank credits shall be purchased, approved, or otherwise fully executed prior to implementing Project-related ground-disturbing activities and prior to the County's issuance of grading permits.	Prior to Project construction and activities	Ventura County/ Applicant
MM-BIO-14- LSA – Easements	If credits at a CDFW-approved mitigation bank are not available, CDFW recommends setting aside replacement habitat to be protected in perpetuity under a conservation easement dedicated to a local land conservancy or other appropriate entity that has been approved to hold and manage mitigation lands. Mitigation lands shall be in the same watershed as the Project site and support in-kind vegetation. An appropriate non-wasting endowment shall be provided for the long-term management of mitigation	Prior to Project construction and activities	Ventura County/ Applicant

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	lands. A conservation easement and endowment funds shall be fully acquired, established, transferred, or otherwise executed prior to implementing Project-related ground-disturbing activities prior to the County's issuance of grading permits.		
MM-BIO-15- LSA – Delineation	The Applicant has not disclosed the acreage of associated habitat through a formal delineation. The LSA shall be conditioned such that potential impacts to riparian habitat, such as arroyo willow thicket, mulefat thicket, and cattail marshes be mitigated at no less than 3:1 if avoidance is not feasible. Mitigation ratios shall increase if on-site mitigation is not possible. CDFW recommends that an on-site Habitat Mitigation and Monitoring Plan (HMMP) be developed. An HMMP shall provide specific, detailed, and enforceable measures.	Prior to Project construction and activities	Ventura County/ Applicant
MM-BIO-16- LSA – Maintenance of Lands	CDFW recommends that all on-site mitigation sites for impacts to waters and riparian/wetland vegetation communities be protected in perpetuity from public encroachment and structural intrusion. This shall include all water features on site, including ephemeral and perennial bodies.	Prior to/After Project construction and activities	Ventura County/ Applicant
MM-BIO-17- Impacts to Special Status Species Habitat – Conservation Easements	CDFW recommends first avoiding any potential impacts to habitat utilized by special status species. If avoidance is not possible the Applicant shall replace habitat at a ratio appropriate to maintain a no net loss of habitat values, acreage, and function. CDFW recommends setting aside replacement habitat to be protected in perpetuity under a conservation easement. CDFW highly recommends protecting the adjacent land parcels held under ownership of the Applicant. By protecting the adjacent parcels similar habitat lost due to project implementation would be preserved and the Santa Monica-Sierra Madre corridor would not be further truncated. Conservation easements shall be dedicated to a local land conservancy or other appropriate entity that has been approved to hold and manage mitigation lands pursuant to Assembly Bill 1094 (2012), which amended Government Code sections 65965-65968. Under Government Code section 65967(c), the lead agency must exercise due diligence in reviewing the	Prior to/After Project construction and activities	Ventura County/ Applicant

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	qualifications of a governmental entity, special district, or nonprofit organization to effectively manage and steward land, water, or natural resources on mitigation lands it approves. An appropriate non-wasting endowment shall be provided for the long-term management of mitigation lands. A mitigation land shall include measures to protect the targeted habitat values in perpetuity from direct and indirect negative impacts. Issues that shall be addressed include, but are not limited to, restrictions on access; proposed land dedications; control of illegal dumping; water pollution; and increased human intrusion. A conservation easement and endowment funds shall be fully acquired, established, transferred, or otherwise executed prior to implementing Project related ground disturbing activities.		
MM-BIO-18- Impacts to Special Status Species Habitat – Mitigation Bank	If protecting the adjacent parcels is not feasible, CDFW recommends participation in a mitigation bank. Off-site mitigation shall increase replacement ratios to achieve a no net loss of habitat values and function. CDFW recommends that mitigation occur at a state-approved bank. Mitigation bank credits shall be purchased, approved, or otherwise fully executed prior to implementing Project related ground disturbing activities. Mitigation credits purchased must be appropriate for the above impacts.	Prior to Project construction and activities	Ventura County/ Applicant
MM-BIO-19- Impacts to Sensitive Natural Communities – Alliances	To determine the rarity ranking of vegetation communities on a specific Project site(s), CDFW utilizes vegetation descriptions found in the MCV. The MCV alliance/association community names shall be provided as CDFW only tracks rare natural communities using this classification system (found online at http://vegetation.cnps.org/).	Prior to Project construction and activities	Ventura County/ Applicant
MM-BIO-20- Impacts to Sensitive Natural Communities – Revegetation Plans	The Applicant shall develop alliance-specific revegetation plans for alliances impacted. Plans shall be based on membership criteria of each specific alliance. Revegetation Plans shall include each species layer and include at least 70% of diversity by layer. Each alliance-specific mitigation plan shall adopt an ecosystem-based	Prior to Project construction and activities	Ventura County/ Applicant

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	approach and be of sufficient detail and resolution to describe the following at a minimum: 1) identify the impact and level of impact (e.g., acres or individual plants/habitat impacted); 2) location of on-site mitigation and adequacy of the location(s) to serve as mitigation; 3) assessment of appropriate reference sites; 4) scientific [genus and species (subspecies/variety if applicable)] of plants being used for restoration; 5) location(s) of propagule source; 6) species-specific planting methods (i.e., container or seed); 7) measurable goals and success criteria for establishing self-sustaining populations (e.g., percent survival rate, absolute cover); 8) long-term monitoring, and; 9) adaptive management techniques.		
MM-BIO-21-Impacts to Sensitive Natural Communities – Success Criteria	Success criteria shall be based on the specific composition of the vegetation communities being impacted. Success shall not be determined until the site has been irrigation-free for at least 5 years and the metrics for success have remained stable (no negative trend for richness/diversity/abundance/cover and no positive trend for invasive/non-native cover for each vegetation layer) for at least 5 years. In the revegetation plan, the success criteria shall be compared against an appropriate reference site, with the same vegetation alliance, with as good or better-quality habitat. The success criteria shall include percent cover (both basal and vegetative), species diversity, density, abundance, and any other measures of success deemed appropriate by CDFW. Success criteria shall be separated into vegetative layers (tree, shrub, grass, and forb) for each alliance being mitigated, and each layer shall be compared to the success criteria of the reference site, as well as the alliance criteria in the MCV ensuring one species or layer does not disproportionally dominate a site but conditions	Prior to Project construction and activities	Ventura County/ Applicant

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	mimic the reference site and meets the alliance membership requirements.		
MM-BIO-22- Impacts to Special Status Species Habitat Communities – Mitigation Ratios	CDFW recommends the environmental document provide measures to fully mitigate the loss of individual ESA- and CESA-listed plants and habitat. In addition to the mitigation measures provided for sensitive natural communities and rare plants within the RDEIR CDFW recommends the project raise minimum replacement ratios for communities and rare plants when developing revegetation Plans. The Applicant shall mitigate at a ratio sufficient to achieve a no-net loss for impacts to special status plant species and their associated habitat. This shall be for the number of plants replaced to number impacted, including acres of habitat created to acres of habitat impacted.	Prior to Project construction and activities	Ventura County/ Applicant
REC-1- Conejo Buckwheat Protection Status	Throughout the document Conejo buckwheat is often referred to as a rare plant, Conejo buckwheat is protected by law under CESA. As such, CDFW recommends that it is made more evident throughout the document so that readers do not minimize its value and rarity.	Prior to Project construction and activities	Ventura County/ Applicant
REC-2- Hours of Operation	CDFW recommends that Project's hours of operation not be extended, nor should operations extend into Sunday. The proposed hours of operation will occur both at dusk and dawn when wildlife is most active and have the potential to change behavior in wildlife, including special status species. Likewise, the absence of noise one day out of the week may give wildlife an opportunity to move more freely within the wildlife corridor.	Prior to Project construction and activities	Ventura County/ Applicant
REC-3- Mountain Lion	CDFW recommends providing habitat impact acreage for mountain lion within the Observed and Potentially Occurring Special-Status Species table (Appendix C-1 Pages 29-36) as it is a species with high probability of occurrence and affords protections under CESA as a CESA-candidate (see Comment 5).	Prior to Project construction and activities	Ventura County/ Applicant

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REC-4- LSA	As part of the LSAA Notification process, CDFW requests a map showing features potentially subject to CDFW's broad regulatory authority over streams. CDFW also requests a hydrological evaluation of the 200, 100, 50, 25, 10, 5, and 2-year frequency storm event for existing and proposed conditions.	Prior to Project construction and activities	Ventura County/ Applicant
REC-4- Seed Collection	CDFW highly encourages the collection of on-site seed over the use of seed mix. Seed collection shall include each species layer.	Prior to Project construction and activities	Ventura County/ Applicant
REC-4- Weed Management Plan	Non-native plants, including noxious weeds (as listed by the California Invasive Plant Council) (CALIPC 2022), shall be prevented from establishing in disturbed areas, either by hand-weeding or selective application of herbicide. The Plan shall include a weed monitoring program with regular inspection (weekly/monthly) of any area that was cleared of vegetation until it is reclaimed/revegetated and vegetation meets success criteria. CDFW also recommends that any irrigation proposed by the Project monitor for the introduction of invasive Argentine ants.	Prior to Project construction and activities	Ventura County/ Applicant
REC-3- MMRP	Per Public Resources Code section 21081.6(a)(1), CDFW has provided the County with a summary of our suggested mitigation measures and recommendations in the form of an attached Draft Mitigation and Monitoring Reporting Plan (MMRP; Attachment A). A final MMRP shall reflect results following additional plant and wildlife surveys and the Project's final on and/or off-site mitigation plans.	Prior to Project construction and activities	Ventura County/ Applicant

Sent via email

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Re: Comments on Partial Recirculated Draft Environmental Impact Report for the Proposed Pacific Rock Mine Project

Dear Mr. Bertoline,

On behalf of the Center for Biological Diversity ("Center"), we are submitting comments on the Partial Recirculated Draft Environmental Impact Report ("RDEIR") for the proposed Pacific Rock Mine Project ("Project"). We along with California Native Plant Society and California Wildlife Foundation submitted comments on the Draft EIR on January 15, 2021 which described our concerns with the Project and the lack of adequate mitigation to limit its impacts (the "January 2021 Letter"). The January 2021 Letter is attached hereto as Exhibit 1. After reviewing the RDEIR, we remain concerned about the Project's impacts to special-status animals and plants, including mountain lions (*Puma concolor*) and Conejo buckwheat (*Eriogonum crocatum*), wildlife connectivity, and sensitive habitats. Such a project located within the Sierra Madre-Castaic Connection and in Ventura County's habitat connectivity overlay zone further constrain one of the last remaining natural corridors between the Santa Monica Mountains and the Sierra Madre Mountains. Increased habitat loss, degradation, and fragmentation will lead to significant impacts to mountain lions as well as many other special-status animals and plants that occur in and adjacent to the Project area. The RDEIR does not adequately assess and mitigate impacts to the area's natural resources.

I. Background on the Center for Biological Diversity

The Center is a non-profit, public interest environmental organization dedicated to the protection of native species and their habitats through science, policy, and environmental law. The Center has over 1.7 million members and online activists throughout California and the United States. The Center and its members have worked for many years to protect imperiled plants and wildlife, open space, air and water quality, and overall quality of life for people in Ventura County and Southern California.

II. The RDEIR still fails to adequately assess and mitigate impacts to mountain lions to less than significant.

The January 2021 Letter documented in detail how the Project fails to assess or mitigate impacts to mountain lions (See Exhibit 1 at 2-9). Those comments are incorporated herein by reference. As explained in the January 2021 Letter as well as in comments submitted by the Mountains Recreation & Conservation Authority ("MRCA") on February 2, 2021, the Project would reduce an existing 980-foot-wide corridor to 720-feet wide, representing a 25-percent loss of width in an already extremely constrained corridor. Any further reduction in width of this already-constrained corridor is unacceptable. This is particularly problematic given that the mine will now operate throughout the night when nocturnal species like mountain lions are most active. California Department of Fish and Wildlife ("CDFW") concurred in their January 22, 2021 comments that the "[t]he Project as proposed would also impair a wildlife corridor. The Project would permanently impact the County's Wildlife Linkage and [habitat] Corridor." CDFW concluded that the proposed mitigation would not result in adequate or successful mitigation. CDFW also proposed five mitigation measures, which do not appear to have been fully integrated into the RDEIR. CDFW has proposed additional mitigation measures for other proposed projects that have the potential to impact mountain lions such as sections of the California High Speed Rail. (See Exhibit 2 at 32-4 – 32-5.) The County should consider and implement the measures in both these letters consistent with their obligations under CEQA and the California Endangered Species Act ("CESA").

The RDEIR does not address these inadequacies. The RDEIR generally states that the Project would result in impacts to mountain lions. (RDEIR at 3.5-60.) This fails to inform decisions makers and the public of the true impacts of the Project. As outlined in the January 2021 Letter and letters by CDFW and MRCA, the Project has the potential to cause severe and permanent impacts to the Santa Monica Mountains puma population and drive them closer to local extinction. The RDIER does not adequately disclose or discuss these impacts as required by CEQA. (See *Citizens to Pres. the Ojai v. County of Ventura* (1985) 176 Cal.App.3d 421, 430-432 [EIR may not understate information concerning severity of impacts and skew decision-makers perspective or ignore information in an applicable plan to downplay seriousness of impact]; *Mountain Lion Coalition v. Fish & Game Com*. (1989) 214 Cal.App.3d 1043, 1050-1051 [EIR may not avoid well-known important environmental considerations and sweep "serious criticisms [] under the rug"].)

The RDEIR likewise still fails to properly mitigate impacts to mountain lions, as outlined in the January 2021 letter. (See Exhibit 1 at 8-9.) The pre-disturbance surveys (MM Bio-4(h)) in the RDEIR suffer from similar flaws as the original measure in the DEIR. MM Bio-4(h) simply states that if mountain lions or dens are found, a report will be prepared and include "measures sufficient to avoid 'take' or other adverse impacts to mountain lions and mountain lion dens and cubs, if found." (RDEIR at 3.5-68.) Absent from the RDEIR is detail on what these measures might entail, or how they might actually limit adverse impacts. If a mountain lion den is found, nothing in the RDEIR requires that the Project not move forward or the project design be changed. Likewise, relocating mountain lions is generally not a solution as they often return to their former homes and/or are killed by another mountain lions when they are placed in another lion's home range. In addition, mountain lion dens are extremely difficult to find. Experts who

have studied mountain lions for many years often have to rely on GPS data from radio collars to locate dens, and even then, locating dens can be challenging. Therefore, the likelihood of pre-disturbance surveys identifying occupied dens, even when they are present, is very low. Increased human activity near a mountain lion den can put both humans and the mountain lions in danger, as mountain lion mothers are protective of their vulnerable kittens.

Not all mountain lions in the area are collared; however, the National Park Service has extensive data and knowledge regarding local mountain lions. The DEIR should require the Project proponent to consult with the National Park Service and CDFW on mountain lion movement and behavior during Project construction, operation, and maintenance.

III. The RDEIR still fails to adequately assess and mitigate impacts to wildlife movement and habitat connectivity to less than significant.

The January 2021 Letter documented in detail how the Project fails to assess or mitigate impacts to wildlife connectivity (See Exhibit 1 at 9-12). Those comments are incorporated herein by reference. The RDIER continues to wrongly state that "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 . . . ." (RDEIR at 3.5-75.) This conclusion is at odds with the numerous scientific studies and analysis included in the January 2021 Letter, as well as the conclusions of two expert agencies—SMMC and CDFW. There is no question that eliminating 25 percent of an already severely-constrained linkage is by-definition significant, particularly when light- and noise-creating mining operations will be conducted throughout the night. As explained in detail in the January 2021 Letter, the proposed mitigation measures (e.g., a lighting plan and fencing plan in MM-Bio 7) do not address the fundamental problem that the linkage will lose functionality because it is too narrow to accommodate the target species.

MM-Bio 7(c) asserts it will mitigate impacts through establishment of wildlife passage areas. While in theory this is a good idea, the problem is that the proposed project sits in what is likely the last available linkage in the area to ensure wildlife movement. Development and other human uses have already degraded other available areas, precluding significant wildlife movement. MM-Bio 7(c) does not identify where these wildlife passage areas will be, and thus amounts to deferred mitigation, which is impermissible under CEQA. It simply kicks the can down the round instead of addressing the fundamental problem with the project: it is sited in a critical area for wildlife connectivity and will have irreversible and permanent impacts on connectivity, and on listed species like the mountain lion.

Moreover, all projects approved by the County must be consistent with the general plan and other county ordinances and policies and further the objectives of the general plan. (See *Pfeiffer v. City of Sunnyvale City Council* (2011) 200 Cal.App.4th 1552, 1562-163; *Ideal Boat & Camper Storage v. County of Alameda* (2012) 208 Cal.App.4th 301, 311.) As noted in the RDEIR, the County's Habitat Connectivity and Wildlife Corridor Overlay Zone ("Connectivity Ordinance") is intended 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. Here, the Project will either degrade or render non-functional a key designated corridor within the Connectivity Ordinance. This is inconsistent with both the requirements and intent of the Connectivity Ordinance, and is thus inconsistent with the County's general plan, and with the County's obligations under the State Planning and Zoning Law.

IV. The RDEIR still fails to adequately assess and mitigate impacts to oaks and oak woodlands to less than significant.

The January 2021 Letter documented in detail how the Project fails to assess or mitigate impacts to oak trees and oak woodlands. (See Exhibit 1 at 13-15). Those comments are incorporated herein by reference. The "tree protection plan" set forth in MM-Bio 6 amounts to deferred mitigation and fails to provide any concrete or enforceable standards for how mitigation will occur. The EIR must explain how impacts to oaks and oak woodlands will be mitigated, including in terms of avoiding oak woodlands and identifying unprotected lands for mitigation, and including the mitigation ratios. None of this information is in the RDEIR, leaving it undetermined how much mitigation (if any) will actually occur. This violates CEQA.

V. The Final EIR should address other comments in the January 2021 Letter.

We note that the RDEIR states it will not be responding to other comments on biological resources (section 3.5 of the RDEIR) that were previously submitted. The January 2021 Letter contained comments on a range of other topics, including the greenhouse gas impacts of vegetation removal (Exhibit 1 at 15-16), impacts and mitigation for rare plants including Conejo buckwheat, Conejo dudleya, and other plant communities (Exhibit 1 at 16-19), as well as other comments on air pollution, greenhouse gas emissions, and alternatives. These comments are incorporated herein by reference.

VI. Conclusion

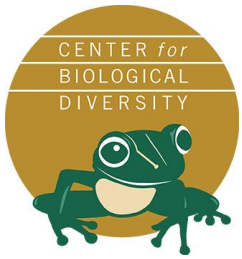
Thank you for the opportunity to submit comments on the RDEIR for the Project. While these comments are not comprehensive, the Center presents some key environmental issues that the RDEIR still fails to adequately describe, assess, and mitigate, and requests the County to review and consider the issues raised in the January 2021 Letter. Please add the Center to your notice list for all future updates to the Project and do not hesitate to contact the Center with any questions at the number or email listed below.

Sincerely,

J.P. Rose
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Center for Biological Diversity
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Tiffany Yap, D.Env/PhD
Senior Scientist, Wildlife Corridor Advocate
Center for Biological Diversity
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Exhibit 1







January 15, 2021

Sent via email

Justin Bertoline
Planning Division
Ventura County Government Center
Administration Building - 3rd Floor
800 S. Victoria Avenue
Ventura, CA 93009
justin.bertoline@ventura.org

Re: Comments on the Draft Environmental Impact Report for the Proposed Pacific Rock Mine Project (Case Number LU10-0003)

Dear Mr. Bertoline,

On behalf of the Center for Biological Diversity ("Center"), the California Native Plant Society ("CNPS") and the California Wildlife Foundation ("CWF"), we are submitting comments on the Draft Environmental Impact Report (DEIR) for the proposed Pacific Rock Mine Project ("Project"). After reviewing the DEIR, the environmental organizations are concerned about the Project's impacts to special-status animals and plants, including mountain lions (*Puma concolor*) and Conejo buckwheat (*Eriogonum crocatum*), wildlife connectivity, and sensitive habitats. Such a project, located within the Sierra Madre-Castaic Connection and in Ventura County's habitat connectivity overlay zone, constrains one of the last remaining natural corridors between the Santa Monica Mountains and the Sierra Madre Mountains. Increased habitat loss, degradation, and fragmentation will lead to significant impacts to mountain lions as well as many other special-status animals and plants that occur in and adjacent to the Project area. The DEIR fails to adequately assess and mitigate impacts to the area's natural resources.

I. Background on the Environmental Organizations

The Center for Biological Diversity ("Center") is a non-profit, public interest environmental organization dedicated to the protection of native species and their habitats through science, policy, and environmental law. The Center has over 1.7 million members and online activists throughout California and the United States. The Center and its members have worked for many years to protect imperiled plants and wildlife, open space, air and water quality, and overall quality of life for people in Ventura County and Southern California.

The California Native Plant Society ("CNPS") is a non-profit environmental organization with over 10,000 members. CNPS' mission is to protect California's native plant heritage and preserve it for future generations through application of science, research, education, and conservation. CNPS works closely with decision-makers, scientists, and local planners to advocate for well-informed and environmentally friendly policies, regulations, and land management practices.

The California Wildlife Foundation ("CWF") is committed to conserving, restoring, and maintaining habitats and corridor linkages throughout the state in order to ensure the biological diversity of species over time. The California Oaks program of California Wildlife Foundation works to conserve oak ecosystems because of their critical role in sequestering carbon, maintaining healthy watersheds, providing habitat, and sustaining cultural values.

II. The DEIR fails to adequately assess and mitigate impacts to mountain lions to less than significant.

A. Inadequate assessment of impacts to mountain lions

The DEIR falsely and inappropriately concludes that mountain lions (*Puma concolor*), a candidate species under the California Endangered Species Act, have a "moderate" potential to occur within or adjacent to the Project site (DEIR at 3.5-18), when in fact they should be categorized as "Present." The Project site is located in high quality mountain lion habitat within one of the last remaining corridors between the Santa Monica Mountains and the Sierra Madre (Penrod et al. 2006) and there is a wealth of data from the National Park Service (NPS) that demonstrates their presence in and adjacent to the Project area. Maps of the NPS data are publicly available at www.flickr.com, and they clearly show that the area is used by mountain lions. Figure 1 shows NPS telemetry locations for lions P-1 through P-22 from 2002 to 2013 (from GPS collars on individuals), and numerous individuals were documented in and adjacent to the Project site. Similarly, Figure 2 shows the home ranges of several mountain lions encompassing the Project area. Figure 3 shows predation sites where collared mountain lions fed on mule deer, some of which are located in and adjacent to the Project area (Benson et al. 2016b). This clearly shows that the DEIR fails to adequately assess the Project's impacts to mountain lions, as they provide a false representation of the likelihood of mountain lions being present, using, and moving through habitat in and near the Project area. Mountain lions should be considered "Present" in and adjacent to the Project site.

In failing to adequately determine the presence of mountain lions in and near the Project site, the DEIR fails to adequately assess impacts to mountain lions. The Project would have insurmountable impacts on struggling local mountain lions. Local mountain lions are at risk of extinction as their genetic health deteriorates due to inbreeding caused by roads and development slicing through their habitat and isolating populations (Ernest et al. 2014; Riley et al. 2014; Vickers et al. 2015; Gustafson et al. 2018; Benson et al. 2019). Low genetic diversity combined with high human-caused mortalities (*e.g.*, from car strikes, depredation kills, rodenticide poisoning, and poaching) threaten the long-term survival of several populations. Mountain lions in the Santa Monica Mountains are especially imperiled, as abnormalities linked with inbreeding depression was recently observed.[1] Should inbreeding depression occur, scientists predict there is a >99% chance of extinction, which could occur within as little as 15 years (Benson et al. 2019). Therefore, high quality habitat that is being used by mountain lions within one of the last remaining natural corridors between the Santa Monica Mountains and the Sierra Madre is critical for the population's long-term survival. The DEIR fails to adequately assess the severely low genetic diversity of the Santa Monica Mountains puma population that is driven by isolation and the significant impacts the Project will have on this population by eliminating portions of the corridor and degrading connectivity in the area.

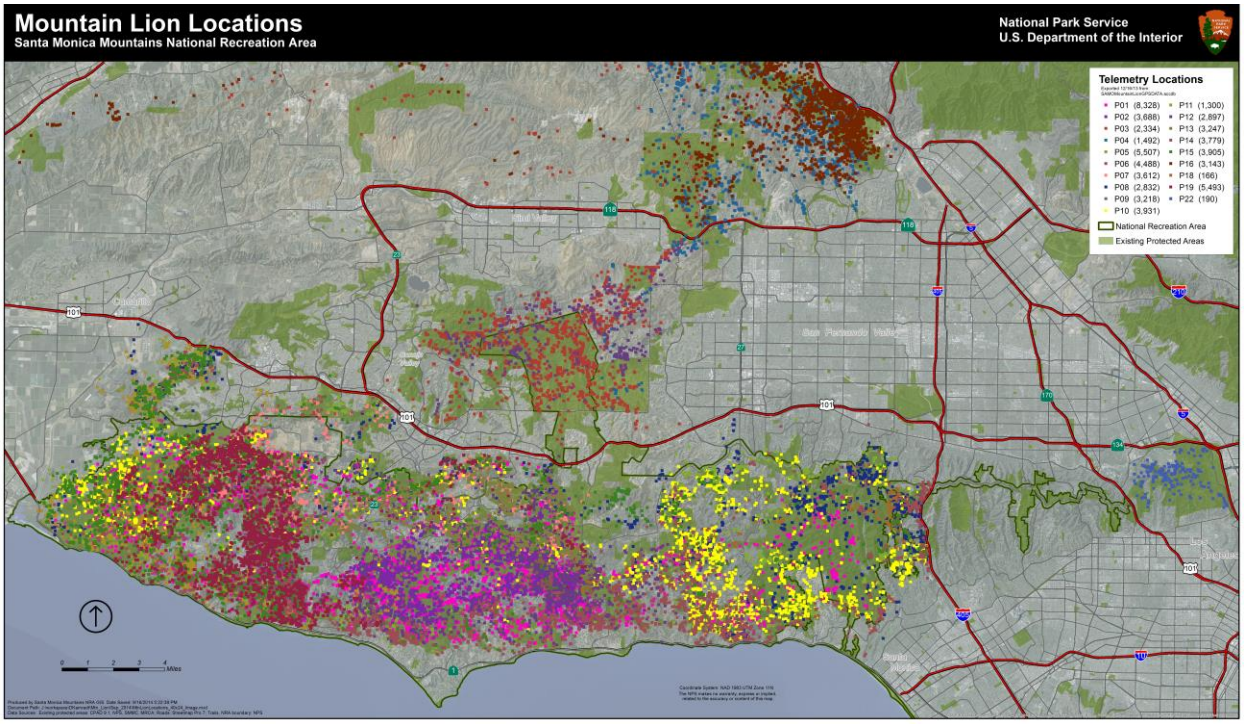


Figure 1: Mountain Lion GPS Data Points of lions P-1 through P-22 from 2002 through 2013 (NPS 2015).

[1] News Release: NPS Biologists Report First Abnormalities Linked to Inbreeding Depression in Mountain Lions P-81, a Subadult Male, Has Reproductive and Tail Defects. Available at: https://www.nps.gov/samo/learn/news/first-abnormalities-linked-to-inbreeding-depression.htm

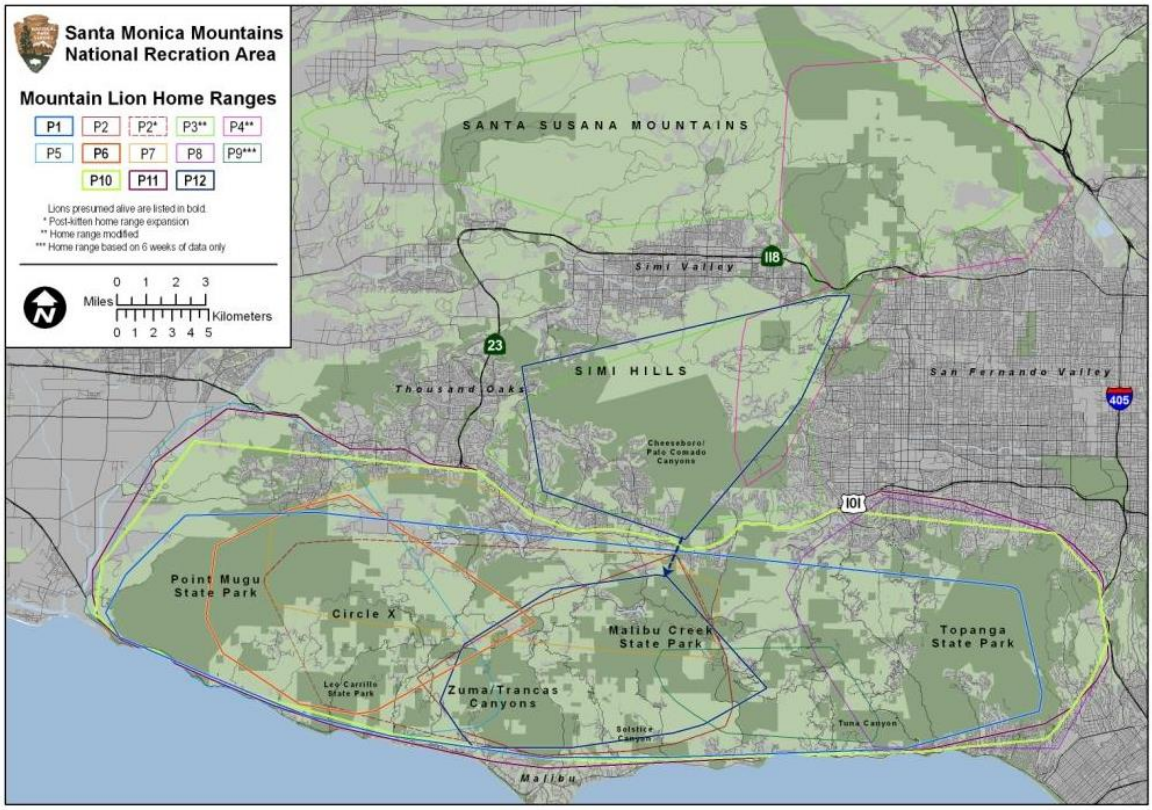


Figure 2: Home Range Map for Lions P-1 through P-12 (NPS 2013).

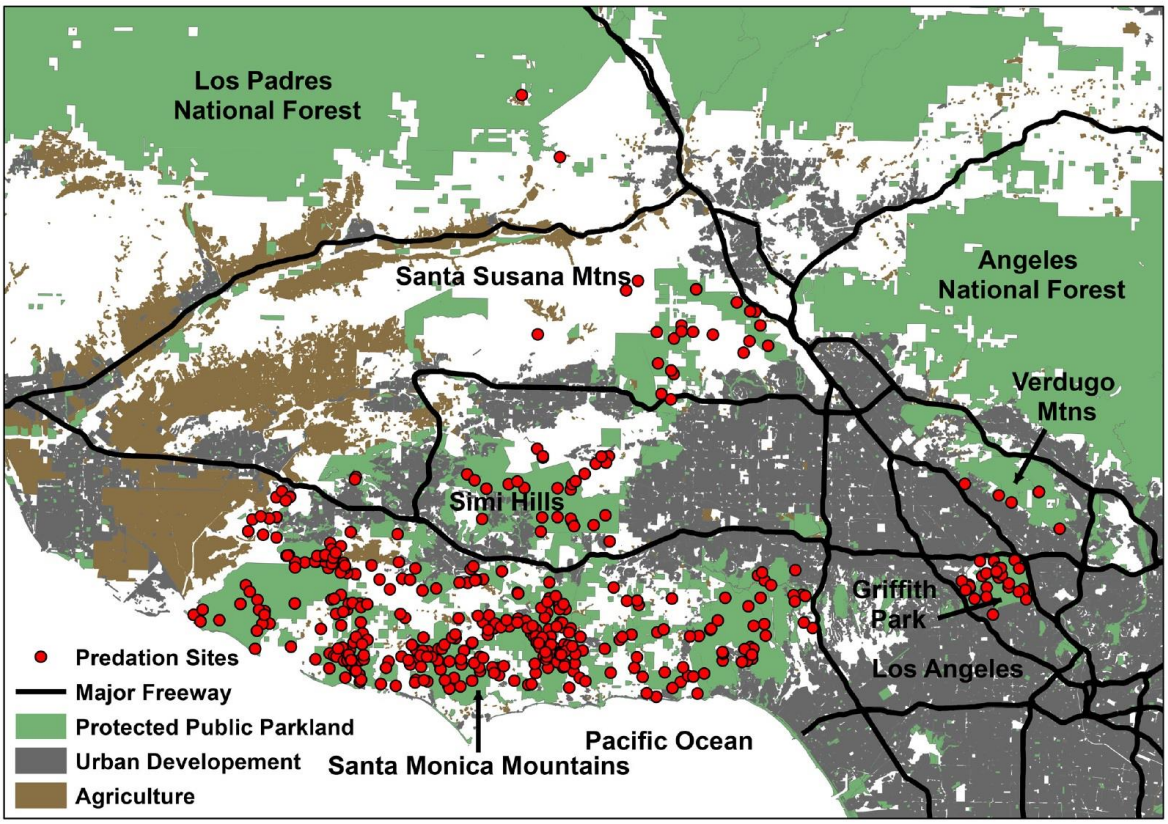


Figure 3: Predation sites where mountain lions fed on mule deer (Benson et al. 2016b).

The DEIR fails to adequately disclose how the Project could impact mountain lion movement, behavior, and long-term survival and therefore fails to adequately assess the impacts to mountain lions in and around the Project area. There are many scientific studies that provide insights on the profound impacts human activities and infrastructure have on mountain lion survival, and they emphasize the need to adequately assess and mitigate impacts to these California Endangered Species Act (CESA) candidate species in the Project area. There is cumulating scientific evidence that mountain lions require a habitat mosaic that provides sufficient room to roam away from human-disturbed areas and connected to expansive, intact, heterogeneous habitats (Beier et al. 1995; Dickson and Beier 2002; Dickson et al. 2005; Kertson et al. 2011; Zeller et al. 2017). Expanding the mining operation in the Conejo Mountain and Mountclef Ridge connection, an area identified as highly suitable mountain lion habitat and one of the last remaining natural corridors between the Santa Monica Mountains and the Sierra Madre Range (Penrod et al. 2006), will limit the lions' ability to move through the area, further isolate pumas in the Santa Monica Mountains, and drive them closer to extinction.

The DEIR only discusses blasting as a potential direct impact of the Project on mountain lions and fails to adequately assess the significance of other impacts on mountain lions due to the proposed Project. Expanding the area and operation of the mine would increase human activities in important mountain lion habitat, thereby increasing the chances of other direct impacts from things like vehicle strikes, rodenticide poisoning, increased fire ignitions, disease spread, poaching, etc. In addition, cutting the width of the existing natural corridor from 1,500 ft to 800 ft would significantly constrict mountain lion movement and connectivity, which would directly impact the mountain lion population in the Santa Monica Mountains by impeding gene flow. Edge effects of development and human activities could deter mountain lions from using a narrower corridor. The combination of low genetic diversity and added human-caused mortalities from the Project will drive the Santa Monica Mountains puma population closer to extinction.

The DEIR fails to consider the best available science regarding the Project's potential impacts to mountain lions. In a study conducted from 2002 to 2019 in the Santa Monica Mountains, Benson et al. (2020a) found high human-caused mortality rates in puma adults and high intraspecific mortalities among subadults. Most known causes of death among adults and subadults (14/20) were directly human-caused: vehicle strikes, rodenticide poisoning, poaching, and wildfire. The remaining six known causes of deaths were intraspecific killing (Benson et al. 2020a). And while intraspecific killings have been documented to naturally occur in mountain lion populations, they were likely exacerbated in the Santa Monica Mountains with the presence of significant movement barriers that prevent subadults from being able to adequately disperse, which likely led to increased conflicts with territorial males (Riley et al. 2014; Benson et al. 2020a). The Santa Monica Mountains puma population is relatively small, extremely isolated, and geographically limited. Demographic and environmental stochasticity and high mortality rates increase the risk of local extinction, particularly when combined with small population size, low density, female-biased sex ratios, and skewed male reproductive success (Ernest et al. 2014; Riley et al. 2014; Vickers et al. 2015; Benson et al. 2016a; Gustafson et al. 2018; Benson et al. 2019). Increased movement barriers and human-caused mortalities of adult males could lead to occasional male extinctions, which have been documented in the Santa Ana Mountains puma population (Beier and Barrett 1993). Lack of breeding males would disrupt reproduction and

could severely limit the short- and long-term viability of a population (Beier 1993; Benson et al. 2016; Benson et al. 2019; Benson et al. 2020a). This highlights the need to reduce human-caused mortalities, in part, by improving connectivity and stopping the use of anticoagulant rodenticides. The proposed Project would increase movement barriers of an already extremely isolated mountain lion population.

Numerous studies highlight the impacts of human activities on mountain lions. For example, Shilling et al. (2019) reported 299 observed roadkill mountain lions throughout the state from 2015 to 2018, but these deaths are likely underreported. CDFW biologist Justin Dellinger estimates there could be 200 puma deaths on roads every year (Price 2020). And a recent University of California (UC) Davis special report identified a 58% reduction in mountain lion road mortalities after a 71% decrease in road use due to COVID-19 pandemic "stay-at-home" orders (Nguyen et al. 2020). This report highlights how roads and traffic are deadly barriers to puma movement and gene flow. Therefore, vehicles traveling on roads used for the operation of the mine pose a threat to mountain lions in the area.

Human activities alter these large carnivores' behavior in ways that likely further impede important movement and gene flow that is important for their long-term survival. For example, Smith et al. (2017) found that mountain lions are so fearful of humans and noise generated by humans that they will abandon the carcass of a deer and forgo the feeding opportunity just to avoid humans.[2] The study concluded that even "non-consumptive forms of human disturbance may alter the ecological role of large carnivores by affecting the link between these top predators and their prey" (Smith et al. 2017). In addition, mountain lions have been found to respond fearfully upon hearing human vocalizations, avoiding the area and moving more cautiously when hearing humans (Smith et al. 2017; Suraci et al. 2019).

Other studies have demonstrated that mountain lion behavior is impacted when exposed to other evidence of human presence, such as noise, lighting, or vehicles/traffic (Wilmers et al. 2013; Smith et al. 2015; Wang et al. 2017). In addition, preliminary results from study by researchers at UC Davis and University of Southern California, as well as those by other researchers, suggest that the light, noise, and other aspects of roads can have negative impacts on wildlife numbers and diversity near the highways (Shilling 2020; Vickers 2020). Thus, roads, traffic, development, and other human activities have negative impacts on puma survival and behavior, which can reduce the genetic health of populations and ultimately diminish their chances of long-term survival.

Yovovich et al. (2020) documented the impacts of human activities on mountain lion communication and reproductive behaviors important for their survival. Males use scrapes to delineate territories as well as attract potential mates (Allen et al. 2015; Allen et al. 2016), and the males in the study preferred to use relatively flat areas away from human influence as scrape habitat (Yovovich et al. 2020). Similarly, when nursing females (with kittens less than 8 weeks old) shrank their home ranges to an average of 9 km^2 while their young were most vulnerable, they also selected undeveloped lands away from human disturbance, opting for habitat with

[2] *See also* Sean Greene, "How a fear of humans affects the lives of California's mountain lions," *Los Angeles Times* (June 27, 2017), available at https://www.latimes.com/science/sciencenow/la-sci-sn-pumas-human-noise-20170627-story.html.

protective cover and sufficient water and prey availability (Yovovich et al. 2020). The loss of adequate undisturbed communication and nursery habitat could disrupt important communication and reproductive behaviors that facilitate social structure and overall survival.

The DEIR fails to adequately assess the impacts of increased wildfire ignitions due to the Project on mountain lions. Most wildfires in California are caused by human ignitions, like power lines, arson, improperly disposed cigarette butts, debris burning, fireworks, campfires, or sparks from cars or equipment (Keeley and Syphard 2018). In fact, almost all (95-97%) contemporary wildfires in California are caused by humans and human infrastructure (Syphard et al. 2007; Balch et al. 2017; Keeley and Syphard 2018; Radeloff et al. 2018; Syphard and Keeley 2019; Keeley and Syphard 2020; Syphard and Keeley 2020). In the Santa Monica Mountains, fires from 1978-2017 were often ignited near roads and other human infrastructure (Figure 4).

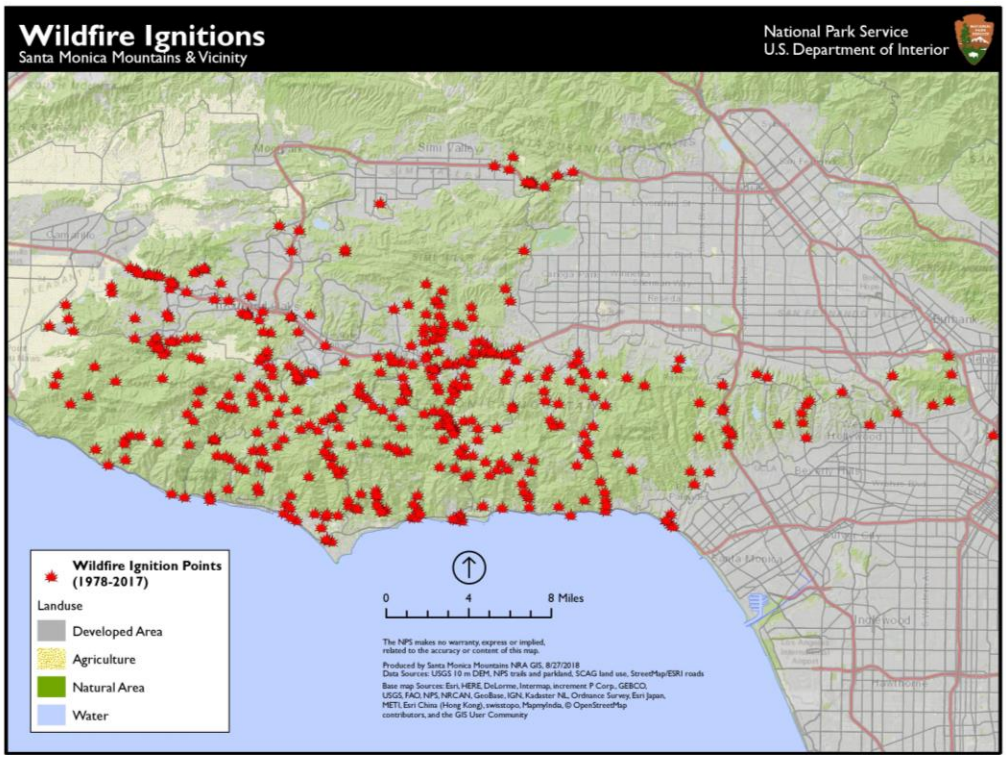


Figure 4: Wildfire Ignition Points in the Santa Monica Mountains and Vicinity (NPS 2018).

The Project would place more people and infrastructure and more human activity in high fire-prone areas, which would increase wildfire risk and threaten humans and nearby neighborhoods as well as mountain lions. Although mountain lions are highly mobile and generally able to move away from wildfires, in severe weather conditions wind-driven fires can spread quickly. The 2018 Hill Fire in Ventura County, which occurred just north of the Project site, spread three miles in 15 minutes (County of Los Angeles 2019). If mountain lion movement is constrained by roads and development and the lions are unable to access escape routes, then their chances of surviving wildfires are greatly reduced. Two NPS-collared mountain lions, P-64 and P-74, were killed in the 2018 Woolsey Fire. Such stochastic events (*e.g.*, wildfires, flooding) could destabilize small mountain lion populations and make them more vulnerable to extinction

(Benson et al. 2016a; Benson et al. 2019). The DEIR fails to consider and assess impacts of increased wildfire ignitions to mountain lions.

Mountain lions are a key indicator species of wildlife connectivity and healthy ecosystems. As the last remaining wide-ranging large carnivore in the region, the ability to move through large swaths of interconnected habitat is vital for genetic connectivity and their long-term survival. Local extinction of mountain lions in the region could have severe ecological consequences. Many scavengers, including many raptors, foxes, and numerous insects, would lose a reliable food source (Ruth and Elbroch 2014; Elbroch et al. 2017; Barry et al. 2019). Fish, birds, amphibians, reptiles, rare native plants, and butterflies could potentially diminish if this apex predator were lost (Ripple and Beschta 2006; Ripple and Beschta 2008; Ripple et al. 2014). Loss of this ecosystem engineer and important predator-prey dynamics could have cascading effects on other plant and animal species, potentially leading to a decrease in biodiversity and diminished overall ecosystem function (Ripple et al. 2014; Elbroch et al. 2017; Barry et al. 2019; Benson et al. 2020b).

B. Mitigation Measures do not minimize impacts to mountain lions to less than significant

The DEIR fails to mitigate impacts to mountain lions to less than significant. MM BIO-3(j)(2) states that a biologist will conduct mountain lion surveys prior to vegetation clearing or ground disturbance, including drilling and blasting, and "provide direction for such activities as deemed appropriate…to avoid take or other adverse effects to mountain lions" (DEIR at 3.5-48). This mitigation measure is vague and lacks any explanation or scientific-based methods of how it would actually minimize impacts to mountain lions. What would the surveys entail? How large would the survey area be? At what distance from any blasting would a mountain lion be considered unimpacted? When would the surveys be conducted in relation to the ground disturbance – that morning, a few days before, that year? How will they determine if there is a den with kittens in or near the ground disturbance zone? What will be the course of action if there is a den with kittens in or near the ground disturbance zone? If a predation site is found and it is possible the lion is nearby and still visiting the site, how will they ensure that the animal is not in the ground disturbance zone when blasting occurs? If the blast zone is within the home range of a mountain lion, what kind of "direction" would the biologist provide to make the blasting "appropriate"? The mitigation measure provided has insufficient detail with no evidence of it actually mitigating impacts from ground disturbance to mountain lions. The DEIR fails to provide the public and decisionmakers sufficient information needed to understand if/how impacts will be mitigated. As currently written, MM BIO-3(j)(2) does not mitigate impacts to mountain lions to less than significant.

Mountain lions are nocturnal, elusive creatures that are difficult to find in the wild. They are so stealthy and secretive that lion sightings are rare despite the high numbers of outdoor recreationists in mountain lion habitat. They occur in low densities and have large home ranges. In California, resident adult and total population densities have been found to be 1.1 and 3.6 per 100 km^2, respectively (Pierce and Bleich 2003). Riley et al. (2014) found that mountain lions in the Santa Monica Mountains have home ranges of 100-200 km^2 for females and 300-500 km^2 for males. If one does not see a mountain lion or evidence of a mountain lion in the area, a lion could

still be there using the site in some way. For example, a wildlife camera study conducted in the Northlake project area found no trace of mountain lions on the site, yet in November 2020 a mountain lion was recorded on a wildlife camera using a culvert adjacent to the site (Exhibit 1). Kitten dens are very well hidden in rocky outcrops or dense vegetation. Experts often find them because the mother has a GPS collar, and her behavior (*e.g.*, having a smaller home range, staying in one location frequently) can signal she has had kittens. Such dens could be easily missed during surveys, which could result in kittens being killed or orphaned if the mother is deterred by the blasting and abandons them. Simply conducting mountain lion surveys (with undisclosed protocols) is insufficient and inadequate mitigation.

More appropriate mitigation would be to work closely with mountain lion experts at NPS, who have been studying mountain lions in the area for almost 20 years, to determine if collared or tagged mountain lions are in the vicinity or using the area when vegetation clearing and ground disturbance is planned. Although they have not collared all mountain lions in the area, they have the most on-the-ground data, knowledge, and experience regarding this mountain lion population, they have a critical understanding of both collared and uncollared lions in the area, and they would be able to provide the best science-based guidance to minimize impacts to mountain lions.

See Section III(B) for comments regarding MM BIO-6.

III. The DEIR fails to adequately assess and mitigate impacts to wildlife movement and habitat connectivity to less than significant.

A. Inadequate assessment of impacts to wildlife movement and habitat connectivity

Roads and development create barriers that lead to habitat loss and fragmentation, which harms native wildlife, plants, and people. As barriers to wildlife movement, poorly-planned development and roads can affect an animal's behavior, movement patterns, reproductive success, and physiological state, which can lead to significant impacts on individual wildlife, populations, communities, landscapes, and ecosystem function (Mitsch and Wilson 1996; Trombulak and Frissell 2000; van der Ree et al. 2011; Haddad et al. 2015; Marsh and Jaeger 2015; Ceia-Hasse et al. 2018). For example, habitat fragmentation from roads and development has been shown to cause mortalities and harmful genetic isolation in mountain lions in southern California (Ernest et al. 2014; Riley et al. 2014; Vickers et al. 2015), increase local extinction risk in amphibians and reptiles (Cushman 2006; Brehme et al. 2018), cause high levels of avoidance behavior and mortality in birds and insects (Benítez-López et al. 2010; Loss et al. 2014; Kantola et al. 2019), and alter pollinator behavior and degrade habitats (Trombulak and Frissell 2000; Goverde et al. 2002; Aguilar et al. 2008). Habitat fragmentation also severely impacts plant communities. An 18-year study found that reconnected landscapes had nearly 14% more plant species compared to fragmented habitats, and that number is likely to continue to rise as time passes (Damschen et al. 2019). The authors conclude that efforts to preserve and enhance connectivity will pay off over the long-term (Damschen et al. 2019). In addition, connectivity between high quality habitat areas in heterogeneous landscapes is important to allow for range shifts and species migrations as climate changes (Heller and Zavaleta 2009; Cushman et al.

2013; Krosby et al. 2018). Loss of wildlife connectivity decreases biodiversity and degrades ecosystems.

The DEIR fails to adequately describe the Project area's importance in wildlife connectivity. Although the DEIR acknowledges that the Project site is located in the Santa Monica-Sierra Madre Connection and within a Ventura County habitat connectivity and wildlife corridor overlay zone, the DEIR states that the Project is "not expected to significantly affect wildlife movement through the area compared to baseline conditions" (DEIR at 3.5-53). This is pure conjecture not based on any scientific evidence or understanding.

The proposed development will increase human activities in open space and further fragment the landscape, which could affect the diverse animals and plants in the area. For instance, field observations and controlled laboratory experiments have shown that traffic noise can significantly degrade habitat value for migrating songbirds (Ware et al. 2015). Subjects exposed to 55 and 61 dBA (simulated traffic noise) exhibited decreased feeding behavior and duration, as well as increased vigilance behavior (Ware et al. 2015). Such behavioral shifts increase the risk of starvation, thus decreasing survival rates. Another study also highlighted the detrimental impacts of siting development near areas protected for wildlife. The study noted that "Anthropogenic noise 3 and 10 dB above natural sound levels . . . has documented effects on wildlife species richness, abundance, reproductive success, behavior, and physiology" (Buxton et al. 2017). The study further noted that "there is evidence of impacts across a wide range of species [] regardless of hearing sensitivity, including direct effects on invertebrates that lack ears and indirect effects on plants and entire ecological communities (*e.g.*, reduced seedling recruitment due to altered behavior of seed distributors)" (Buxton et al. 2017). Moreover, human transportation networks and development resulted in high noise exceedances in protected areas (Buxton et al. 2017). Blasting and other ground disturbance as well as mine operation could impact species and species movement in the area. The DEIR fails to adequately assess such impacts.

In addition, preliminary results from studies underway by researchers at UC Davis and University of Southern California, as well as those by other researchers, suggest that the light, noise, and other aspects of roads can have negative impacts on wildlife numbers and diversity near the roadways (Shilling 2020; Vickers 2020). The researchers found a significant difference between species richness and species type, with lower richness and fewer species at along roadsides compared to background areas 1 km away from the roads (Shilling 2020). They also found that as traffic noises surpassed 60 dBC, the number of visits by small to large mammals decreased, and most of the species in their study avoid traffic noise (Shilling 2020). It is clear that different species have variable sensitivities to noise and light associated with development and transportation infrastructure; this can lead to changes in species distributions and population health and survival, which can have ecosystem-level impacts (*e.g.*, Suraci et al. 2019). Again, the DEIR fails to adequately assess and mitigate impacts of edge effects on functional connectivity.

The Project would result in shrinking the width of the corridor from 1,500 feet to 800 feet, which would result in habitat loss and degradation due to edge effects. Negative edge effects from human activity, traffic, lighting, noise, pollutants, invasive weeds, and increased fire frequency have been found to be biologically significant up to 300 meters (~1000 feet) away

from development in terrestrial systems (Environmental Law Institute 2003). By reducing the corridor width to 800 feet, the Project would diminish the functionality of one of the last remaining natural corridors between the Santa Monica Mountains and the Sierra Madre.

The Project's placement will subject the limited surrounding open space to development edge effects and will likely impact key, wide-ranging predators, such as mountain lions and bobcats (Crooks 2002; Riley et al. 2006; Delaney et al. 2010; Lee et al. 2012; Vickers et al. 2015), as well as smaller species with poor dispersal abilities, such as song birds, small mammals, and herpetofauna (Cushman 2006; Benítez-López et al. 2010; Kociolek et al. 2011). Limiting movement and dispersal can affect species' ability to find food, shelter, mates, and refugia after disturbances like fires or floods. Individuals can die off, populations can become isolated, sensitive species can become locally extinct, and important ecological processes like plant pollination and nutrient cycling can be lost. In addition, linkages and corridors between major core habitat areas are important to allow for range shifts and species migrations as climate changes. Therefore, it is imperative that thorough analyses are conducted to determine if Project activities will affect species movement. The DEIR fails to provide sufficient details and analyses to warrant their conclusion that Project impacts on habitat connectivity and wildlife movement would be mitigated to less than significant.

The DEIR fails to consider the need for corridor redundancy (*i.e*. the availability of alternative pathways for movement), or in this case, a wider corridor. Wider corridors provide a level of corridor redundancy in that they help to ensure that appropriate habitat is available for numerous species. Corridor redundancy is important because it allows for improved functional connectivity and resilience. Compared to a single or narrow pathway, multiple or wider connections between habitat patches increase the probability of movement across landscapes by a wider variety of species, and they provide more habitat for low-mobility species while still allowing for their dispersal (Mcrae et al., 2012; Olson & Burnett, 2008; Pinto & Keitt, 2008). In addition, corridor redundancy provides resilience to uncertainty, impacts of climate change, and extreme events, like flooding or wildfires, by providing alternate escape routes or refugia for animals seeking safety (Cushman et al., 2013; Mcrae et al., 2008; Mcrae et al., 2012; Olson & Burnett, 2008; Pinto & Keitt, 2008).

Corridor redundancy is critical when considering the impacts of climate change on wildlife movement and habitat connectivity. Climate change is increasing stress on species and ecosystems, causing changes in distribution, phenology, physiology, vital rates, genetics, ecosystem structure and processes, and increasing species extinction risk (Warren et al. 2011). A 2016 analysis found that climate-related local extinctions are already widespread and have occurred in hundreds of species, including almost half of the 976 species surveyed (Wiens 2016). A separate study estimated that nearly half of terrestrial non-flying threatened mammals and nearly one-quarter of threatened birds may have already been negatively impacted by climate change in at least part of their distribution (Pacifici et al. 2017). A 2016 meta-analysis reported that climate change is already impacting 82 percent of key ecological processes that form the foundation of healthy ecosystems and on which humans depend for basic needs (Scheffers et al. 2016). Genes are changing, species' physiology and physical features such as body size are changing, species are moving to try to keep pace with suitable climate space, species are shifting their timing of breeding and migration, and entire ecosystems are under stress (Parmesan and

Yohe 2003; Root et al. 2003; Parmesan 2006; Chen et al. 2011; Maclean and Wilson 2011; Warren et al. 2011; Cahill et al. 2012). Therefore, functional habitat connectivity is critical for many animals and plants to adapt to climate change. Again, the DEIR fails to use the best available science and adequately assess and mitigate impacts to wildlife movement and functional connectivity.

B. Mitigation Measures do not minimize impacts to wildlife movement and habitat connectivity to less than significant

MM BIO-6 is insufficient to mitigate impacts to habitat connectivity and wildlife movement to less than significant. Although the DEIR states the Project will comply with County zoning code requirements associated with development and activities in wildlife corridor areas that modifies lighting (MM BIO-6(a)) and fencing (MM BIO-6(b)) to minimize impacts to wildlife movement, such measures do not negate the impacts of the Project extending 700 feet into one of the last remaining corridors between the Santa Monica Mountains and Sierra Madre. Even with reduced lighting and wildlife-friendly fencing, increased human activities extending into an already tenuous corridor will also increase noise, vehicles/traffic, and the chances of fire ignitions, for which the DEIR does not provide sufficient mitigation.

The Project will degrade the existing corridor, inhibit wildlife movement, and directly and indirectly impact special-status species like mountain lions. As mentioned previously, local mountain lions are facing an extinction vortex largely driven by lack of connectivity and human-caused mortalities. Encroaching on this corridor will further isolate the Santa Monica Mountains puma population and drive them closer to local extinction. The DEIR fails to adequately mitigate impacts to wildlife movement and habitat connectivity to less than significant.

MM BIO-6(c) mentions the establishment and maintenance of a wildlife passage where development is prohibited, but the DEIR improperly defers mitigation by not providing acreage or a map of the wildlife passage areas being proposed. As written, it appears the wildlife passage areas they are referring to are simply outside the Project boundary. The DEIR refers to "restoration of native plants as a component of reclamation" as the only permitted activity within the wildlife passage areas, but there is no native plant restoration plan provided for the public or decisionmakers to review. This amounts to improperly deferred mitigation. Mitigation measures for the Project must be considered in the DEIR so that the proper environmental analysis can take place. (See *Sundstrom v. Co. of Mendocino* (1988) 202 Cal.App.3d 296.). The amount and location of the land to be set aside for wildlife passage and a restoration plan need to be included in the DEIR to enable the public and decisionmakers to evaluate the effectiveness of the mitigation measures to minimize impacts to wildlife movement and habitat connectivity. Such wildlife passage areas should also be conserved, restored, and adaptively managed with measurable success criteria in perpetuity.

IV. The DEIR fails to adequately assess and mitigate impacts to oaks and oak woodlands to less than significant.

A. Impacts to all oaks of 5 inches or greater in diameter must be assessed and mitigated.

California Public Resources Code §21083.4 (2004, Senate Bill 1334) requires that when a county is determining the applicability of the 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 for the removal of oaks that are not commercial species, which are five (5) inches or more in diameter as measured at a point 4.5 feet (breast height) above natural grade level. The DEIR summarizes California Public Resources Code §21083.4, but it is not clear that that the analysis includes all oaks of 5-inches or greater that would be impacted by the project, or if the DEIR instead simply assesses project impacts to oak trees that are encompassed by Ventura County's tree protections.

California Fish and Game Code §1361, enacted with the passage of the Oak Woodland Conservation Act (2001, Assembly Bill 242), defines oak woodlands: "*Oak woodlands* means an oak stand with a greater than 10 percent canopy cover or that may have historically supported greater than 10 percent canopy cover." The DEIR and its appendices designate a section of the property as Coast Live Oak Woodland and include photographs that suggest the presence of a greater number of oaks than the 13 described in the DEIR.

B. Impacts on oaks proximate to the construction footprint must be assessed and mitigated.

The Protected Trees Map presented on page 27 of Appendix C-1 identifies a number of protected trees within the project impact area (T1 – T6) and others that are proximate to the impact area (T7-T16). Given the scope and scale of the proposed project, what basis is used to determine that proximate trees, especially trees T8-T10, are not subject to project impacts? Further, as noted in IV(A), above, other oak trees of five-inches in diameter or greater that subject to impacts from the construction or operation of the proposed project must be included in the DEIR's analysis and mitigation sections.

Ventura County's *Arborist Verification of Tree Protection Measures* provides guidance on steps to assess project impacts on protected trees. Specifically it requires:

> …The area within the dripline of protected trees, called the tree protection zone (TPZ), be protected from any encroachment (or intrusion) that could cause soil compaction, injury to lower limbs, grade changes, contamination of soil, or damage to the root system… If development or other disturbance will occur near a protected tree, certain measures, such as temporary protective fencing around the TPZ, must be in place first to protect the tree. Arborist Verifications of Tree Protection Measurers provide the Planning Division with confirmation that such required protective measures are in place. The final approved tree protection measures shall be shown on the final construction plans for the project. Verification that these protection measures were in place throughout the time of

construction may be requested by the Planning Division. Written confirmation or photos may be requested.

Ventura County defines the tree protection zone (See Performance Standards for Ministerial Tree Permits) as: "The TPZ extends out from the trunk to 5 feet beyond the dripline, **or** a minimum of 15 feet from the trunk—whichever is greater." California Wildlife Foundation/California Oaks finds the TPZ area to be insufficiently protective and instead recommends no disturbance within the root protection zone for oaks. The root protection zone is the area that is half as large again as the area from the dripline—the area directly below the outer canopy—to the trunk. That area is the most critical to oaks. Many problems are initiated by disturbance within this zone. Additional information can be found at: http://californiaoaks.org/wp-content/uploads/2016/05/CareOfCAsNativeOaks.pdf.

Further, the potential mitigation areas map presented on page 49 of Appendix C-1 shows mitigation zones that are also proximate to the construction footprint. Again, it is unclear that these areas will not be subject to impacts from the construction or operation of the project. Nor is it clear that these areas have been assessed as viable oak habitat, including whether there is a sufficiency of surface and groundwater to sustain oaks after the seven-year establishment period.

C. Habitat connectivity impacts of oak removals must be fully assessed in the DEIR.

The DEIR does not provide information on how habitat connectivity would be maintained during the period after oak habitat is destroyed and before restored oak habitat near the project site again provides ecosystem services. Ventura County's Oak Woodland Management Plan articulates the importance of mitigation that addresses habitat value (p. 24-25):

> ….[R]eplacing a century-old tree with 1, 3, or 10 one-year-old seedlings does not adequately replace the lost habitat value of large trees. It has become evident that simply focusing on mitigation planting based on a tree to seedling ratio is not a sufficient strategy to ensure the viability of oak woodlands...there is broad recognition that it is critical to conserve the inherent values that exist in mature oak forests wherever possible.[3]
>
> Additional studies have noted that many important habitat elements, such as understory, cavities, acorns, and snags, will not be mitigated through a tree planting strategy alone.

The county's oak woodland management plan provides further guidance on the analysis necessary to fully assess proposed oak ecosystem impacts (p. 24):

> …A wide range of tree densities and site characteristics can sustain functional woodlands. In addition, different oak species have different natural canopy cover densities. For example, both coastal oak and valley oak woodlands can vary from open savannahs to closed canopy forests. Density variation can also promote greater biodiversity of animal species, as some species prefer closed canopy

[3] A Planners Guide for Oak Woodlands, Second Edition, University of California, Agriculture and Natural Resources, 2005.

> woodlands, while others use openings within the woodlands or edges between woodlands and other habitat types.
>
> ...Given that oak size ("WHR size") data available for Ventura County indicates potential oak regeneration problems, protecting seedlings and sapling trees is crucial for maintaining future oak woodland viability. Therefore, the County should include an evaluation of oak seedlings/saplings during an Initial Study Assessment for a given project.

Given that Section 3.5.1.4 of the DEIR, ***Habitat Connectivity and Wildlife Corridors***, notes "the entirety of the existing and proposed CUP areas are designated as a habitat connectivity and wildlife corridor area" Ventura County should consider the no project alternative.

D. The DEIR's oak mitigation plan is inadequate.

A number of Ventura County and California Public Resources Code §21083.4 oak mitigation requirements are missing from the DEIR:

1. The DEIR lacks language about restrictive covenants from pages 8 and 9 of *Content Requirements for Tree Protection Plans,* which is reproduced in Exhibit 2.
2. The DEIR's formula for mitigation plantings (from page 44 of Appendix C-1 MM4: Oak Trees) does not incorporate Ventura County's Tree Protection Guidelines specifications for replacement (p.4):
   Section 8107-25.10 of the Ventura County Zoning Ordinance Code (Tree Protection Regulations) states tree replacement shall be on a "Cross-sectional" basis. This basis is defined as the aggregate areas of the cross sections of the replacement trees must be equal to or greater than the cross sectional areas of the altered elements of a tree (e.g., trunks, limbs, or roots)… Use the resulting circumference, divide by pi (3.14) to get the diameter. Divide the diameter by 2 to get the radius (or use the chart on next page). The radius squared (times itself) multiplied by pi is the cross sectional area. (r^2x 3.14 = Area) As long as the aggregate areas of the replacement trees equal or exceed the lost tree elements, any number of trees can be used. Trees below one inch in area cannot be used.
3. Public Resources Code requires a seven-year rather than the two-year establishment period presented in Appendix C-1 MM4: Oak Trees.

E. Greenhouse Gas impacts of vegetation removal must be assessed.

Section 3.4, ***Air Quality and Greenhouse Gases***, of the DEIR does not analyze the greenhouse gas (GHG) impacts of tree or other native vegetation removal, which is in violation of California law. CEQA's sole GHG focus is "the mitigation of greenhouse gas emissions or the effects of greenhouse gas emissions." Net present value of GHG emissions forms the foundation of the state's greenhouse reduction objectives, as well as the California Forest Protocol preservation standards. Every ton of carbon dioxide (CO_2) released into the atmosphere by oak woodland or forest conversion represents a measurable potential adverse environmental effect, which is covered by CEQA. Thus California requires the analysis and mitigation of greenhouse gas emissions associated with proposed oak woodland or forest conversions.

Similarly, the removal and degradation of the Project area's chaparral- and sage scrub-dominated landscapes would also result in high amounts of carbon release. Above-ground biomass of these shrub communities were found to be as high as 3461 g/m^2, with the amount of carbon stored increasing with the age of the stand (Bohlman et al. 2018). In addition, a substantial amount of carbon may be stored belowground in their roots and in the microbial communities and symbiotic fungi that are associated with the roots (Bohlman et al. 2018; Kravchenko et al. 2019; Soudzilovskaia et al. 2019). The removal and degradation of these systems have been found to result in the loss of both above- and below-ground carbon storage (*e.g.*, Austreng 2012). And although these systems are often overlooked in the fight against climate change, they are adapted to hot and dry weather conditions and have been found to be resilient to drought (Luo et al. 2007; Vicente-Serrano et al. 2013), which makes them an untapped opportunity to sequester more carbon as the climate crisis becomes exceedingly urgent. Therefore, the DEIR fails to adequately analyze and mitigate GHG emissions from the removal and degradation of native ecosystems.

V. Impacts to Rare Plants

A. An Incidental Take Permit (ITP) for Conejo Buckwheat Is Required.

Surveys in 2010, 2016, and 2018 documented individuals of Conejo buckwheat (*Eriogonum crocatum*) on the project site. This globally rare species is endemic to Ventura County, is known only from 13 occurrences, and is restricted to volcanic rock substrates in the Conejo Grade area. As a result, any impacts to this species are likely to be significant and must be mitigated fully.

Conejo buckwheat is listed as Rare under California's Native Plant Protection Act. 14 Cal. Code Reg. § 670.2(c)(21)(C). As indicated in scoping comments submitted by the California Department of Fish and Wildlife (CDFW) in 2017 (DEIR Appendix A-2, pg. 52-60), impacts to this species may only take place following the issuance of an Incidental Take Permit (ITP) by CDFW. 14 Cal. Code Reg. § 786.9. An application for such a permit requires the applicant to analyze the impacts of the proposed taking on the species, propose measures to minimize and *fully mitigate* the impacts of the proposed taking, and propose a plan to monitor compliance with the minimization and mitigation measures and the effectiveness of the measures. 14 Cal. Code Reg. § 783.2(a) (emphasis added). The ITP will only be issued if CDFW finds that the applicant will minimize and fully mitigate the impacts of the take authorized under the permit. 14 Cal. Code Reg. § 783.4(a)(2). The DEIR (Vol. 1, 2-22) makes no reference to the need to obtain an ITP for impacts to State Rare species, and the analysis and proposed mitigation plan required for the ITP pursuant to Section 783.2 of the California Code of Regulations has not been provided. This oversight must be corrected and the process of obtaining this necessary permit should be commenced.

B. Negative Survey Results for Federally-Listed Species of Dudleya

Surveys in 2010 located individuals of the federally-listed Conejo dudleya (*Dudleya parva*) and Verity's dudleya (*Dudleya verityi*). Yet, surveys in 2016 and 2018 failed to locate

either of these species, despite the fact that the 2018 surveys were timed correctly, and botanists visited nearby reference sites to ensure that both species were detectable. Regardless of the negative results, the DEIR correctly considers both of these species to be present on the site. (DEIR Volume 1, 3.5-13-14). We concur with this assessment given that plant species, even though not detected in a given year, may be dormant or could exist solely in the soil seedbank. These species of dudleya should be treated as present and mitigated accordingly.

The county should also consider and disclose factors that may have influenced the negative results. Did botanists visit the exact locations where these species were located in 2010, possibly aided by survey maps from prior surveys? If so, had conditions on the site changed between 2010 and 2016/2018, such that the negative survey results are explainable? In short, the EIR should explain the possible reasons for the negative survey results for both Conejo dudleya and Verity's dudleya in 2016 and 2018.

Additionally, since the project has a potential federal nexus due to its impacts to wetlands and the potential for the presence of least bell's vireo, California gnatcatcher, and dudleya in the project area, the project may require Section 7 consultation with the U.S. Fish and Wildlife Service (USFWS) and the subsequent issuance of a Biological Assessment and Biological Opinion. These processes are necessary to ensure that the project does not result in jeopardy for listed species. Has the project applicant initiated consultation with the USFWS?

C. Inadequate Quantification of Impacts to All Rare Species

The DEIR fails to include an accounting of the level of impacts to rare species, and thus fails as an informational document for the public and decision makers. Pub. Resources Code § 21061 states that, "The purpose of an environmental impact report is to provide public agencies and the public in general with detailed information about the effect which a proposed project is likely to have on the environment; to list ways in which the significant effects of such a project might be minimized; and to indicate alternatives to such a project." An EIR that merely states that a species is present or absent on the site does not provide enough information for the public to understand the gravity of impact to those species. EIRs should, at the very least, disclose the acres and/or number of individuals of each species that will be impacted directly or indirectly by the project in order to fulfill their purpose as an informational document. *See Lotus v. Dep't of Transp.*, 223 Cal.App.4th 645, 658 (2014) (an EIR did not comply with CEQA because it failed to evaluate the significance of a project's impact on the root systems of old growth redwood trees, "preclud[ing] both identification of potential environmental consequences arising from the project and also thoughtful analysis of the sufficiency of measures to mitigate those consequences"). Not only is this level of information necessary for the EIR to satisfy its purpose as a public disclosure document, these data are also necessary to assess a project's level of impact.

This information is also crucial to the development of mitigation measures and to inform CEQA findings of significance. Yet, the EIR concludes that impacts to rare plant species is less than significant with mitigation. What data and rationale did the county apply to arrive at this conclusion? At a minimum, the EIR should be revised to include an accounting of the quantitative impacts to each rare species that is present on the site. Lastly, the fact that Conejo

dudleya and Verity's dudleya are listed as present on the site but were not located during surveys in recent years makes it impossible to adequately assess levels of impact to these species and to adopt appropriate mitigation measures.

D. Mitigation Measures for Rare Species Are Inadequate

Mitigation measure BIO-2 refers to the possibility of conferring with CDFW for concurrence on the mitigation plan prior to project approval. Yet, this mitigation measure makes no reference to the need to obtain legally mandated permits for the loss of State Rare species (ITP issued by CDFW), and possibly also federally-listed plant species (Biological Opinion issued by the USFWS). Mitigation Measure BIO-2 requires that all impacts to rare species be mitigated at a ratio of 1:1 at a site where "no future disturbance will occur." The EIR fails to disclose the standard used to conclude that this mitigation ratio is sufficient to adequately mitigate impacts to rare plants to less than significant. The lack of information and specificity in this mitigation measure renders it vague, uninformative, and speculative. *See Berkeley Keep Jets Over the Bay Committee v. Board of Port Commissioners*, 91 Cal.App.4th 1344, 1371 (2001) (failure to support an EIR's conclusory statements with scientific or objective data is a violation of CEQA); *California Clean Energy Committee v. City of Woodland* (2014) 225 Cal.App.4th 173, 205 (an EIR must "disclose the analytic route the agency traveled from evidence to action" (internal quotations omitted)). CEQA requires the lead agency to present mitigation measures that have a reasonable likelihood of adequately compensating for a project's impact. Impacts to Conejo buckwheat, for example, must be fully mitigated in order to meet the requirements for a take permit under Section 783 *et seq.* Yet, the EIR does not contain an analysis supporting the conclusion that a 1:1 mitigation ratio is sufficient to fully mitigate impacts to this species. The lack of information in the EIR renders it impossible for the county or the public to assess if the proposed mitigation is even feasible, not to mention sufficient to fully mitigate impacts. For example, the EIR relies solely on the securing of offsite mitigation lands, when the availability of potential mitigation lands for each impacted species has not been identified. Has the county identified land that is available for the purchase of conservation easements for each of the rare species that have been documented on the project site? The EIR should disclose whether offsite mitigation credits have been secured, and if so, identify the locations.

VI. Impacts to Plant Communities

A. Documentation of Impacts to Sensitive Plant Communities

The County's "Summary of Biological Resource Regulations" states that EIRs must document impacts to plant communities that have been assigned a NatureServe rank of G/S1 thorough G/S3, in order to make "CEQA findings of significance." Remarkably, table ES-1, the "Summary of Project Impacts and Mitigation Measures" does not even address the need to account for impacts to sensitive plant communities. The Initial Study documents at least two plant communities, Red Willow Thicket (G3/S3) and Giant Wild Rye Grasslands (G5/S3), which meet the county's definition of sensitive plant communities. However, in contrast to the sparse analysis of impacts to rare plants, the DEIR Table 3.5-7 quantifies the acreage of impact to plant communities. This table confirms that 1.5 acres of Giant Wild Rye Grasslands (75% of the

acreage on the site) will be eliminated by the project. The loss of these 1.5 acres is a significant impact and the DEIR should contain mitigation measures to address this impact.

B. Lack of analysis and mitigation for impacts to plant communities

While the Initial Study details the distribution and abundance of plant communities on the site, it concludes that "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." (DEIR Appendix C-1, pg. 2). Subsequently, in conflict with the county's own regulations, the EIR fails to make CEQA findings of significance for impacts to sensitive plant communities. Instead, the EIR states that the following impacts to sensitive plant communities 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." (DEIR Vol. 1, 3-5-33). This vague assessment does not provide decision makers or the public with enough information to determine the extent to which these resources will be impacted by the project. Consistent with this omission is the failure to adopt mitigation measures to compensate for the loss of plant communities.

VII. The County Should Require Stronger Air Quality Mitigation Measures.

A. Air Pollution is a Public Health Crisis.

According to a recent Stanford University study, poor air quality cost the U.S. seven hundred and ninety billion dollars in 2014.[4] The study noted that air quality has improved over the last ten years but still cost the U.S. about five percent of the yearly GDP in 2014.[5] The study indicated that air pollution near urban centers has a higher impact because of the proximately to people.[6] Additionally, a recent study found that someone who lives for decades in a county with high levels of fine particulate pollution is 8% more likely to die from COVID-19 than someone who lives in a region with just one unit less of such pollution.[7]

In addition to public health, many plants and trees, including agricultural crops, are injured by air pollutants. This damage ranges from decreases in productivity, a weakened ability to survive drought and pests to direct mortality. (VCAQR) Wildlife is also impacted by air pollution because the plants and trees that comprise their habitats are weakened or killed (yet the DEIR contains no analysis of the impacts of air pollution on crops, native plants, or wildlife). Greenhouse gases, such as the air pollutant carbon dioxide released by fossil fuel combustion, contribute directly to human-induced climate change.[8] In this feedback loop, poor air quality that

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[4] Ellis Robinson, *How Much Does Air Pollution Cost the U.S.?* Stanford Earth (Sept 19, 2019).
[5] *Id.*
[6] *Id.*
[7] Xiao Wu, Rachel C. Nethery, Benjamin M. Sabath, Danielle Braun, Francesca Dominici, *Air pollution and COVID-19 mortality in the United States: Strengths and Limitations of an Ecological Regression Analysis*, *Science advances*, 6(45) (2020) https://doi.org/10.1101/2020.04.05.20054502.
[8] EPA, *Causes of Climate Change*, Webpage https://19january2017snapshot.epa.gov/climate-change-science/causes-climate-change_.html (last update 12/26/2016)

contributed to climate change will, in turn, worsen the impacts of climate change and attendant air pollution problems.[9]

Although there are many different types of air pollution, Ozone, Fine Particulate Matter, and Toxic Air Contaminants are the most significant concern in urban areas, particularly in Southern California. These three air pollutants have been linked to an increased incidence and risk of cancer, congenital disabilities, low birth weights, and premature death, in addition to a variety of cardiac and lung diseases such as asthma, COPD, stroke, and heart attack.[10] Ozone, also commonly referred to as smog, is created by the atmospheric mixing of gases from fossil fuel combustion and other volatile organic compounds and sunlight. Although it is invisible, ozone poses one of the greatest health risks, prompting the EPA to strengthen its National Ambient Air Quality Standard for Ozone in 2015.[11] Fine Particulate Matter is generally found in urban areas due to vehicle exhaust emissions, and these microscopic particles contribute to visible air pollution. These tiny participles are dangerous because they are small enough to escape our body's natural defenses and enter the bloodstream. Fugitive dust is a term used for fine particulate matter that results from disturbance by human activity such as construction and road-building operations. Toxic Air Contaminants are released from vehicle fuels, especially diesel, which accounts for over 50% of the cancer risk from TACs.[12] This is especially relevant for Southern California with its abundance of diesel shipping traffic.[13]

The DEIR analyzes the air pollutants' health impacts and finds that only NOx needs mitigation as required by the Clean Air Act standards. Yet the DEIR states the air quality monitoring sites near the project are at times out of attainment for ozone, while PM 10 and PM 2.5 frequently exceed the Federal 24-hour standard.[14] The DEIR believes that the increased diesel trucks and fugitive dust are not harmful enough to warrant mitigation despite the detrimental effects of these pollutants, as discussed above.[15] Additionally, the majority of pollution from the project comes from diesel fumes from transporting mined materials, and the DEIR citing the California Air Resources Control Board states that seventy percent of the cancer risk the average Californian faces from breathing TACs stems from diesel exhaust particles, which is up from fifty percent in 2016.[16]

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[9] Bay Area Air Quality Management District (BAAQMD), *Planning Healthy Places: a guidebook for addressing local sources of air pollutants in community planning* (2016).

[10] American Lung Association (ALA), *State of the Air 2016;* Laurent, O. et al., *Low birth weight and air pollution in California: which sources and components drive the risk?*, Environment International 92-93:471-477 (2016).

[11] American Lung Association (ALA), *State of the Air 2016.*

[12] Bay Area Air Quality Management District (BAAQMD), *Planning Healthy Places: a guidebook for addressing local sources of air pollutants in community planning* (2016).

[13] Betancourt, S. and Mark Vallianatos, *Storing harm: the health and community impacts of goods movement warehousing and logistics*, THE Impact Project (2012); Bailey, D., et al., *Clean cargo: a guide to reducing diesel air pollution from the freight industry in your community*, NRDC.

[14] DEIR 3.4-5.

[15] DEIR 3.4-24-25.

[16] DEIR 3.4-4.

B. The Air Pollution Mitigation is Inadequate Under CEQA

The California Environmental Quality Act (CEQA) mandates that significant environmental damage be avoided or substantially lessened where feasible.[17] Moreover, although "an EIR need not consider every conceivable alternative to a project . . . it must consider a reasonable range of potentially feasible alternatives that will foster informed decision decision-making and public participation."[18] Additionally, the "key to the selection of the range of alternatives is to identify alternatives that meet most of the project's objectives but have a reduced level of environmental impacts."[19]Accordingly, a rigorous analysis of reasonable alternatives to the project must be provided to comply with this strict mandate.

CEQA requires all feasible mitigation measures, yet the DEIR does not discuss what is feasible. Instead, it discusses what would be minimally required by the Federal and California Clean Air Acts. Ventura County should require a higher standard for the project; Table 3.4-2 shows that the El Rio Monitoring station exceeded CAAQS and NAAQS NOx standard 180 and 100 days, respectively, during 2016 and 2018.[20] Thus the County must, at a minimum, require the DEIR to analyze whether further mitigation could allow the County to meet the minimum air quality standards. As this DEIR stands, the County will continue to exceed NOx emissions because this project is only maintaining the polluted status quo. The DEIR suggests mitigation that will allow NOx to double its current levels as its mitigated response.[21] The standard the DEIR uses requires no more than 25 additional NOx emissions by a project, but since the project currently emits 25 NOx, the NOx will double from this project site by allowing the expansion.[22] CEQA does not just require the bare minimum meeting of state and federal requirements but all feasible mitigation of significant environmental impacts. Here, doubling NOx after the proposed mitigation is still significant. The DEIR should discuss further mitigation to allow knowledgeable participation by decision-makers and the public regarding this project's impacts. This project proposes moving much closer to residential areas, which will increase the health impacts residents' experience.[23] Unless the project can further mitigate its increased air pollution, the County should not expand the project closer to residential areas.

Additionally, ozone and PM10 and PM2.5 are not meeting attainment levels, and this project plans to increase these pollutants with no mitigation efforts. This is especially troubling since the project will expand closer to residential and agricultural zones. Thus residents will be impacted by both increased air pollution and through closer vicinity to these dangerous pollutants. Ozone is a very toxic substance that endangers public health, increases climate change impacts, and can decrease crop yields.[24] By reclassifying agricultural lands to allowing nearby mining activities, the County would go against the general plan requirement to not endanger agricultural lands and hurt nearby farmers.[25]

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[17] Pub. Res. Code § 21002; Guidelines §§ 15002(a)(3), 15021(a)(2), 15126(d).
[18] CEQA Guidelines § 15126.6(a).
[19] *Watsonville Pilots Assn. v. City of Watsonville* (2010) 183 Cal.App.4th 1059, 1089.
[20] DEIR 3.4-17.
[21] DEIR 3.4-24.
[22] DEIR 3.4-25.
[23] DEIR 3.4-23.
[24] DEIR 3.4-26.
[25] *Id.*

Instead of the EIR proposals, this project could decrease air pollution in this area by requiring more innovative renewable requirements. Electric trucks or solar electrical generation on the property would reduce the air pollutants this project emits. Yet, the DEIR did not consider any renewable options; instead, the EIR focuses solely on mitigation through emission reduction technology and reduction of use. As it currently stands, the DEIR does not discuss all feasible mitigation measures, instead only focusing on required mitigations under the Clean Air Act, ignoring CEQA's added mitigation requirements. CEQA and the residents near this project deserve more to protect their health and welfare.

VIII. The DEIR Lacks GHG Mitigation Measures.

A. Climate Change Is a Catastrophic and Pressing Threat to California.

A strong, international scientific consensus has established that human-caused climate change is causing widespread harm to human society and natural systems. The threats from climate change are becoming increasingly dangerous. The Intergovernmental Panel on Climate Change ("IPCC"), the leading international scientific body for the assessment of climate change, concluded in its 2014 Fifth Assessment Report that: "[w]arming of the climate system is unequivocal, and since the 1950s, many of the observed changes are unprecedented over decades to millennia. The atmosphere and ocean have warmed, the amounts of snow and ice have diminished, and sea level has risen," and further that "[r]ecent climate changes have had widespread impacts on human and natural systems."[26] These findings were echoed in the United States' own 2014 Third National Climate Assessment and 2017 Climate Science Special Report, prepared by scientific experts and reviewed by the National Academy of Sciences and multiple federal agencies. The Third National Climate Assessment concluded that "[m]ultiple lines of independent evidence confirm that human activities are the primary cause of the global warming of the past 50 years"[27] and "[i]mpacts related to climate change are already evident in many regions and are expected to become increasingly disruptive across the nation throughout this century and beyond."[28] The 2017 Climate Science Special Report similarly concluded:

> [B]ased on extensive evidence,…it is extremely likely that human activities, especially emissions of greenhouse gases, are the dominant cause of the observed warming since the mid-20th century. For the warming over the last century, there is no convincing alternative explanation supported by the extent of the observational evidence.
> In addition to warming, many other aspects of global climate are changing, primarily in response to human activities. Thousands of studies conducted by researchers worldwide have documented changes in surface, atmospheric, and oceanic temperatures; melting glaciers; diminishing snow cover; shrinking sea

[26] IPCC [Intergovernmental Panel on Climate Change]. (2014). Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change, [Core Writing Team, R.K. Pachauri & L.A. Meyer (eds.)]. 2, Available at: http://www.ipcc.ch/pdf/assessment-report/ar5/syr/SYR_AR5_FINAL_full_wcover.pdf.

[27] Melillo, Jerry M, Terese (T.C.) Richmond & Gary W. Yohe (eds.). (2014). Climate Change Impacts in the United States: The Third National Climate Assessment, U.S. Global Change Research Program. 7, Available at: http://nca2014.globalchange.gov/downloads.

[28] *Id.* at 10.

ice; rising sea levels; ocean acidification; and increasing atmospheric water vapor.[29]

The U.S. National Research Council concluded that "[c]limate change is occurring, is caused largely by human activities, and poses significant risks for—and in many cases is already affecting—a broad range of human and natural systems."[30] Based on observed and expected harms from climate change, in 2009, the U.S. Environmental Protection Agency found that greenhouse gas pollution endangers the health and welfare of current and future generations.[31]

These authoritative climate assessments decisively establish the dominant role of anthropogenic GHG emissions in driving climate change. As the Third National Climate Assessment explains: "observations unequivocally show that climate is changing and that the warming of the past 50 years is primarily due to human-induced emissions of heat-trapping gases."[32] The Assessment makes clear that "reduc[ing] the risks of some of the worst impacts of climate change" will require "aggressive and sustained greenhouse gas emission reductions" over the course of this century.[33]

The impacts of climate change will be felt by humans and wildlife. Climate change is increasing stress on species and ecosystems—causing changes in distribution, phenology, physiology, vital rates, genetics, ecosystem structure, and processes—in addition to increasing species extinction risk.[34] Climate-change-related local extinctions are already widespread and have occurred in hundreds of species.[35] Catastrophic numbers of species extinctions are projected to occur during this century if climate change continues unabated.[36] In California, climate change will transform our climate, resulting in impacts including, but not limited to, increased temperatures and wildfires and a reduction in snowpack and precipitation levels and water availability.

Therefore, immediate and aggressive greenhouse gas emissions reductions are necessary to keep warming well below 2°C above pre-industrial levels. The IPCC Fifth Assessment Report and other expert assessments have established global carbon budgets, or the total amount of carbon that can be burned while maintaining some probability of staying below a given

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[29] USGCRP [U.S. Global Change Research Program]. (2017). Climate Science Special Report: Fourth National Climate Assessment, Volume I [Wuebbles, D.J. et al. (eds.)], U.S. Global Change Research Program, 10. Available at: https://science2017.globalchange.gov/.

[30] NRC [National Research Council]. (2010). Advancing the Science of Climate Change, 2.

[31] 74 Fed. Reg. 66496 (December 15, 2009) [U.S. EPA, Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act; Final Rule].

[32] Melillo et al. 2014, p. 2; *see also id.* at 15 [Finding 1: "The global warming of the past 50 years is primarily due to human activities, predominantly the burning of fossil fuels."].

[33] Id. at 13-14, 649; *see also id.* at 15 [Finding 3: "Human-induced climate change is projected to continue, and it will accelerate significantly if global emissions of heat-trapping gases continue to increase."].

[34] Warren, Rachel et al.. (2011). Increasing impacts of climate change upon ecosystems with increasing global mean temperature rise, 106 *Climatic Change* 141.

[35] Wiens, John J. (2016). Climate-related local extinctions are already widespread among plant and animal species, 14 *PLoS Biology* e2001104.

[36] Thomas, Chris. D. et al. (2004). Extinction risk from climate change, 427 *Nature* 145; Maclean, Ilya M. D. & Robert J. Wilson. (2011). Recent ecological responses to climate change support predictions of high extinction risk, 108 *PNAS* 12337; Urban, Mark C. (2015). Accelerating extinction risk from climate change, 348 *Science* 571.

temperature target. According to the IPCC, total cumulative anthropogenic emissions of CO_2 must remain below about 1,000 $GtCO_2$ from 2011 onward for a 66 percent probability of limiting warming to 2°C above pre-industrial levels, and to 400 $GtCO_2$ from 2011 onward for a 66 percent probability of limiting warming to 1.5°C.[37] These carbon budgets have been reduced to 850 $GtCO_2$ and 240 $GtCO_2$, respectively, from 2015 onward.[38]

Given that global CO_2 emissions in 2016 alone totaled 36 $GtCO_2$,[39] humanity is rapidly consuming the remaining carbon budget needed to avoid the worst impacts of climate change. As of early 2018, climate policies by the world's countries would lead to an estimated 3.4°C of warming, and possibly up to 4.7°C of warming, well above the level needed to avoid the worst dangers of climate change.[40]

The United States has contributed more to climate change than any other country. The U.S. is the world's biggest cumulative emitter of GHGs, responsible for 27 percent of cumulative global CO_2 emissions since 1850, and the U.S. is the world's second-highest emitter on an annual and per capita basis.[41] Nonetheless, U.S. climate policy is wholly inadequate to meet the international climate target to hold global average temperature rise to well below 2°C above pre-industrial levels to avoid the worst dangers of climate change. Current U.S. climate policy has been ranked as "critically insufficient" by an international team of climate policy experts and climate scientists.[42]

In response to inadequate action on the national level, California has taken steps through legislation and regulation to fight climate change and reduce statewide GHG emissions. Enforcement of and compliance with these measures is essential to help stabilize the climate and avoid catastrophic impacts to our environment. AB 32 mandates that California reach 1990 levels of GHG emissions by the year 2020, equivalent to approximately a 15 percent reduction from a business-as-usual projection.[43] Based on the warning of the IPPC and leading climate scientists, Governor Brown issued an executive order in April 2015 requiring GHG emissions reductions to 40 percent below 1990 levels by 2030.[44] The Executive Order is in line with a previous Executive Order mandating the state reduce emission levels to 80 percent below 1990 levels by 2050 in order to minimize significant climate change impacts.[45] In enacting SB 375, the

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[37] IPCC [Intergovernmental Panel on Climate Change]. (2013) 2013: Summary for Policymakers. In: Climate Change 2013: The Physical Science Basis, Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Stocker, T.F. et al. (eds.)], Cambridge University Press, 25; IPCC [Intergovernmental Panel on Climate Change]. (2014). Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change, [Core Writing Team, R.K. Pachauri & L.A. Meyer (eds.)], 63-64 Table 2.2. Available at: http://www.ipcc.ch/pdf/assessment-report/ar5/syr/SYR_AR5_FINAL_full_wcover.pdf.

[38] Rogelj, Joeri et al. (2016). Differences between carbon budget estimates unraveled, 6 *Nature Climate Change* 245, Table 2.

[39] Le Quéré, Corrine, et al. (2017). Global Carbon Budget 2017, *Earth Syst. Sci. Data Discuss.*, https://doi.org/10.5194/essd-2017-123. Available at: http://www.globalcarbonproject.org/carbonbudget/17/data.htm.

[40] Climate Action Tracker. (November 2017). Improvement in warming outlook at India and China move ahead, but Paris Agreement gap still looms large. Available at: http://climateactiontracker.org/publications/briefing/288/Improvement-in-warming-outlook-as-India-and-China-move-ahead-but-Paris-Agreement-gap-still-looms-large.html.

[41] World Resources Institute. (November 25, 2014). 6 Graphs Explain the World's Top 10 Emitters.

[42] Climate Action Tracker, USA (last updated November 29, 2018). Available at: http://climateactiontracker.org/countries/usa.

[43] Health & Saf. Code § 38550.

[44] Executive Order B-30-15 (2015).

[45] Executive Order S-3-05 (2005).

legislature has also recognized the critical role that land use planning plays in achieving greenhouse gas emission reductions in California.

The legislature has found that failure to achieve GHG emissions reductions would be "detrimental" to California's economy.[46] In 2018, Governor Brown issued Executive Order B-55-18, in which he declared it to be a statewide goal to "achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter."

Governor Newsom continued this zero-emissions mandate in September 2020, signing an executive order to require all new passenger cars and trucks be zero-emission vehicles by 2035.[47] The California Air Resources Control Board voted in June 2020 to "require Manufacturers who certify Class 2b-8 chassis or complete vehicles with combustion engines to sell zero-emission trucks as an increasing percentage of their annual California sales from 2024 to 2035."[48] By 2035, zero-emission truck/chassis sales would need to be 55% of Class 2b – 3 truck sales, 75% of Class 4 – 8 straight truck sales, and 40% truck tractor sales.[49] CARB states that there are seventy zero-emission buses, vans, and trucks currently commercially available. Most major truck manufacturers plan to phase zero-emission trucks into their inventory in the future as well.[50]

Although some GHG emissions sources may appear insignificant in isolation, climate change is a problem with cumulative impacts and effects.[51] One source or one small project may not appear to have a significant effect on climate change, but the combined impacts of many sources can drastically damage California's climate as a whole. Therefore, project-specific GHG emissions disclosure, analysis, and mitigation are vital to California meeting its climate goals and maintaining our climate.

B. The DEIR Should Include an Analysis of GHG Mitigation Alternatives.

Here, the DEIR concludes that the GHG increases from the project are not significant. The DEIR came to this conclusion by reviewing the Wayne J Sand and Gravel Re-circulated Draft EIR (March 2015), which found its GHG emission standard from the Ventura County Greenhouse Gas Thresholds of Significance Options for Land Use Development Projects in Ventura County (VCAPCD, 11/8/2011). 2011 is a very old standard in climate change terms, especially since California has added numerous GHG reduction requirements in the last ten years, as discussed above.[52] CARB has recently approved expanding the phase-in of medium and heavy-duty truck zero-emission standards, which shows that although the VCAPOD may be the

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[46] Health & Saf. Code § 38501(b).

[47] Office of Governor Gavin Newsom, Governor Newsom Announces California Will Phase Out Gasoline-Powered Cars & Drastically Reduce Demand for Fossil Fuel in California's Fight Against Climate Change, (Sept 23, 2020) Available at: https://www.gov.ca.gov/2020/09/23/governor-newsom-announces-california-will-phase-out-gasoline-powered-cars-drastically-reduce-demand-for-fossil-fuel-in-californias-fight-against-climate-change/.

[48] California Air Resource Control Board, *Advanced Clean Trucks Fact Sheet* (June 25, 2020) Available at: https://ww2.arb.ca.gov/resources/fact-sheets/advanced-clean-trucks-fact-sheet.

[49] *Id.*

[50] *Id.*

[51] *Ctr. for Biological Diversity v. Nat'l Highway Traffic Safety Admin.*, (9th Cir. 2008) 538 F.3d 1172, 1217 ["the impact of greenhouse gas emissions on climate change is precisely the kind of cumulative impacts analysis" that agencies must conduct].

[52] See DEIR Appendix B-1 *Air Quality, Health Risk, and Climate Change Impact Assessment*, (Sespe 2019b).

most recent standard published in Ventura County, the DEIR could and should consider further GHG emission mitigations. This project will raise the CO_2 from approximately 155.3 tons to 3466.6 tons.[53] This increase is twenty-two times higher than the current project. The DEIR states that since the CO_2 will not exceed ten thousand, then it is not significant. But climate change is too important not to discuss mitigation when a twenty-two level increase occurs; particularly when CEQA mandates feasible mitigation to environmental damage, and climate change is our most pressing environmental concern. The County should not approve a project that will increase GHG emissions without even considering GHG mitigation options. There are zero-emission trucks on the market and although there is a higher upfront cost, CARB states that the fuel costs are less than traditional trucks, which offsets the upfront costs. [54] Additionally, on-site solar generation or even purchasing carbon offsets could all reduce the GHG impacts of this project.

The DEIR claims that mitigation is not required because the state requires RPS increases from Southern California Edison, which will decrease the project's reliance on GHG electrical generation.[55] Additionally, the California Low-Carbon Fuel Standard will reduce diesel fuel GHG emissions by raising the standard.[56] But these statements are just riding the coattails of others and the project should also be committing to GHG reductions to further mitigate climate impacts from occurring now when the project is proposing greatly increasing its GHG emissions.

Lastly, the DEIR cites Berck as proof that GHG impacts from VMT will be less because otherwise, mining materials will come from farther away.[57] But the DEIR does not analyze competing mine locations and whether this expansion will allow the project to expand its service area and thus its VMTs. The County states that it does not have the expertise or time to determine a different site for an alternative mine because of the numerous factors involved in mine siting.[58] This determination might be reasonable, but claiming that VMT will decrease by allowing expansion without further verification of this fact is inadequate.

IX. The DEIR should have considered a wider range of alternatives, including those with a significantly smaller development footprint.

The DEIR should have analyzed a wider range of alternatives. As courts have made clear, "[a] potential alternative should not be excluded from consideration merely because it would impede to some degree the attainment of the project objectives, or would be more costly."[59] The DEIR should have included a more extensive range of alternatives from which decision-makers could choose.

The DEIR does not consider any alternatives that would allow the project but take wildlife and endangered plants into account or significantly lower the project's GHG impacts besides the no project alternative or the no increased expansion alternative. These may seem

[53] DEIR 3.4-31 Table 3.4-9.
[54] California Air Resource Control Board, *Advanced Clean Trucks Fact Sheet* (June 25, 2020) Available at: https://ww2.arb.ca.gov/resources/fact-sheets/advanced-clean-trucks-fact-sheet.
[55] DEIR 3.4-31.
[56] DEIR 3.4-31.
[57] DEIR 3.9-9.
[58] DEIR 5.3-1.
[59] *Save Round Valley Alliance v. County of Inyo* (2007) 157 Cal. App. 4th 1437, 1456-57 (quotations omitted).

adequate, but both are alternatives to bar the project and one alternative is to approve the project. There is no middle ground with a project that needs to incorporate further mitigation, which may cost more for the applicant but still allow the project. The DEIR does not state that a middle ground alternative would be infeasible because it does not consider this option. For an informed decision to occur, the decision-makers should have an alternative that works to meet the project goals while lessening environmental impacts.

By refusing to include any alternatives that provide for a moderately reduced project size, the DEIR sets up a false "all or nothing" decision for the County and prohibits the County from considering or approving a smaller version of the project that does not have such profound environmental impacts on California's wildlife corridors, air quality, and carbon footprint. CEQA's mandate that a reasonable range of alternatives be considered is violated by a DEIR that fails to include any alternatives with a moderately reduced footprint.

The project could be considerably down-sized or mitigated and still be considered feasible. Whether a project is economically unfeasible "is not measured by increased cost or lost profit, but upon whether the effect of the proposed mitigation is such that the project is rendered impractical."[60] In *Citizens of Goleta Valley v. Board of Supervisors* (1988) 197 Cal.App.3d 1167, 1180, the Court agreed with the trial court that the administrative record did not contain an analysis of the project alternatives in terms of comparative costs, comparative profit or losses, or comparative economic benefit to the project proponent or the community at large. Here, the EIR does not include feasibility of the project alternatives based on the projects expected costs and profits and losses, leaving it impossible to assess the viability of the alternatives. This is an inadequate under CEQA and the EIR should be required to include additional environmentally conservative alternatives and their feasibility.

[60] *Uphold Our Heritage v. Town of Woodside* (2007) 147 Cal.App.4th 587, 600 (internal citation omitted).

X. Conclusion.

Thank you for the opportunity to submit comments on the proposed Pacific Rock Mine Project. Please include the undersigned environmental organizations on your notice list for all future updates to the project and do not hesitate to contact us with any questions at the email listed below.

Sincerely,





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(*Provided via OneDrive*)

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Exhibit 1

December 22, 2020

Sent via email

Los Angeles County Board of Supervisors
c/o Ms. Celia Zavala
Executive Officer
500 West Temple Street
Los Angeles, CA 90012
executiveoffice@bos.lacounty.gov

Re: Supplemental EIR for the Northlake Specific Plan

Dear Supervisors Mitchell, Kuehl, Solis, Hahn, and Barger:

We are writing to urge you to direct staff at the Los Angeles County Department of Regional Planning to prepare a supplemental environmental impact report ("EIR") for the Northlake Specific Plan ("Northlake Development"). The Northlake Development is a 1,300-acre housing development proposed on fire-prone wildlands adjacent to Castaic Lake State Recreation Area approved by the Board in April 2019. Even though the Northlake Development sits within a wildlife connectivity linkage known as the Sierra Madre-Castaic Connection, County staff did not require enforceable or adequate measures to address wildlife connectivity because the project proponent claimed mountain lions do not use the crossings in the area. **We are submitting evidence showing these claims are incorrect: the Mountains Recreation and Conservation Authority recently captured photographic evidence of a mountain lion using the crossing immediately adjacent to the development site.**

Background on the Conservation Groups

The Center for Biological Diversity ("Center") is a non-profit, public interest environmental organization dedicated to the protection of native species and their habitats through science, policy, and environmental law. The Center has over 1.7 million members and online activists throughout California and the United States. The Center and its members have

worked for many years to protect imperiled plants and wildlife, open space, air and water quality, and overall quality of life for people in Los Angeles.

Endangered Habitats League (EHL) is a non-profit, public interest conservation group for Southern California. It is dedicated to ecosystem protection and sustainable land use for all the region's inhabitants. EHL is and has been a stakeholder in several County of Los Angeles planning and environmental initiatives.

Photographic Evidence from the Mountains Recreation and Conservation Authority Confirms that Mountain Lions Use the Crossing Adjacent to the Northlake Development Site

We are submitting photos to you which were taken by staff at the Mountains Recreation and Conservation Authority ("MRCA") which demonstrate that mountain lions use the culverts under the I-5 freeway immediately next to the Project site. In particular, the attached photos (which we received from MRCA and are authenticated by the attached declaration from Chad Christensen) depict a mountain lion crossing from the east side of the southbound direction of the separated I-5 freeway from Grasshopper Canyon and westerly into the Marple Canyon on November 5, 2020 approximately between 2:49 a.m. and 2:59 a.m. (the "Mountain Lion Photos"). The single-lane box culvert for the Marple Canyon access road that crosses under this southbound section of I-5 is identified as "Tunnel 2" and "Underpass 2" in Santa Monica Mountains Conservancy's April 17, 2018 letter on the Northlake Development. Underpass 2 is one of two freeway crossing structures along a ten-mile section of I-5 between Templin Highway and Castaic Creek. The MRCA owns 245 acres of Marple Canyon west of Underpass 2 between the separated north-/southbound sections of I-5 and six acres east of Underpass 2 that connect with Grasshopper Canyon. The Mountain Lion Photos were taken by a camera placed on MRCA conservation lands by Mr. Christensen for the MRCA's Marple Canyon I-5 Wildlife Crossing Enhancement Project.

While the EIR for the Northlake Project does generally acknowledge that mountain lions may use the Project area (Final EIR at 2-136), County counsel joined the project proponents (which include Northlake Associates, LLC, which is controlled by NLDP Associates, LLC, Castaic Development Partners, LLC, and Michael Rosenfeld of Woodridge Capital Partners, LLC) in representing in court proceedings that "mountain lions will not be impacted by the Project" and "mountain lions are not using Project site crossings as confirmed by expert studies, including a wildlife camera study . . . ." (Respondents' and Real Parties in Interest's Joint Opposition Trial Brief at pp. 8 & 16-17.) **The Mountain Lion Photos demonstrate that these claims (which were based on a developer-commissioned study) are incorrect.**[1]

We further note that the County's own staff biologist, Joseph Decruyenaere, urged the developer's EIR drafters not to minimize the connectivity value of the existing culverts under the

[1] On December 17, 2020, the Conservation Groups requested judicial notice of these photos in Los Angeles County Superior Court case *Center for Biological Diversity et al. v. County of Los Angeles et al*., Case No. 19STCP01610, and the County and developer submitted a brief opposing the request for judicial notice.

I-5, which are far from perfect but are the only available means for mountain lions to cross the I-5 in the area. Mr. Decruyenaere wrote that the EIR language prepared by the developer's consultant:

> unduly minimizes the value of compromised movement opportunities. Nowhere else in biological conservation would you want to argue that because a resource is rare it's less than valuable. The fact that the use of a highly constrained opportunity for movement between natural areas might be made more difficult should always be considered a potentially significant impact unless there simply aren't any wildlife around to use the crossing. If a movement opportunity lacks a vegetated approach or some other feature that would seem to make it work better, that doesn't mean it doesn't pose an opportunity for movement. It just suggests that an animal might be less inclined to use it in the imaginary scenario that they have a better alternative. **However, in the real world, and in the highly fragmented, difficult to navigate landscapes that wildlife are consigned to, compromised movement opportunities may be the only opportunities available.** Revise the discussion to acknowledge the value of the crossings and instead of devaluing them, talk about how the project might change the potential for their use.[2]

Mr. Decruyenaere also wrote that the developer's consultant relies "chiefly on the idea that existing crossing features are not ideal but [they] neglect[] to provide conclusions as to how overall wildlife movement on the site and through the crossing features may actually change with buildout of the project."[3]

The Mountain Lion Photos confirm that mountain lions are using the culverts adjacent to the Project site even if they could be enhanced to be more friendly for wildlife. If built as proposed, the Northlake Development would permanently block these crossings and further constrain the already-limited movement opportunities for mountain lions.

We are submitting this evidence to the Board so the County can prepare an EIR for the Project that accurately discloses the impacts of this Project on the Central Coast South mountain lions. With an accurate EIR the Board can determine whether to reconsider the Project or require mitigation measures or project modifications to ensure the Northlake Development does not harm these mountain lions.

The County Must Prepare A Supplemental EIR for the Northlake Development

Relevant authorities require preparation of a subsequent or supplemental EIR in these circumstances. The California Environmental Quality Act ("CEQA") states that a subsequent or supplemental EIR may be required when either (1) substantial changes occur with respect to the

[2] Mr. Decruyenaere's comments were attached to an email sent by County Planner Jodie Sackett on February 18, 2018 and are accessible in the administrative record ("AR") of the Los Angeles County Superior Court case *Center for Biological Diversity et al. v. County of Los Angeles et al*., Case No. 19STCP01610 at AR025874 (and Mr. Sackett's email is located at AR025825-26).
[3] Mr. Decruyenaere's comments are included in an email sent on February 12, 2018, and is available at AR025822-23.

circumstances under which the project is being undertaken which will require major revisions in the environmental impact report or (2) new information, which was not known and could not have been known at the time the environmental impact report was certified as complete, becomes available. (Pub. Res. Code § 21166.)

The Mountain Lion Photos qualify as either (or both) of these two categories. Mountain lions in the Project area are part of the Central Coast South population, which were granted "candidacy status" under the California Endangered Species Act ("CESA") in April 2020, such that they are afforded the same protections as other CESA-listed species. CEQA requires a "mandatory finding of significance" when a project has the potential to impact a CESA-listed species. (CEQA Guidelines § 15065(a)(1); *Endangered Habitats League, Inc. v. County of Orange* (2005) 131 Cal.App.4th 777, 792 fn. 12.) And such a finding triggers a duty to consider and adopt all feasible alternatives or mitigation measures to reduce such impacts. (Pub. Res. Code § 21002.)

We Urge The Board Not To Drive Struggling Mountain Lions Closer to Local Extinction

Prior to the Board's approval of the Northlake Development last year, we submitted a letter to the Board on April 1, 2019 which included multiple peer-reviewed studies showing that Southern California's mountain lions are facing an extinction vortex due primarily to a loss of habitat connectivity. The Central Coast South population is particularly at risk with studies noting that a subset of the Central Coast South population in the Santa Monica mountains has "extremely low genetic diversity" while diversity of broader Central Coast South population is only "slightly higher."[4]

As currently proposed, the Northlake Development would permanently block connectivity over a significant portion of the Sierra Madre-Castaic Connection, which is a linkage critical to the survival of the Central Coast South mountain lions. Numerous expert agencies including the Santa Monica Mountains Conservancy ("SMMC") and California Department of Fish and Wildlife have raised serious concerns about the Northlake Development's permanent impacts on wildlife connectivity, with SMMC even filing an administrative appeal asking the Board to reconsider the Planning Commission's approval of the Project.

[4] Gustafson KD, Gagne RB, Vickers TW, Riley SPD, Wilmers CC, Bleich VC, Pierce BM, Kenyon M, Drazenovich TL, Sikich JA, Boyce WM, Ernest HB (2018) Genetic source–sink dynamics among naturally structured and anthropogenically fragmented puma populations. Conserv Genet 1–13 . doi: 10.1007/s10592-018-1125-0

Ensuring regional wildlife connectivity and protecting local mountain lions will require cooperation from conservation groups and state and local officials. We ask the Board to be part of the solution – and not part of the problem – by re-assessing the impacts of this development proposal.

Sincerely,

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Declaration of Chad Christensen

I, Chad Christensen, hereby declare as follows:

1. The facts set forth in this declaration are based on my personal knowledge. If called as a witness, I could and would testify competently to these facts. As to those matters which reflect an opinion, they reflect my personal opinion and judgment on the matter.

2. I am the Deputy Chief of Natural Resources and Planning for the Mountains Recreation and Conservation Authority (MRCA) and have been in this position since April 2020. Previously I was a Project Analyst hired in February 2017.

3. Attached are true and correct copies of photos taken on November 5, 2020 approximately between 2:49 a.m. and 2:59 a.m. of a mountain lion crossing from the east side of the southbound direction of the separated I-5 freeway from Grasshopper Canyon and westerly into the Marple Canyon. The single-lane box culvert for the Marple Canyon access road that crosses under this southbound section of I-5 is identified as "Tunnel 2" and "Underpass 2" in Santa Monica Mountains Conservancy's April 17, 2018 letter on the Northlake Project (AR010051-59). Underpass 2 is one of two freeway crossing structures along a ten-mile section of I-5 between Templin Highway and Castaic Creek. The MRCA owns 245 acres of Marple Canyon west of Underpass 2 between the separated north-/southbound sections of I-5 and six acres east of Underpass 2 that connect with Grasshopper Canyon.

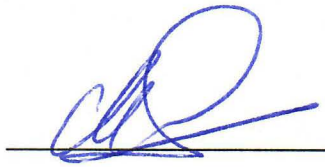
4. These photos were taken by a wildlife camera that I placed on MRCA conservation lands on June 9, 2020 in my official capacity as Deputy Chief of Natural Resources and Planning and as Project Manager for the MRCA's Marple Canyon I-5 Wildlife Crossing Enhancement Project (Project).

5. The Project was awarded Wildlife Conservation Board (WCB) funding in 2020 to enhance 2.75 acres of habitat on the west and east approaches to Underpass 2 in order to promote wildlife movement between Marple and Grasshopper Canyons. On March 27, 2020, I received a Caltrans Encroachment Permit No. 07-20-N-SV-0894 to install the wildlife cameras within the freeway right-of-way as an MRCA in-kind contribution towards the Project. The

Project Area and Underpass 2 are part of the South Coast Wildland's *Castaic – Sierra Madre Connection.*

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Executed this 15th of December 2020,



Chad Christensen

Ventura, California


28.32 inHg - 68°F 11/05/2020 02:49AM MARPLE1


28.32 inHg - 68°F 11/05/2020 02:49AM MARPLE1


28.32 inHg - 68°F 11/05/2020 02:49AM MARPLE1


28.38 inHg - 73°F 11/05/2020 02:59AM MARPLE2


28.38 inHg - 73°F 11/05/2020 02:59AM MARPLE2


28.38 inHg - 73°F 11/05/2020 02:59AM MARPLE2

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Exhibit 2

10. Restrictive Covenants to Guarantee Protected Tree Offsets/Mitigation

In order to ensure the success of trees planted or transplanted as offsets for impacts, and that any future landowners are notified about requirements for protection and maintenance of these trees, a restrictive covenant must be recorded. The following language must be included in Tree Protection Plans (TPP).

If protected trees are damaged and require offsets/mitigation and planting new trees onsite is the approved offset/mitigation measure, the Permittee shall record against the parcel(s) governed by this permit a restrictive covenant indicating that the Planning Division has authorized development on the subject property subject to terms and conditions that restrict the use of that property.

The restrictive covenant shall be recorded by the Permittee on a form provided by the Planning Division and shall conform to the requirements outlined in the County's *Content Requirements for Tree Protection Plans* document. The restrictive covenant shall include the planting instructions and performance targets required by the TPP for tree replacement planting and shall be imposed as covenants and restrictions on the use of the property. The term of the restriction shall be (5 or 7) years as indicated in the TPP. The restrictive covenant shall include a legal description of the parcel(s) governed by this permit. In addition, the restrictive covenant shall:

a) Prohibit removal or transplanting of replacement or transplanted trees without a permit modification;

b) Restrict activities within the tree protection zone of replacement or transplanted trees;

c) Require appropriate care of replacement or transplanted trees;

d) Commit any future landowners to the tree protection conditions of this permit, including posting of financial assurances, tree monitoring and reporting; and

e) Designate the County of Ventura as a beneficiary of the restrictive covenant in order to allow court action by the County if necessary.

11. Attachments

Arborist Report. The Arborist Report submitted with the project's application should be included as an attachment.

Tree Appraisals. If tree appraisals were not included in the Arborist Report and are needed for offsets, they must be included in the TPP. Appraisals must be done of all trees that require tree protection fencing, on those that will be felled and offset by replacement trees, and on all trees that will be transplanted as offsets. Appraisals shall be done using the most current edition of the Guide for Plant Appraisal (as it applies to Ventura County), published by the Council of Tree and Landscape Appraisers.

Exhibit 2

Submission 988 (Julie Vance, California Department of Fish and Wildlife, Region 4, April 12, 2021)

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State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
Central Region
1234 East Shaw Avenue
Fresno, California 93710
(559) 243-4005
www.wildlife.ca.gov

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director

April 12, 2021

Serge Stanich
Director of Environmental Services
California High-Speed Rail Authority
770 L Street, Suite 620 MS1
Sacramento, California 95814

Subject: California High-Speed Rail Project, Bakersfield to Palmdale Section (Project) Revised Draft Environmental Impact Report/Supplemental Draft Environmental Impact Study (RDEIR/SDEIS)
SCH No. 2009082062

Dear Mr. Stanich:

The California Department of Fish and Wildlife (CDFW) received a Notice of Availability of a RDEIR/SDEIS from the California High-Speed Rail Authority (Authority) for the above-referenced Project pursuant to the California Environmental Quality Act (CEQA) and CEQA Guidelines.[1] CDFW previously commented on related environmental documents as stated in our comment letter for the Draft EIR/EIS for the Bakersfield to Palmdale Section on April 28, 2020.

Following the Authority's publication of the Draft EIR/EIS in February 2020, the Authority learned that the California Fish & Game Commission advanced the Southern California and Central Coast mountain lion (*Puma concolor*) populations to candidacy for listing under the California Endangered Species Act. The Authority also learned that the U.S. Fish & Wildlife Service (USFWS) determined that listing the monarch butterfly (*Danaus plexippus)* under the Federal Endangered Species Act is warranted, but that listing is precluded by other priorities; therefore, the monarch butterfly is now a candidate species under the Federal Endangered Species Act. The U.S. Fish & Wildlife Service will review the species' status annually until a listing decision is made. These listing actions led to the Authority to revise the DEIR/EIS for analysis of impacts to mountain lion and monarch butterfly, as well as including additional mitigation measures for impacts to wildlife resulting from lighting during construction and during project operation.

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish and wildlife. Likewise, CDFW appreciates the opportunity to provide comments regarding those

[1] CEQA is codified in the California Public Resources Code in section 21000 et seq. The "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with section 15000.

Conserving California's Wildlife Since 1870

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aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under Fish and Game Code.

CDFW ROLE

CDFW is California's **Trustee Agency** for fish and wildlife resources and holds those resources in trust by statute for all the people of the State (Fish & G. Code, §§ 711.7, subd. (a) & 1802; Pub. Resources Code, § 21070; CEQA Guidelines § 15386, subd. (a)). CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species (*Id.*, § 1802). Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect fish and wildlife resources.

CDFW is also submitting comments as a **Responsible Agency** under CEQA (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381). CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code. As proposed, for example, the Project may be subject to CDFW's lake and streambed alteration regulatory authority (Fish & G. Code, § 1600 et seq.). Likewise, to the extent implementation of the Project as proposed may result in "take" as defined by State law of any species protected under the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 et seq.), related authorization as provided by the Fish and Game Code will be required.

PROJECT DESCRIPTION SUMMARY

Proponent: California High-Speed Rail Authority (Authority)

Objective: Bakersfield to Palmdale (B-P) Project Section, which extends approximately 80 miles between High-Speed Rail (HSR) stations in Bakersfield and Palmdale, from the southern San Joaquin Valley and northern Antelope Valley. The Project Section extends from Kern County in the north to Los Angeles (LA) County in the south, with the Bakersfield and Palmdale HSR stations making up this section's beginning and ending points, or the project termini. Four primary build alternatives are considered with two design options.

Location: The proposed Bakersfield to Palmdale Section is located in Kern and Los Angeles counties. The Project northern termini is located in the City of Bakersfield at the intersection of 34th and L streets (latitude 35°23'25.90"N/longitude -119°0'58.97"W). The southern Project terminus is in the City of Palmdale, terminating at Spruce Court, just past the proposed Palmdale Station (latitude 34°33'47.8"N/longitude -118°6'55.4"W).

Timeframe: Unspecified.

Submission 988 (Julie Vance, California Department of Fish and Wildlife, Region 4, April 12, 2021) - Continued

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COMMENTS AND RECOMMENDATIONS

988-1240 CDFW offers the following comments and recommendations to assist the California High-Speed Rail Authority in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources. Comments that were provided in the April 28, 2020 comment letter for the DEIR/EIS remain the same and will not be restated in this letter. Editorial comments or other suggestions may also be included to improve the document.

Currently, the RDEIR/SDEIS indicates that the Project's impacts would be less than significant with the implementation of mitigation measures described in the RDEIR/SDEIS. However, as currently drafted, it is unclear whether the mitigation measures described will be enforceable or sufficient in reducing impacts to a level that is less than significant. CDFW is concerned regarding adequacy of mitigation measures for special-status species including, but not limited to: the State Candidate Species for listing as threatened, Southern California/Central Coast evolutionarily significant unit (ESU) mountain lion (*Puma concolor*) and the U.S. Fish and Wildlife Service (USFWS) candidate for listing monarch butterfly (*Danaus plexippus plexippus*).

I. Mitigation Measure or Alternative and Related Impact Shortcoming

Would the Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or United States Fish and Wildlife Service (USFWS)?

COMMENT 1: Mountain Lion (ML)

988-1241 **Issue:** The Project alignment transects the Southern California/Central Coast ESU and the Western Sierra Nevada (WSN) population. The RDEIR/SDEIS acknowledges that mountain lion have the potential to occur within or near the Project. However, the RDEIR/SDEIS (Section 3.7 and BIO Impact #2) lacks the Project impact analysis of the genetically distinct subpopulations of the Southern California ESU (San Gabriel San Bernardino (SGSB), the Central Coast-South (CC-S), Santa Monica Mountains (SAM)) and the WSN as a source of genetics. The SGSB, CC-S, and SAM, have small population numbers. The effective subpopulation size for SGSB is **5** and the estimated adult subpopulation size of **10-20** (Yap et al., 2019). The RDEIR/SDEIS does not address impacts of the potential gene-flow disruption between these subpopulations, nor does it address how impacts to the WSN population (genetic source) would impact the other subpopulations. The Impact BIO#2 is a generalized analysis of Project impacts to mammals that included mountain lion. CDFW recommends Section 3.7 be revised to contain specific analysis on the mountain lion Southern California/Central Coast ESU (SGSB, WSN, CC-S, and SAM genetic subpopulations) impacts to dispersal and genetic exchange between populations, including issues of connectivity and fragmentation of habitat adjacent to the Project, which will be impacted by the alignment. CDFW also recommends the DEIR/EIS be revised to include robust feasible

Serge Stanich
California High Speed Rail Authority
April 12, 2021

988-1241 avoidance, minimization, and mitigation measures to reduce impacts to these isolated subpopulations providing connectivity for WSN mountain lion population to less than significant. CDFW recommends referencing the attached mapping (Attachment 1) for analysis.

988-1242 **Specific impacts:** The Project as proposed will impact the Southern California/Central Coast ESU mountain lion subpopulations by cutting off the source of genetics and impede movement between the WSN and the SGSB, CC-S, and SAM. These subpopulation islands (SGSB, SAM, and CC-S) can currently persist by genetic connectivity to a larger population (WSN), without this connection the subpopulations would go extinct. The Project has the potential to cause impacts during construction by increasing human presence, traffic, noise, vibration, air pollutants and dust, artificial lighting, and will significantly and permanently reduce and potentially eliminate the existing wildlife movement corridor.

988-1243 **Evidence impact would be significant:** The mountain lion is a specially protected mammal in the State (Fish and G. Code, § 4800). In addition, on April 21, 2020, the California Fish and Game Commission accepted a petition to list an ESU of mountain lion in southern and central coastal California as threatened under CESA (CDFW 2020a). As a CESA-candidate species, the mountain lion in southern California is granted full protection of a threatened species under CESA.

The Project would continue to have significant impacts because mitigation as proposed would not result in adequate and successful mitigation for the unavoidable direct and indirect, permanent, or temporal losses, of genetic connectivity between subpopulations of mountain lion.

The WSN population provides a source of genetic diversity for the rest of the State and Nevada (Gustafson et al., 2019). The WSN population appear to be large (i.e., high effective population size), genetically diverse, and well-connected. (Gustafson et al., 2019). It is important that this population remain connected to adjacent populations via suitable habitat and unobstructed sizeable movement corridors. Currently, the only area connecting the WSN population to adjacent areas in southern and central California is the Tehachapi Mountains in Kern County. Decreased and impeded connectivity in this area would quickly increase the decline in genetic diversity of mountain lions in southern and central parts of the State (Dellinger et al., 2020). Loss of wildlife connectivity is another primary driver for the potential demise of the southern California mountain lion population (Yap et al. 2019). Habitat loss and fragmentation due to roads and development has driven the southern California mountain lion population towards extinction (Yap et al. 2019). Conserving and restoring habitat connectivity and corridors is essential for mitigating impacts to mountain lions.

Mountain lions will use caves and other natural cavities, thickets in brush, and timber for cover and denning. Mountain lions require extensive areas of riparian vegetation and brushy stages of various habitats, with interspersions of irregular terrain, rocky outcrops, and tree/brush edges. These habitat types are throughout the Project area. Mountain

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988-1243

lions are active yearlong (mostly nocturnal and crepuscular). The home range for male are a minimum of 40 km² (15 mi²) and female home ranges usually are 8-32 km² (3-12 mi²). The main diet for mountain lion is mule deer (CWHR). Mule deer migration corridors will also be impeded by the Project. Mountain lions have a wide-ranging nature and large territories, as well as the need for dispersal (especially of young males). In order to maintain genetic diversity, large blocks of conserved habitat and unobstructed and sizable safe travel corridors between them are essential for long term population persistence and stability (Vickers, 2014). Thermal characteristics cause mountain lions to select north-facing slopes at high elevations, with more vegetation and cooler temperatures in the summer and south-facing slopes with little snow cover in winter. These habitats were also strongly correlated with the density and distribution of deer. Den sites are preferentially located in nearly impenetrable vegetation areas and mountain lion feed on cached prey primarily after sunset and often rested long distances from the cache site during the day (Pierce and Bleich 2003). Cutting off or restricting access to these habitats will reduce opportunities for genetic exchange, foraging, and fecundity.

988-1244

Recommended Potentially Feasible Mitigation Measure(s):
Because the RDEIR/SDEIS identifies the potential for mountain lion to occur within the Project footprint, CDFW recommends conducting the following evaluation of the Project, updating the RDEIR/SDEIS to include the following measures, and that these measures be made Conditions of Approval for the Project. CDFW recommends quantitative and enforceable measures that will reduce the impacts to less than significant levels.

Recommended Mitigation Measure 1: ML Habitat Assessment
CDFW recommends that a qualified biologist conduct a habitat assessment and suitable habitat mapping of individual Project areas in advance of Project implementation, to determine if the Project area or its vicinity contains suitable habitat as well as caves and other natural cavities and thickets of brush and timber which provide cover and are used for denning. Mapping should also include the following: the project area with identified wildlife linkages within the ESU subpopulations, identified Project undercrossing, overcrossing, tunnels, viaducts, and designated wildlife crossing locations and adjacent habitat to assist with development and implementation of avoidance, minimization, and mitigation measures.

Recommended Mitigation Measure 2: ML Wildlife Crossing Monitoring
CDFW recommends that the Authority devise and implement a Mountain Lion Crossing Monitoring Plan. CDFW recommends the Authority consult with CDFW during the drafting of the Monitoring Plan and obtain approval of the Plan prior to Project implementation. CDFW recommends that the proposed Mitigation Measure #64 Establish Wildlife Crossings, include a design that establishes specific criteria for monitoring the performance of the crossings (viaducts, undercrossing, overcrossings) for routine and ongoing use by mountain lion and its prey. The monitoring plan should be contingent with action-based monitoring performance objectives and be adaptive. Goals of the monitoring plan should at a minimum include: 1) to provide data to assist in designing crossings and inform placement for future HSR segments in Southern

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California (Palmdale to Burbank and Burbank to LA); 2) conduct long-term population monitoring for use by the mountain lion sub-populations; 3) track progress of use; and 4) evaluate overall effectiveness of the crossings.

Recommended Mitigation Measure 3: ML-Avoidance-Buffer for Corridor Areas
CDFW recommends that during construction, movement corridors such as drainages and riparian areas maintain a ¼ mile buffer to minimize impacts to mountain lion movement through these areas.

Recommended Mitigation Measure 4: ML-No Night Work in Corridor Areas
To minimize impacts to movement of mountain lion during construction, CDFW recommends that no night work occur in drainages and riparian areas of the Project.

Recommended Mitigation Measure 5: ML-Avoidance Use of Rodenticides
CDFW discourages the use of rodenticides and second-generation anticoagulant rodenticides due to their harmful effects on the ecosystem and wildlife. CDFW recommends the Authority include a mitigation measure prohibiting the use of such materials during construction and operation and maintenance of the HST.

Recommended Mitigation Measure 6: ML-Provide Dedicated Wildlife Crossings
CDFW recommends that recurrently positioned dedicated wildlife crossings for mountain lion and deer be a “required” design feature in the final design of the Project.

Recommended Mitigation Measure 7: ML-Take Authorization
There should be no net loss of suitable habitat for mountain lions. CDFW recommends that the Authority identify opportunities for the Project to enhance nearby areas and create movement opportunities including wildlife corridor restoration or enhancement as potential mitigation strategies. Since the RDEIR/SDEIS assumes wildlife movement and corridor impacts, the inherent loss of gene-flow, cannot be avoided between the subpopulations, thus the Authority must ensure some level of conservation is present in the areas that provide connectivity. CDFW recommends improving habitat connectivity (e.g., wildlife road-crossing structures) to facilitate unimpeded wildlife movement and gene-flow between adjacent areas of the WSN. CDFW recommends the replacement habitat be located adjacent to the Project and Wildlife Linkage and Corridor, see Attachment 1.

988-1245

The Authority should consult and collaborate with CDFW to conserve areas beneficial to the Southern California ESU and the WSN subpopulation that may improve and maintain connectivity. The mitigation lands should be protected in perpetuity under a conservation easement dedicated to a local land conservancy or other appropriate entity that has been approved by CDFW to hold and manage mitigation lands.

In the event that a mountain lion or den is detected during surveys, consultation with CDFW is warranted to discuss how to implement the Project and avoid take. If

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988-1245 avoidance as described in the above Mitigation Measure 4 is not feasible, acquisition of an Incidental Take Permit (ITP), pursuant to Fish & Game Code section 2081 subdivision (b) prior to any ground-disturbing activities may be warranted in order to comply with CESA.

COMMENT 2: Monarch Butterfly (MB)

988-1246 **Issue:** The Project falls within the monarch butterfly spring and summer breading area (Pelton 2016). Project related activities have the potential to impact monarch butterfly. It is unclear how the following BIO-IAMFs (BIO-IAMF#1, BIO-IAMF#3, BIO-IAMF#5, BIO-IAMF#8, BIO-IAMF#9, BIO-IAMF#10, and BIO-IAMF#1) are avoiding and minimizing impacts from construction to monarch butterflies. Without appropriate avoidance and minimization measures for the species mentioned above, potential significant impacts associated with the Project's milkweed removal activities include, inadvertent entrapment, reduced reproductive success, reduction in health and vigor of eggs and/or larvae, and direct mortality of individual monarch butterflies.

Specific impact: The document lacks appropriate analysis on how operations and maintenance (O&M) activities such as herbicide and vegetation removal adjacent to the HSR would remove and degrade habitat and host plants, or how train strike could injure/kill monarch butterflies. CDFW recommends addressing the following O&M impacts: dust impacts and groundwater impacts to the host plants (*Asclepia ssp*., milkweed) and nectar producing flowers during construction and operation.

988-1247 **Evidence impact would be significant:** The availability of milkweed is essential to monarch butterfly reproduction and survival, the reductions in milkweed is cited as a key driver in monarch butterfly decline (USFWS 2020). Habitat loss and fragmentation is among the primary threats to the population (USFWS 2020). During the breeding season monarch butterflies lay their eggs on the milkweed host. Monarchs also need milkweed for both oviposition and larval feeding and nectar producing habitat (USFWS 2020). Project activities have the potential to significantly impact the species by reducing possible nectar producing plants and milkweed host plant for breeding. Habitat where monarch butterflies are found may be subject to insecticide use and these impacts are primarily influenced by the extent to which monarch butterflies are exposed to insecticides throughout their range (USFWS 2020).

988-1248 **Recommended Potentially Feasible Mitigation Measure(s)**
To evaluate potential impacts of the Project to special-status species, CDFW recommends conducting the following assessment of the Project area, including the following mitigation measures, and requiring them as Conditions of Approval for the Project.

Recommended Mitigation Measure 8: MB Habitat Assessment
CDFW recommends that a qualified biologist conduct a habitat assessment, well in advance of Project implementation, to determine if the Project area or its immediate vicinity contain habitat suitable to support life stages of the monarch butterfly.

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988-1248 **Recommended Mitigation Measure 9: MB Surveys**
If suitable habitat is present, CDFW recommends assessing presence of monarch butterflies and milkweed by conducting surveys following recommended protocols or protocol-equivalents.

Recommended Mitigation Measure 10: MB Take Avoidance
CDFW advises that all milkweed be avoided if ground-disturbing activities will occur during the overwintering period (October through February) by a minimum of 50 feet to avoid potentially significant impacts. Avoidance of insecticide use within the Project area during construction and operation. Detection of special-status species within or in the vicinity of the Project area, warrants consultation with CDFW and USFWS to discuss how to implement ground-disturbing activities and avoid take, such as restoring and enhancing milkweed and nectar resources a possible minimization measure.

988-1249 **COMMENT 3: Section 3.7.4 Pre-field Investigation and Consultation, Wildlife Movement Corridor Page 1**

This section states, "The focal species included in the local permeability analysis Mountain lion (*Puma concolor*) Southern California/Central Coast ESU of the RDEIR." CDFW recommends that the focus of analysis be the movement of the WSN population.

988-1250 **COMMENT 4: Section 3.7.5.5 Special-Status Wildlife Species Page 2**

Technical reports were not included as appendices to the RDEIR/SDEIS. The DIER/EIS's appendices had to be referenced instead, this did not allow easy referencing of the data. CDFW recommends providing a figure (mapping) of the mountain lion ESU subpopulations.

988-1251 **COMMENT 5: Table 3.7-7 Intersection of the Bakersfield to Palmdale Project Section Build Alternatives (Station to Station) and Modeled Federal and State Threatened/Endangered Species Habitat Pages 6-8**

CDFW recommends adding the mountain lion ESU subpopulations (SGSB, WSN, CC-S, and SAM) as a study area to this table. CDFW also recommends that this table describes how direct, indirect, permanent, and temporary impacts were calculated for each species and specifically for mountain lion and monarch butterfly. Table 3.7-7 and Section 3.7.6.4 Impact BIO# 2 for Insects and Mammal lacks a description of the methodology used to calculate mountain lion and monarch butterfly impacts acreages.

988-1252 **COMMENT 6: Section 3.7.6.4 Impact BIO #5: Construction Impacts on Wildlife Movement- Temporary Page 16**

CDFW recommends that the gene-flow between each of the subpopulations of mountain lion and specifically from the source populations of the WSN to the SGSB and the CC-S and SAM to the SGSB subpopulations need to be analyzed. The BIO #5 impact analysis is a generalized assessment. Also, the period of construction is not a

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988-1252 short-term period, construction can last up to 5 years or more. There are also temporal impacts to wildlife from the construction period activities.

988-1253 **COMMENT 7: Section 3.7.6.4 Impact BIO #5: Construction Impacts on Wildlife Movement-CEQA Conclusion Page 17**

CDFW recommends that BIO-MM#42, BIO-MM#37, BIOMM#56, BIO- MM#64, BIO-MM#77, BIO-MM#78, BIO-MM#86, and IAMF pertaining to mountain lion movement of the subpopulations be quantified and enforceable. CDFW also recommends including a CEQA significance conclusion for impacts to the mountain lion ESU and the genetic impacts to the subpopulations.

988-1254 **COMMENT 8: Section 3.7.6.5 Operations Impacts Impact BIO #8: Operational Impacts on Special-Status Wildlife Species Page 17**

Please quantify the train operation and maintenance; "infrequent" does not provide information for the analysis. It should be noted that avian line strikes, and electrocution are permanent operational impacts. Take of any State fully protected species (SFP) is prohibited, and CDFW cannot authorize their take for any Project-related reason.

CDFW recommends quantifying the train operation and maintenance including the duration of time the train will travel through this segment daily for the full build-out analysis. CDFW also recommends including the following to properly analyze operational impacts: the maximum number of trains and the physical length of the train, the durational impacts for all special-status wildlife species, daytime and night-time train frequency during full operation, not just start-up years. It is unclear how many times "daily" is. CDFW recommends quantifying the special-status wildlife species that are impacted in number of acres based on impacts from train-travel sound, vibration, and light, that the train will impact from active travel and frequency during night and day-time operation. It should be noted, mountain lions are active not only during the midnight hours (active through the day, particularly the crepuscular periods, and den year-round) and can be disturbed by noises at all times of the night and day. Please clarify if maintenance of the HSR will routinely occur every night. Please clarify how thresholds-based analysis was done for mountain lion.

988-1255 **COMMENT 9: Section 3.7.6.5 Operations Impacts Impact BIO #8: Operational Impacts on Special-Status Wildlife Species-Mammals Page 18**

This section lacks discussing O&M activity impacts to mountain lion. CDFW recommends including impacts from O&M activities to the subpopulations of mountain lion which will be impacted by the proposed Project. This section states, “Indirect impacts from noise, vibration, and wind could result in the displacement of mammal species. These impacts may result in shifts in foraging patterns or territories, shifts in dispersal movements, increased predation, decreased reproductive success, and reduced population viability.” CDFW recommends addressing these impacts in terms of the mountain lion subpopulations found in and adjacent to the Project and provide analysis of noise and vibration to all mammals, comparable to the analysis in Section

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988-1255 3.4 of the DEIR/EIS that analyzed noise and vibration impacts to humans. Please clarify, how these temporary disruptions of wildlife movement would impact the gene-flow between the three subpopulations of mountain lion, please provide this analysis. CDFW recommends analysis of mountain lion movement and/or their prey-base and impacts to their foraging opportunities. Potential effects could result in additional stressors during breeding cycles, effects of den selection, and force animals into movement paths/areas that could increase their vulnerability to vehicle strikes.

988-1256 **COMMENT 10: Section 3.7.6.5 Operations Impacts Impact BIO #8: Operational Impacts on Special-Status Wildlife Species-Native Fauna Page 19**

This section lacks discussing O&M activity impacts to mountain lion and their prey base. CDFW recommends including an impact analysis of O&M activities to mountain lion and their prey base.

988-1257 **COMMENT 11: Section 3.7.6.5 Operations Impacts Impact BIO #8: Operational Impacts on Special-Status Wildlife Species CEQA Conclusion Page 19**

CDFW recommends including a CEQA significance conclusion for impacts to the mountain lion ESU and the genetic impacts to the subpopulations.

988-1258 **COMMENT 12: Section 3.7.6.5 Impact BIO #11: Operation Impacts on Wildlife Movement-Temporary Page 21**

This section states, “Intermittent maintenance activities are unlikely to have a long-term effect on wildlife movement corridors in terms of their effectiveness for gene flow and dispersion.” CDFW recommends analysis of intermittent maintenance activities impact on the mountain lion subpopulations.

988-1259 **COMMENT 13: Section 3.7.6.5 Impact BIO #11: Operation Impacts on Wildlife Movement-Permanent Pages 21-22**

This section states, “This result could lead to further habitat fragmentation, restricted movement within wildlife corridors, habitat shifts, increased foraging competition, and possibly increased predation near undisturbed crossings.” It is unclear what this statement means to the ESU subpopulations of mountain lion. CDFW recommends that these claims should be tied to the mountain lion subpopulations. CDFW recommends analyzing the impact beyond a generalized statement of habitat fragmentation. Please correlate location of vehicle strikes and current highway locations then address the cumulative impact of the addition of the HSR to these locations to the disruption of gene-flow between the two subpopulations.

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988-1260 **COMMENT 14: Section 3.7.6.5 Impact BIO #11: Operation Impacts on Wildlife Movement-CEQA Conclusion Page 22**

It should be noted that the IAMFs and BIO-MM#76, BIO-MM#77, BIO-MM#78, and BIO-MM#64 lack measurable, quantifiable actions and therefore enforceability to minimize, avoid, or mitigate impacts on wildlife movement during project operation.

988-1261 **COMMENT 15: Section 3.7.7.2 Mitigation Measures for Biological and Aquatic Resources BIO-MM#85: Provide Compensatory Mitigation for Impacts on Mountain Lion Core and Patch Habitat Page 24**

It should be noted, mountain lion Core and Patch Habitat is not described or depicted in a figure in the RDEIR/SDEIS to allow for analysis of the effectiveness of this mitigation measure. "Compensatory mitigation would be provided using one or more of the methods described in BIO-MM#53 and would, where feasible and acceptable to CDFW, contribute to preserving important movement lands across the HSR alignment." Measure# 53 is not described in the 3.7.7 mitigation section of this document.

988-1262 **COMMENT 16: Section 3.7.7.2 Mitigation Measures for Biological and Aquatic Resources BIO-MM#64: Establish Wildlife Crossings Pages 22-23**

This section states, "For terrestrial wildlife, all crossings will conform to the minimum spacing and dimensions identified in the Wildlife Corridor Assessment (Appendix I of the *Biological and Aquatic Resources Technical Report*), unless different dimensions are specified in authorizations issued under the ESA or CESA." CDFW recommends that the specifics that pertain to establish wildlife crossings for mountain lion in the *Biological and Aquatic Resources Technical Report* from the DEIR/EIS be included in this measure. CDFW recommends that additional language be added to include mountain lion. Please clarify how the data from this report was used in RDEIR/EIS or in the Wildlife Corridor Assessment (WCA). It should also be noted that recommendations of this measure are not enforceable design requirements for wildlife crossings.

"…the Authority will incorporate features to accommodate wildlife movement into the design of bridges and culverts that are replaced or modified as part of project construction, wherever feasible." This statement does not ensure that established crossings will be required. CDFW recommends the Authority coordinate with the California Department of Transportation (Caltrans) in their effort in conducting a SR-58 wildlife crossing study (Bakersfield to Mojave), to obtain roadkill data, inventoried culvert and bridges identified to be improved for connectivity and to ensure that these locations are not impaired by the Project and correspond with improvements of crossing locations of the Project. This study area is within one of the wildlife movement barrier priorities identified in CDFW Region 4 (CDFW 2021).

CDFW recommends that the creation of new crossing structures incorporate land-overcrossings to facilitate movement of mountain lion and other wildlife. It is unclear how this measure would be enforced and CDFW recommends that these be required crossing features. Please provide the crossing design requirements for openness factor

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April 12, 2021

988-1262 and clear line of sight from end to end (entrance to exit) distances. Crossing designs and locations must not result into pushing animals to small areas adjacent to highways subject to vehicle strikes. CDFW has concerns with what the wildlife crossing connects to; this is an important element to consider in the design and locations of crossings. CDFW recommends that crossing location entrance/exits be collocated with habitat areas that will be immediately encountered/adjacent and further, these habitat areas be conserved/protected to maintain effective movement corridors to sustain functional habitat for mountain lions in perpetuity.

988-1263 **COMMENT 17: Section 3.7.7.2 Mitigation Measures for Biological and Aquatic Resources BIO-MM#84: Conduct Pre-Construction Surveys and Implement Avoidance and Minimization Measures for Mountain Lion Dens Pages 23-24**

"Prior to any ground-disturbing activity, regardless of the time of year, the Project Biologist would conduct pre-construction surveys for known or potential mountain lion dens within suitable habitat located within the work area and within 2,000 feet of the work area, where access is permitted." It is unclear how areas not accessible to the Project would be surveyed and it is unclear what the suitable habitat components are.

"The Project Biologist will use location-specific survey methods to identify known and potential dens. The survey method will consider topography, vegetation density, safety, and other factors. Surveys will be conducted by a qualified biologist (i.e., a biologist with demonstrated experience in mountain lion biology, identification, and survey techniques) and may involve the establishment of camera stations, scent stations, pedestrian surveys (looking for tracks, caches, etc.), or other appropriate methods. Survey methods used will be designed to avoid the disturbance of known or potential dens to the extent feasible." CDFW is concerned with the overall practicability of this approach. Please provide a way to minimize impacts prior to construction that is feasible. CDFW recommends that should employment of scent dogs for detection surveys be used, CDFW considers this as potential for take in the form of pursuit as defined in Fish and Game Code section 86. Therefore, CDFW advises prior to employing scent tracking dogs, the Authority consult with CDFW to determine if take authorization through the acquisition of an ITP is warranted. It should be noted that dens can be very difficult to detect even for mountain lion experts. Another possible approach to be incorporated into detection surveys is camera station surveys.

"If known, or potential, mountain lion dens are identified or observed during pre-construction surveys, mountain lion dens will be assumed to have kittens present until the Project Biologist can document that they are not present and/or that the den is not being used." CDFW recommends additional information be included in the measure on how dens will be checked to see that dens are no longer occupied without disturbing the adult female and kittens.

"However, ground disturbance would be limited to those days between October 1 and January 31 within 2,000 feet of known or potential dens to the extent feasible." If it is not feasible to work within the proposed work window, CDFW recommends including

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988-1263 another option to minimize and avoid impacts. To the "extent feasible", means aspects of the measure are not enforceable requirements. Buffer establishment should be implemented if a den is detected with kittens. If such a discovery is made, then project activities in the defined buffer area would need to halt for 2 months and a re-survey conducted to determine if the female has abandoned the den and relocated the kittens. Also recommended, is immediate consultation with CDFW upon detection of an active den. Mountain lions will den throughout the year so a proposed work window is ineffective for a minimization measure and such reference to a work window to reduce impacts to mountain lions should be removed from the document.

988-1264 **COMMENT 18: Section 3.7.7.2 BIO-MM#85: Provide Compensatory Mitigation for Impacts on Mountain Lion Core and Patch Habitat Page 24**

The Authority has proposed to provide compensatory mitigation for impacts on mountain lion core and patch habitats. The RDEIR/SDEIS indicates that each alternative for the Project has approximately 33.4 acres of permanent impacts and 12 acres of temporary impacts to core and patch habitats. CDFW believes the proposed ratios of 2:1 for permanent impacts on breeding/foraging habitat and high priority foraging and dispersal habitat; and 1:1 for low priority foraging and dispersal habitat do not sufficiently account for loss of habitat and is not well supported based on the RDEIR/SDEIS analysis of the impacts which was a coarse level spatial modeling exercise. Overall, the analysis of direct, indirect, permanent, and temporal impacts is lacking including the impact to loss of gene-flow between subpopulations and impacts to ESUs due to the loss of connectivity. Therefore, it is unclear whether the proposed 2:1 mitigation to impacts ratio is sufficient to reduce the impacts to the subpopulations to less than significant. The proposed mitigation ratios should ensure the persistence of the mountain lion subpopulations.

988-1265 **COMMENT 19: Section 3.7.7.2 Mitigation Measures for Biological and Aquatic Resources BIO-MM#86: Implement Lighting Minimization Measures During Construction Pages 24-25**

CDFW recommends including mitigating for impacts of vehicle lighting during construction. "The Authority would avoid conducting ground-disturbing activities within known wildlife habitat during nighttime hours, to the extent feasible." It should be noted that aspects of the measure are not requirements, therefore not enforceable. CDFW recommends that there be measure(s) to avoid impacts if it is not feasible to implement the proposed measure. CDFW recommends there be specifications and quantification of the proposed shielding for this mitigation measure. CDFW recommends that the analysis of light impacts calculate and consider the zone of operation of the lighting level to which it meets ambient light level. Calculate the perimeter of the light until the light is reduced to ambient light levels to create a minimum light level. CDFW also recommends analysis of night glow and construction lighting between urban areas. It is unclear if the limitation on the number of days/months lighting would be used, or the number of hours in an evening. CDFW recommends the duration of lighting be

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988-1265 analyzed for operational impacts as well. CDFW also recommends manual operation of lighting.

988-1266 **COMMENT 20: Section 3.7.7.2 Mitigation Measures for Biological and Aquatic Resources BIO-MM#87: Implement Lighting Minimization Measures for Operations Page 25**

This section states, "To address the permanent and intermittent impacts from lighting, the Authority would implement measures to minimize the intensity and duration of operational lighting of permanent facilities (e.g., traction power facilities, radio sites, and maintenance facilities), as well as intermittent train lighting, to the extent feasible." It should be noted that aspects of the measure are not requirements and are therefore not enforceable.

"Train headlights would use the minimum standard allowed by the FRA under 49 CFR 229.125 (a single headlight of at least 200,000 candelas) within non-tunnel portions of the Project Section." It is unclear if this minimum standard amount has been analyzed for impacts in the impact section. It is also unclear if 200,000 candelas is a quantity of light that reduces *or* avoids impacts to wildlife. It is also unclear what the full distance is, and the extent of, a single train headlight and associated illumination zoom-cast on a moonless night considering lowest level of night glow in the non-urban areas. The range of light and impacts to species is needed in the analysis. Please clarify if lighting from the tunnel portal entrances will be omitted only during operation of the train (timeframe of lighting at the portal) and does this measure address the light impacts from the tunnel portals.

988-1267 **COMMENT 21: Section 3.19 Cumulative Impacts Page 1**

This section indicates that no revisions were made because the DEIR/EIS addressed cumulative impacts and the conclusions reached for mountain lion and monarch butterfly and lighting are the same and new mitigation measures ensure that cumulative impacts do not occur. CDFW does not agree with this conclusion and recommends that the cumulative impacts and conclusions be reanalyzed to address the gene-flow impacts to each of the subpopulations adjacent and within the Project.

988-1268 **COMMENT 22: Section 3.19.5.7 Biological and Aquatic Resources Page 2**

This section states the following: "The cumulative impact analysis for biological and aquatic resources evaluates the potential effects of the proposed improvements within the Bakersfield to Palmdale Project Section the specific projects identified in Appendix 3.19-A,…" It should be noted that Appendix 3.19-A is missing the proposed high-speed rail from Victorville, California to Las Vegas, Nevada (XpressWest), which has a connection at the Palmdale Station.

"Widening of existing transportation corridors or new transportation improvements could result in additional impacts on biological and aquatic resources. Each of these improvement projects would be subject to environmental review, including evaluation of

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988-1268 the impacts of habitat loss, habitat degradation, and "take" of special-status species. Impacts on biological and aquatic resources would be mitigated as part of those projects, including avoidance of "take" during construction, minimization of impacts during construction and operation, restoration of disturbed sites, and preservation of compensatory." CDFW does not agree with nor recommend assuming that other projects environmental evaluation and minimization and mitigation measures will be appropriate to offset cumulative impacts. CDFW advises that throughout the RDEIR/SDEIS addressing cumulative impacts of take of mountain lion from the SGSB, SAM, and CC-S subpopulations from multiple projects, the effectiveness of mitigation for a subpopulation that has such low numbers, and the compounded impacts to these subpopulations by future projects.

988-1269 **COMMENT 23: Section 3.19.5.7 Construction Wildlife Movement Corridors Pages 2 and 3**

This section states the following: "Construction of the proposed improvements within the Bakersfield to Palmdale Project Section and cumulative projects such as High Desert Corridor (LA-4) and Northwest 138 Corridor Improvement Plan (LA-5) could result in construction activities and placement of wildlife movement barriers in natural lands such that they would interfere with the movement of wildlife species. Opportunities for wildlife movement in the cumulative RSA would be diminished because the HSR project is a linear project, spanning hundreds of miles, which could affect known and modeled wildlife movement corridors. Similarly, the High Desert Corridor and Northwest 138 Corridor Improvement Plan are linear projects that could also restrict wildlife movement corridors." CDFW recommends including these impacts to wildlife impacts in Section 3.7 when addressing impacts to mountain lion ESU subpopulations.

II. Editorial Comments and/or Suggestions

988-1270 **Western Joshua Tree:** The RDEIR/SDEIS did not address western Joshua tree (*Yucca brevifolia*) (YUBR) as a candidate species. On November 1, 2019, CDFW accepted a petition for western Joshua tree as a threatened species for listing under the CESA (Commission 2019). CDFW determined that listing "may be warranted" and advancing the species to the candidacy stage of the CESA listing process (CDFW 2020a). On September 22, 2020, the California Fish and Game Commission determined that listing western Joshua tree as threatened or endangered under CESA may be warranted (CDFW 2020b). Possession or removal of any additional trees, portions or trees, and/or dead trees may require a permit under CESA. According to the RDEIR/SDEIS "Impacts to the western Joshua tree, however, were analyzed in the Draft EIR/EIS, and no changes were necessary based on the subsequent change in legal status." CDFW provided comments in the B-P DEIR/EIS April 28, 2020 comment letter and are currently recommending additional analysis on western Joshua tree.

The Project will remove approximately 268.2 to 300.3 acres of western Joshua tree habitat resulting in a net loss of a valuable habitat type. The Project falls within the one of the two geographically separate populations, YUBR South, in the Mojave Basin

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988-1270 Range (CDFW 2020). Joshua tree woodland is considered a California Native Plant Society 3 listed rare vegetation community that has limited distribution in California. Project implementation would result in a substantial adverse effect, either directly or through habitat modifications, on a rare vegetation community identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations or by CDFW or USFWS. CDFW advises that throughout the Project footprint, the Joshua tree habitat appears to be of good to excellent functional quality displaying a high percentage of recruitment (juvenile trees). This is significant given the recent drought experienced in the region.

Beyond the physical removal of mature Joshua trees, Project activities are likely to have compounding negative impacts to the local population. Fruit and seed production of western Joshua trees fluctuates yearly depending on factors that include availability of pollinators (Sirchia et al. 2018). The yucca moth (*Tegeticula synthetica*) is the sole pollinator of western Joshua trees. After feeding on fruits, yucca moth caterpillars drop onto the soil and retreat to pupate underground (Baker 1986; Bogler 1995). The Project would pave over soils that may otherwise support the yucca moth's pupal stage. Regional collapses of yucca moth populations have led to complete failure of fruit production in the closely related banana yucca (*Y. baccatta*) in the Mojave Desert (St. Clair and Hoines 2018).

Furthermore, the permanent placement of rail may result in permanent loss of seeds buried by abiotic processes and seed caches made by rodents (Waitman et al. 2010). Local extirpation of western Joshua trees may occur in the absence of a seed source that could be dispersed to adjacent areas. Due to Project site clearing, grading, and rail placement, Western Joshua trees and their supportive ecology would be permanently extirpated from the Project site.

CDFW acknowledges that Joshua tree habitat was addressed in the DEIR/EIS for the Project, however the DEIR/EIS lacked analysis and mitigation for the temporal loss of Joshua tree habitat. BIO-MM# 1 does not include a specific and enforceable avoidance buffer for Joshua trees. CDFW notes that the DEIR/EIS does not discuss or propose compensatory mitigation to offset the loss of the habitat type in the implementation of the Project. Therefore, it is unclear how Project impacts would be reduced to less than significant without specific and enforceable avoidance, minimization, or mitigation measures identified in the DEIR/EIS. As stated in the DEIR/EIS COMMENT #12 from CDFW comment letter dated April 28, 2020. CDFW recommends the RDEIR/SDEIS identify, map, and discuss the specific vegetation communities and habitat communities within the Project Area following CDFW's "Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities" (Survey Protocols) see: (https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18959&inline). Please note, this protocol was updated, and the 2018 version referenced here should be used. In order to determine the rarity ranking of vegetation communities potentially affected by the Project, the Manual of California Vegetation (MCV) alliance/association community

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988-1270 names should be provided as CDFW tracks rare natural communities using this classification system.

Joshua tree mitigation areas should be protected against anthropogenic impacts for the life of the Project. CDFW recommends mitigation lands be preserved and managed in perpetuity under a conservation easement and managed by a local land conservancy. The proposed specific mitigation location should be identified in the CEQA document in order to ensure that mitigation is not deferred until some future time; however, the RDEIR/SDEIS document "may specify performance standards which would mitigate the significant effect of the Project and which may be accomplished in more than one specified way" (CEQA Guidelines, § 15126.4(a)(1)(B)).

As a CESA candidate species, western Joshua tree is granted full protection of a threatened species under CESA. If impacts to western Joshua trees cannot be avoided, please be advised that acquisition of an ITP may be required (pursuant to Fish & Game Code, § 2080 et seq.) prior to vegetation and ground disturbance activities.

988-1271 **Wildlife Corridor Movement:** The RDEIR/SDEIS asserts, "As part of the B-P Build Alternatives and both CCNM Design Options, the project would minimize impacts on wildlife movement through the incorporation of tunnels and viaducts into the design that allow wildlife to freely move over or under the alignment." This statement assumes that the viaduct locations will remain in place; however, as with other HSR segments currently under construction, these viaduct locations could later be redesigned to be fenced at-grade and impermeable to wildlife. CDFW advises that a stronger design criterion be developed and included in the RDEIR/SDEIS to ensure that areas of planned viaduct and tunnel cannot be changed to less permeable features by the Design-Build contractor.

As CDFW has discussed during early consultation and in previous comment letters to the Authority, the single biggest potential biological impact arising from construction of the HSR project is the impact on regional movements of wildlife and connections between habitats. The HSR has the potential to disrupt wildlife movement corridors that are already hindered with existing obstacles, create long stretches of impediments, and further narrow areas of low or compromised permeability, many of which are already threatening the continued viability of mountain lion, deer, and several species. Construction of access-controlled rail lines may create barriers to the movement of wildlife, thereby cutting them off from important food, shelter, and breeding areas. Resulting isolation of mountain lion subpopulations (WSN, SGSB, SAM, and CC-S) limits the exchange of genetic material and puts populations at risk of local extirpation through genetic and environmental factors. Barriers can prevent the re-colonization of suitable habitat following natural population expansions, ultimately putting the species at risk of extinction of the SSB, SAM and CC-S subpopulation of mountain lion.

The construction and operation of the HSR will severely inhibit north-south as well as east-west wildlife movement along the B-P segment. While the Authority suggests it will examine the feasibility of implementing a variety of wildlife passages to aid animal

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988-1271 movement along both sides of the rail alignment, it is unclear where and at what intervals these will be placed. This is a concern, especially considering recent design changes in the Fresno to Bakersfield segment of the Project where originally designed elevated structures are being changed to an at-grade design and elevated structures over waterways are being significantly reduced in length, narrowing the available space for wildlife passage. Later changes of this nature could limit the ability of mountain lion to move unimpeded throughout its range.

Potential future design changes that could result in reduced wildlife permeability and increased wildlife impacts need to either be considered in the DEIR/EIS, or somehow precluded from occurring at the construction phase. An elevated or below ground rail design could reduce the impacts that the HSR system would have on animal movement and migration, by allowing wildlife to pass unimpeded underneath or over the top of the entire length of the railway while providing access-controlled tracks. Elevated or below ground railways would be more effective in facilitating animal movement than the proposed wildlife underpasses and overpasses, which are not always effective or have untested efficacy for most taxa. Because wildlife would be more likely to move underneath an elevated rail, or over a below ground rail, as opposed to using a tunnel or vegetated overpass, CDFW advises the inclusion of the at-grade embankment in the DEIR/EIS as an impact to wildlife movement and that this impact be thoroughly analyzed as a barrier to movement, gene-flow, reproductive success, loss of colonization opportunities, and to discuss this in the context of planned wildlife crossings.

If wildlife passage structures will be used instead of elevated or below ground rail, CDFW continues to recommend that an extensive evaluation be conducted before final wildlife passage locations are selected to determine the appropriate and most effective locations and number and types of such wildlife passage structures. As was recommended in previous correspondence, methods to determine best locations of wildlife passage structures or avoidance should include things such as: 1) track station surveys; 2) ditch and canal crossing surveys; 3) monitoring trails with infrared or Trailmaster cameras; and 4) geographic information system (GIS) habitat modeling to identify likely wildlife travel corridors and anthropogenic barriers (such as highways, canals, reservoirs) at the landscape level. In addition, wildlife habitat passage structures, such as underpasses, overpasses, elevating or placing below grade the alignment and tunnels, may not be suitable for all species and locations and would need to be evaluated carefully. Dedicated wildlife crossing structures should ensure permeability, be evaluated on a species-specific basis, and be required to meet specific minimum dimensions for increased probability of wildlife utilizing these structures for crossing opportunities.

Specific care should be afforded to ensure that any wildlife crossing structure design incorporates generous openness and clear line of sight from entry to exit to maximize detection of the crossing by species at the time of encounter and to ensure use. Currently, the RDEIR/SDEIS does not provide specific dimensions listed for the openness, what constitutes a "slight grade of approaches to prevent flooding", and the

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988-1271 number of crossings that would ensure permeability for such a long linear feature. Without these specifics and other relevant assumptions, it is not possible to determine if the effectiveness of this mitigation measure will reduce the level of significance. CDFW recommends that wildlife crossing locations, configurations, and demonstrated efficacy for mountain lion and other target species use (e.g., desert kit fox, Mohave ground squirrel, desert tortoise, etc.) be a requirement of the final design.

Finally, the RDEIR/SDEIS does not analyze the impact of design elements, such as the Intrusion Protection Barriers (IPBs) and Access Restriction (AR) fencing, in terms of impacts to wildlife corridor movements and/or the reduction of effectiveness of wildlife crossings compounded by the additional infrastructure fencing. The RDEIR/SDEIS includes information that the at-grade segments of the project would be entirely fenced or walled and thereby eliminate adverse interactions with wildlife, including direct strikes. While this may be true in some instances at the individual or localized level, the total length and linear nature of the project's fencing/walls, along with other projects in the area, may cause site-specific and cumulative impacts involving species fragmentation and impediments to wildlife movement. CDFW agrees that inclusion of proper placement and design of the dedicated wildlife crossings will be a very important component of the environmental planning process for the Project.

It is paramount that the final appropriate and effective design features, dimensions, and locations for elevated rail, viaduct, tunnel, and wildlife crossings through the Tehachapi Mountains remain as minimum criteria and are not a design-build option to reduce dimensions or alter locations without approval from the wildlife agencies to ensure connectivity of gene-flow for the WSN to the other mountain lion subpopulations (CC-S, SGSB, and SAM).

988-1272 **Use of Modeling for Impact Analysis**
CDFW has previously expressed its concern with using coarse-level predictive models for the impact analysis without having site-specific surveys to supplement the modeling effort. We are concerned that the lack of current, site-specific information to accurately quantify the magnitude of impact to CESA-listed species may cause delays in the impact of the taking analyses necessary for CESA and issuance of an ITP. CDFW is also concerned how the modeled output is proposed to be used for areas where there are no occurrence data. As a reminder, CNDDB captures voluntarily reported detections only; areas without records should not be treated as areas where species do not occur. Our primary concerns with using modeling without site-specific protocol surveys to assess and quantify impacts for purposes of CESA include the following:

- Modeling alone may not capture the full extent of species occurrences and habitat suitability due to data sources, timing of surveys, limited access to significant portions of the alignments, and the inherent accuracy issues associated with using regionally-based data to determine site-specific impacts without a reliable verification method (e.g., protocol surveys). Using predictive modeling only to evaluate species presence/absence and to quantify project-specific impacts (acreages) could miss marginal or atypical habitat usage,

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988-1272 especially by highly mobile species, and impose a risk of unauthorized take. In addition, some areas not ranked as suitable have not been surveyed recently or have never been surveyed.

- Due to the stochasticity and cryptic nature of some species, it is very difficult to accurately "detect" species and determine mitigation requirements using modeling. Some species are unpredictable due to variables the modeling may not or cannot adequately capture, habitat requirements that are constantly evolving over time or space and/or have distributions that can be analyzed statistically but not be predicted precisely. For example, opportunistic species can have dynamic ranges and use areas not ranked at all by the model based on its current parameters.

- As an estimation of reality, the current model includes a defined range of species and conditions (using the rules selected) based on a snapshot of time and may not accurately capture use by all species when impacts occur and/or translate down to the site-specific (e.g., footprint) level. Modeling alone can provide a statistically significant underrepresentation of habitats potentially occupied by State-listed species. For example, some listed plants may only occur at specific times of the year under certain conditions and only be adequately evaluated with protocol surveys within the project footprint at the appropriate time. Likewise, some SFP bird species not known to nest or breed in the project area (e.g., white-tailed kite, peregrine falcon and bald eagle) could be transient to the area at certain times of the year.

It should be noted that the WCA is not an adequate analysis of the genetic landscape. The landscape connectivity/permeability vs. the genetic connectivity. Habitat quality landscape does not capture the movement through the Project for WSN population of mountain lions who breed and pass on genes to other subpopulations. The WCA (Appendix 3.7B of the DEIR/EIS) modeling limitations pose issues and assumptions that are problematic in addressing the genetic permeability of mountain lion.

CDFW continues to emphasize that although the current modeling can be a helpful tool for the Authority's own preliminary evaluation, as well as for compensatory mitigation planning, it will not be a substitute for our analysis when it comes to CESA permitting. CDFW will need to conclude whether or not listed species will be impacted by the project. If predictive modeling is used in lieu of biological surveys by the CHSRA, CDFW's ITP related analysis we will need to err on the side of assuming presence in the Project footprint. Our impact and take analysis and required minimization and mitigation measures will be reflective of this assumption.

988-1273 **Nesting Birds:** CDFW has jurisdiction over actions with potential to result in the disturbance or destruction of active nest sites or the unauthorized take of birds. Fish and Game Code sections that protect birds, their eggs and nests include, sections 3503 (regarding unlawful take, possession or needless destruction of the nest or eggs of any

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988-1273 bird), 3503.5 (regarding the take, possession or destruction of any birds-of-prey or their nests or eggs), and 3513 (regarding unlawful take of any migratory nongame bird).

988-1274 **Water Pollution:** Pursuant to Fish and Game Code section 5650, it is unlawful to deposit in, permit to pass into, or place where it can pass into "Waters of the State" any substance or material deleterious to fish, plant life, or bird life, including non-native species. It is possible that without mitigation measures implementation of the Project could result in pollution of Waters of the State from storm water runoff or construction-related erosion. Potential impacts to the wildlife resources that utilize these watercourses include the following: increased sediment input from road or structure runoff; toxic runoff associated with development activities and implementation; and/or impairment of wildlife movement along riparian corridors. The Regional Water Quality Control Board and United States Army Corps of Engineers also have jurisdiction regarding discharge and pollution to Waters of the State.

In this role, CDFW is responsible for providing, as available, biological expertise during public agency environmental review efforts (e.g., CEQA), focusing specifically on project activities that have the potential to adversely affect fish and wildlife resources. CDFW provides recommendations to identify potential impacts and possible measures to avoid or reduce those impacts.

988-1275 **Federally Listed Species:** CDFW recommends consulting with the USFWS on potential impacts to federally listed species including, but not limited to, monarch butterfly. Take under the Federal Endangered Species Act (FESA) is more broadly defined than CESA; take under FESA also includes significant habitat modification or degradation that could result in death or injury to a listed species by interfering with essential behavioral patterns such as breeding, foraging, or nesting. Consultation with the USFWS in order to comply with FESA is advised well in advance of any ground-disturbing activities.

ENVIRONMENTAL DATA

988-1276 CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be used to make subsequent or supplemental environmental determinations (Pub. Resources Code, § 21003, subd. (e)). Accordingly, please report any special-status species and natural communities detected during Project surveys to CNDDB. The CNDDB field survey form can be found at: https://www.wildlife.ca.gov/Data/CNDDB/Submitting-Data. The completed form can be mailed electronically to CNDDB at the following email address: CNDDB@wildlife.ca.gov. The types of information reported to CNDDB can be found at: https://www.wildlife.ca.gov/Data/CNDDB/Plants-and-Animals.

FILING FEES

988-1277 If it is determined that the Project has the potential to impact biological resources, an assessment of filing fees will be necessary. Fees are payable upon filing of the Notice

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988-1277 of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the fee is required in order for the underlying project approval to be operative, vested, and final (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089).

CDFW appreciates the opportunity to comment on the Project to assist the Authority in identifying and mitigating the Project's impacts on biological resources.

988-1278 More information on survey and monitoring protocols for sensitive species can be found at CDFW's website (https://www.wildlife.ca.gov/Conservation/Survey-Protocols). Please see the enclosed Mitigation Monitoring (MMRP) table which corresponds with recommended mitigation measures in this comment letter. If you have any questions, please contact Ms. Primavera Parker, Senior Environmental Scientist (Specialist), at the address provided on this letterhead, by telephone at (559) 320-6666, or by e-mail at Primavera.Parker@wildlife.ca.gov.

Sincerely,

DocuSigned by:
Bob Stafford
5343A684FF02469...

Julie A. Vance
Regional Manager

Attachment 1- Mountain Lion ESU Subpopulation Mapping
Attachment 2- MMRP

ec: See Page Twenty-three

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CDFW Region 4: Ferranti, Tomlinson, Parker
CDFW Region 5: Wilson-Olgin, R. Rodriguez, M. Evans

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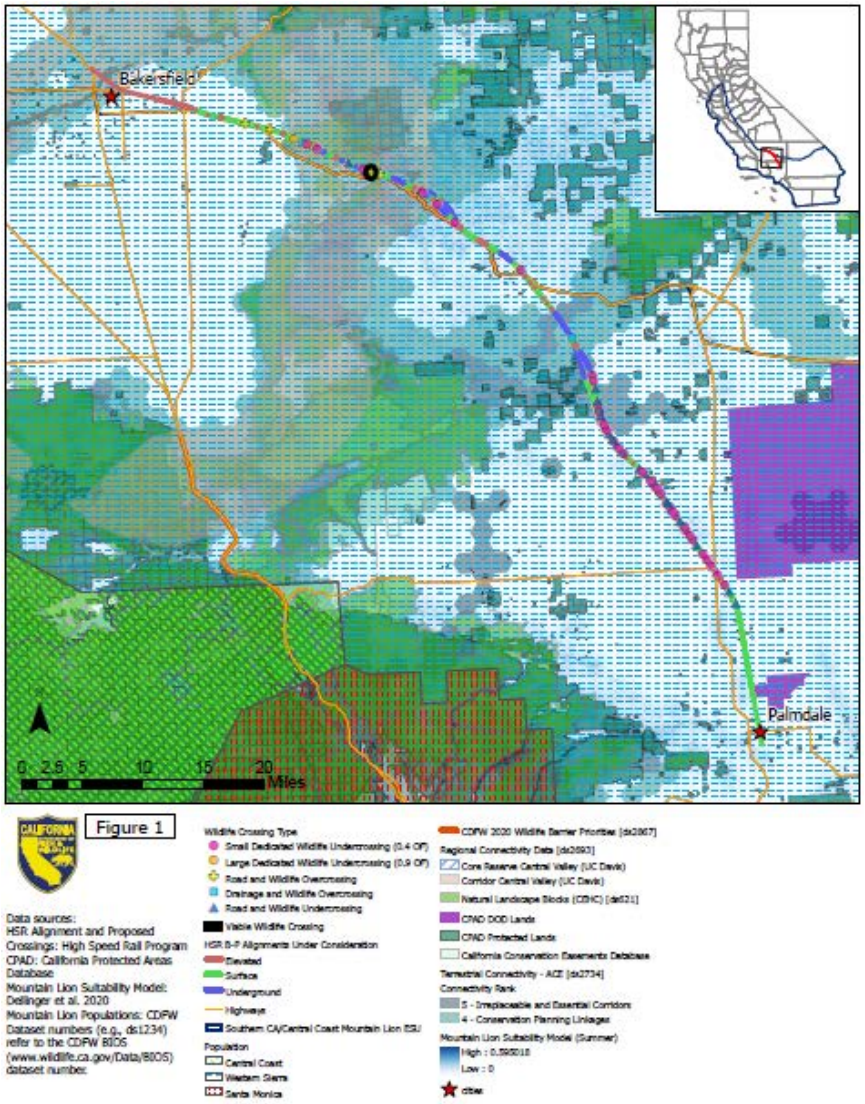
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Attachment 2

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE
RECOMMENDED MITIGATION MONITORING AND REPORTING PROGRAM (MMRP)

PROJECT: California High-Speed Rail Project (Bakersfield to Palmdale Section)

SCH No.: 2009082062 (Revised DEIR/Supplemental DEIS)

RECOMMENDED MITIGATION MEASURE	STATUS/DATE/INITIALS
Before Disturbing Soil or Vegetation	
Mitigation Measure 1: ML Habitat Assessment	
Mitigation Measure 2: ML Wildlife Crossing Monitoring	
Mitigation Measure 3: ML Avoidance-Buffer for Corridor Areas	
Mitigation Measure 4: ML No Night Work in Corridor Areas	
Mitigation Measure 5: ML Avoidance Use of Rodenticides	
Mitigation Measure 6: ML Provide Dedicated Wildlife Crossings	
Mitigation Measure 8: MB Habitat Assessment	
Mitigation Measure 9: MB Surveys	
During Construction	
Mitigation Measure 2: ML Wildlife Crossing Monitoring	
Mitigation Measure 3: ML Avoidance-Buffer for Corridor Areas	
Mitigation Measure 4: ML No Night Work in Corridor Areas	
Mitigation Measure 5: ML Avoidance Use of Rodenticides	
Mitigation Measure 6: ML Provide Dedicated Wildlife Crossings MB Take Avoidance	
Mitigation Measure 7: ML Take Authorization	
Mitigation Measure 10: MB Take Avoidance	

Rev. 2013.1.1

Response to Submission 988 (Julie Vance, California Department of Fish and Wildlife, Region 4, April 12, 2021)

988-1240

The commenter expresses concern regarding whether the mitigation measures described will be enforceable or sufficient in reducing impacts to a level that is less than significant under CEQA. The mitigation measures included in the EIR/EIS are both enforceable and will effectively reduce impacts to a less than significant level.
The Authority has committed to designing the wildlife crossings consistent with Section 7.3.4 of the WCA, Appendix I of the BARTR. Applicable mitigation measures (MM) to wildlife movement include BIO-MM#37, BIO-MM#64, BIO-MM#77, BIO-MM#78, BIO-MM#84, BIO-MM#85, BIO-MM#86, and BIO-MM#87 provide mitigation for minimizing effects to wildlife movement during construction and establishing wildlife fencing, jump outs, and preconstruction mountain lion den surveys, core and patch replacement, and minimizing lighting.

BIO-MM#82 and BIO-MM#83 will reduce the impacts to a less than significant level for the monarch butterfly by avoidance and compensatory mitigation measures as described in BIO-MM#53.

The IAMFs and MMs have been developed to ensure consistency throughout all sections of the HSR project, and will be required during construction and operation, as applicable. All IAMFs and MMs are enforceable measures that will be included in the Mitigation Monitoring and Enforcement Plan (MMEP). The MMEP will be considered for adoption at the time the Authority Board considers certification of the EIR and approval of the project.

988-1241

The commenter states that the RDEIR/SDEIS does not address impacts of the potential gene-flow disruption between these subpopulations, nor does it address how impacts to the WSN population (genetic source) would impact the other subpopulations.

Regarding wildlife movement, the HSR Bakersfield to Palmdale Project Section maintains wildlife permeability across the alignment through a series of elevated viaducts, tunnels and dedicated wildlife crossings. The project includes 52 elevated viaducts, 9 underground tunnels and 39 dedicated wildlife crossings (Table 2-1 in the WCA, Appendix I in the BARTR). The Local Permeability Assessment, described in the WCA (Appendix I in the BARTR) modeled wildlife movement across a 6 KM wide corridor using South Coast Wildlands movement data for select representative focal species and compared it with project conditions that prohibit wildlife from crossing at fenced at-grade segments. Because of the number, sizes, and distribution of the elevated viaducts, underground tunnels, and dedicated wildlife crossings, the project would reduce permeability for mountain lion by 1 percent, mule deer by 2 percent, American badger by 3 percent, San Joaquin kit fox by 1 percent, desert kit fox by 9 percent, desert tortoise by 7 percent, western gray squirrel by 2 percent, blunt-nosed leopard lizard by 1 percent, and Tipton kangaroo rat by 1 percent. Further, the Southern California/Central Coast ESU mountain lion occurs within the Tehachapi Mountains and interfaces with the Western Sierra Nevada mountain lion population along SR 58. Within the mountain lion species range, genetic connectivity is maintained between these populations through the use of 14 elevated viaducts, 6 underground tunnels, and 5 dedicated wildlife crossings. As part of the development of the South Coast Missing Linkages: A Linkage Design for the Tehachapi Connection (Penrod et al. 2003), South Coast Wildlands developed modeled least cost corridors (top 1 percent of movement habitat) for a number of focal species, including mountain lion. The mountain lion least cost corridor crosses the HSR alignment at a 2.37-mile-long underground tunnel segment, which would allow mountain lion to freely cross over the project unimpeded.

Impact Bio#2 in Section 3.7 of the Final EIR/EIS has been updated to clarify that the project will facilitate movement and maintain existing genetic exchange between the Southern California/Central Coast ESU of mountain lion population and the Western Sierra Nevada population.

Response to Submission 988 (Julie Vance, California Department of Fish and Wildlife, Region 4, April 12, 2021) - Continued

988-1242

The commenter states that the Project has the potential to cause impacts during construction by increasing human presence, traffic, noise, vibration, air pollutants and dust, artificial lighting, and will significantly and permanently reduce and potentially eliminate the existing wildlife movement corridor. The Authority has adopted substantial avoidance and minimization measures to address construction impacts on wildlife movement. Portions of the alignment important to mountain lion movement will be constructed underground. As discussed in Response to Comment 988-1240 and 988-1241, contained in this chapter, the HSR project maintains genetic connectivity between the southern California and central coast ESU of mountain lion from the western Sierra Nevada mountain lion population.

988-1243

The commenter states that the Project would continue to have significant impacts because mitigation as proposed would not result in adequate and successful mitigation for the unavoidable direct and indirect, permanent, or temporal losses, of genetic connectivity between subpopulations of mountain lion. As discussed in Response to Comment 988-1240 and 988-1241, the HSR project maintains genetic connectivity between the southern California and central coast ESU of mountain lion from the western Sierra Nevada mountain lion population such that the impact would not be significant.

988-1244

The commenter recommends quantitative and enforceable measures that will reduce the impacts to less than significant levels. As discussed in Responses to Comments 988-1240 and 988-1241, contained in this chapter, the HSR project maintains genetic connectivity between the southern California and central coast ESU of mountain lion with the western Sierra Nevada mountain lion population. The WCA (Appendix I in the BARTR) quantified impacts to core and patch mountain lion habitat as well as relative movement cost based on South Coast Wildland mountain lion movement data.

Mitigation Measure BIO-MM#84: Conduct Pre-Construction Surveys and Implement Avoidance and Minimization Measures for Mountain Lion Dens, requires that the Authority consult with CDFW and other mountain lion experts to develop a survey protocol to locate and identify denning mountain lions in and adjacent to the project to avoid adversely disturbing the mother and kittens, and sets specific standards for surveys and minimum buffer distances to ensure significant impacts will be avoided. BIO-MM#85: Provide Compensatory Mitigation for Impacts on Mountain Lion Core and Patch Habitat, requires compensatory mitigation for impacts on mountain lion core and patch habitat through the preservation of suitable habitat that is acceptable to CDFW. BIO-MM#64: Establish Wildlife Crossings, requires dedicated wildlife crossings to accommodate wildlife movement across permanently fenced infrastructure consistent with the details requirements in the wildlife corridor assessment that was prepared for the project and circulated with the Draft EIR/EIS. In addition, requirements for monitoring and adaptive management have been added to BIO-MM#64, and BIO-MM#37:Minimize Effects to Wildlife Movement Corridors during Construction will provide methods to minimize construction-related disturbance to terrestrial wildlife using established wildlife movement linkages. By limiting the amount of construction fencing and permanent fencing, the impacts on wildlife movement corridors would be reduced.

Additional mitigation measures have been added to address lighting impacts to special-status species including the mountain lion. BIO-MM#86:Implement Lighting Minimization Measures During Construction and BIO-MM#87:Implement Lighting Minimization Measures for Operations have been added to the Final EIR/EIS to address lighting impacts to special status species including mountain lion. The project also includes numerous IAMFs that will minimize impacts to species and wildlife movement.

Response to Submission 988 (Julie Vance, California Department of Fish and Wildlife, Region 4, April 12, 2021) - Continued

988-1244

The Authority will consult with CDFW and other mountain lion experts on preconstruction survey protocol and crossing design. The Authority will consult with CDFW on developing a monitoring program to monitor the effectiveness of the elevated viaducts, underground tunnels, and dedicated wildlife crossings for mountain lion movement, as part of the Section 2081 incidental take permitting process. The authority will also consult with CDFW regarding the location of compensatory mitigation as required by BIO-MM#85.

The Authority will comply with the Endangered Species Act, including applicable requirements for take authorization.

988-1245

The commenter states that the Authority should consult and collaborate with CDFW to conserve areas beneficial to the Southern California ESU and the WSN subpopulation that may improve and maintain connectivity.

The compensatory mitigation described in Section 3.7.7.2 of this Final EIR/EIS identifies mitigation measures per species that will be implemented in consultation and with oversight from regulatory agencies that are specifically charged with protecting the species. This will further ensure that the mitigation is effective and successful. Specifically, BIO-MM#53: Prepare a Compensatory Mitigation Plan (CMP) for Species and Species Habitat, as identified in specific BIO-MMs, commits the Authority to preparing compensatory mitigation plans which provide descriptions for compensatory mitigation to restore, and/or mitigate for suitable habitat affected by the Bakersfield to Palmdale Build Alternatives. The CMP would establish specifications of success criteria to gauge the effectiveness of restoration and function of the mitigation lands. The mitigation lands, their management, and monitoring serve to allow for intended ecologic function of compensation habitat for sensitive plant species and special-status species habitat loss related to the Bakersfield to Palmdale Build Alternatives.
BIO-MM#85 and BIO-MM#53 include detailed requirements for compensatory mitigation, including approval from CDFW, and the Authority will comply with all applicable laws and regulations.

Additionally, refer to Responses to Comments 988-1240 through 988-1244, contained in this chapter.

Response to Submission 988 (Julie Vance, California Department of Fish and Wildlife, Region 4, April 12, 2021) - Continued

988-1246

The commenter states that lit is unclear how the following BIO-IAMFs (BIO-IAMF#1, BIO-IAMF#3, BIO-IAMF#5, BIO-IAMF#8, BIO-IAMF#9, BIO-IAMF#10, and BIO-IAMF#1) are avoiding and minimizing impacts from construction to monarch butterflies. Impact BIO #8: Operational Impacts on Special-Status Wildlife Species, has been updated to address the Annual Vegetation Control Plan preparation and Implementation and how it will deter insects from host plants within the right-of-way during operation and maintenance. A dust control plan will be prepared. Note that there will not be ground disturbance within the right-of-way during operation and maintenance. No ground disturbance to habitat areas will occur during operation.

988-1247

The commenter expresses concern about the potential effects of insecticide use on native milkweed species and loss of habitat for monarch butterfly. The train track area will be already clear of vegetation and will be maintained throughout operations. Mitigation Measure #54 (Prepare and Implement an Annual Vegetation Control Plan) provided in Section 3.7.7 of this Final EIR/EIS will only allow Caltrans-approved herbicides to be used in the vegetation control program.

Additionally, as identified in Section 3.7.7.2 of this Final EIR/EIS, BIO-MM#82: Avoid Direct Impacts on Monarch Butterfly Host Plants, requires pre-construction surveys and measures to minimize impacts to milkweed, and BIO-MM#83: Provide Compensatory Mitigation for Impacts on Monarch Butterfly Breeding and Foraging Habitat, requires compensatory mitigation for impacts to monarch habitat and specifies ratios to be applied for permanent impacts. Native milkweed will also be replanted in temporary impact areas.

988-1248

The commenter recommends a mitigation measure for monarch butterfly habitat assessment. Mitigation Measure BIO-MM#82 Avoid Direct Impacts to Monarch Butterfly Host Plants provided in Section 3.7.7 of this Final EIR/EIS provides for the habitat assessment for the butterfly.

BIO-MM#82 provides for surveying prior to any ground-disturbing activities, specifically the Project Biologist would survey for monarch butterfly larval host plants (native milkweed species) within suitable habitat. If host plants are found, the Project Biologist would conduct surveys for adult butterflies during the peak flight period for Southern California (approximately October 1 through March 15) to determine presence/absence or presence may be assumed. Where adult butterflies are present or assumed to be present, construction personnel would avoid host plants in temporary impact areas, where feasible. In the event host plants are impacted in temporary impact areas, native milkweed species would be replanted.

BIO-MM#83 would provide compensatory mitigation for the monarch butterfly breeding and foraging habitat by implementing preparation of a compensatory mitigation plan (CMP) for the butterfly per BIO-MM#53.

The Authority would provide compensatory mitigation to offset impacts on breeding and foraging habitat for monarch butterfly at a ratio of 2:1, and coordinate with CDFW for updates to protocol information.

Response to Submission 988 (Julie Vance, California Department of Fish and Wildlife, Region 4, April 12, 2021) - Continued

988-1249

The commenter recommends that the focus of analysis be the movement of the WSN population. The WCA in the appendix of the BARTR analyzes the effects of mountain lion across the project which would link the two populations (western Sierra Nevada and the Southern California/Central Coast ESU). As described in the WCA, the project maintains genetic connectivity across the project through a combination of 14 elevated segments, six underground segments, and five dedicated wildlife crossings. The crossing opportunities includes a 2.3-mile tunnel segment through the mountain lion least cost corridor identified by South Coast Wildlands in the development of the South Coast Missing Linkages Project: A Linkage Design for the Tehachapi Connection (Penrod 2003). Section 3.7 has been updated to clarify impacts to mountain lion. The number and spacing of crossing opportunities through viaducts, tunnels, and dedicated wildlife crossings reduces relative permeability for modeled mountain lion movement by only 1 percent across the mountain lion species range.

988-1250

The commenter recommends providing a figure (mapping) of the mountain lion ESU subpopulations. This figure is provided in the BARTR Technical Report Supplement (Authority 2021) which was provided upon request.

988-1251

The commenter recommends adding the mountain lion ESU subpopulations to Table 3.7-7 of the EIR/EIS.

The methodology implemented for the biological and aquatic resources analyses is discussed in Section 3.7.4 of the Draft and this Final EIR/EIS, and is detailed in the Biological and Aquatic Resources Technical Report (BARTR) and the BARTR Technical Report Supplement (TRS). Specifically for the monarch butterfly, the breeding and foraging habitat covers all of the area of the alignment, and therefore, the impact acreages were derived from the entire footprint. As for the ESU mountain lion range, using a Geographic Information System (GIS), the footprint was overlaid with the modeled species range, which is south of SR 58 within the Tehachapi Mountains, to derive the acreages within the temporary and permanent impact areas. The impact acreages of the identified mountain lion range and monarch butterfly within the project footprint have been added to Table 3.7-7 of this Final EIR/EIS for Modeled Federal and State Threatened/Endangered Species Habitat. Species that would be potentially affected, or special-status species that have the potential to occur within the resource study area, are discussed in Section 3.7. Additionally, Section 3.7.4.2 of this Final EIR/EIS describes the IAMFs that will be implemented during design, construction, and operations of the project, and Section 3.7.6 discusses the environmental consequences of the project alternatives, outlining potential biological and aquatic resource impacts, including special-status mammal species and wildlife corridor analysis.

Response to Submission 988 (Julie Vance, California Department of Fish and Wildlife, Region 4, April 12, 2021) - Continued

988-1252

The commenter recommends that the gene-flow between each of the subpopulations of mountain lion and specifically from the source populations of the WSN to the SGSB and the CC-S and SAM to the SGSB subpopulations need to be analyzed. The Southern California/Central Coast ESU mountain lion occurs within the Tehachapi Mountains and interfaces with the Western Sierra Nevada mountain lion population along SR 58. Within the mountain lion species range, genetic connectivity is maintained between these populations through the use of 14 elevated viaducts, 6 underground tunnels, and 5 dedicated wildlife crossings. As part of the development of the South Coast Missing Linkages: A Linkage Design for the Tehachapi Connection (Penrod et al. 2003), South Coast Wildlands developed modeled least cost corridors (top 1 percent of movement habitat) for a number of focal species, including mountain lion. The mountain lion least cost corridor crosses the HSR alignment at a 2.37 mile long underground tunnel segment, which would allow mountain lion to freely cross over the project unimpeded. The number and spacing of crossing opportunities through viaducts, tunnels, and dedicated wildlife crossings reduces relative permeability for modeled mountain lion movement by only 1 percent across mountain lion species range.

Mountain lion will be able to cross portions of the HSR, specifically at the viaducts and tunnels during construction. Section 3.7 has been updated to clarify impacts to mountain lion. As with sections of the project currently under construction, it is anticipated that construction will be phased so that construction would occur on a portion of the alignment at any one time, allowing wildlife to cross where no active construction is occurring.

988-1253

The commenter recommends the mitigation measures and IAMF pertaining to mountain lion movement be quantifiable and enforceable. As required by CEQA, all mitigation measures will be fully enforceable through permit conditions, agreements, or other measures. In addition, all IAMFs and mitigation measures will be included in the MMEP. The MMEP will identify responsible parties, timing of implementation, reporting criteria, and when the measure is complete. The MMEP will be considered for adoption at the time the Authority Board considers certification of the EIR and approval of the project. The MMEP satisfies the requirements of NEPA and is consistent with CEQA requirements for mitigation monitoring and reporting as set forth in Section 15097 of the CEQA Guidelines (Title 14 California Code of Regulations, Division 6, Chapter 3).

While the MMEP will be part of the Record of Decision issued pursuant to NEPA, all IAMFs and mitigation measures identified in this Final EIR/EIS will be included in the MMEP at project approval.

The commenter also recommends including CEQA significance conclusions for impacts to the mountain lion ESU and the genetic impacts to the subpopulations. Additional information regarding impact analysis for mountain lion has been added to Impact BIO #5, #8, and #11 in the Final EIR/EIS. CEQA significance conclusions are determined in species groups such as birds, mammals, etc. Mountain lion is included in the conclusion for mammals, which explains that impacts to the species will be less than significant with mitigation.

Response to Submission 988 (Julie Vance, California Department of Fish and Wildlife, Region 4, April 12, 2021) - Continued

988-1254

The commenter requests that the Authority quantify the train operation and maintenance activities. Operations and maintenance activities are described in Section 2.6 of this Final EIR/EIS. As discussed in Section 2.6.2 of this Final EIR/EIS proposed maintenance activities would occur on rolling schedules. For example, track would be inspected several times per week using special measuring trains, while the overhead catenary system would be inspected nightly, and other maintenance of the right-of-way, aerial structures, and bridge sections of the alignment would include drain cleaning, vegetation control, litter removal, and other inspection that would typically occur monthly to several times per year. Refer to Section 2.6.2 of this Final EIR/EIS for a more detailed discussion of maintenance activities. Impact BIO #8 in Section 3.7.6.4 of this Final EIR/EIS addresses the impacts of operations and maintenance activities on special-status wildlife species, including analysis based on the frequency and duration of trains. Impact BIO #8 has been updated to clarify impacts from operations, including effects of noise and train duration. BIO-MM#86 Implement Lighting Minimization Measures During Construction and BIO-MM#87 Implement Lighting Minimization Measures for Operations, have been added to the Final EIR/EIS to address lighting impacts to special-status species including mountain lion. The project also includes numerous IAMFs that will minimize project impacts, including light and noise impacts, to species and wildlife movement.

In addition, Section 6.2.4 of the WCA, Appendix I to the BARTR addresses noise and vibration effects. Section 7.3.6 of the WCA describes noise and vibration minimization measures that have been added to BIO-MM#64, which commits to noise minimization measures such as sound barriers and berms if noise levels are exceeded.
The thresholds of significance for impacts to species are described in section 3.7.4.7 and are consistent with CEQA Guidelines Appendix G. The analysis is based on extensive studies and technical analysis by qualified biologists and the conclusions are supported by substantial evidence.

988-1255

The commenter recommends including discussion of potential operation and maintenance impacts to mountain lion. This discussion has been incorporated into Section 3.7.6 of this Final EIR/EIS under impacts to mammals. Section 6.2.4 of the WCA, Appendix I to the BARTR also addresses noise and vibration effects. Section 7.3.6 of the WCA describes noise and vibration minimization measures. Further BIO-MM#64 requires noise minimization measures if noise levels are exceeded, such as sound barriers and berms.

988-1256

The WCA provides an extensive analysis of wildlife movement across the HSR alignment including mountain lion and their prey base. The change in legal status for the southern California and central coast ESU of mountain lion does not change the conclusion of the analysis in the WCA. Operational impacts, including impacts from noise and light, are also analyzed in the Draft EIR/EIS and RDEIR/SDEIS. Additional information regarding operational impacts has been added to Section 3.7 to clarify impacts to mountain lion and other species. Impact BIO #8 has been updated to include additional detail regarding O&M-related impacts. Refer to Response to Comment 988-1255, contained in this chapter, for additional information.

Operations and intermittent maintenance activities will only occur within the HSR corridor. Mountain lions and prey cannot enter the HSR corridor because it will either be in tunnel sections, elevated sections, or at-grade sections that will have fencing to prevent entry by wildlife.

As discussed under Impact BIO #8 in this Final EIR/EIS, lighting, noise and vibration impacts at the 14 elevated segments and 5 dedicated wildlife crossings due to operations and maintenance will be limited to short durations, and any such impacts will be further minimized by the measures described in BIO-MM#64. With the mitigation measures identified in Section 3.7 impacts from operations and maintenance will be less than significant.

Response to Submission 988 (Julie Vance, California Department of Fish and Wildlife, Region 4, April 12, 2021) - Continued

988-1257

The commenter recommends including a CEQA significance conclusion regarding mountain lion. Impacts to the mountain lion ESU and genetic impacts to subpopulation are included in the CEQA significance conclusions for special-status mammals. The following language was added to the mammals section of BIO #8: The Southern California/Central Coast ESU mountain lion occurs within the Tehachapi Mountains and interfaces with the Western Sierra Nevada mountain lion population along SR 58. Within the mountain lion species range, genetic connectivity is maintained between these populations through the use of 14 elevated viaducts, 6 underground tunnels, and 5 dedicated wildlife crossings. As part of the development of the South Coast Missing Linkages: A Linkage Design for the Tehachapi Connection (Penrod et al. 2003), South Coast Wildlands developed modeled least cost corridors (top 1 percent of movement habitat) for a number of focal species, including mountain lion. The mountain lion least cost corridor crosses the HSR alignment at a 2.37-mile-long underground tunnel segment, which would allow mountain lion to freely cross over the project unimpeded. As explained in Section 3.7, the project would facilitate wildlife movement and maintain existing genetic exchange between the Southern California/Central Coast ESU of mountain lion population and the Western Sierra Nevada population. Refer to Response to Comment 988-1255 for additional information regarding operations impacts.

988-1258

The commenter recommends analysis of intermittent maintenance activities on mountain lion subpopulations. The following language was added to Impact Bio #11 under Permanent Operation Impacts, which applies to the comment: The Authority developed specific wildlife movement impact avoidance and minimization features (WM-IAMF#1, 2, 3, 4, 5, and 6) as discussed in the WCA and listed in Section 3.7.4.2. The Authority has incorporated details of these measures into various BIO-IAMFs and the BIO-MMs, which are described in Sections 3.7.4.2 and 3.7.7.2, respectively. These wildlife movement IAMFs and mitigation measures include measures to reduce impacts by avoidance of impediments to movement, such as measures to reduce impacts from night lighting and noise, wildlife exclusion fencing, measures to reduce impacts from vehicle traffic, and restoration and revegetation plans to address impacts from construction and operation activities on special-status species and wildlife movement corridors.

Refer to Response to Comment 988-1256 and 988-1254, contained in this chapter.

Response to Submission 988 (Julie Vance, California Department of Fish and Wildlife, Region 4, April 12, 2021) - Continued

988-1259

The commenter recommends additional analysis related to vehicle strikes and gene-flow disruption regarding mountain lion. The project provides opportunities for wildlife to cross the project alignment utilizing a combination of elevated viaducts, underground tunnels, and dedicated wildlife crossings. The project includes 14 elevated sections and 6 underground segments within mountain lion range that provide opportunities for mountain lion to cross the alignment and maintain gene flow between the Sierra Nevada mountains and the southern California and central coastal ESU of mountain lion. The EIR/EIS identifies specific BIO-MMs, which are described in Section 3.7.7.2, to reduce impacts from operations and maintenance, including impacts to mountain lion. The IAMFs and mitigation measures include measures to reduce impacts by avoidance of impediments to movement, including measures to reduce impacts from night lighting and noise, wildlife exclusion fencing, measures to reduce impacts from vehicle traffic, and restoration and revegetation plans to address impacts from construction and operation activities on special-status species and wildlife movement corridors. Additional detail is provided in the BARTR and WCA.

Caltrans (2014) and TNC (2019) collected roadkill data on SR 58, which parallels the HSR project. Only one mountain lion roadkill (2019) was recorded during those two study periods at a location on SR 58, south of the César Chávez National Monument. As shown in the WCA, Appendix I of the BARTR, the number and spacing of crossing opportunities through viaducts, tunnels, and dedicated wildlife crossings reduces relative permeability for modeled mountain lion movement by only 1 percent across mountain lion species range. The 1 percent reduction in mountain lion permeability would not be considered a significant cumulative impact because of the number and spacing of crossing opportunities provided by the project.

988-1260

The commenter states certain mitigation measures and IAMFs lack measurable, quantifiable actions and are therefore unenforceable. The IAMFs have been developed by the Authority to ensure consistency across the HSR project. The mitigation measures identified in the comments are both enforceable and will be effective. As explained in the EIR/EIS, mitigation measures have been designed to work together to reduce or avoid impacts. IAMFs and mitigation measures as discussed in Section 3.7 of this Final EIR/EIS will be enforceable through the MMEP pursuant to NEPA. The MMEP is consistent with CEQA requirements for mitigation monitoring as set forth in Section 15097 of the CEQA Guidelines (Title 14 California Code of Regulations, Division 6, Chapter 3). The MMEP will identify responsible parties, timing of implementation, reporting criteria, and when the measure is complete. The MMEP will be considered for adoption at the time the Authority Board considers certification of the EIR and approval of the project. While the MMEP will be part of the Record of Decision issued pursuant to NEPA, all IAMFs and mitigation measures identified in this Final EIR/EIS will be included in the MMEP at project approval.

988-1261

The commenter states that the mountain lion core and patch habitat is not described or depicted in a figure in the RDEIR/SDEIS and that BIO-MM#53 is not described in Section 3.7.7 of the RDEIR/SDEIS.
Figure 12: Core Habitat for Mountain Lion Crossed by HSR is included on page 2-20 of the Wildlife Corridor Assessment Technical Report Supplement (Appendix I to the BARTR). BIO-MM#53: Prepare a Compensatory Mitigation Plan (CMP) for Species and Species Habitat is included in Section 3.7.7.2 of this Final EIR/EIS and was included in the Draft EIR/EIS but was not changed as a result of the new information about the monarch butterfly and Southern California and Central Coast mountain lion as candidate species under the Endangered Species Act, therefore, was not included in the RDEIR/SDEIS. BIO-MM#53 specifies the preparation of a comprehensive CMP, which will include maps and methods for compensatory mitigation on various special-status species, including the monarch butterfly and Southern California and Central Coast mountain lion.

Response to Submission 988 (Julie Vance, California Department of Fish and Wildlife, Region 4, April 12, 2021) - Continued

988-1262

The commenter recommends that the specifics that pertain to establish wildlife crossings for mountain lion in the Biological and Aquatic Resources Technical Report from the DEIR/EIS be included in this measure and states that the recommendations in the measure are not enforceable design requirements. BIO-MM#64 requires that the crossing must conform to the WCA unless different dimensions are specified in authorizations issued under CESA and ESA, and thus are enforceable requirements. The designated wildlife crossings will be designed consistent with Section 7.3.4 of the WCA, Appendix I in the BARTR, including:

· Conform to the Wildlife Crossing Structure Handbook Design and Evaluation in North America (Federal Highway Administration 2011 [identical to Clevenger and Huijser 2009 and Meese et al. 2009]), where practical;

· 10-foot-tall arches within mountain lion and mule deer species range;

· Limits culvert lengths;

· Slopes follow natural grades and contouring, less than 2 percent slope;

· Use natural substrate;

· Plant native vegetation at the opening at large crossing where light is available;

· Physical separation for dual use crossings;

· Use fencing and riprap to funnel wildlife toward crossing;

· Bridges will be wide enough to support riparian vegetation;

· Utilize artificial cover such as rock and pipes for refugia of reptiles and small animals; and

· Create escape structures for kit fox were appropriate.

In addition, the Authority will consult with CDFW and wildlife experts on the design of the dedicated wildlife crossings during the preparation of construction-level design.

988-1262

dedicated wildlife crossings during the preparation of construction-level design.

988-1263

The commenter is concerned with the overall practicability of the approach for preconstruction surveys under BIO-MM#84 and recommends buffers when dens are detected with kittens. BIO-MM#84 requires a minimum 2,000-foot non-disturbance buffer around any known or potential den until the Project Biologist can document and confirm that the den is not occupied. As required by BIO-MM#84, the Authority will consult with CDFW and mountain lion experts to develop survey protocols to effectively identify denning mountain lion and establish appropriate protective disturbance buffers and the appropriate duration to halt construction activities within the defined buffer areas.

988-1264

The commenter expresses concern regarding the proposed compensatory mitigation ratios in BIO-MM#85. As stated in BIO-MM#85, habitat would be replaced at a minimum ratio of 2:1 for permanent impacts on breeding/foraging habitat and high-priority foraging and dispersal habitat; the final ratio will be determined based on further consultation with CDFW as project design progresses. As discussed in the WCA, mountain lion connectivity across the HSR alignment is maintained through the series of elevated viaducts, underground tunnels, and dedicated wildlife crossings. These mitigation ratios are provided in addition to the connectivity maintained in the design.

Response to Submission 988 (Julie Vance, California Department of Fish and Wildlife, Region 4, April 12, 2021) - Continued

988-1265

The commenter recommends that there be measure(s) to avoid impacts if it is not feasible to implement the proposed measure BIO-MM#86. Nighttime lighting necessary during construction will be minimized and shielded to protect wildlife in adjacent wildlife habitat. BIO-MM#86 specifies numerous ways that nighttime lighting must be minimized if nighttime construction is necessary. Mitigation measures as identified in section 3.7.7 will be enforceable through the MMEP pursuant to NEPA. The MMEP is consistent with CEQA requirements for mitigation monitoring as set forth in Section 15097 of the CEQA Guidelines (Title 14 California Code of Regulations, Division 6, Chapter 3). The MMEP will identify responsible parties, timing of implementation, reporting criteria, and when the measure is complete. The MMEP will be considered for adoption at the time the Authority Board considers certification of the EIR and approval of the project. While the MMEP will be part of the Record of Decision issued pursuant to NEPA, all IAMFs and mitigation measures identified in this Final EIR/EIS will be included in the MMEP at project approval. In addition, refer to Response to Comment 789-341, contained in Chapter 25 of this Final EIR/EIS.

988-1266

The commenter suggests that the there are no assurances that BIO-MM#87 Implement Lighting Minimization Measures will be carried out, and questions whether it will effectively reduce operations-related lighting impacts to a less than significant level.

The adjacent Union Pacific Railroad utilizes the same FRA lighting requirements of 200,000 candelas and wildlife, including mountain lion, continue to utilize the area and cross the railroad tracks. BIO-MM#87 identifies measures that will be implemented to minimize the intensity and duration of operational lighting of permanent facilities, such as tunnels. As discussed in the California High-Speed Rail Design Criteria Manual (Authority 2019), lighting shall be provided in the tunnels, consistent with the California Building Standards Commission and the National Fire Protection Association requirements. During nighttime hours, lighting will be provided in the threshold zone (entrance to the tunnel) with illumination levels no greater than 10 lux (1 foot-candle), which is generally equivalent to the lighting provided in parking garages. As discussed in BIO-MM#87, nighttime lighting would be shielded to contain the lighting to the extent practicable.

This mitigation measure, and others as identified in Section 3.7.7, will be enforceable through the MMEP pursuant to NEPA. The MMEP is consistent with CEQA requirements for mitigation monitoring as set forth in Section 15097 of the CEQA Guidelines (Title 14 California Code of Regulations, Division 6, Chapter 3). The MMEP will identify responsible parties, timing of implementation, reporting criteria, and when the measure is complete. The MMEP will be considered for adoption at the time the Authority Board considers certification of the EIR and approval of the project. While the MMEP will be part of the Record of Decision issued pursuant to NEPA, all IAMFs and mitigation measures identified in this Final EIR/EIS will be included in the MMEP at project approval. In addition, please refer to Response to Comment 789-341, contained in Chapter 25 of this Final EIR/EIS.

Response to Submission 988 (Julie Vance, California Department of Fish and Wildlife, Region 4, April 12, 2021) - Continued

988-1267

The commenter does not agree with the conclusions in the cumulative impact analysis regarding mountain lion. The Southern California/Central Coast ESU mountain lion occurs within the Tehachapi Mountains and interfaces with the Western Sierra Nevada mountain lion population along SR 58. Within the mountain lion species range, genetic connectivity is maintained between these populations through the use of 14 elevated viaducts, 6 underground tunnels, and 5 dedicated wildlife crossings. As part of the development of the South Coast Missing Linkages: A Linkage Design for the Tehachapi Connection (Penrod et al. 2003), South Coast Wildlands developed modeled least cost corridors (top 1 percent of movement habitat) for a number of focal species, including mountain lion. The mountain lion least cost corridor crosses the HSR alignment at a 2.37 mile long underground tunnel segment, which would allow mountain lion to freely cross over the project unimpeded. Mountain lion will be able to cross portions of the HSR, specifically at the viaducts and tunnels during construction. By maintaining wildlife connectivity the project will maintain gene flow connectivity; therefore, no cumulative impacts will occur.

988-1268

The commenter states that the cumulative project list should include Xpress West high-speed train project. Appendix 3.19-A, Cumulative Project List, of this Final EIR/EIS provides a full list of cumulative projects analyzed in the Final EIR/EIS. The cumulative analysis considers all reasonably foreseeable projects within the resource study areas. A definition for reasonably foreseeable projects was included in Section 3.19.3.2, Identify Cumulative Projects and Regional Projections. It states that a project would be considered reasonably foreseeable if:

- The project is a foreseeable future phase of an existing project.
- Applications for project entitlements or construction are pending with a government agency (these projects may have been identified during interviews with regional and local planning agencies or may have been analyzed in a recent environmental document).
- The project is included in regional transportation plans; regional transportation improvement programs; local long-range transportation plans; local land use, general, and specific plans; or an agency's budget or capital improvement program.

Xpress West was not included in the cumulative project list because it is a proposed HSR system that would link Las Vegas to Victorville and is not in the vicinity of the Bakersfield to Palmdale Project Section. However, the High Desert Corridor train, which would link to the California HSR System in Palmdale is included as a reasonably foreseeable project in Appendix 3.19-A and the analysis in Section 3.19, Cumulative Impacts.

Refer to Response to Comment 988-1267, contained in this chapter, regarding cumulative impacts to mountain lion.

Response to Submission 988 (Julie Vance, California Department of Fish and Wildlife, Region 4, April 12, 2021) - Continued

988-1269

The commenter recommends that Section 3.7 include a discussion of the cumulative effects of the High Speed Rail, High Desert Corridor and Northwest 138 Corridor Improvement Plan on wildlife movement. The cumulative analysis is discussed in Section 3.19, Cumulative Analysis. The analysis in Section 3.7, Biological and Aquatic Resources, is focused on project-level impacts; therefore, a cumulative analysis of wildlife movement was not added to Section 3.7. As discussed in Section 3.19.5.7, High Desert Corridor and Northwest 138 Corridor Improvement Plan were considered in the cumulative impact analysis. Although cumulative development could interfere with wildlife movement, the Bakersfield to Palmdale section of the HSR includes IAMFs and mitigation measures to reduce impacts to wildlife corridors. In addition, the Authority is committed to constructing the elevated viaducts, underground tunnels, and dedicated wildlife crossings shown in the current project design. These areas will maintain wildlife connectivity and permeability and therefore would not result in a cumulative considerable contribution to cumulative impacts on wildlife corridors even with implementation of the High Desert Corridor and Northwest 138 Corridor Improvement Plan.

In addition, refer to Response to Comment 988-1262 and 988-1267, contained in this chapter.

988-1270

While this comment is not related to the new information about the monarch butterfly and Southern California and Central Coast mountain lion as candidate species under the Endangered Species Act, and new mitigation measures to address impacts to wildlife resulting from lighting during construction and project operation in the Revised Draft EIR/Supplemental Draft EIS, the Authority appreciates all comments and is responding in full here.

As discussed in responses to comments from CDFW on the Draft EIR/EIS (refer to Submission 781 in Chapter 21 of this Final EIR/EIS), Section 3.7.4.5 of this Final EIR/EIS discusses that botanical surveys and protected trees in the study area were identified based on the regulations summarized in Appendix B of the BARTR (Authority 2018c). When permission to enter was granted, surveyors classified trees into species groups such as oak trees or Joshua trees. In areas where permission to enter was not granted, survey crews mapped these protected trees and “unknown” trees using aerial photographic interpretation and ArcGIS software. To address information needs for areas where access was not granted, the Authority used habitat suitability models based on several databases, including the California Wildlife Habitat Relationship System, which assists in mapping habitat and land uses that are crossed with the species’ known geographic range to determine suitable habitats for special-status wildlife species. This system is a widely used tool, and its approach assumes the presence of special-status wildlife species in areas where suitable habitat occurs (as identified in the California Wildlife Habitat Relationship System or other published agency literature). The California Wildlife Habitat Relationship approach is widely used in California on large infrastructure projects and other projects where permission to enter is limited, and it provides a reasonable and consistent approach to the assessment of potential for wildlife presence. It provides a reasonable and conservative basis for estimating potential impacts. The net result of the analysis included a very conservative approach that overestimated impacts on special-status plant communities, including Joshua tree and oak tree woodlands. Impact BIO#3 of the Final EIR/EIS discusses the construction impacts on special-status plant communities, including oak woodland and Joshua tree woodland. As discussed under Impact BIO #3, the impact on sensitive plant communities under CEQA would be potentially significant during construction.

However, with implementation of BIO-MM#1, BIO-MM#6, BIO-MM#35, BIO-MM#47,

Response to Submission 988 (Julie Vance, California Department of Fish and Wildlife, Region 4, April 12, 2021) - Continued

988-1270

BIO-MM#50, BIO-MM#53, BIO-MM#54, BIO-MM#58, BIO-MM#61, and BIO- MM#75, impacts on sensitive plant communities would be reduced to a less-than-significant level.

BIO-MM#1 will enable HSR to establish revegetation goals within different vegetation communities including but not limited to oak woodland and Joshua tree, and BIO-MM#35 requires the project biologist to identify protected trees, including Joshua trees, prior to ground disturbing activities and establish environmentally sensitive area buffers around those trees. In addition, this measure commits the Authority to providing compensatory mitigation for impacts on protected trees, including impacts associated with removing or trimming a protected tree. Compensation will be based on requirements set out in applicable local government ordinances, policies, and regulations, with replacement ratios of 3:1 for native trees, 10:1 for heritage trees, or 1:1 for ornamental trees, unless higher ratios are required by local government ordinances or regulations. Additionally, refer to Response to Comment 967-1183, contained in Chapter 34 of this Final EIR/EIS.

The change in status of the Joshua tree was noted in the cover memo that accompanied the RDEIR/SDEIS and in the Final EIR/EIS. However, the change of status for Joshua tree did not require additional analysis as it was already covered in the Draft EIR/EIS.

988-1271

The commenter expresses concern that the viaduct locations could later be redesigned to be fenced at-grade and impermeable to wildlife. The Authority is committed to maintaining those area shown as elevated viaducts, underground tunnels, and dedicated wildlife crossings shown in the current project design. However, if any design changes are proposed by the Authority or its design contractors, these changes will be evaluated in an environmental reexamination under NEPA pursuant to Section 13.e of *FRA's 1999 Environmental Procedures for Considering Environmental Impacts* and under CEQA pursuant to Sections 15162-15164 of the CEQA Guidelines.

Refer to Responses to Comments 908-1038, contained in Chapter 33 of this Final EIR/EIS, 913-1049, 914-1053, 917-1071, and 917-1073, contained in Chapter 34 of this Final EIR/EIS, regarding impacts to wildlife movement and required crossings.

988-1272

The commenter expressed concern with using predictive models for the impact analysis. Refer to Response to Comment 781-626, contained in Chapter 21 of this Final EIR/EIS.

988-1273

While this comment is not related to the new information about the monarch butterfly and Southern California and Central Coast mountain lion as candidate species under the Endangered Species Act, and new mitigation measures to address impacts to wildlife resulting from lighting during construction and project operation in the Revised Draft EIR/Supplemental Draft EIS, the Authority appreciates all comments and is responding in full here.

The commenter notes that CDFW has jurisdiction over actions with potential to result in destruction of active nest sites or the unauthorized take of birds. Refer to Response to Comment 781-619, contained in Chapter 21 of this Final EIR/EIS.

Response to Submission 988 (Julie Vance, California Department of Fish and Wildlife, Region 4, April 12, 2021) - Continued

988-1274

While this comment is not related to the new information about the monarch butterfly and Southern California and Central Coast mountain lion as candidate species under the Endangered Species Act, and new mitigation measures to address impacts to wildlife resulting from lighting during construction and project operation in the Revised Draft EIR/Supplemental Draft EIS, the Authority appreciates all comments and is responding in full here.

The commenter notes that CDFW is responsible for providing biological expertise during public agency environmental review efforts, focusing specifically on project activities that have the potential to adversely affect fish and wildlife resources. As noted in Table 2-26 of this Final EIR/EIS, the Authority acknowledges that the proposed project will require permits issued by the State Water Resources Control Board and CDFW. The Authority acknowledges CDFW's role during the public agency environmental review effort.

988-1275

The commenter recommends consulting with the USFWS on potential impacts to federally listed species. As discussed in Section 3.7.8 of this Final EIR/EIS, a draft Biological Assessment was prepared and submitted to the USFWS for review prior to the publication of the Draft EIR/EIS for public review. The Authority submitted the Biological Assessment to the USFWS on April 28, 2020 and requested the initiation of formal Section 7 Consultation (an update was submitted in September 2020). The Authority submitted the Biological Assessment Supplement to the USFWS in May 2021. The Biological Assessment and Biological Assessment Supplement evaluate the potential adverse effects of the proposed action on species that are listed as endangered or threatened are proposed for listing as endangered or threatened, or that are candidates for listing as endangered or threatened under FESA, as well as designated or proposed critical habitats.

988-1276

The commenter discusses CEQA requirements and requests the reporting of species found during surveys to CNDDB for addition to the database. The Authority appreciates the provided information and will comply with CEQA policies and report biological data per the commenter's request.

988-1277

The commenter discusses the requirement of assessment of filing fees if biological impacts are determined. The Authority appreciates the provided information and will comply with applicable CDFW fee requirements.

988-1278

The commenter provides information regarding surveys and monitoring protocols available on the CDFW website. The Authority appreciates the provided information and will comply with surveys and monitoring protocols available on the CDFW website, as appropriate.

APPENDIX J
BIOLOGICAL RESOURCES ERRATA

PACIFIC ROCK QUARRY EXPANSION PROJECT
FINAL ENVIRONMENTAL IMPACT REPORT

BIOLOGICAL RESOURCES ERRATA

SECTION 3.5–BIOLOGICAL RESOURCES

The Biological Resources section of the EIR was initially circulated with the November 2020 Draft EIR (DEIR) for public review and comment. In consideration of comments received, the County made revisions with additional information and analysis to the DEIR Biological Resources section, and circulated the revised section for public review and comment in the October 2022 Partially Recirculated DEIR (PRDEIR). In consideration of comments on the 2022 PRDEIR, additional analysis and information has been assembled and is incorporated into this "Section 3.5 - Biological Resources Errata," prepared to accompany the Final EIR (FEIR). This Biological Resources Errata is a full reproduction of the Biological Resources section showing revisions made to the text of the PRDEIR Biological Resources section using underline format for added text and strikethrough format for deleted text and also includes three additional appendices (Appendix C-4, C-5, and C-6, each discussed herein). FEIR Chapter 3, "Revisions to DEIR and PRDEIR," summarizes the revisions (see Section 3.3, "Revisions to PRDEIR"). The revisions herein, including the additional appendices, do not identify new significant impacts and do not identify a substantial increase in the severity of previously identified significant impacts.

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 "Supplemental Technical Report Addressing Drainage Feature Width and Potential Mitigation Ratios for Impacts Resulting from the Pacific Rock Quarry Expansion Project (CUP 3817-3)" prepared by BRC (BRC, 2024) and included as Appendix C-4, the "Potential Impacts to Mountain Lion and Wildlife Movement Corridors for the Pacific Rock Quarry Expansion Project – LU10-0003 (CUP 3817-3)" technical memorandum prepared by ECORP Consulting, Inc. (ECORP, 2024) and included as Appendix C-5, and Appendix C-6, "Potential Impacts to Biological Resources Associated with Extending the Permit Duration from 30 to 60 Years for the Pacific Rock Quarry Expansion Project – LU10-0003 (CUP 3817-3)" (ECORP, 2025).

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.

[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.

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 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*

Common Name	Scientific Name
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*
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	

Common Name	Scientific Name
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*

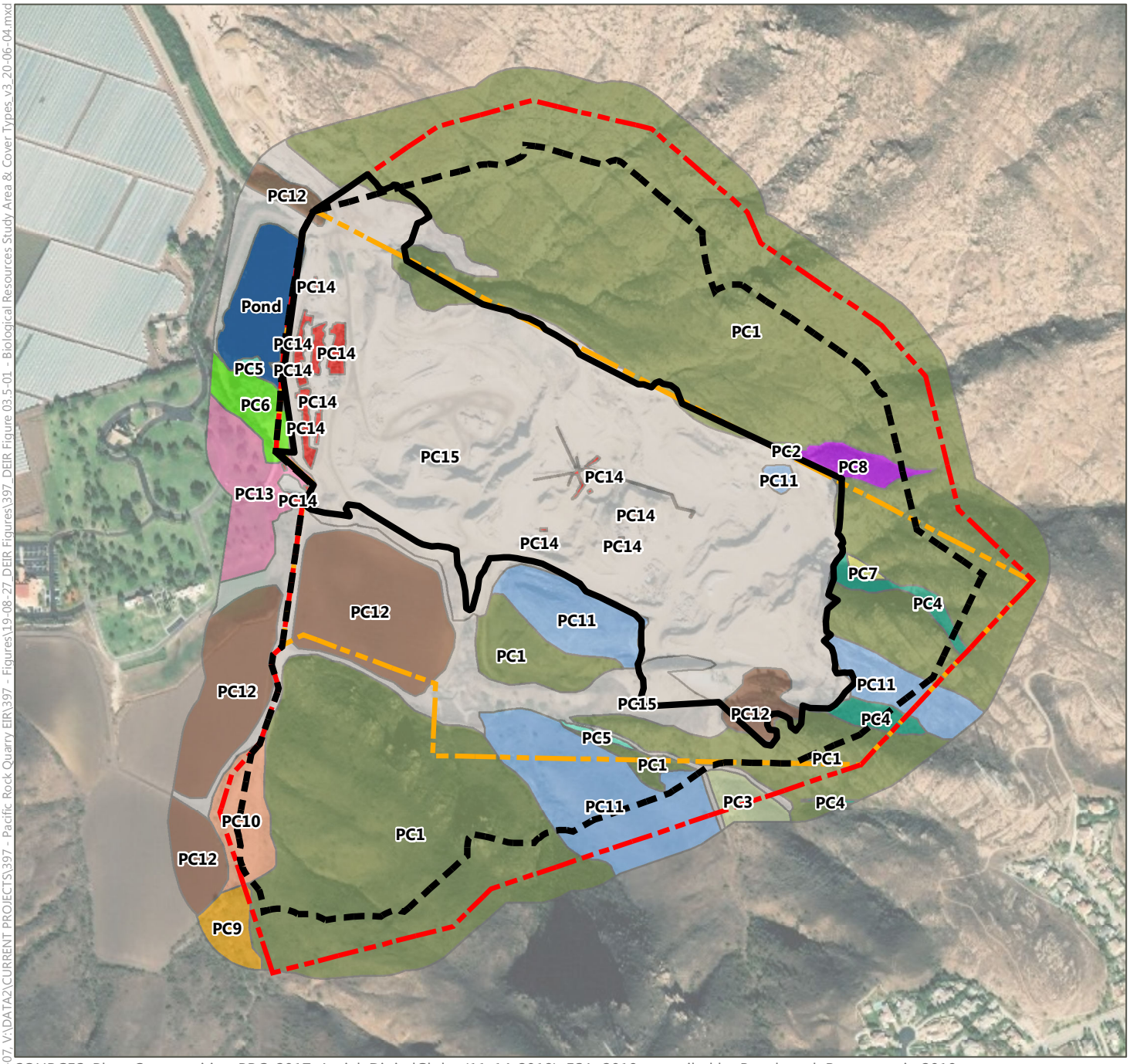
Sources: BRC, 2017; ESA, 2018.
Notes:
[1.] Observed flying over Project site and/or foraging in general area.

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 within a corridor that is located approximately 17 miles east of the Project site. 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.

The linkage design for the Santa Monica – Sierra Madre Connection was developed as part of the *South Coast Missing Linkages Project: A Linkage Design for the Santa Monica – Sierra Madre Connection* (Penrod et al 2006). As part of the missing linkages project, a landscape permeability analysis was conducted to identify the least cost movement corridors between the Santa Monica Mountains and Sierra Madre Range for mountain lion, mule deer, and American badger. The least cost corridor for mountain lion, or the most permeable path resulting from the analysis, captured habitat with a medium to high degree of suitability for mountain lions along their preferred travel routes as they move between the Santa Monica Mountains and the Sierra Madre Range. The least cost corridor varies in width from approximately 0.9 to 3.7 miles, and it extends from the Santa Monica Mountains, crosses the U.S. Highway 101 at Las Virgenes and Crummer Canyons to enter the Simi Hills, crosses the 118 Freeway at Santa Susana Pass, continues through Tapo and Salt Canyons in the Santa Susana Mountains, to the Santa Clara River, and through the areas near Piru Creek into the Sierra Madre Range. The Project site is not located within the Target Area of the Santa Monica Mountains and the Santa Monica – Sierra Madre Connection and the least cost corridor identified in the missing link project analysis is located approximately 17 miles to the east of the Project site, as shown in Figure 1 of FEIR Appendix C-5 (ECORP, 2024).

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 include "/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.



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

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

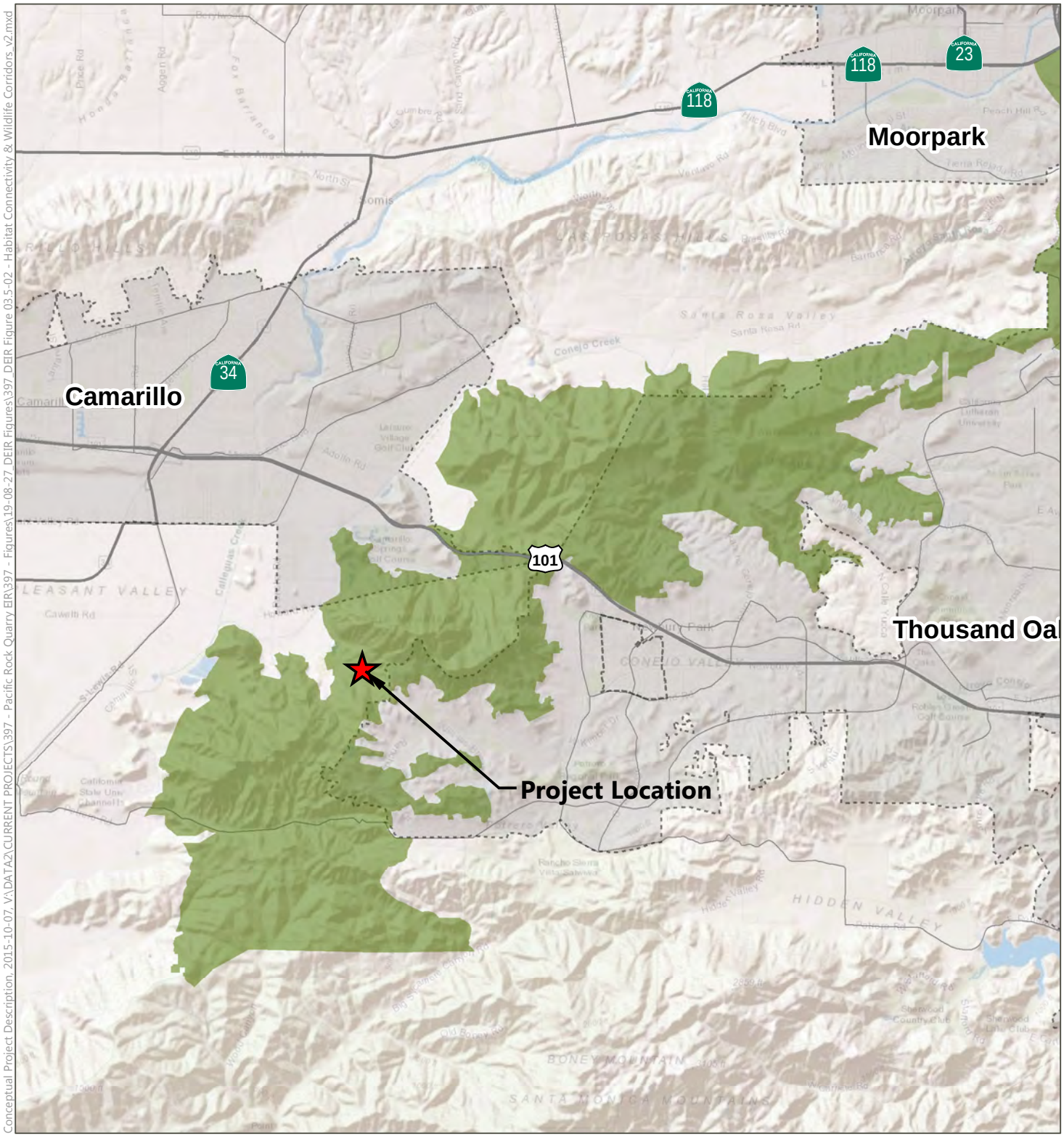
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Biological Resources Study Area and Cover Types
PACIFIC ROCK QUARRY EXPANSION PROJECT
Figure 3.5-1

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

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 within the area designated by the County as Habitat Connectivity and Wildlife Corridors Overlay Zone~~a habitat connectivity and wildlife corridor area~~. (Note that Figure 3.5-3 has been revised in this Biological Resources Errata to correct PRDEIR Figure 3.5-3 which inadvertently showed a boundary for the City of Thousand Oaks as overlying a portion of the Project site.) 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~~ is an approximately 1,500-foot-wide open space 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~~ open space corridor is within the County-designated Habitat Connectivity and Wildlife Corridors Overlay Zone and provides a connection between the Santa Monica Mountains and Conejo Mountain area. The open space corridor ~~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 open space corridor ~~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 Corridors Overlay Zone~~habitat connectivity and wildlife corridor~~, the 1,500-foot-wide open space corridor ~~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. The area consists of scattered rock outcroppings within Deerweed Scrub and Laurel Sumac Scrub habitats, and provides habitat for foraging, cover, and local and regional wildlife (including mountain lion) movement in a generally west-to-east direction (ECORP, 2024). 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

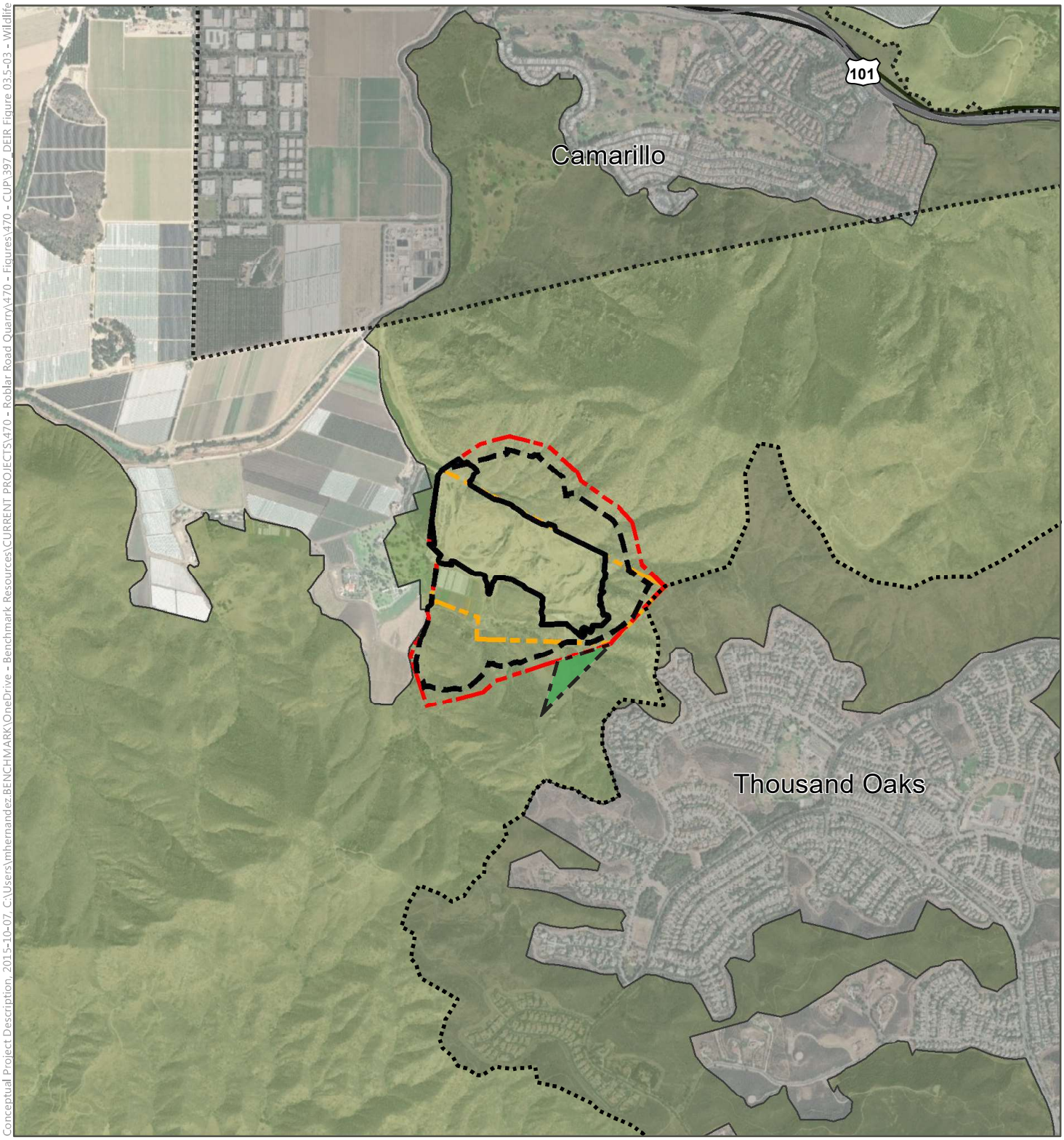
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0 0.75 1.5 3 Miles

Habitat Connectivity and Wildlife Corridors

PACIFIC ROCK QUARRY EXPANSION PROJECT

Figure 3.5-2



SOURCES: ESRI World Shaded Relief accessed May 2023, ESRI World Topographic Map accessed May 2023; ESRI World Streetmap, 2009; compiled by Benchmark Resources in 2023

- Existing Disturbance Area Boundary
- Proposed Mine Area Boundary
- Existing CUP Boundary
- Proposed CUP Boundary
- MM BIO-7(c) Wildlife Corridor Preservation Area
- 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

Conceptual Project Description, 2015-10-07, C:\Users\vhernandez.BENCHMARK\OneDrive - Benchmark Resources\CURRENT PROJECTS\470 - Roblar Road Quarry\470 - Figures\470 - CUP\397_DEIR Figure 03.5-03 - Wildlife Corridors

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 and Alliance	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 and Alliance	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 and Alliance	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.
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.

Common Name	Status	Habitat Description	Potential for Occurrence Within or Adjacent to the Project Site
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.
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.

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	FE, S1	Requires aquatic habitat with flowing waters.	**None.** No permanent water source suitable for steelhead on the Project

[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

Common Name	Status	Habitat Description	Potential for Occurrence Within or Adjacent to the Project Site
(*Oncorhynchus mykiss irideus*)			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.
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~~ CESAC (Status updated for FEIR to reflect Oct 2024 CDFW decision to identify as Candidate for CESA listing.)	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.

Common Name	Status	Habitat Description	Potential for Occurrence Within or Adjacent to the Project 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 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	SSC	Primarily roosts in mines and caves but also found roosting in buildings, bridges or other cavities including tree hollows.	**Low.** No cave or open mine shaft habitat is present on site. Roosting habitat may be found within hollow

Common Name	Status	Habitat Description	Potential for Occurrence Within or Adjacent to the Project Site
(Corynorhinus townsendii)		Occurs in a variety of habitats including coniferous forests, deserts, prairies, riparian habitats, agricultural areas, and coastal habitats.	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 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.
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

Common Name	Status	Habitat Description	Potential for Occurrence Within or Adjacent to the Project Site
			NPS GPS collared mountain lions (NPS, 2013). Approximately 74.42 acres of native vegetation communities present within the Project area may be considered suitable habitat that may be impacted by the Project.

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 the 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.

Table 3.5-6. Waters and Wetlands Summary

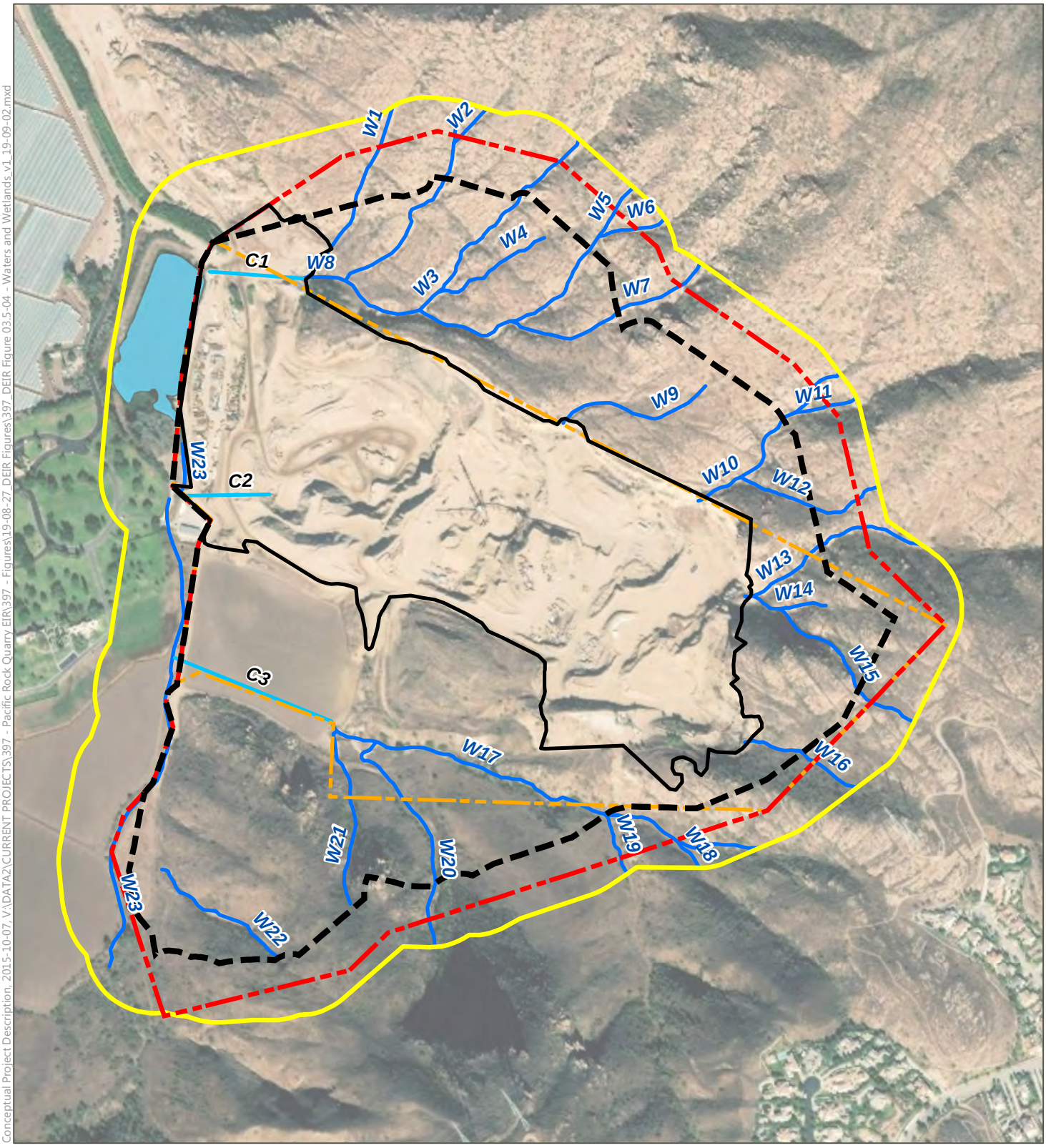
ID #	Water/Wetland Type	Drainage Size (length in feet or acreage where noted)	Hydrological Status	Primary Water Source	Habitat Conditions
W1	Ephemeral drainage	842	Dry	Precipitation, natural runoff	Ephemeral drainage contains healthy, moderately disturbed chaparral and few invasive species.
W2	Ephemeral 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.

ID #	Water/Wetland Type	Drainage Size (length in feet or acreage where noted)	Hydrological Status	Primary Water Source	Habitat Conditions
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.
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.

ID #	Water/Wetland Type	Drainage Size (length in feet or acreage where noted)	Hydrological Status	Primary Water Source	Habitat Conditions
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."
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.

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

Source: BRC, 2017.



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

Although a formal delineation has not been prepared for onsite drainages, BioResource Consultants prepared a letter report, "Supplemental Technical Report Addressing Drainage Feature Width and Potential Mitigation Ratios for Impacts Resulting from the Pacific Rock Quarry Expansion Project (CUP 3817-3)" (BRC, 2024), that was submitted to the County by the Applicant and is included as Appendix C-4 of the FEIR. Among other information, the BRC letter provides supplemental information related to the drainages that may be affected by the Project. BRC determined that the average width of the onsite drainages is conservatively expected to be approximately two feet, noting that portions of the drainages likely exhibit widths less than two feet and some may be slightly wider in places, but that an average width of two feet is considered a conservative estimate. Table 1 of the BRC letter (FEIR Appendix C-4) summarizes the approximate size of each of the drainage features observed onsite and is also presented below as Table 3.5-6b, "Drainage Feature Lengths, Approximate Widths, and Estimated Acreages." A shown in the table, based on BRC's evaluation, the observed drainage features encompass an area of approximately 0.91 acres within the proposed CUP boundary and approximately 0.68 acres of these drainage features are within the proposed mine disturbance area.

Table 3.5-7b. Drainage Feature Lengths, Approximate Widths, and Estimated Acreages

ID #	Length within Proposed CUP Boundary (feet) (per BRC's 2017 ISBA)	Estimated Average Width (feet)	Estimated Area within Proposed CUP Boundary (acres)	Length within Proposed Disturbance Area (feet)	Estimated Area within Proposed Disturbance Area (acres)
W1	842	2	0.0387	505	0.0232
W2	1,226	2	0.0563	981	0.0450
W3	1,062	2	0.0488	956	0.0439
W4	552	2	0.0253	552	0.0253
W5	829	2	0.0381	663	0.0304
W6	308	2	0.0141	0	0.0000
W7	980	2	0.0450	637	0.0292
W8	988	2	0.0454	988	0.0454
W9	714	2	0.0328	714	0.0328
W10	910	2	0.0418	683	0.0313
W11	322	2	0.0148	0	0.0000
W12	981	2	0.0450	638	0.0293
W13	894	2	0.0410	581	0.0267
W14	212	2	0.0097	212	0.0097
W15	946	2	0.0434	899	0.0413
W16	555	2	0.0255	444	0.0204
W17	2,046	2	0.0939	1841	0.0845
W18	154	2	0.0071	0	0.0000
W19	292	2	0.0134	15	0.0007
W20	1,070	2	0.0491	963	0.0442
W21	796	2	0.0365	796	0.0365
W22	678	2	0.0311	678	0.0311
W23	2,405	2	0.1104	962	0.0442

ID #	Length within Proposed CUP Boundary (feet) (per BRC's 2017 ISBA)	Estimated Average Width (feet)	Estimated Area within Proposed CUP Boundary (acres)	Length within Proposed Disturbance Area (feet)	Estimated Area within Proposed Disturbance Area (acres)
Total	19,762	NA	0.91	14,707	0.68
Source: BRC, 2024.					

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 3.5-8. 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 and are considered in the evaluation and significance determinations of Impact BIO-1 (for protected bird species) and Impact BIO-4 in Section 3.5.2.2:

- 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 and are considered in the evaluation and significance determinations of Impacts BIO-2 and BIO-3 in Section 3.5.2.2:

- 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 and are considered in the evaluation and significance determinations of Impact BIO-5 in Section 3.5.2.2:

- 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,

[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.

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 and are considered in the evaluation and significance determinations of Impact BIO-7 in Section 3.5.2.2:

- 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 3.5-9. 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

Plant Community	Status	Acres Impacted by Project	Percent of Total Project Area

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 74.42~~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~~ 60 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~~60-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 3.5-10. 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

Botanical Name	Common Name
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
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~~60-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 and receive Planning Division approval of 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 complying with this requirement shall be at a minimum of a 1:1 ratio for the 74.~~42~~~~23~~ acres of sensitive upland scrub vegetation communities that will be impacted by the Project. If protection cannot be feasibly accomplished adjacent to or in close proximity to the Project site, protection may be accomplished at another off-site location and/or at a State-approved mitigation bank. If accomplished at an off-site location and not at a State-approved mitigation bank, the ratio may be increased above 1:1 dependent upon the location, quality of habitat, and other relevant factors associated with the quality of the offsite location, with the specific ratio to be determined by the County as sufficient to achieve no net loss of habitat values and function. If accomplished at a State-approved mitigation bank, the ratio may be adjusted from 1:1 to another ratio deemed acceptable by the County and with supporting documentation providing evidence that the modified ratio in consideration of the location and quality of the mitigation bank. All such mitigation shall be sufficient to achieve no net loss of habitat values and function. 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. Upland scrub/grassland seed mix shall be sourced from a reputable native plant seed supplier and collected from the same general geographic region in which the Project is located.

~~5.~~6. 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.~~7. Scientific names of plants being used for restoration and enhancement, if applicable, including Genus and species and subspecies/variety.

~~7.~~8. Site preparation procedures for the restoration and enhancement with native plant species (i.e., container or seed), if applicable.

~~8.~~9. An irrigation and maintenance schedule if restoration and/or enhancement is conducted.

~~9.~~10. Identification of success criteria and performance standards by which to measure the success of the restoration and enhancement areas, if applicable.

~~10.~~11. Identification of appropriate reference sites if restoration and/or enhancement are implemented.

~~11.~~12. Measures to exclude unauthorized entry into the preservation areas.

~~12.~~13. Identification of responsible parties.

~~13.~~14. Adaptive management strategies.

~~14.~~15. Measures to exclude unauthorized entry into the mitigation areas.

~~15.~~16. Contingency measures to implement in the event that mitigation efforts are not successful.

~~16.~~17. Identification of responsible parties.

~~17.~~18. A five-year maintenance and monitoring program, including annual monitoring reports that shall be prepared and submitted to the Planning Division for review.

~~18.~~19. Measures for long-term maintenance and monitoring.

~~19.~~20. 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 <u>proposed</u> 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

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

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, 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

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

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~~60-year duration of the Project. The reclamation and revegetation will also be conducted incrementally over the ~~30~~ 60 years rather than waiting until the end of the ~~30~~60-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.

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.

[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).

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~~60-year duration of the Project. The reclamation and revegetation will also be conducted incrementally over the ~~30~~ 60 years rather than waiting until the end of the ~~30~~60-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 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). Additional detail regarding the presence of mountain lion and habitat functions of areas within and adjacent to the Project site are provided in the "Potential Impacts to Mountain Lion and Wildlife Movement Corridors for the Pacific Rock Quarry Expansion Project – LU10-0003 (CUP 3817-3)" technical memorandum (ECORP, 2024) included as Appendix C-5 of this FEIR.

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.

The Project would impact a total of 166.98 acres, including 74.42 acres of native plant communities that would be considered preferred by mountain lion and also including approximately 11.50 acres of non-native annual grasslands. The Project would reduce the width of the open space corridor adjacent to the site from approximately 1,500 feet to approximately 800 feet. As discussed in more detail in Appendix C-5, the reduced width of 800 feet would remain in excess of the 328-foot-wide minimum corridor design width recommended by Beier (1995) when a movement corridor spans a distance of less than 800 meters (2,625 feet). With the Project's reduction in the width of the open space corridor to 800 feet, the corridor width would still exceed the recommended minimum width of 328 feet. Mountain lion use of the corridor would be anticipated to continue and the mine expansion is not expected to substantially constrain or preclude mountain lion use or movement through the open space areas compared to baseline conditions. Additionally, revegetation of the mined areas following reclamation post-mining would include planting with woody vegetation and grassland species that would provide future cover and foraging habitat for mountain lions. Following all reclamation and revegetation activities, the 166.98 acres encompassed by the existing and expanded mining operations would provide open space habitat that will facilitate the movement and foraging activities of mountain lions. Although the Project would reduce the width of the existing open space corridor between the Project site and residences to the southeast during active mining, for the reasons summarized here and discussed in detail in Appendix C-5, the Project is not expected to substantially affect the ability for mountain lions to use the open space corridor for movement through the area. (ECORP, 2024) However, as discussed further at Impact BIO-7, Mitigation Measure MM BIO-7 is recommended to further minimize potential effects on wildlife, including mountain lion, utilizing the open space corridor.

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 open space ~~Santa Monica-Sierra Madre Connection~~ wildlife movement corridor adjacent to the Project site 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 3.5-11. 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.

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

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 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(h)(4) Movement Corridor Provisions: *Implement Mitigation Measure MM BIO-7 wildlife movement corridor provisions.*

MM BIO-4(h)(5) Noise Reduction Measures: *Implement Mitigation Measure MM NV-1 noise reduction provisions.*

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* *if required as a result of the delineation.*

Prior to new vegetation removal or new ground disturbing activities on the Project site for expansion of mining within the approved mine area boundary, ~~*T*~~*the Permittee shall prepare and obtain Planning Division approval of a Habitat Mitigation and Monitoring Plan (HMMP)* ~~*a compensatory mitigation plan*~~ *addressing temporary and permanent impacts to federal and/or state jurisdictional wetlands and waters, and riparian areas within the Project site* ~~*prior to disturbance*~~*. The* ~~*plan*~~ *HMMP shall be developed in consultation with the USACE, RWQCB, and*~~*/or*~~ *CDFW during the permitting process. The* ~~*plan*~~ *HMMP shall provide for avoidance of waters, wetlands, and riparian areas on the site to the extent feasible, and, for those waters, wetlands, and riparian areas on the site which cannot be avoided, the HMMP shall provide for protection of the mitigation lands at a minimum ratio of 1:1 (preserved:impacted) for direct and indirect permanent impacts of the Project to jurisdictional waters, wetlands, and riparian areas and as deemed sufficient to achieve no net loss of waters, wetlands, or riparian area habitat values. Whether onsite or offsite, mitigation lands shall be protected in perpetuity with a non-wasting endowment to provide funding for long-term management under a conservation easement dedicated to a local land conservancy or other appropriate entity approved to hold and manage mitigation lands. 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*~~ *the Planning Division's approval of the HMMP. Conservation easement(s) and*

endowment funding specified in the HMMP shall be sufficient to fund a minimum of 10 years of initial restoration and maintenance, and the easement(s) shall be fully acquired, established, transferred, or otherwise executed prior to Project-related ground-disturbing activities prior to Project-related site disturbance. 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~~ HMMP 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 3.5-12. 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 within the open space corridor adjacent to the Project site~~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 open space corridor ~~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. The County-designated Habitat Connectivity and Wildlife Corridor Overlay Zone (as discussed in Section 3.5.1.4) encompasses the Project Site, the areas around the Project Site, and an approximately 1,500-foot-wide open space corridor to the southeast of the existing mining disturbance areas, between the existing disturbance areas of the quarry and residential development to the southeast. This portion of the open space 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 habitat for foraging, cover, and local and regional wildlife (including mountain lion) movement.

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~~ open space corridor 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 within the open space corridor ~~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~~ Mitigation Measures MM BIO-7(a) and MM BIO-7(b) contain~~ing~~ specific provisions for minimizing potential effects of light and glare (MM BIO-7(a)) and fencing (MM BIO-7(b)) on wildlife movement adjacent to planned mining areas and for compliance with County zoning code Section 8104-7.7. Additionally, Mitigation Measure MM BIO-7(c) requires establishment of an approximately 6.7-acre wildlife corridor preservation area (WCPA) between the southern edge of the Project's proposed CUP boundary and existing preserved lands owned by Mountains Recreation and Conservation Authority (MRCA), as shown on Figure 3.5-3 and in more detail on Figure 6 in Appendix

C-5. The WCPA is within APN 234-0-060-220, which is owned by the Applicant. With establishment of the WCPA, the Project would still reduce the narrowest portion of the open space corridor southeast of the Project site to 800 feet in width, however, the WCPA would ensure that the corridor to the southwest of the Project impact area maintains a permanent width of no less than 1,100 feet when combined with the MRCA preserved lands. See pages 18-20 of FEIR Appendix C-5 for additional detail and rationale for the WCPA.

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 Corridor Preservation~~Passage~~ Areas: *The Permittee shall mitigate the Project's potentially significant environmental impacts to wildlife migration corridors through establishment and maintenance of a wildlife corridor preservation area ~~passage (WP~~WCPA), as specified herein. The ~~WP~~WCPA shall be established for the 6.7-acre portion of APN 234-0-060-220 shown generally on FEIR Figure 3.5-3 and more specifically on Figure 6 of FEIR Appendix C-5 ~~include areas~~and shall be held under ~~common~~ ownership by the Permittee or ~~held by~~ a conservation group with County approval.*

~~In these areas~~Within the WCPA, 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 WCPA~~WP area~~.

The Permittee shall prepare a legal description and map of the WCPA ~~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 WCPA ~~WP areas must~~ shall be depicted on all site plans for any future development that may be proposed on the parcel within which the WCPA is located~~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 associated with the Project.

The Planning Division will maintain~~s~~ 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 WCPA ~~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."

APPENDIX C-4
DRAINAGE CALCULATIONS

BRC
BioResource Consultants Inc.
PO Box 1539, Ojai, CA 93023 805.646.9006

May 31, 2024

Ms. Susan Curtis
Ventura County Planning Division
800 South Victoria Avenue
Ventura, CA 93009

Re: Supplemental Technical Report Addressing Drainage Feature Width and Potential Mitigation Ratios for Impacts Resulting from the Pacific Rock Quarry Expansion Project (CUP 3817-3)

Dear: Ms. Curtis,

The purpose of this letter is to provide supplemental technical information related to the drainages that may be affected by the Pacific Rock Quarry Expansion Project (Project) and the mitigation ratios that may be required by the resource agencies to compensate for impacts to the drainages. BioResource Consultants Inc. (BRC) conducted biological surveys within the Project site in 2016 and during those surveys, twenty-three drainage features were identified that could be impacted by the Project. The results of the surveys are included in the Initial Study Biological Assessment (ISBA) Report for the Project that was prepared by BRC in 2017. A formal aquatic resources delineation (ARD) of the drainages, which would identify the types and sizes of drainages present as well as the acres of areas that would fall under the jurisdiction of the U.S. Army Corps of Engineers (USACE), California Department of Fish and Wildlife (CDFW), and Regional Water Quality Control Board and could potentially be impacted by the Project, was not conducted at that time. A formal ARD will be required prior to submitting applications for permits from the resource agencies, and through discussions and negotiations with the resource agencies, the amount of compensatory mitigation and the mitigation ratio for impacts to the drainage features will be determined.

Drainage Features Description

Section 3.5.1.7 in both the DEIR and PRDEIR describes the locations and sizes of the drainage features and their indirect connection via an offsite swale to Conejo Creek. Table 3.5-5 in the Draft Environmental Impact Report (DEIR) and Table 3.5-6 in the Partially Recirculated Draft Environmental Impact Report (PRDEIR) both identify the drainages by number, identify the waters or wetland type, the drainage size (length in feet or acreage where noted), hydrological status, primary water source, and habitat conditions. Under Impact BIO-4 in the DEIR (pages 3.5-49 and 3.5-50) and Impact BIO-5 in the PRDEIR (pages 3.5-70 through 3.5-72), the potential for indirect and direct impacts to the drainage features was identified and a mitigation measure (MM BIO-4 in the DEIR and MM BIO-5 in the PRDEIR) was included that is designed to reduce the impacts to less than significant. The mitigation measure requires that an ARD be conducted by a qualified wetland scientist in the year prior to Project implementation to determine the extent of jurisdiction present and the extent to which the Project footprint affects

jurisdictional resources. In addition, the mitigation measure requires the Permittee to submit applications to and acquire permits from the USACE, CDFW, and RWQCB prior to Project implementation. The mitigation measure also requires the preparation of a compensatory mitigation plan that provides for the protection of mitigation lands in perpetuity at either an onsite or offsite location or at an approved mitigation bank. The proposed compensatory mitigation is required to be agreed upon with the USACE, CDFW, and RWQCB prior to agency approval of the compensatory mitigation plan.

As stated in the previous paragraph, the DEIR and PRDEIR both identified the number of drainage features and the length of those features that could potentially be impacted by the Project. The acreage of the impacts was not included in either the DEIR or PRDEIR because the formal ARD had not been conducted at the time the documents were prepared. In response to a comment from the CDFW on the DEIR, BRC conducted a subsequent assessment of the approximate widths of the drainages to address the potential acreage of impacts to these drainages. The assessment included reviewing the results of the 2016 field survey in BRC's ISBA and also conducting a desktop review of the drainages in 2023.

The subsequent assessment verified the presence of the twenty-three unnamed drainage features described in the DEIR and PRDEIR. Twenty-two of the drainages are typical of narrow ephemeral drainages with rocky bottoms that flow down steep slopes vegetated with chaparral and coastal sage scrub plant species. The ephemeral drainages, which only flow during storm events and collect runoff from the adjacent slopes, are vegetated with upland vegetation and do not support riparian vegetation. Standing or flowing water was not observed in the ephemeral drainages during the 2016 surveys for the ISBA or during rare plant surveys conducted on the Project site in 2023.

One of the drainages identified in the ISBA, which was labeled as W17, was described as an intermittent drainage with moderately disturbed sumac scrub containing a small section of cattail marsh habitat within the bed and bank. The drainage was noted as moderately disturbed with few invasive species. The primary water sources for this drainage were described as annual spring, precipitation, groundwater, and natural and agricultural runoff. Ephemeral drainage features W18 through W21 serve as tributaries to drainage feature W17.

Based on aerial review of the drainages and onsite observation of the drainages in 2016 and during the 2023 rare plant surveys, combined with BRC's experience conducting aquatic resources delineations of Waters of the U.S. and Waters of the State in the region within similar vegetation communities and topography, BRC determined that the average width of the onsite drainages is conservatively expected to be approximately two feet. Portions of the observed drainages likely exhibit widths less than the selected average of 2-feet and some may be slightly wider in places, but an average width of 2-feet is considered a conservative estimate. Table 1 summarizes the approximate size of each of the drainage features observed onsite. Based upon BRC's evaluation, the observed drainage features encompass an area of approximately 0.91 acres within the proposed CUP boundary and approximately 0.68 acres of these drainage features are within the proposed mine disturbance area. The actual acreage of the drainage features impacted by the Project will be determined during the ARD required by MM BIO-5 in the FEIR.

Table 1. Observed Drainage Feature Lengths, Approximate Widths, and Estimated Acreages

ID #	Length within Proposed CUP Boundary (feet) (per BRC's 2017 ISBA)	Estimated Average Width (feet)	Estimated Area within Proposed CUP Boundary (acres)	Length within Proposed Disturbance Area (feet)	Estimated Area within Proposed Disturbance Area (acres)
W1	842	2	0.0387	505	0.0232
W2	1,226	2	0.0563	981	0.0450
W3	1,062	2	0.0488	956	0.0439
W4	552	2	0.0253	552	0.0253
W5	829	2	0.0381	663	0.0304
W6	308	2	0.0141	0	0.0000
W7	980	2	0.0450	637	0.0292
W8	988	2	0.0454	988	0.0454
W9	714	2	0.0328	714	0.0328
W10	910	2	0.0418	683	0.0313
W11	322	2	0.0148	0	0.0000
W12	981	2	0.0450	638	0.0293
W13	894	2	0.0410	581	0.0267
W14	212	2	0.0097	212	0.0097
W15	946	2	0.0434	899	0.0413
W16	555	2	0.0255	444	0.0204
W17	2,046	2	0.0939	1841	0.0845
W18	154	2	0.0071	0	0.0000
W19	292	2	0.0134	15	0.0007
W20	1,070	2	0.0491	963	0.0442
W21	796	2	0.0365	796	0.0365
W22	678	2	0.0311	678	0.0311
W23	2,405	2	0.1104	962	0.0442
Total	**19,762**	**N/A**	**0.91**	**14,707**	**0.68**

Potential Mitigation Ratio Information

Consistent with BRC's recommendations in the 2017 ISBA, as well as Mitigation Measure BIO-5 described in the County's DEIR and PRDEIR, a formal ARD shall be completed and submitted to the County. In addition, the Permittee shall submit permit applications to the USACE, CDFW, and RWQCB prior to any new ground disturbance to formally confirm the size of each drainage and the acreage of jurisdictional areas affected by the Project. The Permittee shall also be required to 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 and the compensatory mitigation, whether it is implemented onsite, at an offsite location, or in a USACE-or CDFW-approved mitigation bank, shall be agreed upon with the USACE, RWQCB, and CDFW prior to plan approval.

The amount of compensatory mitigation and associated mitigation ratio required to offset the impacts of the Project will be determined by the USACE, RWQCB, and CDFW and it may vary based on the factors listed below and others that the agencies may also consider;

- types of impacts (e.g., direct or indirect and temporary or permanent),
- amounts of jurisdictional wetlands or Waters of the U.S. affected,
- types of habitats affected,
- methods of compensatory mitigation proposed (e.g., creation, restoration, rehabilitation, enhancement, or preservation), and
- location of the compensatory mitigation (e.g., onsite, offsite and adjacent to the impact area, offsite location, or approved mitigation bank).

Stating a required mitigation ratio in an EIR is speculative because the ratio will be determined by the resource agencies during the permitting process. If the EIR states that a compensatory mitigation ratio of at least a 1:1 ratio is required to compensate for the Project impacts, then this will ensure no net loss of wetlands, waters, or habitat values resulting from the Project. When the agencies determine an overall mitigation ratio, they may assign different ratios to the types of impacts.

An example of varying mitigation ratios can be found in the Responses to Comments for Recirculated Portions of the Final Environmental Impact Report and Mitigation Monitoring and Reporting Program (RFEIR) for the Devil's Gate Reservoir Sediment Removal and Management Project (ECORP 2017) and the subsequent Lake or Streambed Alteration Agreement issued by the CDFW (CDFW 2018). In the RFEIR, the mitigation measure for impacts to riparian habitat, sensitive natural communities, and jurisdictional waters (MM BIO-8) required that the Los Angeles County Flood Control District implement a combination of onsite and offsite habitat restoration, enhancement, and exotic plant removal at a 1:1 ratio to compensate for the impacts of the project. The subsequent permit issued by the CDFW required a mitigation ratio of 1:1 for temporary impacts, creation and restoration of riparian woodland at a 2.41:1 ratio for impacts to riparian woodland, and creation and restoration of mule fat scrub at a 1.60:1 ratio for impacts to

mule fat scrub. The overall compensatory mitigation ratio for the permanent impacts of the project was 1.66:1. The varying mitigation ratios for permanent impacts depended on the types of habitats affected by the project. Similarly, the USACE issued a 404 permit for the project that required a compensatory mitigation ratio of 1.21:1 for impacts to wetlands and Waters of the U.S. that fell under the jurisdiction of the USACE. The RWQCB issued a Clean Water Act Section 401 Water Quality Certification and Order for the Devil's Gate project that required a 3:1 mitigation ratio for impacts to Waters of the State. Even though MM BIO-8 in the RFEIR for the Devil's Gate Project stated a 1:1 mitigation ratio was required for impacts to riparian habitat, sensitive natural communities, and jurisdictional waters, the overall mitigation ratios required by the CDFW, USACE, and RWQCB were higher than 1:1 and each of the three agencies required different mitigation ratios based on the specific impacts to resources under their respective jurisdictions.

As stated previously, the impacts to areas under the jurisdiction of the USACE, RWQCB, and CDFW resulting from the Project will be determined through the implementation of an ARD. During the permitting process with each of the three agencies, the mitigation ratio required by each agency will be determined. The ratios are expected to be at least 1:1, they may be higher than 1:1, and they may vary between the resource agencies based on the impacts to the resources that fall under the jurisdiction of each agency.

Please let me know if you have any questions.

Sincerely,



Stephen Jones

BioResource Consultants, Inc., Senior Biologist

References:

California Department of Fish and Wildlife, Region 5. 2018. Devil's Gate Reservoir Sediment Removal and Management Project. Amendment of Streambed Alteration Agreement Notification No. 1600-2015-0263-R5.

ECORP Consulting, Inc. 2017. Responses to Comments for Recirculated Portions of Final Environmental Impact Report and Mitigation and Monitoring and Reporting Program. Devil's Gate Reservoir Sediment Removal and Management Project, Pasadena, CA (Los Angeles County). Prepared for Los Angeles County Flood Control District.

APPENDIX C-5
MOUNTAIN LION TECHNICAL MEMORANDUM

MEMORANDUM

TO: Mr. John Hecht, Sespe Consulting, Inc.

FROM: Mari Quillman

DATE: August 26, 2024

RE: **Potential Impacts to Mountain Lion and Wildlife Movement Corridors for the Pacific Rock Quarry Expansion Project – LU10-0003 (CUP 3817-3)**

This technical memorandum provides information related to the potential impacts to mountain lion (also known as cougar) and to wildlife movement through the open space corridor adjacent to the Pacific Rock Quarry Expansion Project (Project) in Ventura County, California. I am a professional wildlife biologist with over 35 years of experience performing biological resources studies in California. My resume is included as Appendix A. I have site-specific knowledge of the existing operation and conditions in and adjacent to the Project Site. I have reviewed the environmental documents, supporting studies, and public and agency comments on the Project. This memorandum provides an overview of the Project, summarizes the Ventura County environmental review process to date, and provides input and analysis of issues raised in public and agency comments pertaining to potential impacts of the Project on mountain lion (*Puma concolor*) and wildlife movement corridors.

In summary, this memorandum concludes that the impact analysis and conclusions presented in the 2020 Draft Environmental Impact Report (DEIR) and with revisions to the DEIR Biological Resources section circulated in the 2022 Partial Recirculated Draft Environmental Impact Report (PRDEIR) as they pertain to mountain lion and wildlife movement through the adjacent natural open space corridor provides substantial evidence that, with implementation of mitigation measures identified in the DEIR and PRDEIR, the Project would not result in significant impacts to mountain lion or the ability of wildlife to move through the open space corridor adjacent to the Project Site. As summarized and amplified here, the analysis properly concludes that:

1. the width of the natural open space corridor east of the Project Site would be reduced as a result of the Project, but the resulting 800-foot (minimum) width would remain sufficient for mountain lion movement and use;

2. vegetation within the natural open space corridor provides suitable cover for mountain lion movement and use;

3. the Project's reduction in the width of the adjacent open space corridor would not adversely affect genetic diversity in the mountain lion population;

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4. the Project would not adversely affect mountain lion reproduction or natal dens; and

5. the Project would not result in significant impacts to mountain lion associated with lighting, vehicle operation, noise, vibration, or rodenticides.

1.0 PROJECT OVERVIEW AND ENVIRONMENTAL REVIEW BACKGROUND

The Pacific Rock Quarry is located approximately 1.5 miles east of Lewis Road and approximately two miles south of U.S. Highway 101 off a private road (Howard Road) in unincorporated Ventura County. The Project is a proposal by the mine operator, requesting entitlements from Ventura County, that would modify the existing conditional use permit (CUP) to extend the life of the existing permitted operations for an additional 30 years, expand the mining area, extend the operational days for certain activities 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, allow operation of 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. The existing facility is an active quarry that supplies large rock for the production of riprap and various sizes of crushed rock and aggregate to public works and private projects in Ventura County. The request includes expansion of the mining area to the east to address slope conditions at the northerly and northeasterly side of the quarry and expansion onto recently acquired adjacent land. Under the Project, mining methods would continue as they currently occur today at the existing quarry, including blasting to loosen the hard rock material and various processing methods.

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 (DEIR) that described and evaluated the Proposed Project. Following public review of the DEIR, Ventura County determined that revisions to DEIR Section 3.5, "Biological Resources," were necessary and that the revisions warranted recirculation to the "Biological Resources" section for public review pursuant to Public Resources Code (PRC) Section 21092.1 and CEQA Guidelines Section 15088.5. Ventura County then prepared and circulated for public review between October 26 and December 9, 2022, a Partial Recirculated Draft EIR (PRDEIR) containing the revised Biological Resources section. ECORP Consulting, Inc. (ECORP) understands that the County is preparing a Final EIR (FEIR) that will include responses to comments received for the DEIR and the PRDEIR. The comments were provided to ECORP for review and this memorandum was prepared by ECORP to provide supplemental information and additional context related to certain comments raised during the public comment period(s) for the County's consideration in preparing the FEIR.

The DEIR and PRDEIR used information from various supporting technical reports and other documents, including an Initial Study Biological Assessment (ISBA) that was prepared for the Project (BioResource Consultants, Inc. [BRC] 2017). The ISBA was included as Appendix C-1 of the DEIR and the PRDEIR. When the ISBA was prepared, mountain lion (*Puma concolor*) was not considered a protected species and the ISBA did not address potential impacts to mountain lion. The ISBA did provide an evaluation of potential Project impacts associated with habitat connectivity and migration corridors, identifying that the Project would reduce the area of the existing wildlife movement area known as the Santa Monica - Sierra Madre

Connection and would narrow the corridor between the existing quarry and residential development to the east. The ISBA (PRDEIR, Appendix C-1, ISBA page 47) concluded that, "Although the implementation of the Project may reduce available habitat for wildlife in the Santa Monica-Sierra Madre Connection, the Project is not expected to be significant being that wildlife movement through the area will not be impeded.".

On April 21, 2020, the California Department of Fish and Wildlife (CDFW) designated the Southern California/Central Coast Evolutionary Significant Unit (ESU) as a *Candidate* for listing as Threatened or Endangered under the California Endangered Species Act (CESA). Although not addressed in the ISBA (which was prepared prior to the Candidate status determination), the DEIR and the PRDEIR (both of which were prepared subsequent to the Candidate status determination) identified the mountain lion's Candidate status and provided analysis of potential impacts of the Project on mountain lion, including mountain lion movement within the Project Site and adjacent areas designated by Ventura County as the Habitat Connectivity and Wildlife Corridor Overlay.

The PRDEIR was prepared and recirculated for additional public/agency review and included substantially expanded discussion of mountain lion in terms of existing conditions and potential direct and indirect Project impacts. The PRDEIR included revising the discussion of data of known mountain lion occurrences and identified mountain lion as "present" within and adjacent to the Project Site, expanded the discussion of impacts associated with the reduced width of the open space corridor in the site vicinity, and expanded the discussion of potential impacts associated with Project activities, lighting, vehicle movement, noise, vibration, and other factors. The PRDEIR also provided expanded and enhanced mitigation measures for potential impacts to mountain lion and the ability of wildlife to move through the open space corridor east of the Project Site.

The information in this technical memorandum further discusses the presence of mountain lion on and in the vicinity of the Project Site and discusses the potential impacts of the Project on mountain lion and on mountain lion movement through the open space corridor adjacent to the Project Site. Although this technical memorandum provides enhanced discussion and substantiation, the information presented herein does not identify significant new information indicating the Project would result in a new significant impact or a substantial increase in the severity of a previously identified significant impact beyond those disclosed in the DEIR and PRDEIR. Instead, the findings in this memorandum further support the conclusions previously presented within the DEIR and PRDEIR, specifically that the Project's potential impacts to mountain lion would be reduced to less than significant with mitigation measures identified in the PRDEIR, while also recommending that the County consider nominal modifications to certain PRDEIR mitigation measures to further strengthen their efficacy.

2.0 WILDLIFE MOVEMENT CORRIDORS AND MOUNTAIN LION OCCURRENCE

2.1 Wildlife Movement Corridors

The Project Site is in unincorporated Ventura County southwest of the city of Camarillo, approximately 1.5 miles southwest of U.S. Highway 101, and is bordered by Conejo Mountain Memorial Park and agricultural lands to the west. Residential development is located to the southeast of the Project Site and undeveloped open space areas are present to the north, east, and south of the Project.

As discussed in the PRDEIR (Section 3.5.1.4, page 3.5-6), 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 the Habitat Connectivity and Wildlife Corridors Overlay Zone 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 include "HCWC" in the zoning classification indicating their inclusion in the overlay zone. Both 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 parcels adjacent to the Project parcels to add the HCWC classification. The County's designation applies to the Project Site, including the existing Pacific Rock Quarry and the proposed expansion area, as shown on Figure 3.5-3 in the PRDEIR (Section 3.5-6, page3.5-8), Wildlife Corridors in the Project Vicinity, of the PRDEIR. However, the parcels are not located within the County's Critical Wildlife Passage Overlay Zone.

The County-designated Habitat Connectivity and Wildlife Corridor Overlay encompasses the Project Site, the areas around the Project Site, and an approximately 1,500-foot-wide open space corridor to the southeast of the existing Pacific Rock Quarry disturbance areas, between the existing disturbance areas of the quarry and residential development to the southeast. As discussed in the PRDEIR under Impact BIO-7 (page 3.5-75), this portion of the open space 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 habitat for foraging, cover, and local and regional wildlife (including mountain lion) movement in a generally west-to-east direction.

The County's Habitat Connectivity and Wildlife Corridors Overlay Zone was based on the linkage design for the Santa Monica – Sierra Madre Connection, which was identified in South Coast Missing Linkages: A Wildland Network for the South Coast Ecoregion (South Coast Wildlands 2008). The document summarized the efforts to identify the important wildlife linkages throughout the South Coast Ecoregion. The Santa Monica-Sierra Madre Connection is described in the South Coast Wildlands document (2008) as:

> This linkage 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 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 linkage currently enjoying some level of conservation protection. The linkage is comprised 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 species and ecosystem functions.

For most species, U.S. Highway 101 and State Routes (SR) 23, 118, and 126 are the most obvious barriers between core reserves in the Santa Monica and Sierra Madre mountains, while Interstate 5 (I-5) and SR-14 impede movement between the Santa Susana and San Gabriel Mountains. The U.S. Highway 101 Freeway is the most substantial impediment to movement. Several existing structures facilitate various levels of animal movement across these freeways.

Liberty Canyon was delineated by the landscape permeability analysis for mule deer, but also provides connectivity for species such as mountain lion and badger. Much research has been done to document the importance of this connection to wildlife (Soulé 1989, Kohn et al. 1999, Edelman 1991, Sauvajot et al. 2000, Allen 2001, Riley et al. 2003, Ng et al. 2004, Riley et al. 2006a). The existing bridge is regularly utilized by deer, coyotes, and raccoons (Ng et al. 2004). The National Park Service is working with Caltrans to provide a wildlife-specific crossing structure at this location, either a bridged underpass or an overpass, to prevent colocation of vehicle traffic and animal movement options (the current situation). Habitat restoration is also recommended, as well as fencing to direct animals towards the structure.

A variety of wildlife has been documented using the bridge at Alamos Canyon, including mountain lion, bobcat, coyote mule deer, striped skunk, raccoon, small mammals and birds (Ng 2000, Psomas 2002, LSA 2004). This bridge should be maintained, and if the existing road is not needed for vehicular access for maintenance purposes, we suggest removal of the pavement and habitat restoration. We advise conservation of contiguous natural habitats between Happy Camp Canyon Park and protected areas in the Simi Hills and Tierra Rejada Valley.

Rocky Peak is in the eastern strand of the linkage and was delineated by the least cost corridor analyses for mountain lion, badger, and mule deer, but also provides habitat for virtually every other focal species modeled. Several protected areas occur here, including Rocky Peak, Santa Susana State Historic, and Corriganville parks. This roadway overpass (roughly 60 feet wide and 130 feet long) connects Santa Susana State Historic Park south of SR-118, with Rocky Peak Park to the north. Mule deer, coyote, bobcat, raccoon, and skunk have been recorded utilizing this structure. The existing bridge could be converted to a vegetated land bridge, with native shrubs and trees tall enough to block lighting and reduce noise from traffic. One lane could be decomposed granite for emergency vehicle access.

Caltrans is working with the National Park Service to monitor wildlife movement at several culverts under SR- 23. Proposed improvements include clearing tunnels and culverts and

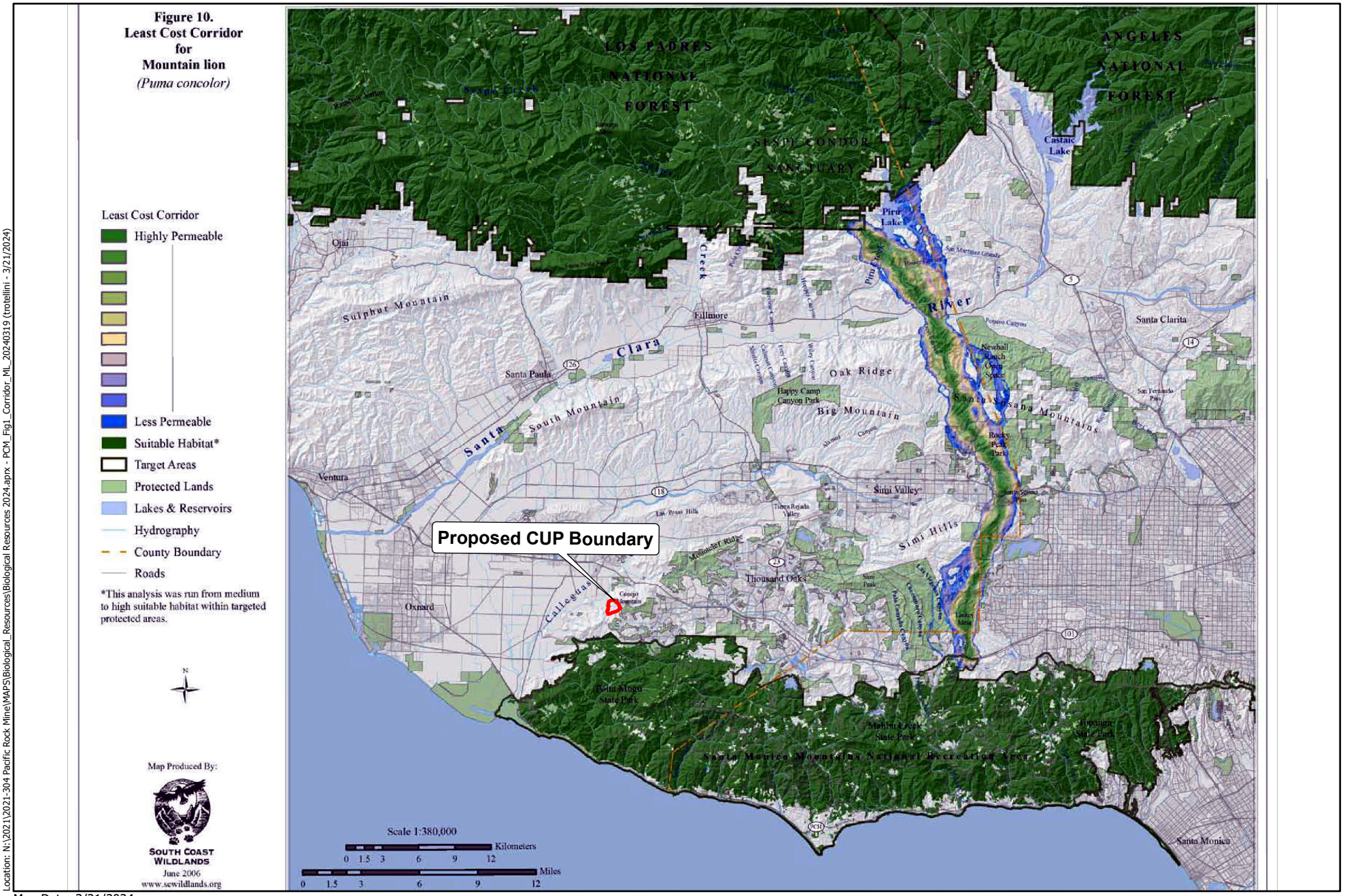
installing wildlife-proof fencing with escape gates to direct animals off the road and through underpasses. The pipe culvert to the right is located north of the Tierra Rejada Valley. Ng et al. (2004) recorded bobcat, coyote, and raccoon using this structure. We encourage protection of remaining natural habitats and conservation measures to maintain the rural character of the Tierra Rejada Valley.

The detailed analysis used to develop this linkage was described in the South Coast Missing Linkages Project: A Linkage Design for the Santa Monica – Sierra Madre Connection (Penrod et al 2006). A landscape permeability analysis was conducted to identify the least cost movement corridors between the Santa Monica Mountains and Serra Madre Range for mountain lion, mule deer, and American badger.

The least cost corridor for mountain lion, or the most permeable path resulting from the analysis, which is shown in Figure 1, captured habitat with a medium to high degree of suitability for mountain lions along their preferred travel routes as they move between the Santa Monica Mountains and the Sierra Madre Range. The least cost corridor varies in width from approximately 0.9 to 3.7 miles, and it extends from the Santa Monica Mountains, crosses the U.S. Highway 101 at Las Virgenes and Crummer Canyons to enter the Simi Hills, crosses the 118 Freeway at Santa Susana Pass, continues through Tapo and Salt Canyons in the Santa Susana Mountains, to the Santa Clara River, and through the areas near Piru Creek into the Sierra Madre Range. As shown in Figure 1, the Project Site is not located within the Target Area of the Santa Monica Mountains and the Santa Monica – Sierra Madre Connection, which are outlined in black on the Figure, that were identified using landscape permeability analysis. The least cost corridor for mountain lion, which was identified in the analysis, is located approximately 17 miles to the east of the Project Site.

The South Coast Missing Linkages Project also modeled a linkage representing a Least Cost Union of the three target species included in the study, which included mountain lion, mule deer, and American badger. The Least Cost Union, which is shown in Figure 2, incorporated the union of the top 1% of the least cost corridors for mountain lion, mule deer, and American badger between the Santa Monica Mountains National Recreation Area and the Sierra Madre Range.

The linkage was modified to add additional habitat outside of the Least Cost Union to serve the movement needs of three additional focal species: southern steelhead trout, cactus wren, and damselflies. In addition, the areas near Conejo Mountain, which encompasses the Project Site, and Mount Clef Ridge were added to accommodate cactus wren, brush rabbit, desert woodrat, and western toad movement. According to Penrod et al (2006), "This connection is dominated by coastal sage scrub and extends from the western Santa Monica Mountains over Conejo Mountain and Mount Clef Ridge to the Tierra Rejada Valley." Penrod et al (2006) also stated, "the majority of other focal species will also benefit from this connection, as will many other native species not specifically addressed by our analysis." Figure 2 shows the Least Cost Union and areas that were added (shown in green) and subtracted (shown in red) to make up the final design for the Santa Monica – Sierra Madre Connection. The configuration of the Least Cost Union and additional areas shown in Figure 2 matches the boundaries of the County's Habitat Connectivity and Wildlife Corridors Overlay Zone within the vicinity of the Project Site.

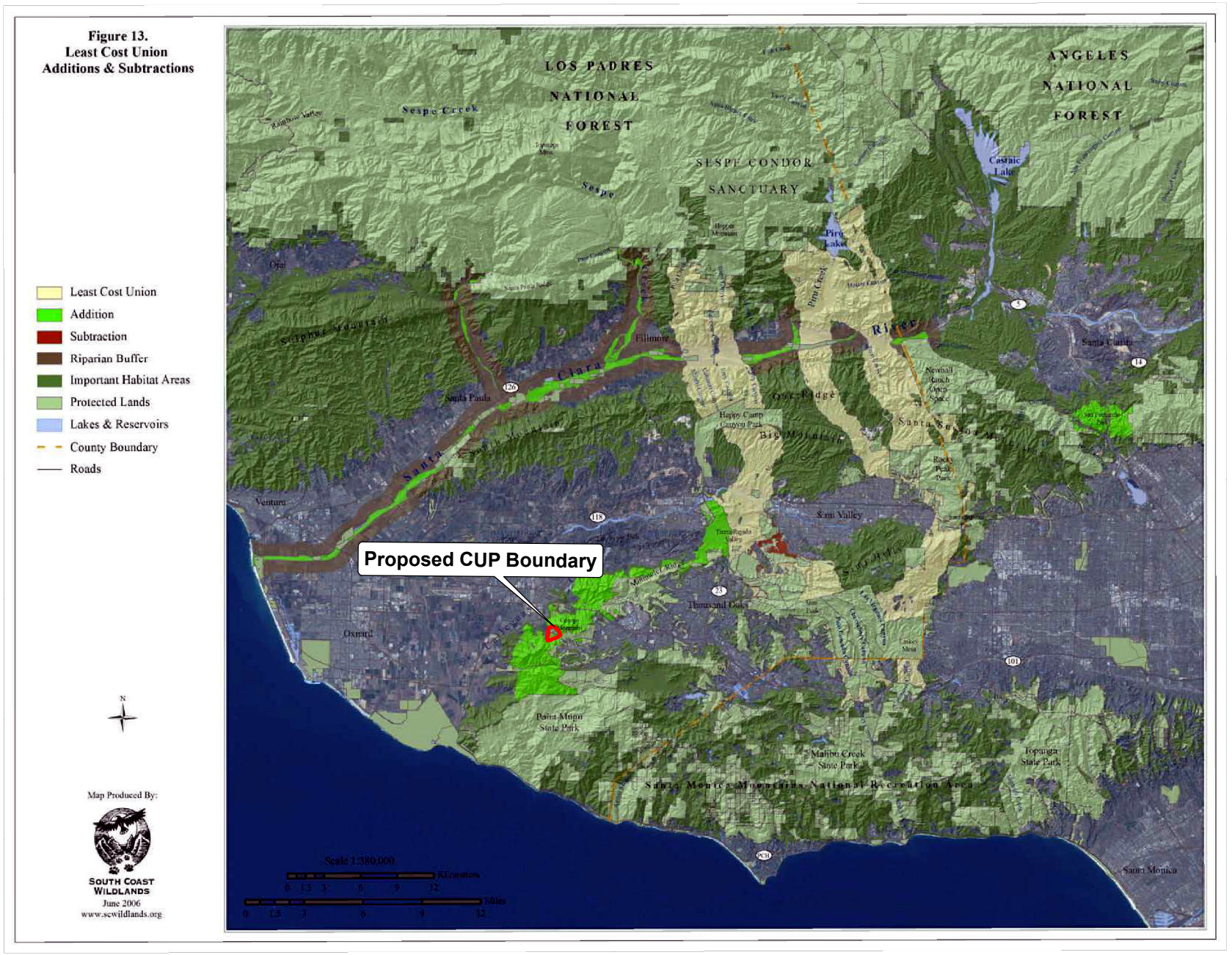


Location: N:\2021\2021-304 Pacific Rock Mine\MAPS\Biological_Resources\Biological Resources 2024.aprx - PCM_Fig1_Corridor_ML_20240319 (trotellini - 3/21/2024)

Map Date: 3/21/2024

Sources: South Coast Wildlands (Penrod et. al 2006)

Figure 1. Least Cost Corridor for Mountain Lion



Location: N:\2021\2021-304 Pacific Rock Mine\MAPS\Biological_Resources\Biological Resources 2024.aprx - PCM_Fig1_LCUnion_20240514 (trotellini - 5/14/2024)

Map Date: 5/14/2024

Sources: South Coast Wildlands (Penrod et. al 2006)

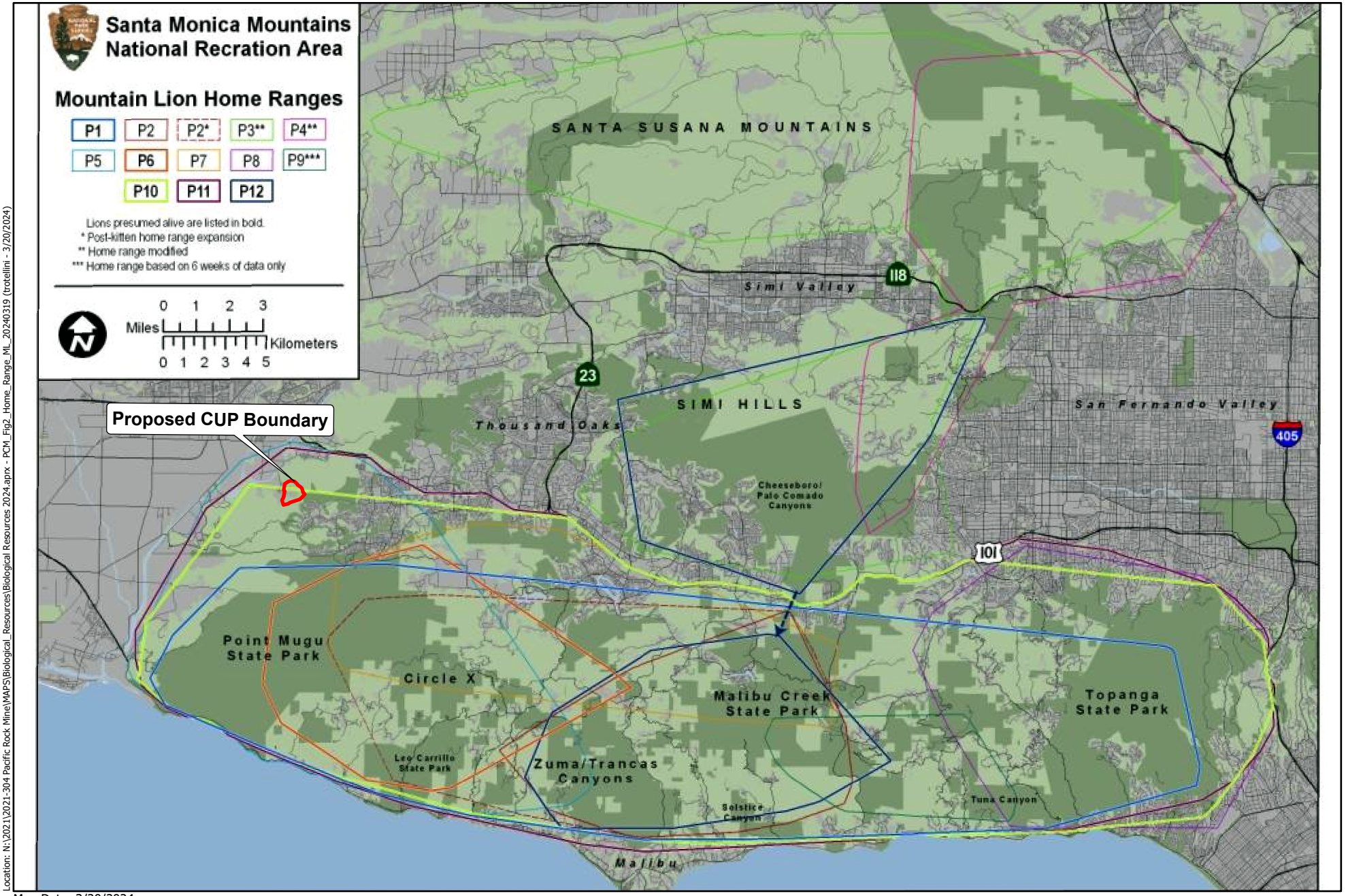
Figure 2. Least Cost Union Additions and Subtraction

2.2 Mountain Lion Presence

Impact BIO-4 in the PRDEIR (page 3.5-60) discusses the presence of mountain lion in and adjacent to the Project Site and throughout the regional wildlife corridor and evaluates the Project's potential to impact mountain lions that may be present. Additional information is provided here to amplify the analysis and potential impact conclusions already disclosed in the PRDEIR. The presence of numerous mountain lions in and adjacent to the Project area has been documented during National Park Service (NPS) telemetry studies using Global Positioning System (GPS) radio-collared lions. Maps of the data collected during the NPS studies are publicly available online from the "Maps, Photos, & Videos" section of the NPS webpage: https://www.nps.gov/samo/learn/nature/pumapage.htm. Figure 3 shows the home ranges of mountain lions tracked during the NPS studies and shows that the home ranges of some of the mountain lions encompass the area around the Project Site and the home ranges of others are located in the vicinity, primarily in areas east and southeast of the Project Site.

Figure 4 shows the telemetry locations for mountain lions P-1 through P-22 that were collected during the NPS studies from 2002 to 2013. The data shows numerous individuals' locations in and adjacent to the Project Site. The data also appears to show that the mountain lions have utilized the habitat to the northeast of the Project Site, including Conejo Mountain, but there are no data points of radio-collared lions located to the north or east of the U.S. Highway 101. This may be an artifact of the study, or it may indicate that the U.S. Highway 101 to the northeast of the Project Site might act as somewhat of a barrier to mountain lion movement. Benson et al. (2016b) conducted a study where they "quantified selection of natural and anthropogenic landscape features by mountain lions at sites where they consumed their primary prey, mule deer (*Odocoileus hemionus*), in and adjacent to urban, suburban, and rural areas in greater Los Angeles." The study was focused on the Santa Monica Mountains National Recreation Area and surrounding areas. Benson et al (2016b) noted that, "The Santa Monica Mountains were bordered by the Pacific Ocean to the south; by US 101, an 8 – 10 lane freeway, and various urban and suburban communities to the north; by the highly urbanized Los Angeles Basin to the east; and by agricultural and developed areas in Ventura County to the west." Mountain lions were captured, fitted with GPS collars, and then monitored following release. Through the monitoring of the collared lions, the study found that predation sites where collared mountain lions fed on mule deer were located in and adjacent to the Project Site. Based on the information gathered during the study, mountain lions are known to use areas in and adjacent to the Project Site for hunting and feeding. Therefore, for the purposes of analyzing the Project's potential to impact mountain lions, mountain lions are assumed to be present, at least periodically, within and adjacent to the site. Impact BIO-4 in the PRDEIR (page 3.5-60) referenced the NPS radio-tracking data, discussed that mountain lion was considered present within the Project Site, and evaluated potential impacts accordingly.

This memorandum provides additional specificity regarding mountain lion occurrence within and near the Project Site and provides additional information related to vegetation/habitat and other characteristics of the open space corridor between the Project Site and residences to the southeast. While this additional information is provided to aid in understanding and further substantiating potential Project impacts previously disclosed, the PRDEIR clearly disclosed and evaluated the Project consistent with the determination that mountain lion is considered "present" within and near the site.



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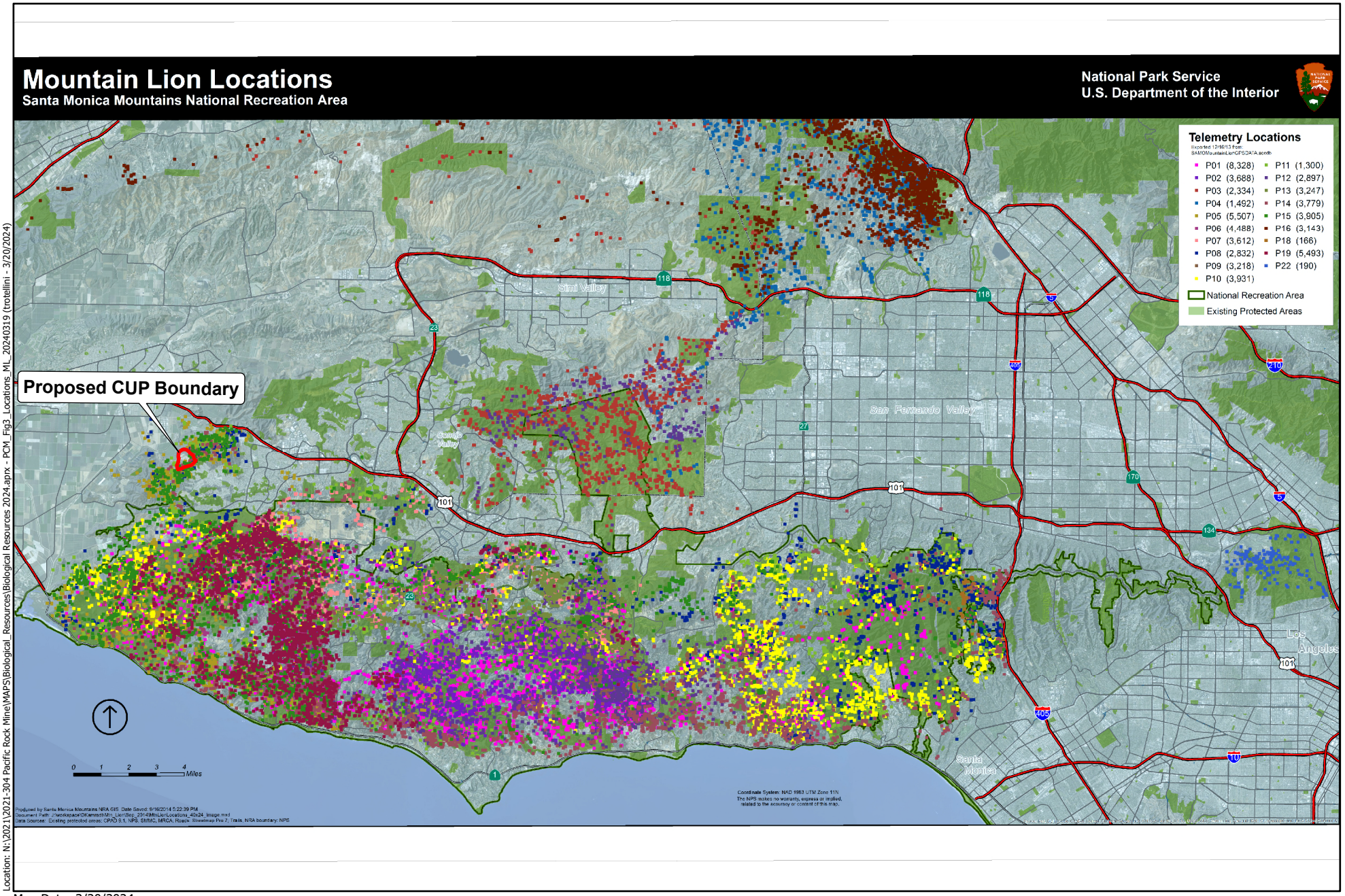
Map Date: 3/20/2024

National Parks Service, US Dept. of Interior, Santa Monica NRA

Figure 3. Mountain Lion Home Ranges
Santa Monica Mountains National Recreation Area

2021-304 Pacific Rock Mine

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Location: N:\2021\2021-304 Pacific Rock Mine\MAPS\Biological_Resources\Biological Resources 2024.aprx - PCM_Fig3_Locations_ML_20240319 (trotellini - 3/20/2024)

Map Date: 3/20/2024
National Parks Service, US Dept. of Interior, Santa Monica NRA

Figure 4. Mountain Lion Locations
Santa Monica Mountains National Recreation Area
2021-304 Pacific Rock Mine

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

2.3 Vegetation Communities Potentially Suitable for Mountain Lion

A study conducted by Beier and Barrett (1993) in the Santa Ana Mountain Range in California documented that, "Cougars clearly used all native vegetation types, but used large grasslands (e.g. Horno Canyon near San Juan Capistrano, large areas in the Chino Hills and Santa Rosa Plateau) much less than would have been expected based on the relative availability of this habitat type." In a study about cougar habitat selection, Dickson and Beier (2002) found that "grasslands were the only natural vegetation type that cougars avoided as strongly as they avoided developed areas." Beier and Barrett (1993) found that "When mountain lions crossed grasslands during overnight monitoring sessions, they usually moved quickly across them to the nearest woody vegetation." In addition, they surmised that, "The cougar's reliance on stealth and ambush probably accounts for this tendency to avoid open areas.

Figure 5 shows the vegetation communities mapped within the Study Area (SA1) by BRC (2017) and identified on Figure 3.5-1 in the PRDER (page 3.5-5), which included the Proposed Project area and a buffer surrounding the boundary of the proposed Conditional Use Permit (CUP). Table 1 lists the acres of native and non-native vegetation communities and disturbed and developed areas included within the Project impact area. The information in Table 1 was included in the Plant Communities table on pages 17 and 18 of the ISBA, and the information was presented in Table 3.5-8 (page 3.5-40) of the PRDEIR.

As shown in Table 1, the Proposed Project would impact a total of 166.98 acres including 74.42 acres of native plant communities. Based on Beier and Barrett's (1993) statements about mountain lion use of vegetation types (above), the 74.42 acres of native plant communities within the Project Site (Table 1) would be considered preferred by mountain lion. The 11.50 acres of non-native annual grasslands within the Project Site may be used less for travel by mountain lions based on Beier and Barrett's assessment of the use of grasslands.

Figure 5. Vegetation Communities and Land Cover Types

Map Content

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

Veg_Comm_Compiled

- Agriculture
- California Sagebrush Scrub
- Cattail Marsh
- Coast Live Oak Woodland
- Deerweed Scrub
- Developed
- Disturbed Chamise/Ceanothus Chaparral
- Giant Wild Rye Grasslands
- Laurel Sumac Scrub
- Mountain Mahogany Scrub
- Non-Native Annual Grassland
- Ornamental
- Pond
- Previously Cleared Land
- Red Willow Thicket
- Russian Thistle Fields

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Location: N:\2021\2021-304 Pacific Rock Mine\MAPS\Vegetation_and_LandCover\PRM_Vegetation_V2.mxd (MAG/TR)-trotellini 3/21/2024

2021-304 Pacific Rock Mine

Scale in Feet
0 500

Photo Source: ESRI (Maxar 2021)
Sources: BRC (2017)

Map Date: 3/21/2024

Table 1. 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%**

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
N/A = Not Applicable
Source: BioResource Consultants, Inc 2017.

3.0 PROJECT IMPACT DISCUSSION

3.1 Wildlife Movement and Connectivity

Impact BIO-4 in the PRDEIR (page 3.5-60) identifies the potential for direct impacts to mountain lion including loss of habitat, range, and movement corridors, which could affect hunting and foraging opportunities and could influence movement and breeding opportunities limiting reproduction and genetic diversity and potential mortality to individuals if present within disturbance areas during blasting. Impact BIO-7 in the PRDEIR (pg. 3.5-75) further discusses the Project's potential to affect wildlife movement opportunities directly and indirectly in the habitat between the Project Site and the housing development to the southeast due to Project effects including reducing the narrowest width of the open space corridor to approximately 800 feet. To avoid or minimize potential impacts to mountain lion and impacts associated with the Project's reduction of the width of the open space corridor where wildlife can move between the Project Site and the housing development to the southeast, the PRDEIR includes Mitigation Measure MM BIO-4(h) (discussed above) and Mitigation Measures MM BIO-7(a) (provisions to minimize impacts of light and glare on wildlife corridor and wildlife habitat), MM BIO-7(b) (provisions pertaining to County code requirements for fencing design to mitigate impacts to wildlife migration corridors), and MM BIO-7(c) (provisions requiring the permittee to establish a wildlife passage). These measures remain sufficient to avoid significant impacts to mountain lion and movement of mountain lions between the Project Site and the housing development.

To further substantiate the potential impacts of narrowing the width of the open space corridor on mountain lions, research studies addressing mountain lion use of wildlife corridors were reviewed to support the information presented in this technical memorandum as well as the analysis and conclusions previously presented in the PRDEIR. Corridor width and vegetation types are both relevant in assessing the adequacy for mountain lion to move through the remaining undisturbed open space between the Project Site and the housing development to the southeast and are therefore further discussed here.

3.1.1 Effects of Reduced Width of the Preserved Open Space

In 2018, Beier published an essay called, "A rule of thumb for widths of conservation corridors" (Beier 2018) where he considered the larger scale problem of designing corridors to connect blocks of habitat up to 80 kilometers apart in a matrix threatened by conversion to land uses that impede wildlife movement. Beier states "there is a shocking lack of rigorous scientific evidence to address the question of how wide the corridor along that optimal route must be to meet conservation objectives." He describes two different types of corridor users based on their mobility relative to corridor length and these include passage species and corridor dwellers. Beier states that," Passage species are species in which an individual animal can walk the length of the corridor in a single event of a few hours or days. In contrast, corridor dwellers need more than a generation to move individuals or genes from one patch, through the corridor, and into another habitat patch." Beier does not specifically address the optimal corridor width for mountain lion in the essay and some large carnivores were excluded from the data he references because they are passage species rather than corridor dwellers. Beier discusses the needs of corridor dwellers in his essay saying that, "A corridor 2 km (1.24 miles) wide would accommodate the home ranges of 96% of terrestrial

mammal species likely to be corridor dwellers." Beier suggests practitioners would benefit from a rule of thumb for the width of a corridor. He stated, "A corridor should be at least 2 km wide, except at unavoidable bottlenecks such as highway crossing structures." Beier states, "As corridor length decreases below 8 km, an increasingly large proportion of animals will be able to travel the corridor in a single dispersal event without needing a live-in corridor, thus permitting some relaxation of this rule." Beier makes it clear that, "It will probably take decades to evaluate enough corridors, with replication across a broad spectrum of corridor widths, so that a meta-analysis can address the question of how wide a corridor should be to provide long-term gene flow and recolonization."

The ISBA (BRC 2017, PRDEIR Appendix C-1, Section 3.3, page 39) discussed the approximately 1,500-foot-wide open space corridor between the Project Site and the residential development and identified it as an existing chokepoint. Table 2 is a reproduction of the table in Section 3.3 of the ISBA. Active mining continued in the permitted areas following the preparation of the ISBA in 2017 and the width of the undisturbed open space corridor has been narrowed to approximately 1,100 feet since that time. The information in Section 3.3 in the ISBA and as shown here in Table 2 still applies to a corridor width of 1,100 feet.

The presence of tracks, scat, and a coyote carcass found during the surveys indicated that coyote and mule deer were present in the areas surveyed around the existing disturbance on the Project Site and in the study area around the Project Site. The ISBA indicated the functional group/species expected to use the corridor included mammals, birds, and reptiles. The existing 1,500-foot-wide corridor does not meet the 2-km-wide rule of thumb for wildlife corridors described in Beier (2018) because it is constrained by existing development on each side, and it would be impossible for it to be widened to 2 km even if the Project were not implemented. As Beier (2018) indicated, "A corridor should be at least 2-km wide, except at unavoidable bottlenecks such as highway structures." The corridor between the existing Project Site and the housing development to the southeast would meet the definition of an existing and therefore unavoidable bottleneck.

Previous research papers were reviewed to evaluate whether narrowing the open space corridor to approximately 800-feet wide would still provide a functional movement corridor for mountain lion. One of these research papers was a 1995 paper by Beier titled, "Dispersal of juvenile cougars in fragmented habitat." In the paper, Beier investigated the dispersal of radio-tagged juvenile mountain lions in a California landscape containing three corridors (1.5, 4.0, and 6.0 km long [0.93, 2.48, and 3.73 miles long]) and several habitat peninsulas created by urban growth. He looked at dispersal patterns, use of corridors, and movements at the wildland-urban interface. Based on his findings, Beier summarized implications for corridor design, which included presence of woody vegetation and roads and trails and the lack of lighting and traffic. Beier suggests that if disturbance level, cover, and the other factors discussed in his paper are suitable, then "a corridor designed for use by cougars should be >100 m [meters] [greater than 328 feet] wide if the total distance to be spanned is <800 m [less than 2,625 feet], and >400 m [greater than 1,312 feet] wide for distances of 1 – 7 km [kilometers] [3,280 to 22,965 feet or 0.62 to 4.4 miles]."

Table 2. 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 Mountains	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

In consideration of Beier's recommendations, Figure 6 was developed to show the location of the Project in relation to the open space area between the Project Site and the housing development. The figure is designed to illustrate the minimum corridor width and length recommended by Beier (1995) in relation to the width of the preserved open space and to determine if the Project would result in a width insufficient for mountain lion use and movement in comparison to Beier's corridor design recommendations. The orange arrow shown in Figure 5 identifies the width of the open space between the proposed mine disturbance area on the west and residential development to the southeast.

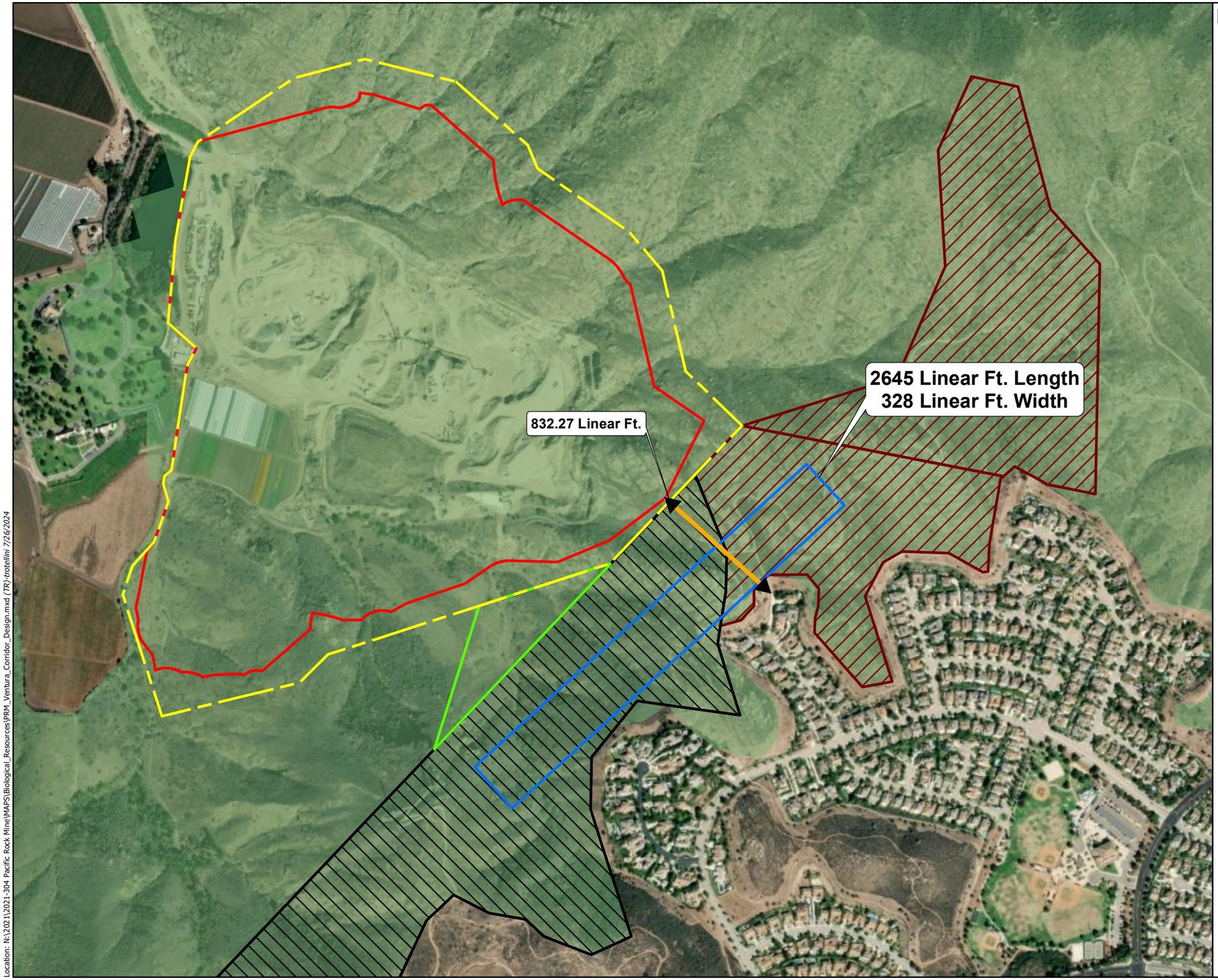
The blue rectangle shown on Figure 6 depicts the 328-foot (100 meters) minimum width if the total distance spanned by the corridor is 2,625 feet (800 meters) or less, which is consistent with Beier's (1995) minimum corridor size recommendation. The distance spanned within the narrowest part of the preserved open space is well below 2,625 feet (800 meters) and the width of the preserved open space is over twice as wide as the 328-foot (100 meter) minimum recommendation by Beier (1995).

Based on Beier's (1995) minimum corridor width recommendations, the Project's reduction in the width of the open space adjacent to the Project Site is not expected to substantially constrain or preclude mountain lion use or movement through the open space areas compared to conditions as they exist today. As stated in Impact BIO-7 in the PRDEIR (page 3.5-75), states, "The Project's reduction in available habitat for wildlife in the 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 reduction in habitat within the County-designated movement corridor." Based on these statements, MM BIO-7(c) (page 3.5-77) was included in the PRDEIR to ensure a Wildlife Passage area would be preserved for use by mountain lion and other species utilizing the corridor.

A review of the lands around the mine to the north and south of the mine was conducted using Google Earth. The areas to the northeast of the mine include preserved lands owned by COSPA and the corridor gets wider to the north of the mine. The connectivity of the open space to the north and other open space areas to the east is interrupted by U.S. Highway 101 and is a less functional corridor than the areas to the south, which connect with the Santa Monica Mountains Recreation Area and other open space and preserved lands. The areas to the southeast of the mine include preserved lands owned by MRCA. The existing housing development to the southeast of the mine is bordered by the MRCA preserved lands but the housing development contributes to the chokepoint in the wildlife corridor. Therefore, the decision was made to locate the proposed Wildlife Passage area to the southeast of the mine to ensure the corridor does not become more constricted.

A proposed Wildlife Passage area is shown in the green triangle in Figure 6. The configuration of the proposed Wildlife Passage area was determined by using the existing approximately 1,100-foot width between the existing mining disturbance and the closest group of houses to the southeast. That same distance of 1,100 feet was then measured out to the Proposed CUP boundary from the southern group of houses to the southeast of the mine. The southern projection of the triangle was created by measuring approximately 1,100 feet from the boundaries of the southern group of houses.

Figure 6. Open Space Width, Minimum Corridor Design, and Proposed Wildlife Passage Area



Map Content

- Proposed CUP Boundary
- Proposed Work Limits
- Minimum Corridor Design (Beier, 1995)
- Open Space Width
- Ventura County Habitat Connectivity and Wildlife Corridor Overlay Zone

Wildlife Passage Area

- Proposed Wildlife Passage Area - 6.77 Acres

Conserved Lands

- Mountains Recreation and Conservation Authority
- Conejo Open Space Conservation Agency

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Location: N:\2021\2021-304 Pacific Rock Mine\MAPS\Biological_Resources\PRM_Ventura_Corridor_Design.mxd (TR)-trotellini 7/26/2024

2021-304 Pacific Rock Mine

Scale in Feet
0 600

Photo (or Base) Source: ESRI (Maxar 2021)
Sources: Vantura County

Map Date: 7/26/2024

The southern projection of the green triangle then intersects the MRCA preserved open space boundary at approximately 1,100 feet from the houses. The green triangle, which depicts the proposed Wildlife Passage, encompasses approximately 6.7 acres and will ensure that the corridor width near the mine will not be reduced to below 1,100 feet in the future.

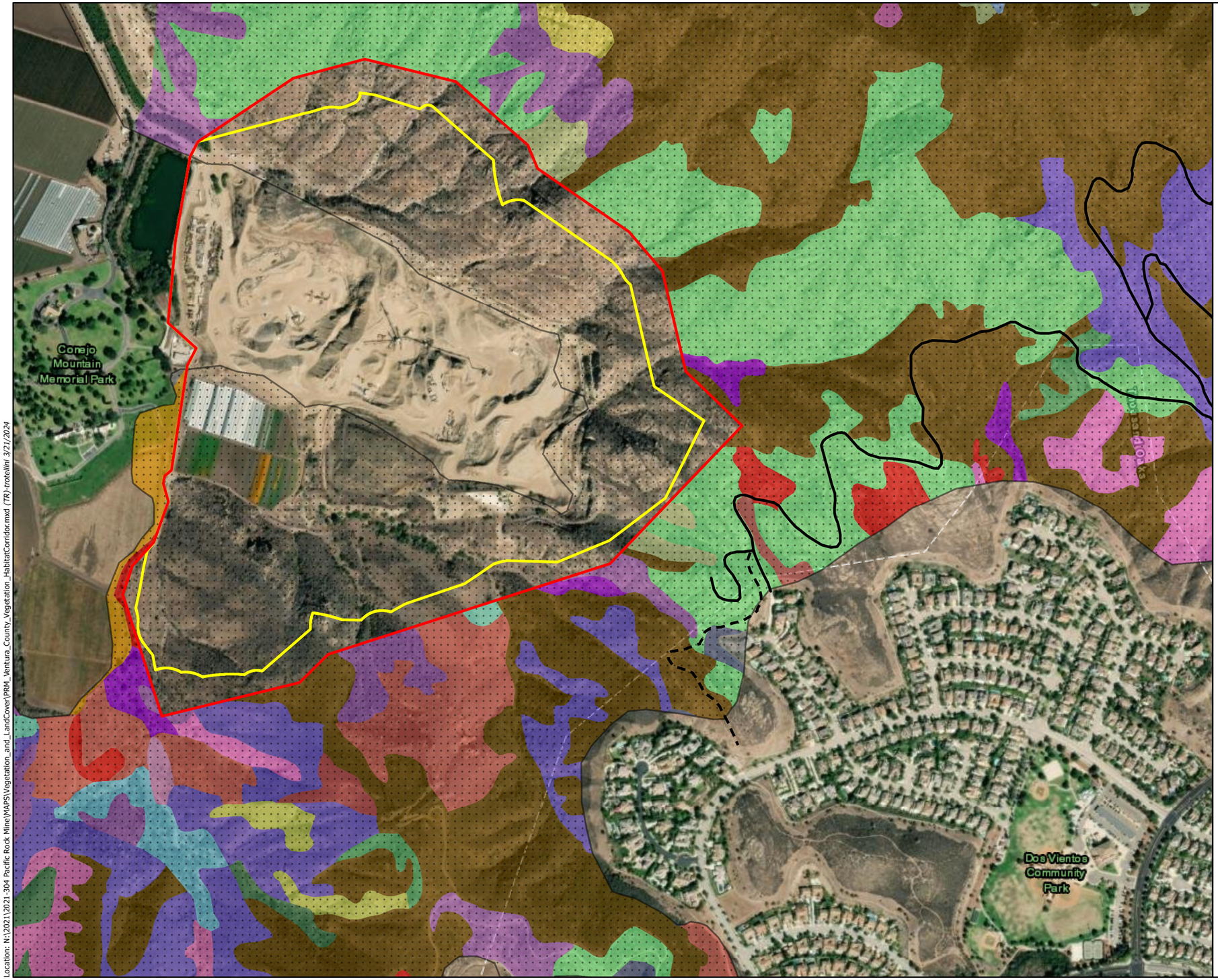
Figure 6 also shows the land ownership of the open space areas east of the Project Site. As shown in Figure 6, the lands between the Project's proposed CUP boundary and residential development consist of permanently preserved lands owned by the Mountains Recreation and Conservation Authority (MRCA) and the Conejo Open Space Conservation Agency (COSCA). COSCA has permanently conserved 1,203 acres in the Dos Vientos Open Space, which surrounds the housing development to the southeast of the Project Site and extends to the boundary of the Santa Monica Mountains National Recreation Area approximately 1.2 miles south of the Project Site. The Santa Monica Mountains National Recreation Area encompasses approximately 157,700 acres and it contains many individual parks and many open space preserves supporting natural vegetation communities.

The Biological Resources Study Area and Cover Types shown on Figure 3.5-1 (page 3.5-5) in the PRDEIR and on the Plant Communities Map in the ISBA (PRDEIR Appendix C-1, page 23) shows the vegetation communities within the study area and the construction footprint. Mapping of the vegetation communities in the Study Area (SA1) included a buffer around the CUP boundary, which included mapping in a section of the narrowest portion of the open space corridor to the east. The vegetation communities in this area primarily include laurel sumac scrub, which is a woody vegetation, interspersed with non-native annual grassland, giant wild rye grassland, and deerweed scrub. Figure 7 was developed using the mapped vegetation in the Ventura County vegetation layer to show the general distribution of vegetation communities within the open space corridor surrounding the Project Site. Figure 7 shows that the vegetation communities throughout the open space corridor are dominated by woody vegetation. In Beier (1995), Beier stated that, "Some native woody vegetation should be present to provide visual cover". The woody vegetation present within the 800-foot-wide open space corridor between the Project Site and the housing development to the southeast that would not be affected by the Project meets Beier's requirement for vegetation in wildlife corridors and will provide visual cover for mountain lion movement through the preserved open space corridor.

Figure 7 also shows an established trail and dirt powerline access road between the Project area and the residential area. According to historic aerial photographs, the powerline road has been in existence since at least 1980. Beier (1995) stated that, "Cougars frequently use dirt roads and trails. Where dense woody vegetation impedes cougar travel, a trail or dirt road running the length of the corridor can facilitate use by cougars and discourage travel into adjacent urban areas."

Beier (1995) reported that, "Because cougars showed no aversion to hikers, bicyclists, equestrians, isolated unlit buildings, or parked vehicles, I conclude that corridors are compatible with such activities." In consideration of Beier's (1995) statement regarding wildlife use of dirt roads and trails in areas where dense woody vegetation is present and mountain lions lack of aversion to hikers, bicyclists, and equestrians, it is expected that the existing trail and dirt road within the open space corridor between the Project Site and the housing development can also be used by mountain lions to move through the area.

Figure 7. Ventura County Vegetation Communities and Land Cover Types



Map Content

- Proposed CUP Boundary
- Proposed Work Limits
- Regional Wildlife Corridor
- Dirt Road
- Trail

Ventura County Vegetation and Land Cover Types

- Agriculture
- Ashy Buckwheat
- Bigpod Ceanothus
- Black Sage
- Bush Mallow
- California Buckwheat
- California Encelia
- California Sagebrush
- California Sagebrush - California Buckwheat
- California Sagebrush - Purple Sage
- Chamise
- Chamise - Black Sage
- Coast Live Oak
- Coyotebrush
- Greenbark Ceanothus
- Laurel Sumac
- Lemonadeberry
- Native and Non-Native Herbaceous Superallliance Mapping Unit
- Purple Sage
- Rock outcrop Mapping Unit
- Rock outcrop/Herbaceous Mapping Unit
- Toyon
- Urban - Herbaceous/Cleared
- Urban/Disturbed or Built-Up

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Location: N:\2021\2021-304 Pacific Rock Mine\MAPS\Vegetation_and_LandCover\PRM_Ventura_County_Vegetation_HabitatCorridor.mxd (TR)-trotellini 3/21/2024

2021-304 Pacific Rock Mine

Scale in Feet
0 600

Photo (or Base) Source: ESRI (Maxar 2021)
Sources: Ventura County

Map Date: 3/21/2024

The Project's proposed disturbance area would not extend to or otherwise alter the existing linear features within the open space corridor and the function that these features currently serve in facilitating mountain lion movement would not be affected.

Figure 4 shows the movement of NPS radio-collared mountain lions between 2002 and 2013 and the tracking data shows that mountain lions have been tracked in the open space corridor between the Project Site and the housing development and in the areas immediately adjacent to the existing mining operation. Mountain lion use of the areas immediately adjacent to the active mining areas indicates that mountain lions may be habituated to the mining operations, which have been occurring on the property for over a century. As discussed in Section 2.3 of the DEIR (page 2-2), the hard-rock quarry has been in operation since 1902. With the expansion of the mining boundary, mountain lion use of these areas would be anticipated to continue. The revegetation of the mined areas following reclamation post-mining will include planting with woody vegetation and grassland species that will provide future cover and foraging habitat for mountain lions. Following all reclamation and revegetation activities, the 166.98 acres encompassed by the existing and expanded mining operations will provide open space habitat that will facilitate the movement and foraging activities of mountain lions.

Although the Project would reduce the width of the existing open space corridor between the Project Site and residences to the southeast during active mining, for the reasons discussed above, the reduced width is not expected to substantially affect the ability for mountain lions to use the open space corridor for movement through the area. Therefore, the impact would remain less than significant with no mitigation necessary as concluded in the PRDEIR.

3.2 Genetic Diversity

As discussed above, Impact BIO-4 in the PRDEIR (page 3.5-60) identifies that the Proposed Project would have the potential for direct impacts to mountain lion including 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.

With regard to potential effects on genetic diversity, Benson et al. (2016a) reported that, "Mountain lion populations isolated by habitat fragmentation and major freeways in the greater Los Angeles area have the lowest levels of genetic diversity documented for this species aside from Florida panther, causing concern regarding inbreeding depression." In Benson et al. (2016a), the study "modelled the dynamics of a small mountain population isolated by anthropogenic barriers in greater Los Angeles, California, to evaluate the influence of demographic, genetic, and landscape factors on extinction probability." The small mountain lion population, which was the focus of the study, was in the Santa Monica Mountains. Benson et al. (2016a) reported, "The SMM (Santa Monica Mountains) mountain lion population is currently demographically vigorous with no indication of inbreeding depression as evidenced by estimated survival and reproductive rates that were mostly similar or slightly higher than other unhunted mountain lion populations across North America The lone exception was subadult survival, which was lower than other populations, likely because dispersal of subadults was frustrated or hindered and many were killed by adult males. The population has strong growth potential as the density-independent model predicted a

rapidly increasing population and an extremely low (less than 1%) probability of extinction over the next 25 years." Benson et al. (2016a) also reported, "In the absence of inbreeding depression, and with no or low immigration, the density-dependent model predicted a stable median growth rate and a 15 – 22% probability of extinction over the next 50 years owing to demographic stochasticity. However, without additional gene flow, the predicted erosion of genetic diversity within 50 years warrants concern regarding inbreeding depression and the potential for rapid extinction."

In 2020, the NPS reported the first potential physical manifestations of low genetic diversity in the mountain lion population in the Santa Monica Mountains. In an NPW news release on September 9, 2020, they reported "A young male mountain lion with physical abnormalities - a kinked tail where the end is shaped like the letter "L" and only one descended testicle - has been discovered in the Santa Monica Mountains, biologists with the National Park Service (NPS) say." The news release reported that, "Dr. Seth Riley, the wildlife branch chief for Santa Monica Mountains National Recreation Area, a unit of the NPS, and an adjunct professor at the University of California, Los Angeles (UCLA), notes that there are a couple of mechanisms that lead to low genetic diversity. One is called "genetic drift," which describes the loss of genetic diversity over time when there is a small population of animals. The other process that leads to low genetic diversity is inbreeding, which is when animals mate with close relatives. Both mechanisms are occurring in the Santa Monica Mountains." https://www.nps.gov/samo/learn/news/first-abnormalities-linked-to-inbreeding-depression.htm. The news release also reported that Riley said, "It makes more sense to increase connectivity here, rather than to import mountain lions from other areas, especially since there is a large population of mountain lions in Los Padres National Forest to the north." Construction of a wildlife bridge crossing in the Liberty Canyon area of Agoura Hills (approximately 17 miles east of the Project Site) is underway to connect populations of wildlife south of the U.S. Highway 101 to those in other natural areas to the north in the Simi Hills, the Santa Susana Mountains, and ultimately in Los Padres National Forest. Caltrans reports that the first phase of the wildlife bridge project, which includes building the vegetated bridge structure over U.S. Highway 101 and supporting roadway items within the Caltrans right of way is anticipated to be completed in 2026. Completion of the wildlife bridge crossing is expected to increase connectivity between mountain lion populations located in the Los Padres National Forest to the north of U.S. Highway 101 and the Santa Monica Mountains located south of the freeway, which would also be expected to increase genetic diversity.

Section 3.1.1 of this technical memorandum addresses wildlife movement and connectivity and explains that Project disturbance would reduce the width of the open space corridor to the east of the Project Site to 800 feet, which exceeds the 328-foot-wide minimum corridor design width recommended by Beier (1995) when the corridor spans a distance of less than 800 meters (2,625 feet). Additionally, the Project would not change or expand the permit boundary significantly (if at all) along much of the site's eastern boundary adjacent to the narrowest portion of the open space corridor, and therefore this 800-foot narrowest area would remain with or without the Project. Mountain lion movement is not expected to be restricted through the open space corridor because the width would not significantly change compared to existing conditions and it would exceed the minimum width recommended by Beier (1995) for corridor design allowing for mountain lion passage. As a result, the Project is not expected to have an impact on the ability of mountain lions to roam through the area looking for mates or on the genetic diversity of the Santa Monica Mountains population.

3.3 Potential Impacts to Natal Dens

Under Impact BIO-4 in the PRDEIR (page 3.5-60), the potential presence of mountain lions in and adjacent to the Project area is discussed. Impact BIO-4 identifies that potential impacts may occur to hunting, foraging, movement, and breeding habitat, which could limit reproduction and genetic diversity. Additional information is provided here to amplify the understanding of mountain lion breeding habitat and denning locations and the potential impacts of the Project, as previously disclosed within the PRDEIR.

Beier and Barrett (1993) conducted intense monitoring of radio-tagged mountain lions and they found, "Although a cougar may remain in one place for 3-4 days while feeding on a deer, over the course of a week there are several nights during which the cat hunts, traveling several km per night. The only exception is a mother with newborn cubs who may remain within 2 km of the den for the first few weeks postpartum." According to Wilmers et al. (2013), "Female mountain lions establish natal nurseries in thick vegetation or rock plies." Beier and Barrett (1993) inspected den sites of four mountain lions and found that, "Several traits were common to all four den sites. Each site was in a small tributary canyon with very dense brush on the canyon sides and in the canyon bottom, lacked a well-developed scour zone in the canyon bottom, had no detectable animal trails, and had very few trees (except for some *Rhus* and *Malosma* plants with a shrubby growth form). Each canyon was away from regular cougar travel routes, and the vegetation made it very difficult for a person to crawl to the birth site. The micro-sites inspected were in drainage bottoms and in the upper ¼ of the drainage. No site was associated with a cave or rock outcrop." Mountain lions could select denning sites in the open space corridor between the Project Site and the housing development and in the open space corridor areas located north and south of the Project Site because the areas consist of suitable woody vegetation and tributary canyons. Wilmers et al. (2013) found, "that reproductive behaviors (communication and denning) require at least a 4 x larger buffer from human development than non-reproductive behaviors (movement and feeding)." Considering the findings of Wilmers et al (2013) regarding a mountain lion's required buffer from human development for reproductive behaviors, the existing habitats in the open space corridor located between the existing active mine and the housing development would likely not be preferred areas for establishing natal dens because an appropriate buffer from human influences is not present. And this is likely the case even without Project implementation. However, mountain lions may potentially establish natal dens in the larger habitat patches in the open space corridor areas to the north and south of the Project Site because there are larger blocks of habitat and fewer human influences.

The PRDEIR addresses the potential for the Project to impact natal denning sites with Mitigation Measure MM BIO-4(h) (PRDEIR Section 3.5.2.2, page 3.5-69), which requires mountain lion natal den surveys of planned disturbance areas, coordination with agencies (including NPS) to obtain current information regarding the presence or recent use of areas by collared mountain lions, and the preparation of a mountain lion natal den survey report for coordination with agencies and to identify, as may be necessary, measures sufficient to avoid take or other adverse impacts to mountain lions, mountain lion dens, and cubs, if identified. The measure also requires avoidance measures, including setbacks, if a mountain lion natal den is found and limits vegetation clearing or ground disturbance within the setback areas until the mountain lion cubs have been successfully reared and the mountain lion has left the area as determined in consultation with CDFW, and prohibits the use of rodenticides. Mitigation Measure BIO-4(h) as

presented in the PRDEIR remains sufficient to avoid or minimize potential Project impacts on natal dens and cubs if present within planned work areas.

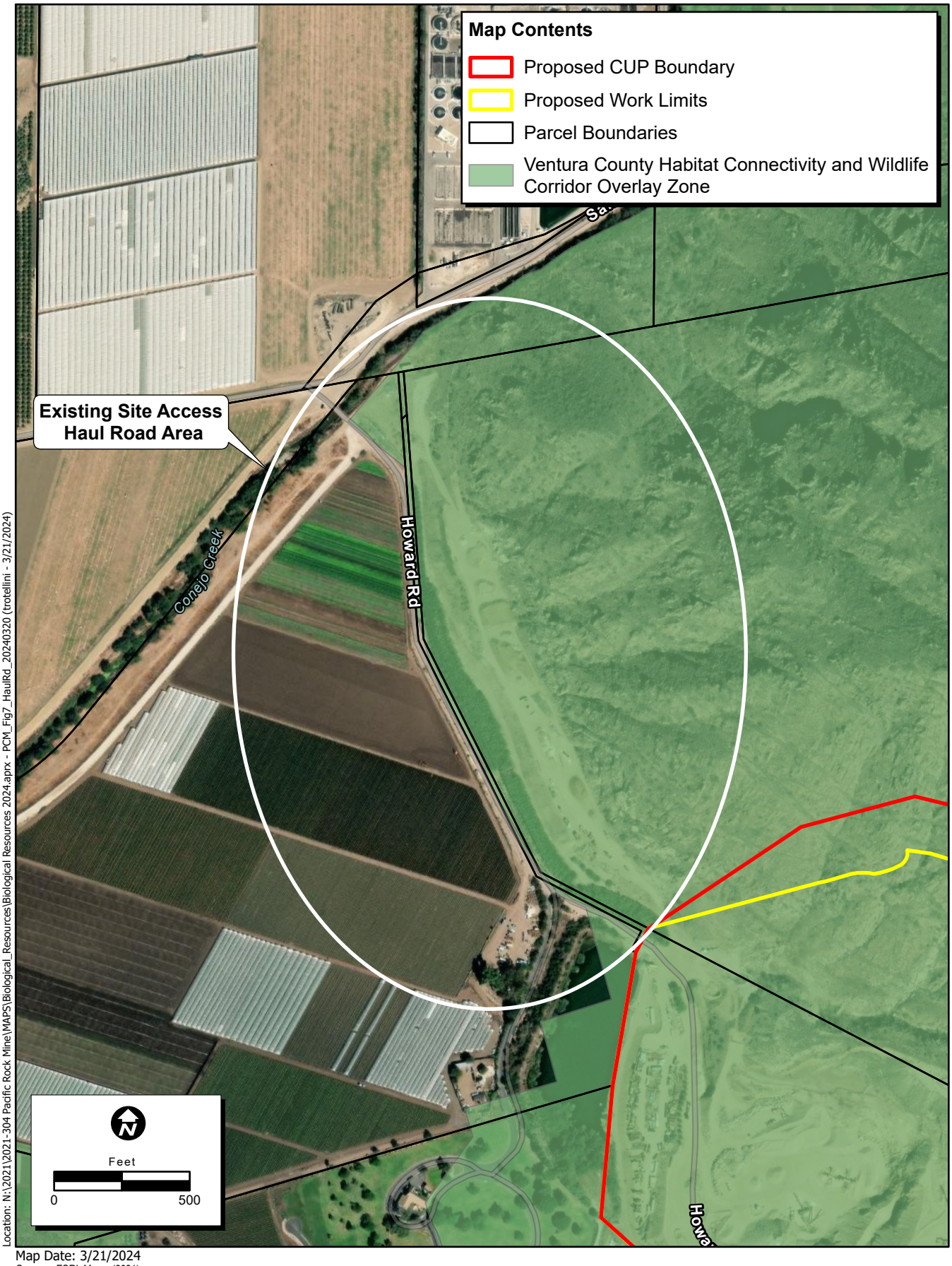
3.4 Vehicle Operation and Collision Potential

As stated in Section 3.9 of the DEIR (pages 3.9-1 through 3.9-12), the Proposed Project would not result in a change to the maximum daily permitted truck activity (would remain at 60 truckloads per day) or changes to the current traffic patterns as the same haul routes would continue to be utilized. Vehicle travel within the preserved open space will not occur because of the Project and therefore, vehicular accidents will also not occur in the preserved open space, as employee vehicles/haul trucks would continue to use the existing site access point/road located to the northwest.

As discussed in PRDEIR Impact BIO-4 (page 3.5-54), the existing ingress/egress to the Project Site would continue to be the only route travelled by vehicles to access the Project Site. DEIR Section 2.6.5 (pages 2-11 and 2-12) discusses that under the Project, no changes to truck loading or hauling practices, routing, or the maximum number of annual, or daily haul truck trips are proposed (would remain 60 truckloads per day). The Project would extend operating hours that would allow for truck loading and hauling during additional hours of the day and days of the week, but loading and hauling practices occurring within those timeframes would remain unchanged from what currently occurs today. Furthermore, trucks and vehicles would continue to utilize the existing ingress/egress points and public roadways located near the western boundary of the Project Site/within the existing excavation pit, separated in elevation and distance from the open space area to the east. DEIR Sections 2.6.6 and 2.6.7 (page 2-12) also describe that materials brought to the site for recycling, the import of fill material to the site, and the shipping of the processed materials, would all be encompassed within the operation's 60 loads per day maximum truck trip limit, and would not increase the existing daily maximum allowed number of truck trips (current operations also are permitted to generate up to a maximum of up to 60 truckloads per day).

While the maximum daily truck activity would not change because of the Project, the average number of vehicles accessing the site during peak-hour periods could increase as compared to baseline conditions (DEIR Section 3.9.2.2, pages 3.9-6 through 3.9-12). As discussed above and throughout the DEIR and PRDEIR, haul trucks and vehicles would continue to utilize the existing ingress/egress points and roadways located near the western boundary of the Project Site within the existing excavation pit. This existing route is separated in elevation and distance from the habitat in the preserved open space corridor that would be partially reduced in width by the Project as discussed above. Therefore, the Project would not have the potential to increase vehicle collision risk with wildlife within the open space areas to the southeast of the Project Site.

As shown in Figure 8, the existing site access haul route along an approximately 0.4-mile segment of Howard Road is adjacent to the area north of the Project Site that is designated by Ventura County as a Habitat Connectivity and Wildlife Corridor. Although the maximum daily number of haul trucks along this segment of Howard Road would not increase with the Project, the average daily and annual number of haul trucks and vehicles would increase as compared to baseline conditions.



Location: N:\2021\2021-304 Pacific Rock Mine\MAPS\Biological_Resources\Biological Resources 2024.aprx - PCM_Fig7_HaulRd_20240320 (trotellini - 3/21/2024)

Map Date: 3/21/2024

Sources: ESRI, Maxar (2021)

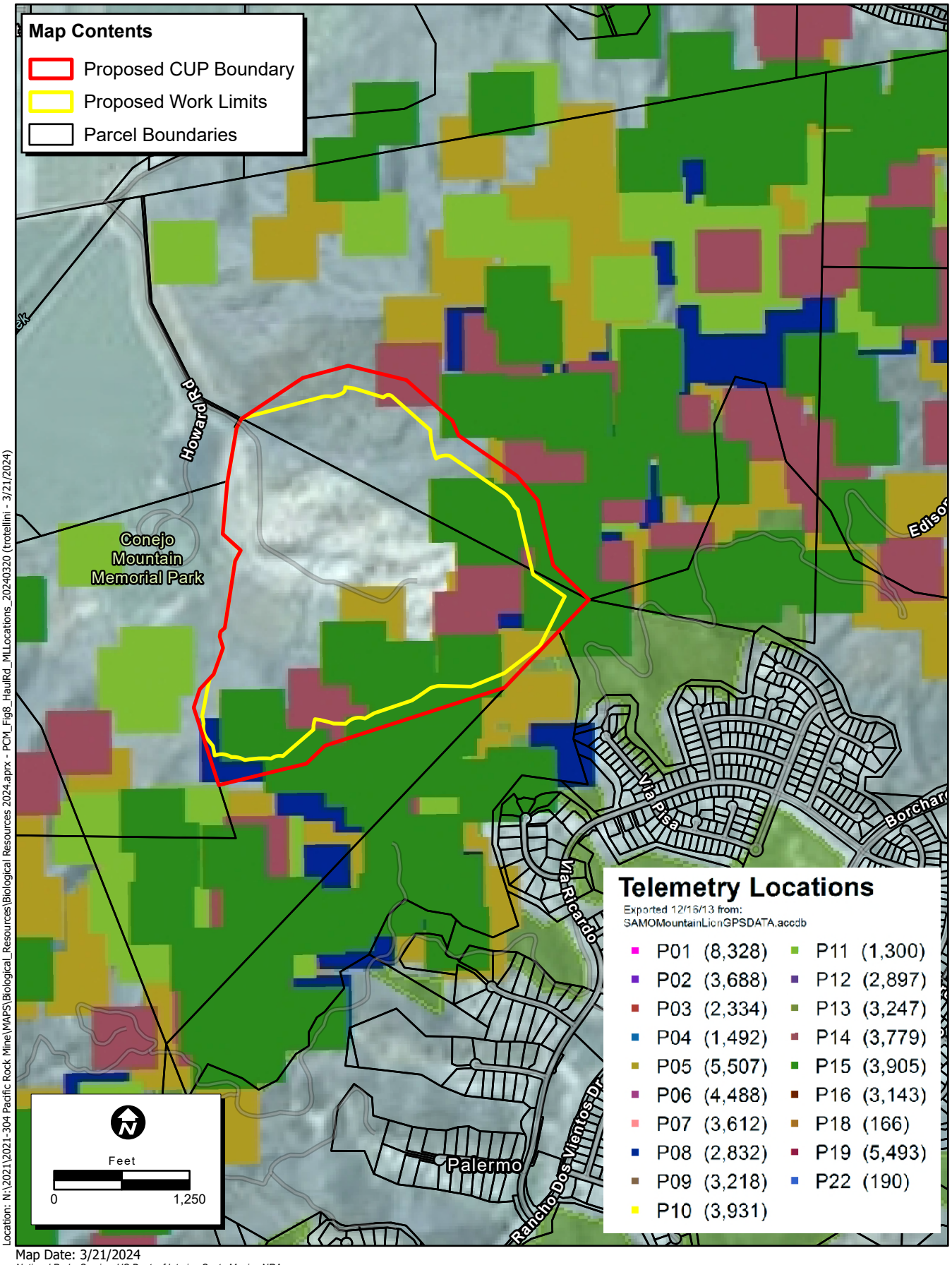
Figure 8. Existing Site Access Haul Road

The hours of operation for equipment maintenance and aggregate hauling would be expanded with the Proposed Project and would be modified from between 7:00 AM and 4:00 PM to between 5:30 AM to 10:00 PM. Mountain lions tend to be most active between dusk and dawn so extending the hauling hours could potentially increase the potential of a mountain lion being hit on Howard Road. Figure 9 shows the locations of radio-collared mountain lions in the areas adjacent to Howard Road during the 2002 to 2013 study conducted by the NPS. Radio-collared mountain lions traveled through the open space area east of Howard Road but none of them appeared to have used or crossed Howard Road. The east side of Howard Road is bordered by very dense stands of nursery trees that are either planted or stored as part of a nursery operation, which creates somewhat of a barrier between Howard Road and the areas designated as Habitat Connectivity and Wildlife Corridor to the east. In addition, Howard Road is flat and a relatively straight, two-lane private road with a posted speed limit at the junction of Pancho Road and Howard Road of 15 miles per hour (mph). The posted speed limit on the Project Site is also 15 mph.

The areas to the west of Howard Road and the Project Site consist of agricultural fields and a memorial park, which do not provide suitable cover for the movement of mountain lions. The tracking data (Figure 8) shows that the mountain lions generally limited their movements to the natural open space areas to the north, east, and south of the Project Site and to the south of the agricultural fields and memorial park, which all support natural woody vegetation that provides cover. Even though the operating hours will be extended into the hours of dusk and dawn when mountain lions are most active, the potential for collisions between mountain lions and haul trucks would remain low because mountain lions don't appear to be crossing Howard Road or using the agricultural field on the west side of Howard Road. In addition, the radio-tracking data shows that mountain lions tracked during the NPS study did not use or cross Howard Road.

3.5 Lighting

Impact VIS-2 in the DEIR (page 3.2-25) explains that mining and processing operations hours would not change and would continue to be limited to occur between 7:00 AM and 4:00 PM, as with existing operations. However, the Project would increase the permitted hours for equipment fueling and truck activity, including loading, and entrance and exiting the site, allowing these activities to occur between 5:30 AM and 10:00 PM. When operating at night, a single light would be used at the scale house and up to four portable light plants would be used at various locations on the Project Site. Vehicles would also operate on the site during these non-daylight periods, including on-road trucks with use of headlights in the scale area and loading equipment (i.e., two front end loaders and one excavator) for loading riprap near the scale house, at the processing plant, and in mining areas.



Location: N:\2021\2021-304 Pacific Rock Mine\MAPS\Biological_Resources\Biological Resources 2024.aprx - PCM_Fig8_HaulRd_MLLocations_20240320 (trotellini - 3/21/2024)

Map Date: 3/21/2024

National Parks Service, US Dept. of Interior, Santa Monica NRA

Figure 9. Mountain Lion Locations
Existing Site Access Haul Road
2021-304 Pacific Rock Mine

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Impact BIO-4 in the PRDEIR (page 3.5-60) identifies that the Proposed Project may indirectly affect mountain lions moving through the open space corridor because of artificial lighting associated with the mining operations. Stray lighting from the Project could potentially affect the portions of the preserved open space corridor located adjacent to the Project Site if actions are not taken to shield the lighting. Beier (1995) found that, "cougars travel mostly at night and avoid brightly lit areas." Penrod et al. (2006) recommend that, "lighting be directed away from linkage and crossing structures to maintain and protect habitat connections for mountain lions. Shielded light fixtures that direct light downwards can significantly reduce negative lighting effects on mountain lion and other wildlife species utilizing natural areas next to developed areas. By focusing the light where it is needed, wildlife habitat can be shielded from the adverse influences of light emissions.

Mitigation Measure MM VIS-2 in the DIER (page 3.2-26) requires the Permittee to submit a lighting plan to the County for approval that includes specifications for lighting on the site and requirements for when vehicle headlights can be used. Additionally, Mitigation Measure MM BIO-7(a) in the PRDEIR (page 3.5-76) requires measures to minimize light and glare on wildlife corridors and wildlife habitat through specific measures that include hooded and directed lighting to prevent illumination of surrounding habitat, prohibition of floodlights, use of materials that minimize reflective glare, and use of high cut-off light fixtures to avoid casting light on adjacent habitat. As specified in MM BIO-7(a), the County will ensure compliance by requiring the permittee to submit a lighting plan that complies with these lighting requirements and to maintain lighting in compliance with the lighting plan for the life of the Project.

As noted in the PRDEIR, implementation of Mitigation Measures MM VIS-2 and MM BIO-7(a), would reduce potential Project light and glare impacts on wildlife, including mountain lions, which may occupy or move through the adjacent natural habitat areas and would be sufficient to avoid significant light and glare impacts on mountain lion using open space habitat areas around the Project Site.

3.6 Noise and Vibration

Impact BIO-4 of the PRDEIR (pages 3.5-50 through 3.5-53) specifically discusses the potential for Project-related noise and vibration to adversely affect special-status species and habitat within the adjacent open space corridor. As discussed there and in Section 3.8.2 of the DEIR (pages 3.8-13 through 3.8-24), Project noise levels were analyzed at Receptor 3 (R3) to account for potential impacts to both humans and wildlife species within the open space corridor to the east of the Project Site. As shown on DEIR Figure 3.8.1 (page 3.8-5), R3 is located within the central portion of the open space corridor (between the nearest existing permit/mining boundary to the west and the nearest residential property to the east). Project noise levels estimated for R3 accurately represent the noise levels expected to be experienced by both transient wildlife and recreational hikers in this area. Additionally, noise from the existing aggregate/recycle plant was estimated assuming the plant(s) would continue to operate within the middle of the quarry, as both the existing aggregate processing plant and proposed recycle plant would operate in this location throughout the life of the Project. While the processing plants would remain in this location away from the open space areas, noise from mobile mining equipment (i.e., loaders, dozers, excavators, rock drill, water truck) was conservatively assumed to occur at the outer most boundary of the Project, in the location closest to each receptor (including R3). To determine worst case impacts at noise receptor locations, it was assumed that mobile mining equipment would operate simultaneously in the closest mining areas. For

these reasons, the noise levels estimated at the nearby open space (i.e., R3) represent a conservative overestimation of the Project's noise levels that are expected to be experienced by wildlife in this area.

Impact BIO-4 in the PRDEIR (pages 3.5-50 through 3.5-53) includes a description of the potential impacts of noise and blasting on wildlife adjacent to the Project Site and mountain lions and other wildlife species traveling through the adjacent open space corridor. The unmitigated Project noise levels at Receptor R3 were estimated to be approximately 59.6 dBA and mitigated noise levels with implementation of DEIR Mitigation Measure (MM) NV-1 (DEIR pages 3.8-21 and 3.8-22) were predicted to be 53.5 dBA during the daytime hours, as identified in DIER Table 3.8-12 (DEIR page 3.8-21). Note, because Mitigation Measure NV-1 would limit onsite mining and processing activities to between 7 a.m. and 4 p.m., there would be no potential evening or nighttime noise impacts to mountain lions or other wildlife species traveling through the adjacent open space corridor. Additionally, Mitigation Measure NV-1 would also require the use of properly fitting mufflers, limit idling times for equipment, and prohibit concurrent operation of the aggregate and recycle plans, all of which would further reduce noise on and around the Project Site.

Impact BIO-4 of the PRDEIR addresses noise level threshold recommendations from the U.S. Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (CDFW) for the protection of birds and other wildlife. The USFWS recommended that noise levels not exceed 60 dBA (hourly average) and the CDFW recommended a 65-dBA for a construction project in Ventura County. The Ventura County General Plan 1-hourly average significance criteria for daytime (between 6 a.m. and 7 p.m.) noise levels is 55 dBA at sensitive receptors which applies to "noise-sensitive land uses" and "sensitive wildlife habitats, including the habitat of rare, threatened, or endangered species" (Ventura County, 2020). Thus, mitigated noise levels of 53.5 dBA at Receptor R3 would be below the noise level thresholds identified by USFWS and CDFW and would be below the Ventura County significance criteria of 55 dBA. As noted above, DEIR Mitigation Measure MM NV-1 (DEIR pgs. 3.8-21 and 3.8-22) requires implementation of onsite noise reduction measures (e.g., restricting the hours of onsite materials processing, recycling, and reclamation activities to daytime hours of 7:00 a.m. to 4 p.m., the use of improved mufflers, limiting equipment idling, avoidance of concurrent aggregate and recycle plant operations).

MM NV-1 also requires noise monitoring at two receptor locations, R1 and R2-B, and requires that if measured noise levels exceed 55 dBA, then activities conducted within line-of-sight of the respective receptor will cease until additional noise control measures are implemented.

Receptors R1 and R2-B are at the Conejo Mountain Cemetery west of the Project Site and at a residence southeast of the Project Site, respectively, and represent sensitive receptor locations for human receptors. Receptor R3 is located within the open space corridor southeast of the Project Site approximately 390 feet from the proposed mine area boundary. As presented in the DEIR, Mitigation Measure MM NV-1 (DEIR pages 3.8-21 and 3.8-22) does not require monitoring at Receptor R3; however, monitoring will occur at Receptor R2-B, which is located at the neighborhoods just southeast of the open space corridor. Mitigated noise levels at Receptor R3 are predicted to be below the 55 dBA threshold and, therefore, would not result in significant impacts to wildlife in the adjacent open space corridor. However, in consideration of agency comments on the DEIR and PRDEIR and to provide additional assurance that Project-related noise would not adversely affect wildlife movement in the adjacent open space corridor located east of the Project Site, this technical memorandum recommends that the County consider revising Mitigation

Measure MM NV-1 to require noise level monitoring at Receptor R3 with similar requirements as specified in DEIR MM NV-1 for Receptors R1 and R2-B. Although with DEIR Mitigation Measure MM NV-1, mitigated noise levels are not anticipated to exceed the 55 dBA significance threshold and revising the mitigation measure is not necessary to avoid a significant impact, revising the mitigation measure to require noise monitoring at Receptor R3 would provide further assurance that any unanticipated exceedances would be identified and addressed through additional noise reduction measures as may be necessary to avoid exceedance of the 55 dBA threshold.

Noise resulting from trucks traveling along Howard Road adjacent to the area designated as Habitat Connectivity and Wildlife Corridor, which is just to the east of Howard Road, was not specifically measured or modelled within the DEIR: however, the DEIR did analyze noise haul truck noise at the residence located adjacent to the corner of Howard Road and Pancho Road, referenced as Receptor 4 (R4) within the DEIR. Even though Howard Road is located outside of the Habitat Connectivity and Wildlife Corridor, consideration should be given to noise generated in areas adjacent to the designated corridor areas. The noise levels at Receptor R4 (R4), which was located near a house at the corner of Howard Road and Pancho Road (R4 was incorrectly labeled as R3 on Figure 3.8-2 [page 3.8-8] in the DEIR), would be expected to be representative of the noise on Howard Road adjacent to the Habitat Connectivity and Wildlife Corridor. Consistent with the Ventura County General Plan, the Project's haul truck noise was estimated at Receptor R4 over a 24-hour period, using the Community Noise Equivalent Level (CNEL) metric, which incorporates a +5 decibel weighing applied to noise occurring during evening (7:00 p.m. to 10:00 p.m.) hours, and a +10 decibel weighing applied to noise occurring during nighttime (10:00 p.m. to 7:00 a.m.) hours. These additions are made to account for the noise sensitive time periods during the evening and nighttime hours, when receptors (e.g., people or wildlife) are generally more sensitive to sound. Using this metric, as well as the measure ambient noise levels and the Project transportation noise levels as modelled in SoundPLAN during the daytime, evening and nighttime periods, the unmitigated 24-hour CNEL Project noise levels at Receptor R4 were estimated to be approximately 55.2 dBA, which is below the applicable Ventura County General Plan outdoor noise threshold of 60 CNEL. As with the average hourly metrics discussed above, the Ventura County General 24-hour average significance criteria of 60 CNEL also applies to "noise-sensitive land uses" and "sensitive wildlife habitats, including the habitat of rare, threatened, or endangered species", when they might be exposed to noise sources such as "highways, truck routes, heavy industrial activities and other relatively continuous noise sources" (Ventura County, 2020). As such, haul truck activity associated with the Project along Howard Road is not expected to adversely impact mountain lions and other wildlife species travelling through the portions of the Habitat Connectivity and Wildlife Corridor adjacent to Howard Road.

The noise and vibration studies conducted for the DEIR (DEIR Impact NV-3, page 3.8-23) found that although blasts would occur closer in location to sensitive receptors in the open space corridor to the east of the site, the vibration levels during blasting were estimated to remain well below the applicable significance thresholds for annoyance and building damage. Note the ground vibration impacts due to blasting are generally analyzed on a per blast basis, and Impact BIO-4 in the PRDEIR (pgs. 3.5-50 – 3.5-53), states that the size and design of each blast occurring onsite would not change. While the size and design of each blast, and therefore the vibration levels generated by each blast would not change or increase, nonetheless it is recommended that the text of the PRDEIR under Impact BIO-4 be corrected to clarify that

the average number of blasts per week may increase to account for a proposed potential increase in annual excavation. Specifically, the actual detonation duration of each blast would remain approximately one second and blasting would continue to be conducted during daytime hours (7 a.m. to 4 p.m.) only. Impacts of the periodic and short-term blasting associated with mining in the proposed expansion areas were analyzed in Impact NV-3 (DEIR Section 3.8.2.2, pages 3.8-23 and 3.9-24). The analysis noted that although the vibration levels may be perceptible, with the very short duration and continued infrequency of blasting events, it is not expected that blasting would significantly impact special-status wildlife species. Additionally, as discussed previously, due to the historical mining operations, including blasting which has occurred at the Project Site for decades, existing operations have likely resulted in some common and 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 has historically occurred. As the mine expands with the Project, some 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 corridor areas around the Project Site.

Regarding potential impacts on mountain lion and the wildlife movement through the open space corridor east of the Project Site, Project vibration levels due to blasting were evaluated in the DEIR, including assessment of predicted vibration levels within the open space at Receptor R3. The analysis was further discussed specifically as associated with wildlife and habitat in the PRDEIR as summarized in the preceding paragraph. As discussed in Section 3.8.2.2 of the DEIR (pages 3.8-23 and 3.8-24), predicted vibration levels at Receptor 3 were estimated to result in a peak particle velocity (PPV) of 0.492 inches per second based on a conservative worst-case estimate assuming that the blast would occur in the permit/mining area closest to Receptor 3 (i.e., approximately 390-feet away). Furthermore, blasting would continue to occur infrequently, during daytime hours only, and an individual blast would last approximately 1-second in duration. For these reasons, the vibration impacts on mountain lions and the adjacent open space areas resulting from the Project would be less than significant.

3.7 Wildland Fire

Mountain lions are highly mobile and are generally able to escape from wildfires. However, wildfires can be a direct threat to mountain lions if they are unable to access escape routes due to their movements being restricted by developed areas or roads. In addition, female mountain lions with kittens may not be able to escape wildfires if the kittens are not mobile. If extreme weather conditions cause wildfires to spread quickly, mountain lions may not be able to reach safety and may be injured or killed. Impact HAZ-7 in the DEIR (page 3.11-14) identifies that the proposed expansion of mining and additional activities at the Project Site would result in marginal increases in the potential for fire ignition. Wildland fire threats to mountain lions include the immediate threat of injury or death of individuals unable to escape burning areas, damage to and temporary loss of vegetation and habitat in the open space areas where they potentially conduct foraging, movement, and breeding activities.

As discussed in Section 3.11 of the DEIR (pages 3.11-1 through 3.11-15), the Project's potential effects related to wildland fires were evaluated and were determined to be potentially significant because the Project would involve activities that create potential sources of fire ignition and could increase the potential for wildland fires. Through the implementation of MM HAZ-7 in the DEIR (pages 3.11-14 and

3.11-15), which includes the development of a fire safety plan and the installation of emergency water distribution systems, the Project's wildfire risk would be reduced, and the mitigation measure was found sufficient to reduce the Project's impact related to wildland fire to less than significant. If a wildfire were to occur in the Project vicinity, vegetation in the open space corridor areas would potentially burn with or without the Project. While loss of vegetation due to wildfire could affect wildlife movement in the area, the Project Site could provide a viable route for wildlife to move through if wildfires were to make other portions of the open space corridor areas impassable. As the Project is not expected to result in a significant increase in wildland fire, the Project's potential impact to wildlife, including mountain lion, and the open space corridor areas adjacent to the Project Site would also be less than significant with mitigation.

3.8 Rodenticides

Impact BIO-4 in the PRDEIR (page 3.5-60) identifies that the Proposed Project could have indirect effects on mountain lions from the use of rodenticides. Human-caused mortalities of mountain lions and other wildlife species, such as bobcats and coyotes, have been attributed to the use of anticoagulant rodenticides (ARs). The large predators have been shown to be indirectly affected by the ingestion of prey that have ingested ARs. A study of radio-collared mountain lions conducted in the Santa Monica Mountains between 2002 and 2019 by Benson et. al. (2019) looked at estimating survival and cause-specific mortality rates and model factors influencing mortality. The authors determined that "The second most frequent form of human-caused mortality in mountain lions in the study area was rodenticide poisoning." Moriarty et. al. (2012) conducted a study looking at the exposure of wildlife to anticoagulant rodenticides at the Santa Monica Mountains National Recreation Area and they reported that, "All carnivore species studied, including mountain lions, coyotes, bobcats, and gray foxes, have tested positive for exposure to toxicants."

PRDEIR Mitigation Measure MM BIO-4(h)(3) (page 3.5-68) imposes restrictions on rodenticide use, specifying, "[t]o 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." As disclosed in the PRDEIR, implementation of this mitigation measure prohibiting the use of anticoagulant rodenticides anywhere within the Project Site would ensure mountain lions and other wildlife species, such as bobcats and coyotes, would not be adversely affected by use of rodenticides associated with the Project.

4.0 CONCLUSION

The purpose of this technical memorandum was to evaluate the impact analysis and conclusions presented in the DEIR, with revisions to the DEIR Biological Resources section circulated in the PRDEIR, to further substantiate the conclusions presented in the documents, and reaffirm that the Project will not result in significant impacts to mountain lion and wildlife movement through the adjacent natural open space corridor with implementation of the mitigation measures described in the DEIR and PRDEIR. The supplemental technical information included in this memorandum was gathered from research studies related to mountain lion presence, behaviors, movement, habitat preferences, and genetic diversity and

potential impacts to mountain lions from traffic, artificial lighting, noise and vibration, wildland fire, and rodenticides. As summarized below, the analysis in this memorandum concludes that:

- based on the findings of Beier (2018 and 1995) regarding the design of movement corridors that support dispersal of mountain lions, the width of the natural open space corridor east of the Project Site would be slightly reduced in some areas as a result of the Project, but the resulting 800-foot (minimum) width of preserved natural open space would remain sufficient for mountain lion movement and use;
- based on Beier's (1995) statement that some native woody vegetation should be present in wildlife corridors to provide visual cover for mountain lions, the presence of woody vegetation within the preserved natural open space corridor adjacent to the Project will provide suitable cover for mountain lion movement and use;
- based on the fact that the width of the preserved open space corridor will meet Beier's (1995) design for movement corridors, the Project's reduction in the width of the adjacent open space would not limit mountain lion movement beyond current conditions and therefore, would not adversely affect reproduction or genetic diversity in the local mountain lion population;
- with the implementation of mitigation measures included in the PRDEIR that address potential impacts to mountain lion natal dens, the Project would not adversely affect mountain lion natal dens;
- with implementation of mitigation measures included in the DEIR and PRDEIR that address potential impacts to mountain lion associated with traffic, lighting, vehicle operation, vibration, wildland fire, and rodenticides, the Project would not adversely affect mountain lions; and
- with implementation of the mitigation measures included in the DEIR that address potential noise impacts of the project and with the recommended modification to Mitigation Measure MM NV-1 to require noise level monitoring at Receptor R3 with similar requirements as specified in DEIR MM NV-1 for Receptors R1 and R2-B, the Project would not have adverse effects on mountain lion from Project related noise.

The findings in the DEIR and PRDEIR correctly conclude that with implementation of mitigation measures identified in the DEIR and PRDEIR, the Project would not result in significant impacts to mountain lion or the ability of wildlife to move through the open space corridor areas adjacent to the Project Site.

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APPENDIX A

Resume

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

Mari Quillman

Principal Biological Resources Program Manager

Ms. Quillman has more than 35 years of experience in managing projects, conducting biological surveys, habitat restoration, and mitigation planning for projects in southern California. Ms. Quillman has conducted general biological surveys, focused surveys for California gnatcatcher, least Bell's vireo, burrowing owl, desert tortoise, and surveys for other special-status wildlife species. She has extensive biological survey experience in grassland, sage scrub, chaparral, woodlands, and riparian habitats and for the associated wildlife species. She has prepared biological technical reports, biological sections of CEQA and NEPA documents, Biological Assessments, Incidental Take Permit applications, Habitat Enhancement and Management Plans, and mitigation and habitat restoration plans.

Ms. Quillman now serves as a Program Manager for large clients and is responsible for client relations, quality control of clients' documents, litigation support, and delegation of projects to ECORP's Project Managers and staff. She specializes in managing large, complex projects involving CEQA/NEPA and biological resources, sensitive and listed species, mitigation banking, and habitat restoration issues. She has extensive experience in consultations with the resources agencies, including the U.S. Fish and Wildlife Service (USFWS), California Department of Fish and Wildlife (CDFW), U.S. Army Corps of Engineers (Corps), and Regional Water Quality Control Board (RWQCB). In addition, she specializes in developing mitigation strategies that consider the clients' needs as well as the resource agencies' wants. She oversees biological technical studies and develops mitigation strategies designed to enhance and restore habitat for endangered species and to support the establishment of habitat mitigation banks.

Education

M.S., Environmental Studies, California State University, Fullerton

B.S., Zoology, California State Polytechnic University, Pomona

Registrations, Certifications, Trainings, and Affiliations

- Desert Tortoise Council – Chairperson 2021 to Present
- Habitat Evaluations Procedures Certificate, USFWS
- Mohave Ground Squirrel CHIEF Analysis, CDFW
- Desert Tortoise Handling Workshop
- Basic Tracking and Wilderness Awareness Training - Earth Skills

Professional Experience

Biological and Agency Coordination Services for the Coal Canyon Mountain Lion Corridor Project (formerly Cypress Canyon Project), Orange County – The St. Clair Company. Conducted biological surveys, protocol surveys for coastal California gnatcatcher, and vegetation mapping of occupied gnatcatcher habitat on the 649-acre site located in Coal Canyon in the City of Anaheim. The initial plan for the site was a large housing development. However, the value of the site as the last mountain lion movement corridor between the Santa Ana Mountains and the Chino Puente Hills was identified during the evaluation of the site. Consequently, the focus shifted to evaluating the site as mitigation for impacts to coastal California gnatcatchers on the site of a proposed housing development project in the City of Yorba Linda. Ms. Quillman conducted agency negotiations with the U.S. Fish and Wildlife Service regarding the value of the habitat on the 649-acres site for coastal California gnatcatcher. Prepared the joint Yorba Linda and Cypress Canyon Projects Biological Assessment under Section 7 of the Federal Endangered Species Act (ESA). Worked with the Project Team providing biological information to the State of California as the site was eventually purchased and has become part of Chino Hills State Park. The Coal Canyon offramp on the 91 Freeway was closed as a condition of the Project. Restoration plans were prepared to remove the underpass road and to plant the area under the 91 Freeway with native plant species to enhance the corridor for the movement of mountain lions.

Biological Services, Jurisdictional Delineation, Restoration Planning, Mitigation Planning, and Biological Monitoring for the Yorba Linda Estates (formerly Fairmont Estates) Project, Orange County – Pulte Homes. Project Manager responsible for overseeing all aspects of the project. General biological surveys, jurisdictional delineation, and protocol surveys for coastal California gnatcatchers were conducted on the approximately 257-acre site in Yorba Linda. The project site supported 11 pairs of gnatcatchers and the project would potentially impact 10 pairs. ECORP worked with the Project Team to identify potential mitigation options for the impacts to gnatcatchers. A 649-acre site in Coal Canyon was identified as an appropriate mitigation site for not only the impacts to gnatcatchers but also to preserve the last mountain lion movement corridor between the Santa Ana Mountains and the Chino Puente Hills. A habitat restoration plan was developed for the areas on the Yorba Linda site that would not be affected by the development. Ms. Quillman prepared the Biological Assessment under Section 7 of the Federal ESA and conducted negotiations with the USFWS. The landowner provided funding along with other entities to purchase the Coal Canyon property and to turn it over to the State of California as part of Chino Hills State Park.

Biological and Cultural Resources Surveys, California Gnatcatcher Surveys, Wetlands Delineation, Permitting, Constraints Analysis, Section 7 Consultation, Habitat Restoration, and California Gnatcatcher Nest Monitoring for the 789-Acre Tonner Hills Site in Orange County – Nuevo Energy Company. Project Manager responsible for overseeing all aspects of this project. Conducted a constraints analysis for the purpose of project planning around sensitive biological and cultural resources. Surveys were conducted to document the existing resources. Conducted focused protocol surveys for the coastal California gnatcatcher, least Bell's vireo, southwestern willow flycatcher, and California red-legged frog. The locations of vegetation communities, sensitive biological resources, and archaeological sites were mapped using the Geographic Information System (GIS). Wetlands/Waters of the United States resources were also delineated and mapped. Using the GIS, the project alternatives were overlaid with the biological, wetlands, and cultural resources layers to determine the acres of impacts on sensitive resources. Using the GIS as a tool, modifications were made in the land use plans in order to avoid sensitive resources, particularly the breeding California gnatcatchers and the jurisdictional

waters. Involved in Section 404 (individual permit) and 401 permitting as well as the negotiation of the 1602 Streambed Alteration Agreement. Prepared the Biological Assessment under Section 7 of the Federal ESA and conducted all of the strategic planning with the client and the negotiations with the USFWS. Planned an extensive habitat restoration program and oversaw the monitoring and maintenance of the coastal sage scrub restoration. Conducted nest monitoring for California gnatcatchers to ensure that restoration activities did not impact this threatened species.

Habitat Resources Management Plan, Biological Surveys and Technical Report, Focused Surveys for California Gnatcatcher and Riverside Fairy Shrimp, Wetlands Delineation, Permitting, Mitigation Monitoring, and Habitat Restoration for the 113-Acre Santiago Canyon Estates Project, Orange County – Santiago Partners/Beazer Homes. Program Manager responsible for overseeing all aspects of this project, including extensive coordination and consultation with the various resources agencies. Conducted a literature review, reconnaissance-level biological survey, and focused surveys for sensitive plant and wildlife resources at this site. Resources identified on the site were documented and mapped. Focused surveys were conducted for the coastal California gnatcatcher and Riverside fairy shrimp. Also conducted an extensive wetlands delineation of the drainages on the site. Prepared the Habitat Resources Management Plan that provided all the specifications and mitigation measures for protecting the sensitive resources during the construction phase of the project and for conducting the habitat restoration on the site. Implemented the restoration of coastal sage scrub, riparian, wetland, and oak woodland habitats and monitored the maintenance and success of the restoration.

Biological Services in Support of the Environmental Impact Report and Mitigation Compliance Monitoring for Top of the World Reservoir, Orange County – Laguna Beach County Water District. Performed surveys for common and sensitive biological resources in support of preparing the biological section of the EIR. Prepared the biological resources section of the EIR and designed mitigation measures to protect sensitive biological resources in the project area. Conducted pre-construction surveys to determine the locations of California gnatcatchers adjacent to the construction areas. Conducted mitigation compliance monitoring for coastal California gnatcatchers during the initial construction phase of the project.

Biological Services for the Gillibrand Tapo Canyon Mine, Ventura County – Gillibrand Industrial Sands, Inc. Program Manager responsible for overseeing all aspects of this project. ECORP provided various biological services for the 27-acre expansion of the Gillibrand Industrial Sands, Inc. Tapo Canyon Mine Project (Project) in Ventura County. The biological services included preparing a Wildlife Best Management Practices Plan, Worker Education Program, focused surveys for threatened and endangered species, rare plant surveys, pre-construction surveys, monitoring Mariposa lily transplant services, agency support, and reporting.

Biological Support Services for the CEMEX Moorpark Aggregate Facility Project in Ventura County, California – CEMEX. Program Manager responsible for providing biological services for the expansion of the mining operation and the associated reclamation at the CEMEX Moorpark Aggregate Facility Project in Ventura County, California. The biological services were in accordance with the Conditions of Approval (COA) and included a Habitat Maintenance Plan, implementation of annual monitoring and reporting, a Wildlife Best Management Practices (BMP) Compliance Plan, and a Tree Mitigation Plan. ECORP prepared guidelines for fencing and signage, monitoring guidelines to address adverse effects to vegetation, protection of habitat through a conservation easement, and conveyance of the reclaimed lands to a conservation agency. An initial monitoring survey of the conservation easement lands that served as a baseline for future monitoring was

conducted. ECORP also developed and implemented a Worker Education Program and prepared a Tree Mitigation Plan to compensate for impacts to oak trees removed as a result of the mining operation.

Habitat Mitigation/Conservation Plan for the Moorpark Sand and Gravel Mine, Ventura County – Transit Mixed Concrete. Program Manager responsible for overseeing all aspects of this project, including preparation of the Habitat Mitigation/Conservation Plan (HMCP) and coordination between the City of Moorpark and Transit Mixed Concrete. The HMCP analyzed three different mitigation alternatives for impacts to coastal sage scrub and the California gnatcatcher. The alternatives included various combinations of onsite and offsite habitat restoration and preservation of adjacent native habitats.

Biological Support for Joint Environmental Impact Statement/Environmental Impact Report (EIS/EIR), Segment 1 of Antelope to Pardee 500kV Transmission Line Project, Los Angeles County – Aspen Environmental for the California Public Utilities Commission. Conducted the QA/QC of the biological sections of the joint EIS/EIR for the California Public Utilities Commission (CPUC) under the U.S. Department of Agriculture (USDA) Forest Service for the Angeles National Forest. The Southern California Edison proposed route of the approximately 25.6-mile 500-kV electric transmission line project spanned the Del Sur Ridgeline in the Angeles National Forest beginning at the Antelope Substation in Lancaster and ending at the Pardee Substation in Santa Clarita. Responsibilities included reviewing the existing biological documents and databases, overseeing the biological surveys, and preparation of the biological sections of the EIS/EIR.

Mitigation Planning, Biological Services, Regulatory Permitting, Litigation Support, and Permit Compliance Services for Devil's Gate Reservoir Restoration Project – Los Angeles County Public Works. Project Manager in charge of all aspects of the project. Services include reviewing existing project information prepared by others, developing a mitigation strategy, communicating with the regulatory agencies and the City of Pasadena, and assessing potential mitigation sites within the reservoir and at off-site locations. Prepared the Habitat Mitigation and Monitoring Plan (HMMP) in support of the Section 404 permit application. The HMMP includes creation, revegetation, and enhancement of native habitats and removal of an extensive invasion of nonnative and invasive plant species are the primary components of the HMMP. The HMMP also includes monitoring and maintenance activities and focused survey efforts for federally and state-listed wildlife species. A jurisdictional delineation was conducted and accepted by the USACE and assistance was provided for the preparation of the EA in support of the Section 404 permit from the USACE. Provided technical assistance with the Streambed Alteration Agreement (SAA) application and prepared the Incidental Take Permit Application (ITP) that was submitted to the CDFW. Participated in extensive agency negotiations and facilitated meetings with the USACE, CDFW, and USFWS. Met with the City of Pasadena and participated in public outreach meetings for the general public. Provided litigation support for the challenge to the CEQA document.

Preparation and Implementation of the Master Mitigation Plan for the Big Tujunga Wash Mitigation Bank – Los Angeles County Public Works. Project Manager in charge of the preparation and implementation of the Master Mitigation Plan (MMP) for the County's Big Tujunga Wash Mitigation Bank. Preparation of the MMP required extensive field work to evaluate the habitat restoration opportunities, to determine the presence/absence of native and non-native terrestrial and aquatic wildlife species, to determine the extent of wetlands and Waters of the U.S. jurisdictional areas, and to map the extensive trails system throughout the site. Extensive coordination was conducted with the resource agencies regarding the potential impact of the Master Plan programs on the stream, jurisdictional waters, riparian habitat, and listed species of plants and wildlife. A significant program for removing nonnative and invasive plants was implemented and the areas

were subsequently restored to riparian woodland/scrub and oak/sycamore woodland. Unnecessary trails were also closed and restored to native habitat. Implemented an extensive public outreach and education program in English and Spanish and conducted meetings with the Community Advisory Committee that was established for the project. Focused surveys for listed species of birds and fish were conducted as well as a large-scale control program for nonnative and invasive terrestrial and aquatic wildlife.

Baseline Biological Surveys, Southwestern Pond Turtle Relocation and Monitoring, Water Quality and Sediment Analysis, and Functional Analysis for the San Gabriel River Sediment Management Plan Project – Los Angeles County Public Works. Program Manager responsible for overseeing all aspects of this large-scale project. Conducted baseline surveys for biological resources, water quality, and sediment analysis between the West Fork and Santa Fe Dam in the San Gabriel River System. The purpose of the surveys was to obtain baseline data in the river system prior to the sluicing of sediments from behind San Gabriel and Morris Dams. Biological surveys were conducted for plants, wildlife, fishes, and macroinvertebrates. Captured southwestern pond turtles below Morris Dam, fitted them with radio transmitters, and relocated them upstream. Ongoing monitoring of the relocated turtles was conducted on a regular basis. Water quality and sediments were sampled prior to and during the sluicing operation. Data related to the biological, physical, and biogeochemical functions were collected along transects in upland, riparian, and aquatic habitats. A complete functional analysis, based on the Corps' Hydrogeomorphic Analysis and Habitat Evaluation procedures, was conducted to assess and compare the biological and aquatic function.

Biological Surveys and Mitigation Bank Feasibility Study for Elizabeth Lake, Los Angeles County – Ridgetop Ranch Properties. Project Manager responsible for overseeing all the tasks associated with the project. Approximately half of Elizabeth Lake, the largest natural lake in Los Angeles County, is privately owned and zoned for recreational use. The owner decided to research the idea of turning the eastern half of the lake into a mitigation bank to improve and preserve the natural integrity of the lake. Utilizing the results of several focused biological surveys previously conducted at the site, the lake was assessed for biological and ecological value as a mitigation bank within the Santa Clara River Watershed. A biological reconnaissance survey was conducted for the purpose of identifying vegetation communities and the potential for sensitive species to occur. Focused surveys were conducted for rare plants, least Bell's vireo (*Vireo bellii pusillus*), southwestern willow flycatcher (*Empidonax traillii extimus*), and southwestern pond turtle (*Actinemys marmorata pallida*) within the privately-owned portion of Elizabeth Lake. A jurisdictional delineation was conducted to identify the extent of federal and state jurisdictional wetlands and waters. A conceptual mitigation plan was prepared that addressed potential habitat restoration opportunities to improve the habitat around the lake and to create additional habitat for listed species. Extensive agency coordination was conducted with the Environmental Protection Agency (EPA), Corps, CDFW, and the RWQCB.

Biological Reconnaissance Surveys, Jurisdictional Delineation, Focused Sensitive Plant Surveys, Habitat Restoration Plan, Implementation and Monitoring of Habitat Restoration, and Assistance with an Update of the Plan of Operations for the Pole Canyon, Rabbit Canyon, and Oak Spring Canyon Quarries, Los Angeles County – Vulcan Materials Company. Vulcan Materials Company's mining operation at Pole Canyon in Los Angeles County required an update of the Plan of Operations and Reclamation Plan to extend the Contract for Sale of Minerals Materials. The mining operation is located within the Angeles National Forest near the City of Santa Clarita. The U.S. Forest Service (USFS) also required updated biological studies and the preparation of a Biological Evaluation/Biological Assessment and a Management Indicator Species Report. In addition, the USFS

also required a revision of the reclamation plans for two nearby quarries (Rabbit Canyon and Oak Springs Canyon Quarries) to complete the closure. Closure of these additional quarries included the preparation of updated restoration plans focused on restoring the historic drainage conditions, removing non-native invasive plants, and planting/seeding with native plant species. Repair and restoration of an eroded slope below a horse trail was also addressed as part of this project. Biological surveys included mapping the vegetation communities in the three quarries, recording plant and wildlife species, determining the potential for occurrence of sensitive and listed species of plants and wildlife, and identifying the potential restoration options for each quarry. In addition, focused surveys were conducted for rare plants and a focused assessment was conducted to determine if sensitive amphibians could potentially occur in the area. A jurisdictional delineation was conducted in the three quarries to identify the areas that fall under the jurisdiction of the U.S. Army Corps of Engineers. A biological resources report and a jurisdictional delineation report were prepared. In addition, a fluvial geomorphic assessment was conducted to determine the flow rates contained in diversion channels versus the historic natural drainage channels and to determine the benefits/constraints of returning the drainage to the historic channels. The Plan of Operations and revised Reclamation Plans were compiled with all the technical reports for submittal to the USFS.

Biological Reconnaissance Surveys, Focused Sensitive Fish Surveys, Sensitive Plant Surveys, Habitat Restoration Plan, Implementation and Monitoring of Habitat Restoration, Wetlands Delineation for the Fish Creek Restoration Project at the Azusa Mine, Los Angeles County – Vulcan Materials Company. Program Manager responsible for overseeing all aspects of this project. Oversaw the biological surveys and wetlands delineation at the mining site. Participated on the planning team that developed an engineered plan to move Fish Creek back to its historic location. In addition, oversaw the preparation of the habitat restoration plan for creating the alder riparian woodland and chaparral that bordered the new creek. Oversaw the implementation of the planting and monitoring of the native habitat restoration areas and provided QA/QC of all of the reports prepared for the project. Performed as the main point-of-contact with the client and the project team.

Biological Reconnaissance and Focused Biological Surveys, Wetlands Delineation, Habitat Restoration Plan, Habitat Restoration Implementation and Monitoring for the Azusa Rock Mine, Los Angeles County – Vulcan Materials Company. Program Manager responsible for overseeing all aspects of this project. Biological surveys and wetlands delineations were conducted in support of the EIR to modify the reclamation plan. Participated on the planning team that developed an engineered plan to move Fish Creek back to its historic location. Habitat restoration plans were prepared for the creek reclamation and for an innovative microbenching technique used to reclaim the steep slopes of the mine. Oversaw the habitat restoration implementation of the planting and monitoring of the native habitat restoration areas and provided QA/QC of all of the reports prepared for the project. Performed as the main point-of-contact with the client and the project team. Participated in the agency consultations in support of the permitting efforts and was responsible for overseeing the monitoring of the creek restoration sites until the performance standards were achieved and agency sign-off was accomplished. Habitat restoration monitoring will be ongoing on the microbenched areas until the success standards are achieved.

EIR/EIS for the Mitsubishi Cement Corporation South Quarry Project, San Bernardino County – San Bernardino National Forest and County of San Bernardino under an MOU with Mitsubishi Cement Corporation. Biological Resources Specialist for the preparation of a joint EIR/EIS to comply with CEQA and

NEPA for the expansion of an existing limestone quarry in the San Bernardino National Forest. The project area totaled approximately 153.6 acres and consisted of a 128-acre quarry; a 2.7-acre landscape berm; a 22.2-acre haul road, 1.8-miles in length haul road; and a temporary construction road of 0.7 acres known collectively as the South Quarry. ECORP prepared and circulated CEQA and NEPA notices, supported public and agency meetings during the scoping and public comment periods, and prepared the EIR/EIS. Specific biological issues include sensitive plants, desert tortoise, and desert bighorn sheep. Worked with USFS biologists to prepare the Biological Assessment to satisfy the Section 7 Consultation.

Sensitive Biological Resources Assessment for the CalMat Cajon Wash Conservation Bank, San Bernardino County – CalMat Company/Vulcan Materials Company. Project Manager and Principal Wildlife Biologist responsible for all aspects of client coordination and project completion. The site was assessed for its value as a Conservation Bank made up primarily of Riversidian Alluvial Fan Sage Scrub. The project included scientifically based studies to determine population sizes of the Santa Ana River woolly star and slender-horned spineflower. Also conducted surveys for the California gnatcatcher, cactus wren, San Bernardino Merriam's kangaroo rat, and Los Angeles pocket mouse in accordance with strict agency-approved protocols. Oversaw the construction and mitigation monitoring during fencing and clearing of portions of the project area. Provided agency coordination with the USFWS, CDFW, and the Corps during all aspects of the project. Managed the preparation of an extensive GIS analysis of the historic and current locations of vegetation communities and habitat for the San Bernardino kangaroo rat (SBKR). Determined impacts of unpermitted activities of upstream landowners on the quality and quantity of SBKR habitat.

Biological Reconnaissance Surveys, Focused Gnatcatcher, Quino Checkerspot, Least Bell's Vireo Surveys, Restoration Plan, Sensitive Plant Surveys, Biological Assessment, Wetlands Delineation, Permitting, and Agency Consultation for the Pala Mine, San Diego County – Vulcan Materials Company. Project Manager responsible for overseeing all aspects of this project. Work included conducting vegetation mapping, reconnaissance-level biological surveys, focused surveys for rare plants, California gnatcatchers, Quino checkerspot, and least Bell's vireos, and a wetlands delineation. A Biological Assessment that satisfied Section 7 of the Federal Endangered Species Act (ESA) was prepared to address impacts to the California gnatcatcher, arroyo toad, least Bell's vireo, southwestern willow flycatcher, and Quino checkerspot. A jurisdictional delineation report and permit applications for a Streambed Alteration Agreement and for Sections 401 and 404 of the Clean Water Act were prepared. Pre-construction surveys and construction monitoring were conducted prior to and during vegetation clearing and mining activities. Development of appropriate mitigation measures, as well as agency coordination, were key components of this project. After mining was completed, coordinated with the USFWS regarding protection measures designed to avoid impacts to California gnatcatcher during mining reclamation and closure. An Informal Section 7 Consultation and Concurrence Letter were negotiated between the Pala Band of Mission Indians and the USFWS for the reclamation activities.

APPENDIX C-6
BIOLOGICAL RESOURCES ASSESSMENT FOR CHANGE FROM 30- TO 60-YEAR PERMIT EXTENSION

MEMORANDUM

TO: Ms. Jane Farkas, J. Elinor Consulting

FROM: Mari Quillman, ECORP Consulting, Inc.

DATE: February 11, 2025

RE: **Potential Impacts to Biological Resources Associated with Extending the Permit Duration from 30 to 60 Years for the Pacific Rock Quarry Expansion Project – LU10-0003 (CUP 3817-3)**

The purpose of this memorandum is to discuss potential impacts to biological resources that may occur if the duration of mining at the Pacific Rock Quarry Expansion Project - LU10-003 (CUP 3817-3) (Project) is extended from 30 years to 60 years. The original Project Description submitted to the County of Ventura (County) stated the total maximum material volume that would be excavated and exported from the Project site under the proposed permit and associated Reclamation Plan (LU10-0003) was approximately 19,800,000 cubic yards. On February 4, 2025, ECORP Consulting, Inc. (ECORP) was notified that the Pacific Rock applicant team had incorrectly estimated, through a math error, the total material volume that could be excavated and exported from the Project site. The original estimate of 19,800,000 cubic yards was incorrectly converted to tons and the resulting total determined that 13,200,000 tons would allow for an estimated 30-year life of the mining operations. The corrected estimate of 29,700,000 tons of available material would extend the life of the quarry from 30 to 60 years. Other than extending the duration of the Project, all other aspects of the Project would remain the same as that stated in the original Project Description. More specifically, the footprint and potential spatial impacts associated with the mining Project would not change nor would the proposed reclamation design or end use.

The potential impacts of the Project on Biological Resources were analyzed in Section 3.5 of both the Draft Environmental Impact Report (DEIR), dated November 2020, and the Partially Recirculated DEIR (PRDIER), dated October 2022. An additional analysis of potential impacts of the Project on mountain lion (*Puma concolor*) and wildlife movement was submitted to the County in a technical memorandum prepared by ECORP (August 2024). The proposed extension of mining from 30 to 60 years warrants a review of the potential impacts and proposed mitigation measures to determine if there are any changes in the impacts or if additional mitigation measures are required to reduce Project impacts to less than significant. The PRDEIR and the technical memorandum prepared by ECORP (August 2024) were used for the comparison since these two documents superseded the biological resources discussion in the DEIR.

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In summary, this memorandum concludes that the impact analysis and conclusions presented in the 2020 Draft Environmental Impact Report (DEIR) and with revisions to the DEIR Biological Resources section circulated in the 2022 Partial Recirculated Draft Environmental Impact Report (PRDEIR) for the 30-year Project as they pertain to biological resources provides substantial evidence that, with implementation of mitigation measures identified in the DEIR and PRDEIR, the Project would not result in significant impacts to biological resources or mountain lion or the ability of wildlife to move through the open space corridor adjacent to the Project site if the Project is extended to 60 years. As summarized and amplified here, the analysis properly concludes that:

1. the boundary of the Project and all mining operations will remain the same as stated in the Project Description regardless of whether the mining operations are conducted over a 30- or 60-year period;

2. the existing conditions of the biological resources described in the PRDEIR and the August 2024 memorandum are the same whether the mining operations are conducted over a 30- or 60- year period;

3. the potential direct and indirect impacts to biological resources described in the impact analysis in the PRDEIR and the August 2024 memorandum for the 30-year Project would be the same for the 60-year Project;

4. the mitigation measures required to be implemented for the 30-year Project in the PRDEIR and with the modification suggested in the August 2024 memorandum would also reduce the impacts of the 60-year Project on biological resources to less than significant.

1.0 PROJECT OVERVIEW AND ENVIRONMENTAL REVIEW BACKGROUND

The Pacific Rock Quarry is located approximately 1.5 miles east of Lewis Road and approximately two miles south of U.S. Highway 101 off a private road (Howard Road) in unincorporated Ventura County. The Project is a proposal by the mine operator, requesting entitlements from Ventura County, that would modify the existing conditional use permit (CUP) to extend the life of the existing permitted operations for an additional 60 years rather than the originally stated 30 years, expand the mining area, extend the operational days for certain activities 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, allow operation of 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. The existing facility is an active quarry that supplies large rock for the production of riprap and various sizes of crushed rock and aggregate to public works and private projects in Ventura County. The request includes expansion of the mining area to the east to address slope conditions at the northerly and northeasterly side of the quarry

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and expansion onto recently acquired adjacent land. Under the Project, mining methods would continue as they currently occur today at the existing quarry, including blasting to loosen the hard rock material and various processing methods.

2.0 BIOLOGICAL SETTING AND IMPACT ANALYSIS

2.1 Existing Biological Setting

The existing biological setting was described in Section 3.5.1 of the PRDEIR, and it included a discussion of the following topics:

- Description of the Project Site and Adjacent Areas (Section 3.5.1.1)
- Vegetation Communities and Landforms (Section 3.5.1.2)
- Wildlife (Section 3.5.1.3)
- Habitat Connectivity and Wildlife Corridors (Section 3.5.1.4)
- Special-Status Vegetation Communities and Plant Species (Section 3.5.1.5)
- Special-Status Wildlife (Section 3.5.1.6)
- Waters and Wetlands (Section 3.5.1.7)
- Protected Trees (Section 3.5.1.8)
- Regulatory Setting (Section 3.5.1.9)

The existing conditions of the biological resources on the Project site would not change with the extension of the mining from 30 years to 60 years and no additional topics need to be included to adequately assess the impacts of the extended mining period.

2.2 Impact Analysis

The impact analysis in the PRDEIR (Section 3.5.2) begins with a discussion of the significance thresholds (Section 3.5.2.1) used to determine if the impacts of the Project on special-status species, sensitive plant communities, waters and wetlands, and habitat connectivity are significant and will require mitigation measures. The project-specific impacts discussion (Section 3.5.2.2) follows the order of the significance threshold discussion and for the purposes of comparing the potential impacts of changing the duration of mining activities from 30 to 60 years, the sections below follow the same order as the PRDEIR.

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Special-Status Species

Impact BIO-1 addressed the potential direct and indirect impacts to nesting birds from ground disturbance or other mining activities occurring within the mine expansion boundary. The extended duration of the mining would not be expected to change the analysis of impacts because the boundary of the mine expansion would not change. Therefore, with the implementation of mitigation measures MM BIO-1(a), MM BIO-1(b), MM BIO-1(c), and MM BIO-1(d), which are still applicable, the impacts to nesting birds would remain less than significant.

Special Status Vegetation Communities

Impact BIO-2 addressed the loss of special-status vegetation communities (upland scrub) resulting from clearing of vegetation for mining purposes. On page 3.5-41 in the PRDEIR, it states the "Mining 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." Extending the mining activities for a period of 60 years would not change the boundaries of the mining area from what was proposed, nor would it change the acreages of vegetation communities that would be removed. The proposed Reclamation Plan for the mined areas would be conducted as proposed with incremental reclamation and revegetation being implemented concurrently with mining, to the extent feasible. On page 3.5-42 of the PRDEIR, it states, "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 the impacts associated with the temporal loss of vegetation would be reduced." Removing the vegetation incrementally over a period of 60 years instead of 30 years would also have the potential to reduce impacts associated with temporal loss of vegetation. If incremental reclamation and revegetation are implemented concurrently with mining, then some revegetated areas may be trending towards maturity and regaining biological functions before new areas are cleared. The impact analysis in the PRDEIR describes the potentially significant temporal loss of vegetation and biological functions between the time when vegetation is cleared and when the plants in the revegetated areas grow to maturity and the biological functions are restored. To offset these potentially significant impacts, mitigation measures MM BIO-2(a) and MM BIO-2(b) are required to ensure that vegetation located outside of the mine expansion boundary would not be impacted and MM BIO-2(c) is required to ensure that the Permittee permanently preserves lands that support the same vegetation communities as those that are impacted by the Project. With the implementation of these mitigation measures, the impacts to sensitive upland scrub vegetation communities would still be less than significant regardless of whether the mining occurs for 30 or 60 years.

Special-Status Plant Species

Impact BIO-3 addressed the loss of special-status plants resulting from clearing within the mine expansion boundaries. The direct removal or other disturbance to special-status plants resulting from Project-related vegetation removal and ground disturbance was considered significant in the PRDEIR. Extending the

duration of mining would not change the potential impacts to special-status plants because the impacts would occur within the same boundary regardless of whether the mining is conducted for 30 or 60 years. To reduce the impacts to less than significant, mitigation measures MM BIO-3(a) through MM BIO-3(h) are required to be implemented. These mitigation measures include conducting baseline rare plant surveys, pre-disturbance surveys prior to each phase of vegetation removal, restrictions on the locations of staging areas, prohibitions on the use of herbicides and implementation of a Worker Environmental Awareness Program. In addition, the measures include applying for an Incidental Take Permit (ITP) from the California Department of Fish and Wildlife (CDFW) if state-listed plants would be impacted by the Project and preparing a Special-Status Plant Mitigation and Monitoring Plan that would replace impacted species at a minimum of a 1:1 ratio. Implementation of these mitigation measures would reduce the potential impacts to special-status plant species to less than significant regardless of whether the duration of mining is 30 or 60 years.

Special-Status Wildlife Species

Impact BIO-4 addressed the loss of wildlife habitat and direct and indirect adverse effects to special-status wildlife species (PRDEIR pages 3.5-50 through 3.5-62). The direct effects of the Project on special-status wildlife species described in the impact analysis in the PRDEIR would not change if the duration of mining is extended to 60 years because the boundary of the Project will remain the same. The PRDEIR includes mitigation measures to offset the direct impacts, and with implementation of the mitigation measures, the direct impacts would be less than significant. The indirect effects that were analyzed in the PRDEIR included noise and vibration, blasting, human presence, project vehicle trips, air pollutants and fugitive dust, and artificial lighting. The impact analysis found that some indirect impacts on special-status wildlife species would be potentially significant without mitigation. Various mitigation measures were included in the DEIR and the PRDEIR and with implementation of the mitigation measures, the indirect impacts were determined to be less than significant. The proposed mining activities described in the Project Description will all remain the same except for extending the duration of mining from 30 years to 60 years. As stated in the Overview of the Proposed Project in the DEIR (page ES-2), the hard rock quarry has been in operation since 1902, and Pacific Rock acquired the mining operation in 2000. As stated in the PRDEIR (page 3.5-51), "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." This presumption is also applied to the other types of indirect impact analyzed in the PRDEIR. Considering that the mine has been in existence for 122 years, the baseline conditions for wildlife species occupying habitats near the Project site have included ongoing mining activities for a very long time. Even with extending the Project duration to 60 years, the indirect impacts to special-status wildlife species are expected to be less than significant with the implementation of the required mitigation measures.

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Wetlands, Waters of the U.S., and/or Waters of the State

Impact BIO-5 addressed the direct and indirect impacts to wetlands and waters of the U.S. and/or waters of the State. The analysis of impacts that was included in the PRDEIR will not change if the duration of mining is extended to 60 years because the boundary of the Project will remain the same and all mining activities will be the same as stated in the Project Description. With implementation of the mitigation measures stated in the Impact BIO-5 discussion in the PRDEIR (pages 3.5-70 through 3.5-72), the impacts to wetlands and waters of the U.S. and/or waters of the State would be less than significant.

Ventura County Protected Trees

Impact BIO-6 addressed the impacts of vegetation clearing that would result in the removal of Ventura County Protected Trees. The extended duration of the mining is not expected to change the analysis of impacts to Ventura County Protected Trees because the boundary of the mine expansion will not change. With implementation of mitigation measure MM BIO-6, the impact to Ventura County Protected Trees would be expected to remain less than significant.

Wildlife Movement Opportunities

Impact BIO-7 addressed the direct and indirect impacts of the Project on wildlife movement opportunities in the Santa Monica – Sierra Madre Connection. The extended duration of the mining is not expected to change the analysis of impacts to wildlife movement opportunities because the boundary of the mine expansion and the mining activities will not change from what was in the Project Description. With implementation of mitigation measures MM BIO-7(a), MM BIO-7(b), and MM BIO-7(c), the impacts to wildlife movement opportunities in the Santa Monica – Sierra Madre Connection would remain less than significant even with a 60-year versus 30-year duration of mining.

Cumulative Impacts

Section 3.5.2.3 in the PRDEIR (page 3.5-77) identified two projects relevant to cumulative impacts on biological resources. The project included agricultural promotional uses and/or temporary outdoor festivals, animal shows, and similar events but did not include any physical changes at the time. The two projects were anticipated to have minimal effects on biological resources and determined that the 30-year Project would not represent a cumulative impact to sensitive biological resources, including special-status species, wetland resources, and wildlife movement when considering the two recently approved projects. The PRDEIR stated the Project would not have a cumulatively considerable impact on biological resources and the Project's cumulative impact was considered less than significant. The extension of the Project to 60 years would have the same impact on biological resources as the 30-year Project so the Project's cumulative impact would still be considered less than significant.

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3.0 MOUNTAIN LION AND WILDLIFE MOVEMENT CORRIDORS

On August 26, 2024, ECORP submitted a memorandum to Mr. John Hecht at Sespe Consulting, Inc. (Sespe) entitled "Potential Impact to Mountain Lion and Wildlife Movement Corridors for the Pacific Rock Quarry Expansion Project – LU10-0003 (CUP 3817-3)." The purpose of the memorandum was to provide additional information related to the existing biological conditions and the potential impacts to mountain lion and wildlife movement through the open space corridor adjacent to the Pacific Rock Quarry Expansion Project. A focused discussion about the existing biological conditions and potential impacts of extending the mining operations from 30 to 60 years on mountain lion and wildlife movement corridors is included below. The order of the discussion follows the order of the topics in the August 2024 memorandum prepared by ECORP.

Wildlife Movement Corridors and Mountain Lion Occurrence

Wildlife Movement Corridors

The County's designated Habitat Connectivity and Wildlife Corridors (HCWC) Overlay Zone was based on the linkage design for the Santa Monica – Sierra Madre Connection and it includes the existing Pacific Rock Quarry and the proposed expansion area. The HCWC Overlay Zone also includes the areas around the Project site and the open space corridor to the southeast of the Project site. The existing conditions within the boundary of the 30-year duration Project on the HCWC Overlay Zone and the Santa Monica - Sierra Madre Connection were analyzed in the PRDEIR. The boundary of the Project's expansion area would not change with an extension of the duration of the Project to 60 years so there would be no difference in the analysis of the existing conditions within the HCWC Overlay Zone or the Santa Monica – Sierra Madre Connection.

Mountain Lion Presence

The August 2024 memorandum identified that the presence of mountain lions in and adjacent to the Project site was established through radio-telemetry studies conducted by the National Park Service (NPS). In addition, the memorandum included a figure (Figure 3) that showed that some of the tracked mountain lion's home ranges encompass the area around the Project. The PRDEIR assumed mountain lions were "present" within and near the Project. The extension of mining activities to 60 years will not change the PRDEIR's assumption that mountain lion was "present" or the results of the NPS's tracking studies that the home ranges of mountain lions encompass the area around the 30-year Project boundary.

Vegetation Communities Potentially Suitable for Mountain Lion

The August 2024 memorandum clarified the acres of each of the vegetation communities and suitable mountain lion habitat that would be directly impacted by the 30-year Project. A table showing the acres of each of the vegetation communities within the 30-year Project boundary was included in Table 3.5-1 (page 3.5-2) in the PRDEIR. The extension of the duration of mining activities to 60 years would not

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change the existing acreages of each vegetation community because the boundary of the Project would remain the same.

Project Impact Discussion

Effects of Reduced Width of the Preserved Open Space

The August 2024 memorandum discussed the width of the existing open space corridor adjacent to the existing Quarry and the effects of the narrowed corridor resulting from the 30-year Project. In addition, the memorandum summarized the specifications for minimum corridor width based on studies by Paul Beier, PhD, a recognized expert on mountain lion, and identified that the width of the corridor would be reduced as a result of the Project, but it would not be below Beier's suggested minimum corridor width. The references for the studies conducted by Paul Beier, PhD are provided in the August 2024 memorandum. The extension of the Project to 60 years would not result in a change in the boundaries of the Project and would also not reduce the width of the corridor from what was analyzed in the PRDEIR. Impact BIO-7 in the PRDEIR (page 3.5-75), determined the 30-year Project's reduction in available habitat for wildlife, including mountain lion, in the Santa Monica-Sierra Madre Connection would not be 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 the evaluation, the impact to wildlife movement was considered potentially significant as a result of reduction in habitat within the County-designated movement corridor. Based on these statements, MM BIO-7(c) (page 3.5-77) was included in the PRDEIR to ensure a Wildlife Passage area would be preserved for use by mountain lions and other species utilizing the corridor. With implementation of MM BIO-7(c), the impacts to wildlife and other species would be reduced to less than significant and this would also apply to the Project if the duration of mining is extended to 60 years.

Genetic Diversity

Impact BIO-4 in the PRDEIR (page 3.5-60) identified that the proposed 30-year Project would have the potential for direct impacts to mountain lion including 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. In the August 2024 memorandum, genetic studies were cited that individual mountain lions in the Santa Monica Mountains population showed signs of genetic abnormalities and that these types of abnormalities could possibly result from low genetic diversity or inbreeding in the small population. The memorandum also cited a study that predicts the Santa Monica Mountain population could experience an erosion of genetic diversity due to inbreeding, without additional gene flow into the area. The August 2024 memorandum stated mountain lion movement would not be expected to be restricted through the open space corridor adjacent to the Project. The reason was because the corridor width would not significantly change compared to existing conditions and the corridor width would exceed the minimum width recommended by Paul Beier PhD for corridor design allowing for mountain lion passage. As a result, the Project (30-year duration) would not

be expected to have an impact on the ability of mountain lions to roam through the area looking for mates or on the genetic diversity of the Santa Monica Mountains population. Impact BIO-7 in the PRDEIR (page 3.5-75), determined the 30-year Project's reduction in available habitat for wildlife, including mountain lion, in the Santa Monica-Sierra Madre Connection would not be expected to significantly affect wildlife movement through the area as compared to baseline conditions, since mining operations would be generally consistent with existing operations. The extension of the duration of mining activities to 60 years would establish the same wildlife corridor width that was analyzed for the 30-year Project and therefore, the impacts to wildlife movement and breeding opportunities for mountain lion would not be expected to significantly impact reproduction and genetic diversity.

Potential Impacts to Natal Dens

The discussion in the August 2024 memorandum covered the potential impacts of the 30-year Project on mountain lion natal dens that could potentially be established in the wildlife corridor adjacent to the Project site. To avoid impacts, the PRDEIR requires mitigation measure MM BIO-4(h) to be implemented, which includes conducting natal den surveys, establishing setbacks, and coordinating with agencies to determine setbacks to avoid take or other adverse impacts to mountain lions, natal dens, or cubs. Mitigation measure MM BIO-4(h), which would also be required if the duration of the Project is extended to 60 years, would be expected to minimize the impacts to mountain lion natal dens and cubs.

Vehicle Operation and Collision Potential

The August 2024 memorandum stated the vehicle traffic and haul trucks would use the same routes as the existing mining operations and that vehicle travel would not occur in the preserved open space areas surrounding the boundary identified for the 30-year Project. As explained in both the DEIR and PRDEIR, the existing routes for ingress/egress and hauling are near the western portion of the Project site within the existing excavation pit, which is separated in elevation and distance from the open space corridor. The conclusion in the DEIR and PRDEIR was that the Project would not increase vehicle collision risk with wildlife in the open space corridor. The Project would not include changes to ingress/egress, truck hauling or loading practices, routing, or the maximum number of annual or daily haul truck trips. The hours of operation would be extended to include the periods between 5:30 AM and 7:00 AM and 4:00 AM and 10:00 PM. The August 2024 memorandum cites radio-tracking studies conducted by the NPS on mountain lion in the Santa Monica Mountains, which showed that the radio-tracked mountain lions didn't appear to be crossing Howard Road, the main ingress/egress route to the Project site. The area to the west of Howard Road does not support suitable mountain lion habitat, which also may be a contributing factor as to why mountain lions didn't appear to be crossing Howard Road. Therefore, the potential for collisions between mountain lions and Project vehicles was determined to be low. The ingress/egress, haul routes, hauling and loading operations, number of truck trips, and hours of operation that were analyzed in the DEIR and PRDEIR for the 30-year Project would remain the same if the Project is extended to 60 years.

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Therefore, the conclusions in the DEIR and PRDEIR that the Project would not have the potential to increase vehicle collisions with wildlife would also apply to the 60-year Project.

Lighting

The August 2024 memorandum explained that with extended operation hours from 5:30 AM to 10:00 PM, additional lighting would be required to support operations during the early morning and late evening hours. Impact BIO-4 in the PRDEIR (page 3.5-60) identified that Project lighting would potentially impact mountain lions moving through the open space corridor. Mitigation measure MM VIS-2 in the DEIR (page 3.2-26) requires an approved lighting plan and MM BIO-7(a) in the PRDEIR (page 3.5-76) requires measures to minimize light and glare on the wildlife corridor through various measures. Implementation of these mitigation measures would reduce the potential Project light and glare impacts on wildlife, and specifically mountain lions occupying the adjacent natural habitat areas and would be sufficient to avoid significant light and glare impacts. With the extension of the Project to 60 years, the same mitigation measures would be required to be implemented so the conclusions in the DEIR and PRDEIR would be the same for the 60-year Project.

Noise and Vibration

The August 2024 memorandum discussed the potential impacts of noise and vibration under Impact BIO-4 of the PRDEIR (pages 3.5-50 through 3.5-53), which specifically addresses the potential for Project-related noise and vibration to adversely affect special-status species and habitat within the adjacent open space corridor. The memorandum also discussed mitigation measure MM NV-1 in the DEIR (pages 3.8-21 and 3.8-22), which requires implementation of onsite noise reduction measures including restricting the hours of onsite materials processing, recycling and reclamation activities limited to daytime hours, use of improved mufflers, limiting equipment idling, and avoidance of concurrent aggregate and recycle plant operations. MM NV-1 also requires noise monitoring at two noise receptors to ensure noise levels are at or below 55 dBA and if not, then activities within line of sight of the receptors would cease until additional noise control measures were implemented. The memorandum suggested modifying MM NV-1 to include required monitoring at Receptor R3, which would be located in the open space wildlife corridor. Implementation of the modified MM NV-1 would ensure Project noise levels do not exceed 55 dBA and would have less than significant impacts to wildlife occupying the movement corridor. This mitigation measure would also be required for the extended 60-year Project so the DEIR and PRDEIR conclusion of less than significant with implementation of mitigation measure MM NV-1 would be the same for the 60-year Project.

Wildland Fire

In the August 2024 memorandum, the potential impacts from wildland fire on mountain lion was discussed and determined to be potentially significant because the Project would involve activities that create potential sources of fire ignition and could increase the potential for wildland fires. Through implementation of mitigation measure MM HAZ-7 in the DEIR (pages 3.11-14 and 3.11-15), which includes the development of a fire safety plan and the installation of emergency water distribution

systems, the Project's impact related to wildland fire would be reduced to less than significant. MM HAZ-7 would also be required if the Project duration is extended to 60 years and therefore, the potential impacts from wildland fire would also be reduced to less than significant in the 60-year Project.

Rodenticides

The August 2024 memorandum cited studies showing anticoagulant rodenticides do cause indirect impacts on mountain lion and other wildlife species, such as bobcat and coyotes, through ingestion of prey that have ingested the rodenticides. For the 30-year Project, the PRDEIR (Impact BIO-4, page 3.5-60)) identified the potential indirect effects of rodenticides on mountain lions and required implementation of mitigation measure MM BIO-4(h)(3), which prohibits the use of rodenticides within the Project site. Implementation of MM BIO-4(h)(3) would ensure mountain lion and other wildlife species would not be adversely affected by rodenticides associated with the Project. MM BIO-4(h)(3) would also be required if the duration of the Project is extended to 60 years and the conclusion of less than significant impacts in the PRDEIR would also apply to the 60-year Project.

APPENDIX K
MEMORANDUM REGARDING HEALTH RISK ASSESSMENT FOR CHANGE FROM 30- TO 60-YEAR PERMIT EXTENSION

MEMORANDUM

SESPE CONSULTING, INC.
A Trinity Consultants Company

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Date: May 12, 2025

To: Jane Farkas, J. Elinor Consulting

From: Scott D. Cohen, P.E., C.I.H.

Cc: Tom Staben, Pacific Rock
Graham Stephens, Sespe Consulting

Re: Effect of Extending Project Duration from 30 to 60 Years on EIR Health Risk Analysis

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The EIR materials describe the Project as having a duration of 30 years. However, a mathematical error found in the calculation of the total volume of resources reveals that it would take twice as long, or 60 years, to excavate and export the total quantity of available reserves at the maximum rates analyzed in the EIR. Note, the maximum annual production rate of 468,000 tons per year analyzed within the EIR would not change. This memo discusses the effect of this change on the health risk impact analyses and significance determinations in the EIR. The EIR is adequate without further changes for the following reasons:

1. Each methodology used in the EIR to evaluate an environmental effect considers a period of 30 years or less. Consistent with Office of Environmental Health Risk Assessment (OEHHA) guidance, the Ventura County Air Pollution Control District (APCD) uses 30 years for residential exposures, regardless of project duration.
2. DEIR Table 3.4-8 shows that cancer risk at the maximum exposed individual receptor (MEIR) would be 1.08 excess cancer cases per million individuals exposed. This value is an order of magnitude less than the threshold of significance (i.e., 10 in 1 million). Cancer risk is directly proportional to the exposure duration and doubling the DEIR reported cancer risk would still result in an estimated cancer risk that is approximately five times less than the threshold of significance.
3. The EIR MEIR cancer risk of 1.08 in 1 million and the estimate in Reason 2 above are overly conservative for the following reasons:
    - In addition to default assumptions established by the OEHHA, the HRA uses a “greenfield” zero baseline scenario which is conservative but fictitious, as the site is currently an active mining and processing operation. On average, 20,900 tons per year (tpy) (Pg. 3.4-22, DEIR) were produced during the ten-year period preceding the start of the future health risk analysis for the Project.
    - Although the baseline production level of 20,900 tpy (Pg. 3.4-22, DEIR) is much less than the Project level (468,000 tpy), the effect of older engines emitting greater amounts of diesel particulates in the existing setting would be offset by any future emissions with much cleaner engines during the additional 30 years of a 60-year Project.

The hourly, daily, and annual rates in the EIR remain unchanged and associated impacts remain unchanged. Extension of the activities in time may affect impacts that consider multi-year effects of the Project. Of the many environmental aspects that are evaluated in the EIR, the only effect assessed using methodology that considers multiple years is the cancer risk portion of the air quality health risk assessment (HRA).

30-Year Exposure Duration is Standard Practice

In California, cancer risk is assessed using the stochastic methods described in the Air Toxics Hot Spots Program Risk Assessment Guidelines (HRA Guidelines)[1], the CARB Risk Management Guidance[2] and as implemented in the HARP2 software developed by CARB.[3] Consistent with the current 2015 HRA Guidelines, the current standard HRA practice evaluates a 30-year exposure for residential and sensitive receptors; and 25-year exposure for worker receptors. Thus, extension of the Project life from 30 to 60 years is inconsequential in calculating cancer risk for this Project and changes to the Project HRA and associated significance determinations in the EIR are unnecessary.

DEIR Significance Determination Remains Unchanged

Double the MEIR cancer risk level reported in the DEIR yields 2.16 in 1 million which is still less than the 10 in 1 million significance threshold. Moreover, doubling of the first 30 years of risk overestimates the risk for 60 years because of two parameters used in assessing risk: age sensitivity factors (ASF) and frequency of time at home (FAH).

Accounting for Other Factors Affecting Cancer Risk Would Offset or Reduce Risk

The above reasons should constitute substantial evidence supporting the EIR's health risk analysis/conclusions, and demonstrate that the extension of the life of the Project would not change the health risk impact determinations presented in the EIR. Additionally, by not accounting for baseline emissions and associated health risk, the DEIR health risk analysis would remain overly conservative, even if related risk levels were evaluated for 60 years rather than 30 years to determine the Project effect on the environment.

Review of the HRA results shows that the primary carcinogen in the first 16 years of the Project is diesel exhaust particulate which represents approximately 80% of the total residential cancer risk for the entire Project. During the last 44 years of a 60-year Project, diesel exhaust represents approximately 40% of the total residential cancer risk. Constituents in fugitive dust (i.e., primarily arsenic) represent the remaining Project risk (i.e., 20% during the first 16 years as compared to 60% in later years) due to the future phase-in of regulations that reduce engine emissions.

As demonstrated above, engine exhaust presents the most risk early in the Project (i.e., the first 16 years), which was fully evaluated within the EIR. Additionally, engines operating in the baseline would necessarily have greater emissions rates than those evaluated for the later years of the Project, as California Air Resource Board (CARB) regulations require that the applicant utilize cleaner engines in accordance with fleet turnover rules. Thus, even though historical production is comparatively low, the risk from the historical operations is greater than the Project on a per ton basis. Therefore, changing the health risk exposure duration would result in no change in the risk level reported in the EIR.

[1] https://oehha.ca.gov/air/crnr/notice-adoption-air-toxics-hot-spots-program-guidance-manual-preparation-health-risk-assessments
[2] https://www.arb.ca.gov/toxics/rma/rmgssat.pdf
[3] https://ww2.arb.ca.gov/resources/documents/harp-air-dispersion-modeling-and-risk-tool

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