Draft
Initial Study
Buena Vista Creek Debris Basin
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Lead Agency and Project Proponent

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1.0 REQUEST/PROJECT DESCRIPTION

The Santa Barbara County Flood Control District (District) proposes construction and operation of a new flood control debris basin on Buena Vista Creek at Park Lane in Montecito, California (Attachment 1, Project Vicinity Map). Buena Vista Creek originates in the Los Padres National Forest and runs through the foothills of the Santa Ynez Mountains along residential neighborhoods of Montecito. The watershed was severely burned during the 2017/2018 Thomas Fire. The devastating debris flow that followed in January 2018 resulted in damage and destruction of property, public infrastructure, and natural habitats in the watershed and nearby. The creek crossing at Park Lane over Buena Vista Creek suffered severe damage within the January 2018 disaster zone. The volume and speed of the debris flow, following just behind a massive wildfire, overwhelmed the capacity of the existing culvert under Park Lane, resulting in debris accumulation and damage to adjacent properties. The District is now proposing the area of Buena Vista Creek immediately upstream of Park Lane as the location for a new debris basin facility. A new debris basin at this location would increase the debris retention and protect Park Lane and nearby infrastructure and properties.

Project Components

The proposed Buena Vista Debris Basin project (Project) involves excavation of the channel of Buena Vista Creek upstream of Park Lane to widen the creek channel (Attachment 2, Project Location Map). The debris basin would comprise the following appurtenant structures:

- Vertical soil pile retaining wall on the east bank (RW1);
- Vertical soil pile retaining wall on the west bank (RW3);
- Concrete access road on the west with a gate;
- Soldier pile wall with tie-backs to stabilize the access road (RW2);
- Rock-Slope protection with half-ton rock within upper channel;
- Pilot channel;
- Debris rack;
- Possible repairs to the upstream headwall of the existing Park Lane corrugated metal pipe (CMP) culvert;
- Restoration and regrading of the existing Buena Vista trailhead to baseline site conditions; and
- Replanting of native vegetation in any suitable areas.

Attachment 3, Site Plan, shows the approximate location of the proposed structures, pending final engineering design.

Construction

Construction of the new debris basin would take approximately 180 working days and would be completed in one phase. It is estimated that up to 20 construction workers would be required each day of construction. Construction would be limited to weekdays from 7:30 a.m. and 4:30 pm. The Buena Vista trailhead and the portion of the trail that occurs adjacent to the Project area to the east would be closed during construction for public safety purposes; a detour or alternate public trail access around the construction site would be implemented when feasible.

Construction equipment would include an excavator, rock-breaking attachment, bulldozer, loader, drill rig, concrete pump, water truck, and haul trucks. Construction equipment and materials would be staged along both road shoulders of Park Lane as permitted by the Santa Barbara County Transportation Division. Construction equipment would access the creek banks and bed through access ramps created on both sides of Buena Vista Creek; after construction is completed, the access ramp created on the west side of the creek would be developed into a new permanent concrete access ramp for continued operation and maintenance of the debris basin and the temporary access ramp on the east side of the basin would be re-

graded and restored to provide access to the existing Buena Vista trail. Any suitable areas would be replanted with native vegetation to meet baseline project conditions.

A 15-foot-wide pilot channel would be created using heavy equipment and maintained in the basin. The pilot channel would extend from the upstream end of the basin to the outlet structure where it would increase in width to 30 feet. Material dislodged during establishment of the pilot channel would be windrowed along the sides to help contain the flows within the pilot channel. Pilot channel establishment and the windrowed material would affect an area approximately 30 feet wide except immediately upstream of the outlet culvert and around the debris rack, where the pilot channel and windrowed material would be widened to an area approximately 45 feet wide.

Once debris basin construction operations have concluded, the temporary access ramp constructed east of the basin would be regraded and restored to provide trail access. Any suitable areas would be replanted with native vegetation to meet baseline project conditions.

Operations and Maintenance

Routine maintenance activities for the Buena Vista Debris Basin would conform to the County's routine maintenance activities for other debris basins managed by the County described in the existing 2021 Updated Debris Basin Maintenance and Management Plan.[1] Routine maintenance includes keeping the outlet works, debris rack, and other specific areas clear of accumulated sediment, debris, and obstructive vegetation in order to minimize plugging. Maintenance of the outlet works would ensure that the basin passes all low and moderate flows so that the basin does not incrementally fill in, which would reduce its effectiveness when it is needed.

The pilot channel would be maintained using hand tools to trim and remove vegetation from the 15-foot wide corridor and around the culvert opening and debris rack. If flows damage or eliminate the pilot channel, then maintenance would be performed with heavy equipment to re-establish the channel bed and banks to the designed width.

The bottom of the debris basin beyond the width of the pilot channel is expected to periodically colonize with vegetation. Vegetation that populates these areas would be allowed to persist between maintenance events; saplings and other woody species that reach approximately 8 feet tall would be thinned and removed in favor of low groundcovers and shrub vegetation. Minimizing large woody vegetation at the base of the retaining walls reduces the potential for root intrusion and rodent activity on the basin walls and provides for efficient sediment transport through the basin, again to discourage incremental filling. Vegetation management in the debris basin would be conducted with hand tools and occasional herbicide to the maximum extent feasible.

Routine maintenance may also include minor repairs to the retaining walls, rock slope protection, debris rack, and outlet pipe that occasionally experience erosion and need to be repaired to protect the structure from further erosion or failure. This type of maintenance has rarely occurred over the history of the County's routine maintenance program. Minor repairs could include addition of concrete or rock to fill in erosion holes, repair or replacement of a damaged outlet pipe, repair of damaged rocks/concrete from debris impacts on the basin walls, and maintenance/repairs to the access road. Repairs to debris basin would not enlarge the structure.

After heavy rains, the basin would be inspected and debris that could plug the outlet works would be removed. It is the District's intent to conduct routine inspections on an annual basis, and after storm events. Maintenance of the pilot channel, debris rack, outlet, and debris basin would be performed as needed, anticipated to be once per year for minor maintenance such as trimming vegetation, and approximately 3 to 7 years for debris removal or other types of repairs.

The District would conduct long-term maintenance, which requires the removal of debris and sediment from the basins (desilting), when the basin's effectiveness is reduced by approximately 25 percent. The frequency of basin desilting is estimated to occur every 4 to 8 years but depends greatly on weather.

[1] Santa Barbara Flood Control and Water Conservation District. 2021. *Final Updated Debris Basin Maintenance and Management Plan*. February.

Long-term maintenance would also take place after a significant fire in the watershed and all vegetation and debris would be removed in anticipation of expected increased post-fire storm runoff. Complete debris and sediment removal from the basins would be necessary immediately after the basins fills if it is early in the rainy season or during the fall maintenance season if a spring inspection identifies an unacceptable amount of debris and sediment in the basin.

A desilted basin is quickly recolonized with native vegetation. Many of the debris basins develop healthy riparian vegetation between maintenance events. The development of this habitat is an anticipated benefit of the maintenance described above. In addition to providing high quality habitat, the native vegetation in the basin can provide an excellent source for the District's biotechnical bank stabilization and revegetation projects. Selective removal and thinning of species such as willow, cottonwood, sycamore, blackberry, etc. can provide material necessary to implement habitat improvement and revegetation projects while still allowing the habitat to persist in the basin. Furthermore, selective removal and thinning will help reduce the potential for the outlet works becoming plugged if basin vegetation is uprooted during high flows.

Avoidance and Minimization Measures

In accordance with the District's 2021 Updated Debris Basin Maintenance and Management Plan and associated CEQA documentation, including the 2001 Programmatic Environmental Impact Report for the Updated Routine Maintenance Program, and CEQA Addenda to this EIR prepared in the 2021 Updated Debris Basin Maintenance and Management Plan, the District proposes to implement the following measures listed in Table 1 for the construction and maintenance of the new Buena Vista Debris Basin in order to avoid and/or minimize environmental impacts:

Table 1 Avoidance and Minimization Measures from the 2021 Updated Basin Maintenance and Management Plan that are Applicable to the Buena Vista Debris Basin Project
Aesthetics/Visual Resources
V-1 - Minimize Visual Impacts in Channels. The District shall minimize brushing in the channel bottom (per Mitigation Measure B-2), incorporate natural channel dimensions during channel reshaping (per Mitigation Measure W-1), restore all temporarily disturbed areas with native riparian trees and shrubs (per Mitigation Measure B-4), and use biotechnical methods with riparian vegetation for bank protection and repair, as feasible (per Mitigation Measure W-5). Implementation of these measures will reduce short- and long-term visual impacts. Monitoring and Timing: The District staff will determine the need and scope of maintenance as part of the development of the Annual Maintenance Plan each spring. District personnel will conduct and/or oversee the maintenance work, and ensure that all applicable mitigation measures are implemented. Reporting: A summary of the actual work conducted will be documented in the annual post maintenance report.
V-2 – Site Restoration. Basin will be natural recolonized with sporadic vegetation, similar to existing conditions along the edges of the channel. The Site Restoration Plan includes new plantings of native screening vegetation. Resto Plan includes weed control, to aid in native plant re-establishment. The Project's Restoration Plan is currently under development for approval from agencies.
Air Quality
A-1 – Reduce Emissions. Implement the following Santa Barbara County APCD- approved measures for each piece of heavy-duty diesel construction equipment to minimize NOx emissions: (1) The engine size of construction equipment shall be the minimum practical size; (2) Heavy-duty diesel-powered construction equipment manufactured after 1996 (with federally mandated clean diesel engines) should be utilized wherever feasible; (3) The number of construction equipment operating simultaneously shall be minimized through efficient management practices to ensure that the smallest number is operating at any one time; (4) Construction equipment operating onsite shall be equipped with two to four degree engine timing retard or precombustion chamber engines; (5) Catalytic converters shall be installed on gasoline-powered equipment, if feasible; (6) Diesel catalytic converters shall be installed, if available; and (7) Diesel powered equipment should be replaced by electrical equipment, whenever feasible.
A-2 – Reduce Fugitive Dust. Implement the following Santa Barbara County APCD- approved measures to minimize fugitive dust emissions: (1) After clearing, grading, earth moving or excavation is complete, the disturbed area must be treated with watering, or revegetating, or by spreading soil binders until the area is paved

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or otherwise developed so that dust generation will not occur; (2) During construction, use water trucks or sprinkler systems to keep all areas of vehicle movement damp enough to prevent dust from leaving the site. At a minimum, this shall include wetting down such areas in the late morning and after work is completed for the day. Increased watering frequency shall be required whenever the wind speed exceeds 15 mph. Reclaimed water shall be used whenever possible; (3) Minimize the amount of disturbed area and reduce on site vehicle speeds to 15 miles per hour or less; (4) Gravel pads should be installed at all access points to prevent tracking of mud onto public roads; (5) If importation, exportation, and stockpiling of fill material is involved, soil stockpiled for more than two days shall be covered, kept moist, or treated with soil binders to prevent dust generation; (6) Trucks transporting fill material to and from the site shall be tarped; and (7) Dust control requirements shall be shown on all grading plans.
Biological Resources
B-1 – Pre-Construction Rare Plant Survey: One focused plant survey **(**with focus on detection of the Nuttall's scrub oak, late-flowered mariposa lily, and Santa Barbara honeysuckle**)** shall be conducted within suitable habitat on the Project site prior to construction and during the appropriate time for identification (May-June). The survey shall be conducted by a botanist or qualified biologist in accordance with the USFWS General Rare Plant Survey Guidelines (USFWS 2002); the CDFW Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities (CDFW 2018); and the CNPS Botanical Survey Guidelines (CNPS 2001). If special-status plant species are not observed on the Proposed Project site, then Proposed Project activities may continue without additional survey or special-status plant species protection requirements. If any special-status species are observed during the rare plant survey and Proposed Project-related impacts to the special-status plant species are unavoidable, then consultation with CDFW may be required to develop a mitigation plan or additional avoidance and minimization measures. Additional protection measures for special-status plant species may include transplanting, seed collection, or avoidance.
B-2 – Minimize Vegetation Removal from Channel Bottom. The District shall minimize vegetation removal from the channel bottom to the least amount necessary to achieve the specific maintenance objectives for the reach (i.e., removing obstructive vegetation or silt trapping vegetation). Brushing and herbicide application for vegetation control on the channel bottom shall be conducted in a non-continuous, mosaic-like manner, to the extent feasible, allowing small patches of in-channel native vegetation to persist.
B-3 – Monitoring During Construction and Maintenance Activities. The District Biologist shall monitor construction and maintenance activities to ensure that the appropriate methods and limits are used. Results of the monitoring shall be documented in the annual post-maintenance report. These activities include brushing, herbicide application, channel shaping, desilting, bank stabilization by placing fill or grading banks, bank protection construction or repair, grade stabilizer construction or repair, pilot channel construction, and access ramp construction.
B-4 – Restore Temporarily Disturbed Areas. The District shall restore channel banks containing riparian or wetland vegetation that are temporarily disturbed by maintenance or construction activities associated with the following: channel shaping, placement of bank protection, ramp construction, and repair or construction of bank protection and grade stabilizers. Restoration objectives, methods, plant species, maintenance, and monitoring shall follow the Resto Plan under development for agency approval. The restoration of channel bed habitats shall only occur if it would not conflict with the maintenance needs in the affected reach.
B-5 – Pre-Construction Biological Surveys and Avoidance Measures. Prior to construction, a pre-construction survey shall be conducted for special-status wildlife within all areas of potential permanent or temporary disturbance. The pre-construction survey should take place no more than 7 days prior to the start of ground-disturbing activities. The pre-construction surveys should take place regardless of breeding season timing and should focus on identifying the presence of special-status wildlife species present on the Project site or that were identified as having a high potential to occur on the Project site. Should any special-status species be identified during the pre-construction survey, consultation to develop suitable avoidance and minimization measures with the appropriate agency (USFWS, CDFW) may need to be undertaken.
B-6 – Construction Monitoring for Sensitive Species. The District Biologist shall monitor earth and vegetation disturbing maintenance activities located at and adjacent to locations where sensitive species are known to occur. The need for monitoring and the areas to be monitored shall be determined during the annual field assessment in the spring. The objective of the monitoring is to ensure that key habitat features or species locations are avoided.

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B-7 – Post Maintenance Channel Bed Treatment. The District shall roughen the channel bed after channel maintenance to create microtopography that will encourage reestablishment of aquatic habitats over time. Pools and riffles shall be recreated in the work area if they were removed during maintenance, to the extent feasible. Modifications of the creek bed shall be consistent with geomorphological considerations identified through measure W-1.
B-8 – Pre-Construction Survey for Nesting Birds and Special-Status Avian Species: Where feasible, ground-disturbing activities, including vegetation removal, shall be conducted during the non-breeding season (approximately September 15 through January 14) to avoid violations of the MBTA and California Fish and Game Code §§ 3503, 3503.5 and 3513. If activities with the potential to disrupt nesting birds or the special-status avian species with potential to occur on the Proposed Project Site are scheduled to occur during the bird breeding season (February 1 through August 31 for songbirds and January 15 through July 31 for raptor species), a pre-construction survey for nesting birds and special-status avian species shall be conducted by a qualified biologist who is experienced in the identification of avian species and conducting nesting bird surveys. The survey shall include the Proposed Project Site and adjacent areas where Proposed Project activities have the potential to cause nest failure. The pre-construction survey shall be conducted no more than three days prior to the start of ground-disturbing activities (including vegetation removal) within the bird breeding season. If no nesting birds or special-status avian species are observed during the survey, site preparation and construction activities may begin. If nesting birds or raptors or special-status avian species are found to be present, avoidance or minimization measures shall be implemented to avoid potential Proposed Project-related impacts to the species. Avoidance and minimization measures shall be developed by the qualified biologist and may include non-disturbance buffers established around active nests until the biologist has determined that the nesting cycle is completed, seasonal work restrictions, or additional survey and monitoring requirements. The width of non-disturbance buffers established around active nests will be determined by the qualified biologist (300 feet is typically recommended for songbirds and 500 feet is typically recommended for raptors). Once nesting is deemed complete by the qualified biologist as determined through periodic nest monitoring, the non-disturbance buffer will be removed by the qualified biologist and Proposed Project work may resume in the area.
Hazardous Materials
H-1 – Reduce Sedimentation. The District shall minimize the amount of surface disturbance and vegetation removal to the extent feasible during all maintenance activities in order to reduce the area of disturbed soils that could be eroded during winter runoff. No stockpiles or dewatering operations shall be established in the channel bed or basin bottom. All fill shall be compacted to reduce erosion. All disturbed banks and terraces above the low flow channel shall be seeded with appropriate riparian grasses and herbs and/or planted with willows, mule fat, or other woody plant species. The objectives of the seeding and/or planting are to stabilize these areas and reduce erosion. The selection of species to be used and the density of seeding or planting shall balance the need for maintaining channel capacity while meeting these objectives. If work must occur in a wetted channel that has continuous flow downstream of the work site, the District shall either temporarily divert streamflow around the work site, or provide temporary sediment containment downstream of the site. In addition, the District shall check silt fencing, diversions, and settling ponds twice a day.
H-2 – Responsible Herbicide Application. To the extent feasible, the primary herbicide application each year shall occur during the months of August through November, when stream flows are minimal. In some instances, a follow-up application will be made in the spring to reduce the frequency of maintenance. Herbicides shall be applied by hand- held sprayers rather than from truck mounted sprayers to the extent feasible. The dilution and application of herbicides shall be conducted in strict accordance with all label recommendations, including all restrictions related to public health, worker safety, and the protection of aquatic organisms. Herbicides shall not be applied when winds at the application site exceed 5 miles per hour, within 12 hours of a forecasted rain event, or when vegetation surfaces are covered with water from recent rainfall or dew. Herbicides shall be applied carefully to plant surfaces in minimal effective amounts, minimizing drift to non-target plants and overspray onto the ground or to open water. Signs shall be placed to warn the public if herbicides are applied within 50 feet of any public recreation location, such as a trail, picnic spot, or other site of regular human activity. The signs shall remain for 48 hours after the application of the herbicide. The District shall also notify residences and businesses located adjacent to drainages to be treated with herbicides. Notification shall occur by mail within 7 days of the planned maintenance work.

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H-4 - Prevent Accidental Spills and Leaks. The mixing and dispensing of herbicides and equipment fueling or maintenance shall not occur within a channel or a basin. Spill containment and clean-up procedures for herbicides and vehicle fuels and oils shall be developed by the District. All field personnel shall be trained and all field vehicles shall be equipped with appropriate materials.
H-6: Public Education Regarding Creek Water Quality. The District shall prepare information brochures for residents located along maintained drainages that explain: (1) how the District applies herbicides in a responsible manner, and provides guidelines on how landowners can use herbicides for residential and commercial uses in a similarly responsible manner to minimize water quality impacts to the creeks; and (2) how landowners can reduce pollution to the creek from their activities by employing best management practices for landscape fertilization; disposal of household paints, hazardous materials and petroleum products; management of trash and landscaping debris; and handling of pet wastes. The brochure shall be prepared in coordination with Project Clean Water and mailed to affected areas on a 3-year rotating basis. It shall include the Project Clean Water phone numbers for technical assistance and for reporting illegal dumping. The brochure shall also include information on how landowners can make their land available for habitat restoration under the routine maintenance program. Monitoring and Timing. The District staff will complete the brochure within one year of the approval of the updated maintenance program. Reporting. The District shall summarize the number of mailings each year in the post-maintenance annual report.
H-7 – Reporting Water Quality Incidents. The District shall train its maintenance crews to identify and report incidents or materials observed in the creeks during routine maintenance work that could cause significant water quality impacts, including illegal dumping of trash, pet waste, and green waste; homeless encampments; and drain outlets with evidence of poor water quality. The staff shall contact appropriate authorities in the County or affected municipalities.
H-8: Reduce Overall Herbicide Use. The District shall make every feasible effort to reduce the overall amount of herbicides used in the maintenance program over the next ten years through more restrictive and selective applications, greater use of manual clearing, actions to reduce in channel obstructive vegetation through shading by new canopy trees, and coordination with the County's Integrated Pest Management Strategy to identify more environmentally friendly pesticides. The 1PM Strategy was adopted by the Board of Supervisors to promote the maintenance of the County's landscapes in way that protects and enhances natural resources and public health, while providing a framework for evaluating pesticide use by County Departments in pursuit of their missions. Monitoring and Timing. The District shall carefully consider the use of herbicides in each Annual Plan, and seek alternative methods. Reporting. The District shall report the amount of herbicides applied each year and the miles of drainages affected in the Annual Plan and annual post-maintenance report, including a cumulative account of past years.
Cultural Resources
C-1 – Unexpected Archeological Finds. If cultural materials are unexpectedly uncovered during construction or maintenance activities, the District shall immediately consult with a qualified archeologist who shall inspect the material and coordinate with the District to halt or redirect earth-disturbing maintenance work until the significance of the material is determined, and the location is cleared for further work.
Geologic Processes
GEO-02: Erosion and Sediment Control Plan. Where required by the latest edition of the California Green Code and/or Chapter 14 of the Santa Barbara County Code, a Storm Water Pollution Prevention Plan (SWPPP), Storm Water Management Plan (SWMP) and/or an Erosion and Sediment Control Plan (ESCP) shall be implemented as part of the project. Grading and erosion and sediment control plans shall be designed to minimize erosion during construction and shall be implemented for the duration of the grading period and until re-graded acres have been stabilized by structures, long-term erosion control measures or permanent landscaping. The County shall submit the SWPPP, SWMP or ESCP using Best Management Practices (BMP) designed to stabilize the site, protect natural watercourses/creeks, prevent erosion, convey storm water runoff to existing drainage systems keeping contaminants and sediments onsite. The SWPPP or ESCP shall be a part of the Grading Plan submittal and will be reviewed by a Registered Civil Engineer.
Hydrology and Water Quality
W-1 – Maintenance Need Analysis. The District shall evaluate relevant hydraulic factors when determining the need, type, and extent of channel maintenance for non-exempt watercourses where natural geomorphic processes are largely intact. Key factors that shall be included in the evaluation include: (1) hydraulic benefits of maintaining the bankfull channel (if present) dimensions, natural sinuosity, and natural channel bed roughness;

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and (2) potential adverse hydraulic effects of excessive brushing, channel shaping, equipment activity in the channel, and bank hardening. Hydraulic principles of creating and maintaining channel stability and sediment transport equilibrium shall be applied, if applicable. The analyses and determinations relevant to this issue shall be documented in the Annual Plan. Clear maintenance objectives with attainable benefits for the protection of life, property, and habitat shall be established for each project and presented in the Annual Plan. A primary objective of this measure is to minimize maintenance activities to the extent feasible, consistent with District's program objectives.
W-2 – Extent of Desilting. The depth of channel desilting shall not cause bank undercutting or channel headcutting. The District shall make a field determination of the maximum depth of desilting based on channel capacity objectives, an evaluation of channel invert elevation and slope through the project reach, and a consideration of the maximum allowable bank length and slope that would cause bank instability. To the extent feasible, banks and bank vegetation shall not be disturbed or reconstructed during desilting to avoid destabilizing the banks.
W-3 – Post Desilting Restoration. After desilting, the District shall restore the channel geometry at the desilting site to a more natural state, as feasible, based on the channel shape, dimension, and slope upstream and downstream of the project site. The channel geometry shall be designed to enhance post-maintenance sediment transport through the desilted reach. If banks are disturbed during desilting, they should be set at a slope that matches existing undisturbed banks and stabilized, to the extent feasible and taking into account available right of way.
W-4 – Pilot Channel Construction. If it is necessary to construct a pilot channel or substantially modify an existing low flow channel, the District shall attempt to maintain the low flow channel length, width, slope, substrate, and sinuosity that are characteristic of the project reach, as determined by field observations of undisturbed low flow channels upstream and downstream of the project reach.
W-5 - Bank Protection Methods. The construction of bank protection shall be limited to situations where bank stabilization is necessary because the banks are vulnerable to continued erosion which could cause a threat to critical public infrastructure, valuable habitat, or otherwise in the public interest and it has been determined that natural slope settling would not achieve the necessary stability. The District shall evaluate different types of bank protection methods, then select one that is most suitable based on the following order of decreasing preference: (1) vegetation stabilization only; (2) bio-technical methods in which vegetation is incorporated with natural type structural components such as woody branches, natural rock, logs, natural fibers and geotextiles, and biodegradable temporary geotextiles; (3) ungrouted rip rap with vegetation; (4) pipe and wire revetment while retaining vegetation; (5) grouted rip rap; and (6) concrete sackwalls, gabion walls, soil cement, and gunite. Only native plants common to the region shall be used in all bank protection projects. Hard bank protection such as grouted and ungrouted rip-rap, pipe and wire revetment, gunite, concrete sackwalls, gabion walls, and soil cement shall only be used if the District has determined that the above methods will not achieve the desired results, are not cost effective, are logistically or technically infeasible, and/or would create greater incidental environmental impacts. Incorporation of plant material into bank protection, and maintenance and monitoring of such plantings, shall follow the guidelines in the updated Routine Maintenance Program Restoration Plan. The installation of new bank protection shall not adversely affect the stability of nearby banks. Bank protection projects that exceed 150 linear feet at any one single location would be considered a separate project, not included in the routine maintenance program. Monitoring and Timing: The District staff will complete the analysis of alternative bank protection methods as part of the development of the Annual Maintenance Plan each spring. District personnel will conduct and/or oversee the maintenance work, and ensure that the appropriate method is implemented. Reporting: The analysis of alternative bank protection methods will be documented in the Annual Maintenance Plan. A summary of the maintenance work conducted will be documented in the annual post maintenance report.
W-6 - Removal of Giant Reed from Banks. If the District will remove a stand of mature giant reed from the bank for habitat restoration purposes, the following measures shall be implemented to ensure that the bank will remain stable after treatment. To the extent feasible, the least invasive method of giant reed removal shall be used, and the removal of native vegetation from the banks shall be minimized. The District shall stabilize the banks after giant teed removal using biotechnical methods that include native plants. This measure shall also apply if similarly large stands of other non-native plants are removed from banks. Monitoring and Timing: The District staff will conduct and/or oversee the maintenance work, and ensure that the appropriate weed removal and bank stabilization method is used. The latter will be identified in the Annual Maintenance Plan. Reporting: A summary of the maintenance work will be documented in the annual post maintenance report.

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W-7 - New or Repaired Grade Stabilizers. Prior to installing a new grade stabilizer to control channel bed degradation, the District shall conduct the hydraulic analysis described in H-1. In addition, the District shall first consider stabilizer designs that use native ungrouted rock. The new structure shall not create a passage impediment for fish. This measure also applies to the repair or reconstruction of existing stabilizers. Detailed plans for new and repaired grade stabilizers shall be presented in Annual Plans, including a consideration of alternative designs and justification for the selected design. Monitoring and Timing: The District staff will complete the analysis of alternative grade stabilizers as part of the development of the Annual Maintenance Plan each spring. District personnel will conduct and/or oversee the maintenance work, and ensure that the appropriate method is implemented, and that a vertical drop is avoided. Reporting: The analysis of alternative stabilizer designs will be documented in the Annual Maintenance Plan. A summary of the actual work conducted will be documented in the annual post maintenance report.
W-8 - Access Ramps. The distance between access ramps shall be determined by balancing the impacts of driving equipment on the channel bed versus creating extra access points. Access ramps shall be placed in areas with minimum potential for erosion. Access ways shall be sited, constructed, and maintained in a manner that minimizes disturbance to native vegetation, wildlife, and aquatic organisms. The width of all new ramps shall be minimized to the extent feasible. Unneeded access ramps shall be removed and restored to a natural condition. For ramps that will be used infrequently (e.g., every three years or more), the District shall seed or plant the ramp after each use with native species, compatible with adjacent vegetation and resistant to occasional vehicle use, to prevent infestations of noxious weeds. Permanent and frequently used ramps shall be stabilized with vegetation, as feasible, and designed to minimize unauthorized vehicle access. Monitoring and Timing: The District staff will conduct and/or oversee the maintenance work, and ensure that the ramp design is consistent with the mitigation measure. A description of the proposed ramp will be included in_ the annual maintenance plan. Reporting: A summary of the maintenance work will be documented in the annual post maintenance report.
W-9 - Landowner Information Regarding Bank Protection. The District shall provide information to landowners along creeks that wish to stabilize eroding banks on their property. The District shall prepare a guide for landowners that describes methods of bank protection, with an emphasis on bio-technical solutions. The booklet shall be written for an educated layperson and include clear diagrams about materials and installation methods. It shall also include discussions of hydraulic and biological impacts when considering bank protection, and permits required from local, state, and federal agencies. The District shall also make staff available to conduct site visits with property owners to provide guidance on an as-needed basis. Monitoring and Timing. The District staff will complete the guide manual within one year of the approval of the updated maintenance program. Reporting. The District shall summarize the number of guidebooks distributed, and the number of landowner meetings, in the post-maintenance annual report.
Noise
N-1 – Minimize Noise. Construction and routine maintenance work shall be limited to weekdays and the hours of 7:00 am and 4:30 pm. Equipment and haul trucks shall be equipped with functioning and properly maintained muffler systems, including intake silencers where necessary. Additional reductions in noise emissions shall be provided, as feasible, by performing noisy operations, such as chipping and loading spoils into dump trucks on the banks, as far away as practicable from sensitive receptors.
N-2 – Minimize Rock-Breaking Noise at Adjacent Properties. Wherever feasible, rock-breaking will be performed with expansive clay-charges, which fracture rock without the need for a rock-breaker attachment. Use of the excavator with rock-breaker attachment will be minimized and deployed only for constrained instances. If needed, the rock-breaker will operated in minimal, concentrated time periods to accomplish the necessary excavation; long periods of continuous rock-breaking will be avoided, or the use of noise-dampening attachments will be implemented, to the maximum extent feasible.
Recreation
R–1 – Minimize Impacts to Trail and Park Users. To the extent feasible, the District shall provide temporary detours for hikers using public trails that must be closed for maintenance work. All work areas shall be marked by signs, and by flagging if necessary to protect the public from hazardous conditions. The District shall notify appropriate County and City parks departments prior to initiating maintenance work in public parks. The work area shall be visibly marked, and measures taken to prevent public entry. If feasible, work shall be restricted to off-peak park hours. *For the Buena Vista Debris Basin project, a trail detour would be provided intermittently, if feasible, depending on the current status of ongoing work and safety considerations at the site. When feasible

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and safe for public access, a trail detour would be implemented for weekend use. Expected closure and opening dates would be posted on-site and notified to Montecito Trails Foundation to alert the public.
R-2 – Disposal of Sediments at Beaches. Sediments removed from debris basins or creeks on the South Coast during long-term maintenance of the basins and during routine maintenance of creeks, respectively, shall be disposed at local beaches to the extent feasible. Only suitably sized sediments shall be disposed at the beaches, as permitted by applicable regulatory agencies.

In addition to the mitigation measures from the District's 2021 Updated Debris Basin Maintenance and Management Plan and associated CEQA documentation, including the 2001 Programmatic Environmental Impact Report for the Updated Routine Maintenance Program, and CEQA Addenda to this EIR prepared in the 2021 Updated Debris Basin Maintenance and Management Plan shown on Table 1, Project-specific mitigation measures have been provided in this Initial Study where applicable.

2.0 PROJECT LOCATION

The Proposed Project is located in the County of Santa Barbara District 1, at 1550 Park Lane, Montecito CA (Attachment 1 and Attachment 2). The Project Site is located between the intersections of Park Lane and Mariposa Ln and Park Lane and East Mountain Dr. The Project Site includes portions of Assessor's Parcel Numbers (APNs): 007-020-052, 007-020-057, 007-020-071, and 007-060-092.

2.1 Site Information	
Comprehensive Plan Designation	The portion of the Project Site north of Park Lane is classified by the County of Santa Barbara as Rural with Land Use Designation (LUD) MA-40 (40-acre minimum parcel size), with the portion south of Park Lane being classified as Urban (LUD) SSR-0.5 (0.5 unit/acre).
Zoning District, Ordinance	Santa Barbara County Code, Chapter 35 (Montecito Land Use & Development Code), Division 35.2 (Montecito Zones and Allowable Land Uses), Section 35.422.020, 35.423.030 35.422 RMZ-40 (Open Land Uses) MA (Mountainous Areas), 40-640 acre minimum parcel size. 35.423 SRR-0.5 (Single Family Residential), 2 acre minimum parcel size.
Site Size	0.65-acre
Present Use & Development	Residential properties adjacent to the north, south, east and west of the Project Site. Project Site itself is contained within private parcel boundaries and hosts a public multi-use trail.
Surrounding Uses/Zoning	North: RMZ-40, Open Land Uses, Resource Management/Minimum Lot Size 40-acre gross. South: 2-E-1, Single Family Residential, Minimum Lot Size 2-acre gross. East: RMZ-40, Open Land Uses, Resource Management/Minimum Lot Size 40-acre gross. West: RMZ-40, Open Land Uses, Resource Management/Minimum Lot Size 40-acre gross.
Access	Park Lane
Public Services	Water Supply: trucked onto the site for construction/not required for operation and maintenance Sewage: portable chemical toilets for construction/not required for operation and maintenance Fire: Montecito Fire Protection District, Station 1. 595 San Ysidro Road, Montecito CA. Other: not applicable

3.0 ENVIRONMENTAL SETTING

3.1 PHYSICAL SETTING

Before the Thomas Fire and January 2018 debris flow, Buena Vista Creek within the Project Area was a narrow but mature riparian corridor, with intermittent flow and rocky substrate. After the fire and debris flow, the Project Area is considerably different. The landscape is mostly bare rock, boulders, and sediment, with limited resprouting vegetation. The burned watershed is currently in a state of recovery as vegetation re-establishes to stabilize the landscape. Riparian habitat is present within the drainage. The west side of the drainage has a high concentration of nonnative species and the east side of the drainage consists of coastal scrub habitat. Buena Vista Creek is not designated critical habitat for any special status species. Other environmental considerations include general habitat for wildlife, water quality protection, recreation, and visual resources. A public trailhead (Buena Vista Trail) runs along the east side of the Project Area. The trailhead and trail are outside of the project limits but are located immediately adjacent to the Project Area to the east.

Attachment 4 includes aerial images of the Project Area (Google Earth 2022). The images depict pre-flow conditions, sediment flow conditions, post emergency sediment removal action conditions, and the current site conditions.

Slope/Topography

The Project site is generally located on the south aspect of the Santa Ynez Mountains foothills. The Project site has banked slopes extending west and east to neighboring properties. The topography is generally hilly (30% to 75% slope) with steep banked slopes along the channel banks (NRCS 2022).

Fauna

Wildlife species observed and detected on the Proposed Project site were characteristic of coastal sage scrub and riparian habitats. Bird species observed within the Proposed Project site included acorn woodpecker (*Melanerpes formicivorus*), house finch (*Haemorhous mexicanus*), California scrub-jay (*Aphelocoma californica*), spotted towhee (*Pipilo maculatus*), Wilson's warbler (*Cardellina pusilla*), and one raptor species, red-tailed hawk (*Buteo jamaicensis*). Two reptile species observed included western fence lizard (*Sceloporus occidentalis*), and California whiptail (*Aspidoscelis tigris mundus*). One mammal species, California ground squirrel (*Spermophilus beecheyi*) was observed during the site visit and evidence of raccoon (*Procyon lotor*) (scat) was documented during the Project site visit. Due to the level of human activity and the partially disturbed nature of the Project site, the property represents relative low-quality habitat for many wildlife species. A complete list of wildlife species observed on or immediately adjacent to the Project site is included in Attachment 4.

Flora

Plant species observed on the Project Site were typical of the coastal sage scrub and riparian communities as well as disturbed land that is present on the Project site. A full list of plant species observed on and immediately adjacent to the Proposed Project site is included in Attachment 4. Five vegetation communities: California Buckwheat – White Sage Scrub (*Eriogonum fasciculatum – Salvia apiana*) Shrubland Alliance (0.19 acre), California Buckwheat – White Sage Scrub shrubland Alliance (Disturbed) (0.09 acre), Goodding's Willow – Red Willow Riparian Woodland and Forest (0.15 acre), Goodding's Willow – Red Willow Riparian Woodland and Forest (Disturbed) (0.01 acre), Laurel Sumac Scrub (*Malosma laurina*) Shrubland Alliance (0.08 acre), and two land cover types (Disturbed/Ruderal [0.12 acre] and Developed [0.01 acre]) were mapped within the Proposed Project limits.

Archeological Sites

Two historic-period resources were identified within the accessible portion of the Project Area. BVDB-001 is a historic-period road known as Park Lane and BVDB-002 is a historic period culvert. Of these resources, only one (BVDB-002) will be impacted by the Project. After evaluation, it was determined that BVDB-002 was not eligible for the National Register of Historic Places (NRHP) or the California Register of Historical Resources (CRHR) under any criteria.

Soils

The Project Area is composed of two mapped soil types: Maymen-Rock outcrop complex (50-75% slopes) and stony fine sandy loam (30-75% slopes) (NRCS 2022).

Surface Water Bodies

Buena Vista Creek flows generally south through the Project Site and is Classified as a Palustrine Forested Seasonally Flooded (PFOC). Additionally, Four Riverine features are within .25-mile of Buena Vista Creek, classified as a Riverine Intermittent Streambed Temporarily Flooded (R4SBA) (USFWS 2022). The Pacific Ocean is located approximately 2 miles south of the Project Site.

There were no suspected federal wetlands present within the Proposed Project site, although one area was sampled due to its supporting apparent persistent urban runoff and the presence of aquatic plant life (algae). This location was at the outfall below the culvert that traverses underneath Park Lane and the water presence was likely due to steady, localized irrigation runoff.

Both the vegetation and soils lacked indicators of hydric characteristics, whereas the hydrology of the area was evidenced by presence of surface water (A1) and biotic crust (B12). Therefore, the location did not meet all three criteria to be delineated as a wetland.

The channel running through the Proposed Project site is considered to be an ephemeral stream, which flows during and immediately after storm events. There was little evidence presence of extended flows in the area, other than the presence of irrigation runoff. Limits of the stream channel were mapped in accordance with the presence of OHWM, evidenced by bed-and-bank topography, scouring of vegetation consistent with water movement through an area, and the changes in vegetative cover between the sides of the overall channel and the channel bottom. The ephemeral stream accounts for a total of 0.145 acre (6,316 square feet) and 234 linear feet of the Proposed Project site.

Surrounding Land Uses

The Project Site is located within the foothills of the Santa Ynez Mountains, in an area characterized by large-lot single-family housing. The Buena Vista Creek Debris Basin Project Site is situated north of Park Lane between two residential lots. The Debris Basin extends south, flowing underneath Park Lane through a culvert.

Project Site: RMZ-40, open land uses, Buena Vista Creek flows south through the project site. Which is developed with an existing culvert and debris basin.

North: Resource Management Zone, multi-use trail network through the foothills of the Santa Ynez Mountains. The area is characterized by undeveloped land with recreational use consistent with open space.

South: Park Lane is located immediately south of the Project Site. Buena Vista Creek flows through the project site and continues south through residential development (2-E-1, Single Family Residential, Minimum Lot Size 2-acre gross).

East: RMZ-40, open land uses, developed with Large-lot Single-Family Residential

West: RMZ-40, open land uses, developed with Large-lot Single-Family Residential

Existing Development

The Project Site is surrounded by existing residential development to the east, west and south and Park Lane to the south. Onsite development consists of the existing debris channel, culvert underneath Park Lane, and multi-use trail along the eastern bank.

3.2 ENVIRONMENTAL BASELINE

The environmental baseline from which the Project's impacts are measured consists of the on-the-ground conditions described above. Additional environmental setting information is provided, where necessary, to establish a baseline for assessing Project impacts.

4.0 POTENTIALLY SIGNIFICANT EFFECTS CHECKLIST

The following checklist indicates the potential level of impact and is defined as follows:

Potentially Significant Impact: A fair argument can be made, based on the substantial evidence in the file, that an effect may be significant.

Significant but Mitigable: Incorporation of mitigation measures has reduced an effect from a Potentially Significant Impact to an Insignificant Impact.

Insignificant Impact: An impact is considered adverse but does not trigger a significance threshold.

No Impact: There is adequate support that the referenced information sources show that the impact simply does not apply to the subject project.

Beneficial Impact: There is a beneficial effect on the environment resulting from the project.

Reviewed Under Previous Document: The analysis contained in a previously adopted/certified environmental document addresses this issue adequately for use in the current case and is summarized in the discussion below. The discussion should include reference to the previous documents, a citation of the page(s) where the information is found, and identification of mitigation measures incorporated from the previous documents.

4.1 AESTHETICS/VISUAL RESOURCES

Will the proposal result in:	Potent. Signif. and Unavoid.	Significant but Mitigable	Insignif.	No Impact / Beneficial Impact	Reviewed Under Previous Document
a. The obstruction of any scenic vista or view open to the public or the creation of an aesthetically offensive site open to public view?		X			
b. Change to the visual character of an area?				X	
c. Glare or night lighting which may affect adjoining areas?				X	
d. Visually incompatible structures?				X	

Existing Setting: The Project Site is directly adjacent to the Buena Vista Trailhead, within a rural residential area bounded by single family residences, open space, and Park Lane. The area is characterized by the geography and vegetation of the Santa Ynez foothills. Public views in this area are dominated by open space and regional trails within the foothills. The primary public views for this Project are looking north from Park Lane into the foothills of Montecito and looking north from the Buena Vista trail, which runs along the east side of the Project Site.

County Environmental Thresholds. The County's Visual Aesthetics Impact Guidelines classify coastal and mountainous areas, the urban fringe, and travel corridors as "especially important" visual resources. A project may have the potential to create a significantly adverse aesthetic impact if (among other potential effects) it would impact important visual resources, obstruct public views, remove significant amounts of vegetation, substantially alter the natural character of the landscape, or involve extensive grading visible from public areas. The guidelines address public, not private views.

Impact Discussion: Construction and maintenance activities associated with the Project will remove vegetation within the channel and temporarily disturb areas that would be visible from public viewpoints along Buena Vista Trail and Park Lane. The aesthetic character of the implemented Project would be visually consistent with the existing site. Retaining walls will have architectural finish on visible portions. The basin floor, channel, and rock-slope would be arranged to mimic a natural stream channel with roughened boulder/cobble exposed similar to the exiting channel condition. Vegetation is anticipated to sprout quickly after incidental disturbance. Additionally, implementation of the Site Restoration Plan would minimize any long-term visual impacts (Mitigation Measure V-2). The basin perimeter between the culvert, Park Lane, and around the trailhead would be replanted with native species. Visual impacts from ongoing maintenance are anticipated to be occasional and minor. Access for maintenance would be provided via the designated ramp, enclosed by a gate. Impacts would be insignificant with the implementation of Mitigation Measures V-1 and V-2.

Cumulative Impacts: The implementation of the Project is not anticipated to result in any substantial change to the aesthetic character of the area with the implementation of Mitigation Measure V-1 and V-2. Thus, the Project would not cause a cumulatively considerable effect on aesthetics.

Mitigation and Residual Impact:

The following mitigation measure would reduce the Project's aesthetic impacts to an insignificant level:

V-1 - Minimize Visual Impacts in Channels. The District shall minimize brushing in the channel bottom (per Mitigation Measure B-2), incorporate natural channel dimensions during channel reshaping (per Mitigation Measure W-1), restore all temporarily disturbed areas with native riparian trees and shrubs (per Mitigation Measure B-4), and use biotechnical methods with riparian vegetation for bank protection and repair, as feasible (per Mitigation Measure W-5). Implementation of these measures will reduce short- and long-term visual impacts. Monitoring and Timing: The District staff will determine the need and scope of maintenance as part of the development of the Annual Maintenance Plan each spring. District personnel will conduct and/or oversee the maintenance work, and ensure that all applicable mitigation measures are implemented. Reporting: A summary of the actual work conducted will be documented in the annual post maintenance report.

V-2 – Site Restoration. Basin will be natural recolonized with sporadic vegetation, similar to existing conditions along the edges of the channel. The Site Restoration Plan includes new plantings of native screening vegetation. Restoration Plan includes weed control, to aid in native plant re-establishment. The Project's Restoration Plan is currently under development for approval from agencies.

With the incorporation of these measures, residual impacts would be insignificant.

4.2 AGRICULTURAL RESOURCES

Will the proposal result in:	Poten. Signif. and Unavoid.	Significant but Mitigable	Insignif.	No Impact / Beneficial Impact	Reviewed Under Previous Document
a. Convert prime agricultural land to non-agricultural use, impair agricultural land productivity (whether prime or non-prime) or conflict with agricultural preserve programs?				X	
b. An effect upon any unique or other farmland of State or Local Importance?				X	

The Project Site is not identified by the California Department of Conservation as Prime Farmland, Unique Farmland, or Farmland or State or Local Importance and does not contain a combination of acreage and/or soils which render the site an important agricultural resource (DOC 2022). The site does not adjoin and/or will not impact any neighboring agricultural operations.

Mitigation and Residual Impact: No impacts are identified. No mitigations are necessary.

The Project Site does not contain a combination of acreage and/or soils which render the site an important agricultural resource. This site does not adjoin and/or will not impact any neighboring agricultural operations.

Mitigation and Residual Impact: No impacts are identified. No mitigations are necessary.

4.3a AIR QUALITY

Will the proposal result in:	Poten. Signif. and Unavoid.	Signif. But Mitigable	Insignif.	No Impact / Beneficial Impact	Reviewed Under Previous Document
a. The violation of any ambient air quality standard, a substantial contribution to an existing or projected air quality violation, or exposure of sensitive receptors to substantial pollutant concentrations (emissions from direct, indirect, mobile and stationary sources)?			X		
b. The creation of objectionable smoke, ash or odors?			X		
c. Extensive dust generation?			X		

Existing Setting: The project site is located within the South-Central Coast Air Basin, which includes Ventura County, Santa Barbara County, and San Luis Obispo County, and is within the jurisdictional boundaries of the Santa Barbara County Air Pollution Control District (SBCAPCD).

Both the U.S. Environmental Protection Agency (USEPA) and California Air Resources Board (CARB) have established ambient air quality standards for common pollutants. These ambient air quality standards are levels of contaminants representing safe levels that avoid specific adverse health effects associated with each pollutant. The ambient air quality standards cover what are called "criteria" pollutants because the health and other effects of each pollutant are described in criteria documents. The six criteria pollutants are ozone (O_3), carbon monoxide (CO), particulate matter (PM), nitrogen oxides (NO_x), sulfur dioxide (SO_2), and lead.

SBCAPCD Rules and Regulations:

The SBCAPCD Rules and Regulations establish emission limitations and control requirements for various sources, based upon their source type and magnitude of emissions. The SBCAPCD rules applicable to the proposed project may include the following**:**

- Rule 302 (Visible Emissions). Rule 302 prohibits emissions of visible air contaminants from any potential source of air contaminants. The rule prohibits air contaminants, other than water vapor, that are a certain level of darkness or opacity from being discharged for a combined period of more than three minutes in any one hour.
- Rule 303 (Nuisance). This rule could apply to fugitive dust emitted during proposed construction activities or odors during operation. This rule states that a person shall not discharge air contaminants from any source that can cause injury, detriment, nuisance, or annoyance to any considerable number of persons, or that can endanger the comfort, repose, health, or safety of any such persons or their business or property.
- Rule 311 (Sulfur Content of Fuels). The purpose of this rule is to limit the sulfur content in gaseous fuels, diesel and other liquid fuels, and solid fuels for the purpose of both reducing the formation of Sox and particulates during combustion.
- Rule 329 (Cutback and Emulsified Asphalt Paving Materials). This rule applies to the application and sale of cutback and emulsified asphalt materials for the paving, construction and maintenance of streets, highways parking lots and driveways and reduces potential emissions by restricting the percent by volume of ROCs in asphalt material.
- Rule 345 (Control of Fugitive Dust from Construction and Demolition Activities). Rule 345 establishes limits on the generation of visible fugitive dust emissions at demolition and construction sites. The rule includes measures for minimizing fugitive dust from on-site activities and from trucks moving on- and off-site.

County Environmental Threshold:

Chapter 5 of the Santa Barbara County Environmental Thresholds and Guidelines Manual (as revised in July 2015) addresses the subject of air quality. The thresholds provide that a proposed project will not have a significant impact on air quality if operation of the project will:

- emit (from all project sources, mobile and stationary), less than the daily trigger for offsets for any pollutant (currently 240 pounds per day for NOx and ROC, and 80 pounds per day for PM_{10});
- emit less than 25 pounds per day of oxides of nitrogen (NOx) or reactive organic compounds (ROC) from motor vehicle trips only;
- not cause or contribute to a violation of any California or National Ambient Air Quality Standard (except ozone);
- not exceed the APCD health risk public notification thresholds adopted by the APCD Board; and
- be consistent with the adopted federal and state Air Quality Plans.

The County has not established thresholds for temporary impacts associated with construction activities however, the County's Grading Ordinance requires standard dust control conditions for all projects involving grading activities. Long-term/operational emissions thresholds have been established to address mobile emissions (i.e., motor vehicle emissions) and stationary source emissions (i.e., stationary boilers, engines, and chemical or industrial processing operations that release pollutants).

Impact Discussion:

The Project would not result in significant new vehicle emissions (i.e., new vehicular trips to or from the site would be fewer than 100 for construction and routine maintenance). It would not involve new stationary sources (i.e., equipment, machinery, hazardous materials storage, industrial or chemical processing, etc.) that would increase the amount of pollutants released into the atmosphere. The Project would also not generate additional smoke, ash, odors, or long-term dust after construction.

(a-c.) Potential Air Quality Impacts

Short-Term Construction Impacts. Project-related construction activities would require grading that has been minimized to the extent possible under the circumstances. Earth moving operations at the Project Site would not have the potential to result in significant project-specific short-term emissions of fugitive dust and $PM_{10,}$ with the implementation of standard dust control measures that are required for all new development in the County.

Emissions of ozone precursors (NO_x and ROC) during Project construction would result primarily from the on-site use of heavy earthmoving equipment. Due to the limited period of time that grading activities would occur on the Project Site, construction-related emissions of NO_x and ROC would not be significant on a Project-specific or cumulative basis. However, due to the non-attainment status of the air basin for the state standards of ozone, the Project would implement measures recommended by the SBCAPCD to reduce construction-related emissions of ozone precursors to the extent feasible. Compliance with these measures is routinely required for all new development in the County.

Long-Term Operation Emissions. Long-term emissions would result from vehicle trips due to routine maintenance on the project site and have been calculated using the California Emissions Estimator Model (CalEEMod), version 2020.4.0. CalEEMod is a statewide land use emissions computer model designed to quantify potential criteria pollutant emissions associated with both construction and operations from a variety of land use projects. operational air pollutant emissions were based on information provided by the project proponent. Long-terms operational emissions attributable to the Project are identified in Table 1 and compared to the operational significance thresholds promulgated by the SBCAPCD.

Table 1. Operational-Related Emissions						
Emissions Source	**Pollutant (pounds per day)**					
	ROC	**NO_x**	**CO**	**SO_x**	**PM_{10}**	**$PM_{2.5}$**
Area	0.00	0.00	0.00	0.00	0.00	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	0.00	0.00	0.02	0.00	0.00	0.00
Total:	0.00	0.00	0.02	0.00	0.00	0.00
Vehicle Source Emission Threshold (Mobile)	25	25	--	--	N/A	--
Exceed SBAPCD Threshold?	**No**	**No**	**No**	**No**	**No**	**No**
Area + Vehicle Source Emission Threshold	240	240	--	--	80	--
Exceed SBAPCD Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Source: CalEEMod version 2020.4.0.
Notes: Emissions taken from the season (summer or winter) with the highest output.

As shown in Table 1, operational emissions generated from the Project would be from mobile sources during routine maintenance of the debris basin on the Project Site. Estimated net vehicle emissions would not exceed the SBCAPCD thresholds for ROC and NO_x and estimated net combined area source (including energy source) and vehicle emissions would not exceed the SBCAPCD thresholds for ROC, NO_x, or PM_{10}. Therefore, the proposed project would not have a potentially significant long-term impact on air quality.

Cumulative Impacts:

The County's Environmental Thresholds were developed, in part, to define the point at which a project's contribution to a regionally significant impact constitutes a significant effect at the project level. In this instance, the project has been found not to exceed the significance criteria for air quality. Therefore, the project's contribution to regionally significant air pollutant emissions is not cumulatively considerable, and its cumulative effect is insignificant.

Mitigation and Residual Impact:

Although Project impacts would be below thresholds set by the County and SBCAPCD, the District implements the following mitigations for all debris basins maintained by the District. These mitigations would further reduce emissions from the Project.

A-1 – Reduce Emissions. Implement the following Santa Barbara County APCD- approved measures for each piece of heavy-duty diesel construction equipment to minimize NOx emissions: (1) The engine size of construction equipment shall be the minimum practical size; (2) Heavy-duty diesel-powered construction equipment manufactured after 1996 (with federally mandated clean diesel engines) should be utilized wherever feasible; (3) The number of construction equipment operating simultaneously shall be minimized through efficient management practices to ensure that the smallest number is operating at any one time; (4) Construction equipment operating onsite shall be equipped with two to four degree engine timing retard or precombustion chamber engines; (5) Catalytic converters shall be installed on gasoline-

powered equipment, if feasible; (6) Diesel catalytic converters shall be installed, if available; and (7) Diesel powered equipment should be replaced by electrical equipment, whenever feasible.

A-2 – Reduce Fugitive Dust. Implement the following Santa Barbara County APCD- approved measures to minimize fugitive dust emissions: (1) After clearing, grading, earth moving or excavation is complete, the disturbed area must be treated with watering, or revegetating, or by spreading soil binders until the area is paved or otherwise developed so that dust generation will not occur; (2) During construction, use water trucks or sprinkler systems to keep all areas of vehicle movement damp enough to prevent dust from leaving the site. At a minimum, this shall include wetting down such areas in the late morning and after work is completed for the day. Increased watering frequency shall be required whenever the wind speed exceeds 15 mph. Reclaimed water shall be used whenever possible; (3) Minimize the amount of disturbed area and reduce on site vehicle speeds to 15 miles per hour or less; (4) Gravel pads should be installed at all access points to prevent tracking of mud onto public roads; (5) If importation, exportation, and stockpiling of fill material is involved, soil stockpiled for more than two days shall be covered, kept moist, or treated with soil binders to prevent dust generation; (6) Trucks transporting fill material to and from the site shall be tarped; and (7) Dust control requirements shall be shown on all grading plans.

4.3b AIR QUALITY - GREENHOUSE GAS EMISSIONS

Greenhouse Gas Emissions - Will the project:	Poten. Signif. and Unavoid.	Signif. But Mitigable	Insignif.	No Impact / Beneficial Impact	Reviewed Under Previous Document
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X		
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			X		

Existing Setting:
Greenhouse gases (GHG) include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF_6), and nitrogen trifluoride (NF_3) (California Health and Safety Code, § 38505(g)). These gases create a blanket around the earth that allows light to pass through but traps heat at the surface, preventing its escape into space. While this is a naturally occurring process known as "the greenhouse effect," human activities have accelerated the generation of GHG emissions above pre-industrial levels (U.S. Global Change Research Program 2018). The global mean surface temperature increased by approximately 1.8°F (1°C) in the past 80 years and is likely to reach a 2.7°F (1.5°C) increase between 2030 and 2050 at current global emission rates (IPCC 2018).

The largest source of GHG emissions from human activities in the United States is from fossil fuel combustion for electricity, heat, and transportation. Specifically, the *Inventory of U.S. Greenhouse Gasses and Sinks: 1990-2017* (U.S. Environmental Protection Agency 2019) states that the primary sources of GHG emissions from fossil fuel combustion in 2017 included electricity production (35%), transportation (36.5%), industry (27%), and commercial and residential end users (17 to 19%, respectively). Factoring in all sources of GHG emissions, the energy sector accounts for 84 percent of total emissions in addition to agricultural (8%), industrial processes (5.5%), and waste management (2%) sources.

The County of Santa Barbara's Final Environmental Impact Report (EIR) for the Energy and Climate Action Plan (ECAP) (PMC 2015) and the *2016 Greenhouse Gas Emissions Inventory Update and Forecast* (County of Santa Barbara Long Range Planning Division 2018) contain a detailed description of the Proposed Project's existing regional setting as it pertains to GHG emissions. Regarding non-stationary sources of GHG emissions within Santa Barbara County specifically, the transportation sector produces 38 percent of the total emissions, followed by the building energy (28%), agriculture (14%), off-road

equipment (11%), and solid waste (9%) sectors (County of Santa Barbara Long Range Planning Division 2018).

The overabundance of GHG in the atmosphere has led to a warming of the earth and has the potential to substantially change the earth's climate system. More frequent and intense weather and climate-related events are expected to damage infrastructure, ecosystems, and social systems across the United States (U.S. Global Change Research Program 2018). California's Central Coast, including Santa Barbara County, will be affected by changes in precipitation patterns, reduced foggy days, increased extreme heat days, exacerbated drought and wildfire conditions, and acceleration of sea level rise leading to increased coastal flooding and erosion (Langridge, Ruth 2018).

Global mean surface warming results from GHG emissions generated from many sources over time, rather than emissions generated by any one project (IPCC 2014). As defined in CEQA Guidelines Section 15355, and discussed in Section 15130, "'Cumulative impacts' refers to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts." Therefore, by definition, climate change under CEQA is a cumulative impact.

CEQA Guidelines Section 15064.4(b) states that a lead agency "should focus its analysis on the reasonably foreseeable incremental contribution of the project's [GHG] emissions to the effects of climate change." A project's individual contribution may appear small but may still be cumulatively considerable. Therefore, it is not appropriate to determine the significance of an individual project's GHG emissions by comparing against state, local, or global emission rates. Instead, the Governor's Office of Planning and Research recommends using an established or recommended threshold as one method of determining significance during CEQA analysis (OPR 2008, 2018). A lead agency may determine that a project's incremental contribution to an existing cumulatively significant issue, such as climate change, is not significant based on supporting facts and analysis [CEQA Guidelines Section 15130(a)(2)].

Environmental Threshold:
Santa Barbara County adopted the ECAP in 2015 as a GHG emission reduction plan. The County has been implementing the plan's emission reduction measures since 2016. In July 2020, the County Board of Supervisors affirmed its target to reduce GHG emissions in unincorporated County areas by 50 percent below 2007 levels by 2030. The County developed interim GHG emissions thresholds based on the County's 2030 GHG target, which are in line with the State's GHG emission reduction goals. These thresholds apply to all non-exempt projects and plans, other than industrial stationary source projects and are described in detail below.

CEQA Guidelines Section 15064.4(a) states "A lead agency should make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate the amount of GHG emissions resulting from a project." CEQA Guidelines Section 15064.4(b) further states,

> A lead agency should consider the following factors, among others, when assessing the significance of impacts from greenhouse gas emissions on the environment:
>
> (1) The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting;
>
> (2) Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project…

A numeric significance threshold is applicable to development projects of various land use types, such as residential, commercial, and mixed-use. The numeric threshold is the emissions level below which a project's incremental contribution to global climate change is less than "cumulatively considerable" and, therefore, the project would have an insignificant impact.

On January 26, 2021, the Board adopted interim GHG emissions thresholds of significance (interim thresholds) for non-exempt discretionary land use projects and plans that do not contain industrial stationary sources of GHG emissions. In January 2021, the Santa Barbara County Board of Supervisors adopted a

numeric Screening Threshold of 300 metric tons of CO_2 equivalents per year ($MTCO_2e$/year) for non-industrial stationary source projects and plans (County of Santa Barbara Planning and Development Department 2021). The recommended Screening Threshold results in approximately 15 percent of all applicable future projects, and 87 percent of all applicable future land use emissions, being subject to the Significance Threshold. Approximately 85 percent of future projects will fall below the Screening Threshold and, therefore, will not require further analysis. This interim Screening Threshold is approximately equivalent to the operational GHG emissions associated with a 62,000 square foot residential housing development or a 12,000 square foot regional shopping center according to the size-based project screening criteria contained in Table 1 of the Greenhouse Gas Emissions section of the County of Santa Barbara's *Environmental Thresholds and Guidelines Manual* (County of Santa Barbara Planning and Development Department 2021).

Threshold Applicability

- The interim thresholds apply to the following GHGs, per the California Health and Safety Code § 38505(g), and any other gas that the California Air Resources Board recognizes as a greenhouse gas in the future, including but not limited to: carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFC), perfluorocarbons (PFC), sulfur hexafluoride (SF_6), nitrogen trifluoride (NF_3). The County recognizes that environmental documents will primarily focus on the first three chemicals because the latter four are unlikely candidates to be associated with projects subject to this threshold.
- The interim thresholds apply to all non-exempt projects and plans, other than industrial stationary source projects, subject to discretionary approvals by the County, where the County is the CEQA lead agency. The County shall request other CEQA lead agencies and NEPA lead agencies to use the interim thresholds when the County is a CEQA responsible agency for a project.
- The interim thresholds apply to both direct and indirect emissions of GHGs, where protocols to support the calculation of such emissions are available.
- Direct emissions encompass the project's complete operations, including GHGs emitted from all on-site (e.g., natural gas combustion in appliances) and mobile sources, involved in the operation, including off-road equipment, as well as the removal of trees and other vegetation.
- Indirect emissions encompass GHGs that are emitted to:
    - Provide the project with electricity, including generation and transmission; and
    - Supply the project with water, including water treatment;
- The interim thresholds apply to the emissions from the (1) transportation and treatment of solid and liquid waste produced from the project's operations and water for the project's operations, and (2) transportation and processing of solid waste.
- Construction-related emissions are to be amortized across the lifetime of the project (i.e., dividing total construction emissions by the number of years the project is expected to be operated).
- The interim thresholds do not apply to GHGs that are emitted throughout the life cycle of products that a project may produce or consume, except as identified above as a project's indirect emissions.
- The interim thresholds do not apply to industrial stationary sources.

Impact Discussion:

(a, b) GHG emissions-related impacts were assessed in accordance with methodologies recommended by the SBCAPCD and the County of Santa Barbara. Where GHG emission quantification was required, emissions were modeled using CalEEMod, version 2020.4.0. CalEEMod is a statewide land use emissions computer model designed to quantify potential GHG emissions associated with both construction and operations from a variety of land use projects. Project construction generated GHG

emissions were calculated using CalEEMod model defaults for Santa Barbara County coupled with details associated with construction timing and phasing provided by the Project proponent. Operational air pollutant emissions were based on the Project site plans and routine maintenance information.

Short-Term Construction Impacts. Construction-related activities that would generate GHG emissions include worker commute trips, haul trucks carrying supplies and materials to and from the Project Site, and off-road construction equipment (e.g., dozers, loaders, excavators). The CalEEMod model estimated that specific construction generated GHG emissions that would result from construction of the Project would be 307 metric tons of CO_2e per year. Once construction is complete, the generation of these GHG emissions would cease. In accordance with County requirements, construction emissions were amortized over the life of the Project, 30 years, and added to the operational emissions described below.

Long-Term Operation Emissions. Long-term operational emissions would result in an increase in GHG emissions associated with motor vehicle trips from routine maintenance on the Project Site. There are no stationary sources of GHG emissions associated with the Project. Long-term operational GHG emissions attributed to the Project are identified in Table 2.

Table 2. Operational-Related Greenhouse Gas Emissions

Emissions Source	CO_2e (Metric Tons/ Year)
Construction Emissions (amortized over the 30-year life of the Project)	10
Area Source	0
Energy	0
Mobile	1
Waste	0
Water	0
Total	11
Significance Threshold	*300*
Exceeds Threshold?	**No**

Source: CalEEMod version 2020.4.0.
Notes: Emission projections predominately based on CalEEMod model defaults for Santa Barbara County. A conservative estimate of one trip per day for routine maintenance was accounted for in the modeling.

As shown in Table 2, Project GHG emissions would not exceed 300 metric tons of CO_2e annually. While climate change impacts cannot result solely from a particular project's GHG emissions, the Project's incremental contribution of GHG emissions combined with all other sources of GHGs may have a significant impact on global climate change. For this reason, a project's contribution to GHG emissions is analyzed below under "Cumulative Impacts."

Cumulative Impacts:

Comparison of the Project's scope (construction and routine maintenance of a debris basin) to the County of Santa Barbara's interim screening threshold of significance (300 $MTCO_2e/yr$), demonstrates that the Project's incremental contribution to the cumulative effect is not cumulatively considerable and would not have a significant impact on the environment.

Mitigation and Residual Impact:

Because the Proposed Project would not have a significant impact on the environment, no mitigation is necessary. Therefore, residual impacts would be insignificant.

References:

California Air Resources Board, *Climate Change Scoping Plan*, December 2008.

County of Santa Barbara Long Range Planning Division, *Energy and Climate Action Plan*, May 2015.

County of Santa Barbara Long Range Planning Division, *2016 Greenhouse Gas Emissions Inventory Update and Forecast*, June 2018.

County of Santa Barbara Planning and Development, *Environmental Thresholds and Guidelines Manual*, October 2008 (Revised January 2021).

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Intergovernmental Panel on Climate Change (IPCC), *Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II, and III to the Firth Assessment report of the Intergovernmental Panel on Climate Change* [Core Writing Team, R.K. Pachauri and L.A. Mayer (eds.)]. IPCC, Geneva, Switzerland, 151 pp.

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Langridge, Ruth (University of California, Santa Cruz). California's Fourth Climate Change Assessment, Central Coast Summary Report, September 2018.

PMC, *Final Environmental Impact Report for the Energy and Climate Action Plan*, May 2015.

U.S. Environmental Protection Agency*, Inventory of U.S. Greenhouse Gasses and Sinks: 1990-2017*, April 2019.

U.S. Global Change Research Program, *Fourth National Climate Assessment, Volume II*: Impacts, Risks, and Adaptation in the United States, 2018.

4.4 BIOLOGICAL RESOURCES

Will the proposal result in:	Poten. Signif. and Unavoid.	Signif. But Mitigable	Insignif.	No Impact / Beneficial Impact	Reviewed Under Previous Document
Flora					
a. A loss or disturbance to a unique, rare or threatened plant community?		X			
b. A reduction in the numbers or restriction in the range of any unique, rare or threatened species of plants?		X			
c. A reduction in the extent, diversity, or quality of native vegetation (including brush removal for fire prevention and flood control improvements)?		X			
d. An impact on non-native vegetation whether naturalized or horticultural if of habitat value?				X	

Will the proposal result in:	Poten. Signif. and Unavoid.	Signif. But Mitigable	Insignif.	No Impact / Beneficial Impact	Reviewed Under Previous Document
e. The loss of healthy native specimen trees?				X	
f. Introduction of herbicides, pesticides, animal life, human habitation, non-native plants or other factors that would change or hamper the existing habitat?		X			
Fauna					
g. A reduction in the numbers, a restriction in the range, or an impact to the critical habitat of any unique, rare, threatened or endangered species of animals?				X	
h. A reduction in the diversity or numbers of animals onsite (including mammals, birds, reptiles, amphibians, fish or invertebrates)?		X			
i. A deterioration of existing fish or wildlife habitat (for foraging, breeding, roosting, nesting, etc.)?		X			
j. Introduction of barriers to movement of any resident or migratory fish or wildlife species?			X		
k. Introduction of any factors (light, fencing, noise, human presence and/or domestic animals) which could hinder the normal activities of wildlife?		X			

Existing Plant and Animal Communities/Conditions:

Background and Methods:

Santa Barbara County has a wide diversity of habitat types, including chaparral, oak woodlands, wetlands and beach dunes. These are complex ecosystems and many factors are involved in assessing the value of the resources and the significance of project impacts. Prior to conducting the biological reconnaissance survey, a literature review using the CDFW's California Natural Diversity Database (CNDDB) and the California Native Plant Society's (CNPS) Electronic Inventory (CNPSEI) was conducted to determine the special-status plant and wildlife species that have been documented near the Proposed Project site. A site visit was conducted on May 10, 2022, and a biological report was prepared by ECORP, Consulting Inc (Attachment 4). The following analysis is based on this information.

Flora:

The Project site consisted of California Buckwheat – White Sage Scrub Scrubland, California Buckwheat – White Sage Scrub Scrubland (Disturbed), Goodding's Willow – Red Willow Riparian Woodland and Forest, Goodding's Willow – Red Willow Riparian Woodland and Forest (Disturbed), Laurel Sumac Scrub Shrubland, and two land cover types (Disturbed/Ruderal and Developed) (see below). The riparian habitat is jurisdictional to CDFW and is considered to be a sensitive natural community. A complete list of plant species observed on the Project site is included in the Biological Report (Attachment 4).

Vegetation Community/Land Cover Type	Amount (acres)
California Buckwheat – White Sage Scrub Shrubland Alliance	0.19
California Buckwheat – White Sage Scrub Shrubland Alliance (Disturbed)	0.09
Goodding's Willow-Red Willow Riparian Woodland and Forest	0.15
Goodding's Willow-Red Willow Riparian Woodland and Forest (Disturbed)	0.01

Vegetation Community/Land Cover Type	Amount (acres)
Laurel Sumac Scrub Shrubland Alliance	0.08
Disturbed/Ruderal	0.12
Developed	0.01
TOTAL:	0.65

There were 35 special-status plant species that appeared in the literature review and database searches for the Project site. None of the special-status plant species were observed during the survey on the Project site. A list was generated from the results of the literature review and the Proposed Project was evaluated for suitable habitat that could support any of the special-status plant species on the list. Of the 35 special-status plants identified, three were determined to have a moderate potential to occur on the Proposed Project due to the presence of moderately suitable habitat in the small portions of disturbed coastal sage scrub and riparian communities: Nuttall's scrub oak (*Quercus dumosa*), a CRPR 1B.1 species (rare and seriously threatened in California); late-flowered mariposa lily (*Calochortus fimbriatus*), a CRPR 1B.2 species (rare and fairly threatened in California); and Santa Barbara honeysuckle (*Loniceria subspicata* var. *subspicata*), a CRPR 1B.2 species. The remaining 32 plant species were identified to have a low potential to occur and/or are presumed absent from the Project site. A complete list of the 35 special-status plant species, with details regarding blooming periods, habitat requirements, and potential for occurrence designations, is included in Attachment 4.

Fauna:

Wildlife species expected to inhabit the site include common species such as acorn woodpecker *(Melanerpes formicivorus*), house finch (*Carpodacus mexicanus*), California scrub-jay (*Aphelocoma californica*), spotted towhee (*Pipilo maculatus*), Wilson's warbler (*Wilsonia pusilla*), and one raptor species, red-tailed hawk (*Buteo jamaicensis*). Two common reptile species, western fence lizard (*Sceloporus occidentalis*), and tiger whiptail lizard (*Aspidoscelis tigris* sp.), and one common mammal species, California ground squirrel (*Otospermophilus beecheyi*), were observed. The Proposed Project site is not located within any USFWS-designated critical habitat. No designated critical habitat is present within 10 miles of the Proposed Project site.

The results of the literature review and reconnaissance-level survey identified 29 special-status wildlife species with potential to occur on or adjacent to the Proposed Project site. Of those 29 species, three species (San Diego desert woodrat [*Neotoma lepida intermedia*], coast horned lizard [*Phrynosoma blainvillii*], and yellow warbler [*Dendroica petechia]*) were determined to have a moderate potential to occur on the Proposed Project site. Fifteen special-status wildlife species have a low potential to occur on the site. Of these fifteen species, six of these species that have low potential to occur but are considered to be of higher sensitivity: monarch butterfly (*Danaeus plexippus*), a candidate for federal listing; arroyo toad (*Anaxyrus californicus*), federally-listed as endangered and a California special species of concern; California red-legged frog (*Rana draytonii*), federally-listed as threatened and a California special species of concern; southwestern willow flycatcher (*Empidonax traillii extimus*), federally- and state-listed as endangered; Belding's savannah sparrow (*Rallus obseletus levipes*), federally-and state-listed as endangered and a California fully-protected species; and least Bell's vireo (*Vireo bellii pusillus*), federally- and state-listed as endangered. The Biological Report (Attachment 4) has additional information on these species.

Thresholds:

Santa Barbara County's Environmental Thresholds and Guidelines Manual (2008) includes guidelines for the assessment of biological resource impacts. The following thresholds are applicable to this project:

Wetlands: Projects which result in a net loss of important wetland area or wetland habitat value, either through direct or indirect impacts to wetland vegetation, degradation of water quality, or would threaten the continuity of wetland-dependent animal or plant species are considered to have a potentially significant effect

on the environment. Projects which substantially interrupt wildlife access, use and dispersal in wetland areas would typically be considered to have a potentially significant impact. Projects which disrupt the hydrology of wetlands systems would be considered to have a potentially significant impact.

Riparian Habitats: Project created impacts may be considered significant due to: direct removal of riparian vegetation; disruption of riparian wildlife habitat, particularly animal dispersal corridors and or understory vegetation; or intrusion within the upland edge of the riparian canopy leading to potential disruption of animal migration, breeding, etc. through increased noise, light and glare, and human or domestic animal intrusion; or construction activity which disrupts critical time periods for fish and other wildlife species.

Oak Woodlands and Forests: Project created impacts may be considered significant due to habitat fragmentation, removal of understory, alteration to drainage patterns, disruption of the canopy, removal of a significant number of trees that would cause a break in the canopy, or disruption in animal movement in and through the woodland.

Individual Native Trees: Project created impacts may be considered significant due to the loss of 10% or more of the trees of biological value on a project site.

Other Rare Habitat Types: The Manual recognizes that not all habitat-types found in Santa Barbara County are addressed by the habitat-specific guidelines. Impacts to other habitat types or species may be considered significant, based on substantial evidence in the record, if they substantially: (1) reduce or eliminate species diversity or abundance; (2) reduce or eliminate the quality of nesting areas; (3) limit reproductive capacity through losses of individuals or habitat; (4) fragment, eliminate, or otherwise disrupt foraging areas and/or access to food sources; (5) limit or fragment range and movement; or (6) interfere with natural processes, such as fire or flooding, upon which the habitat depends.

An evaluation of whether an impact on biological resources would be substantial must consider both the resource itself and how that resource fits into a regional or local context. Substantial impacts would be those that would diminish, or result in the loss of, an important biological resource, or those that would obviously conflict with local, State, or federal resource conservation plans, goals, or regulations. Impacts are sometimes locally important but not significant according to CEQA. The reason is that although the impacts would result in an adverse alteration of existing conditions, they would not substantially diminish, or result in the permanent loss of an important resource on a population-wide or region-wide basis.

Impact Discussion:

(a-b) Vegetation communities on the Project site consisted of coastal sage scrub and riparian woodland with evidence of disturbance. Results of the literature review and reconnaissance-level survey identified thirty-five special-status plant species that occur in the vicinity of the Project site. Of these thirty-five special-status plants, three special-status plant species have a moderate potential to occur (Nuttall's scrub oak, late-flowered mariposa lily, and Santa Barbara honeysuckle) and eighteen species have a low potential to occur on the Proposed Project site. No special status plant species have a high potential to occur on the site. If present, direct impacts to rare or special-status plant species may occur as a result of the Proposed Project in the form of mortality or injury due to ground disturbing and vegetation removal activities during construction or maintenance activities. If present in the areas adjacent to the Project site, indirect impacts to rare or special-status plant species may occur due to habitat degradation and increased dust during construction or maintenance activities. Impacts to rare plant species would be less than significant with the implementation of Mitigation Measures B-1, 3, 5, and 6. The Mitigation Measures for the Proposed Project are discussed below.

(c) The Project site consisted of California Buckwheat – White Sage Scrub Scrubland, California Buckwheat – White Sage Scrub Scrubland (Disturbed), Goodding's Willow – Red Willow Riparian Woodland and Forest, Goodding's Willow – Red Willow Riparian Woodland and Forest (Disturbed), Laurel Sumac Scrub Shrubland, and two land cover types (Disturbed/Ruderal and Developed). The riparian habitat has the potential to provide habitat for special-status wildlife species and nesting birds, it is jurisdictional to CDFW and is considered to be a sensitive natural community. Project-related impacts to this community may include removal, loss of habitat, and habitat degradation during construction or maintenance activities.

Aquatic resources in the Project site consist of 0.145 acre of USACE/RWQCB jurisdiction and 0.528 acre of CDFW jurisdiction including an unnamed ephemeral stream and associated riparian habitat areas (Goodding's Willow – Red Willow Riparian Woodland and Forest). Impacts to these resources are expected to be subject to Section 404 permitting with the USACE, Section 401 Water Quality Certification permitting with the RWQCB jurisdiction and Lake and Streambed Alteration Agreement permitting under Section 1600 of the California Fish and Game Code with the CDFW.

Implementation of Mitigation Measures B-2, B-3, B-4, B-6, and B-7 will reduce impacts to a level that is less than significant.

(d) The Project would result in the loss of 0.09-acre of California Buckwheat – White Sage Scrub WShrubland Alliance (Disturbed), 0.01-acre of Goodding's Willow-Red Willow Riparian Woodland and Forest (Disturbed), and 0.12-acre of Disturbed/Ruderal land cover types that is composed primarily of non-native species. This habitat does not provide significant habitat value because there is a very small amount relative the surrounding area. Therefore, no impact would occur.

(e) One sycamore tree is present on the site that would be removed by Project construction. However, the tree present onsite is neither in good health, nor designated as a "Specimen Tree". Therefore, the Project would not result in the loss of a healthy native specimen tree. No impact would occur.

(f) Please see response (c) above, Implementation of Mitigation Measures B-2, B-3, B-4, B-6, and B-7 will reduce impacts to a level that is less than significant.

(g-h) The results of the literature review and reconnaissance-level survey identified 29 wildlife species with potential to occur on or adjacent to the Proposed Project site. Of those 29 species, three species (San Diego desert woodrat, coast horned lizard, and yellow warbler) were determined to have a moderate potential to occur on the Proposed Project site. If present, direct impacts to special-status wildlife species may occur as a result of the Proposed Project in the form of mortality or injury due to ground disturbing and vegetation removal activities. However, these species are of lower levels of sensitivity (SSC) and the site is not expected to support large numbers of either species. Therefore, impacts to these species due to the Project implementation, though adverse, would not be expected to be significant under CEQA.

Fifteen special-status wildlife species have a low potential to occur (monarch butterfly, arroyo toad, California red-legged frog, coast range newt, northern California legless lizard, California legless lizard, coastal whiptail, western pond turtle, coast patch-nosed snake, two-striped garter snake, southwestern willow flycatcher, Belding's savannah sparrow, least Bell's vireo, Townsend's big-eared bat, and big free-tailed bat). Of these fifteen species, six of these species that have low potential to occur and are listed or otherwise considered to be of higher sensitivity (monarch butterfly, arroyo toad, California red-legged frog, southwestern willow flycatcher, Belding's savannah sparrow, and least Bell's vireo). Although these species were not observed during biological surveys and have a low potential to occur on or adjacent to the Project site, impacts could occur in the form of injury or mortality, loss of habitat, ground vibrations, increased human activity, and noise if they were to move to the Project Site over the lifetime of the Project. For these six species, any direct or indirect impacts to them due to Project implementation would be considered significant under CEQA due to their higher level of sensitivity. Implementation of Mitigation Measures B-3, B-5, B-6, and B-8 will reduce impacts to a level that is less than significant.

(i) The vegetation within the Proposed Project site and adjacent to the site could provide nesting habitat for nesting birds and raptors protected by the MBTA and California Fish and Game Code, and also provides foraging habitat for songbird and raptor species. If construction of the Proposed Project occurs during the bird breeding season (typically February 1 through August 31 for passerines and January 15 through July 31 for raptors), ground-disturbing construction activities could directly affect MBTA-protected birds and their nests through the removal of habitat on the Proposed Project site, and indirectly through increased noise, ground vibrations, and increased human activity. Implementation of Mitigation Measures B-3, B-5, B-6, and B-8 will reduce impacts to a level that is less than significant.

(j) The Project Site is located within and adjacent to areas containing existing disturbances (e.g., paved and dirt roads and residential developments). The Project Site is disturbed and provides little cover; however,

the culvert under Park Lane Road may allow for local movement of wildlife. No migratory wildlife corridors or native wildlife nursery sites were identified within the Project site. Therefore, no significant impacts to wildlife corridors or nursery sites are expected to occur during the development of the Project site.

(k) Please see response (g-h) above. Implementation of Mitigation Measures B-3, B-5, B-6, and B-8 will reduce impacts to a level that is less than significant.

Cumulative Impacts:

Because the Project would not significantly impact biological resources after mitigation, it would not have a cumulatively considerable effect on the County's biological resources.

Mitigation and Residual Impact:

The following mitigation measures would reduce the Project's biological resource impacts to an insignificant level:

B-1 – Pre-Construction Rare Plant Survey: One focused plant survey **(**with focus on detection of the Nuttall's scrub oak, late-flowered mariposa lily, and Santa Barbara honeysuckle**)** shall be conducted within suitable habitat on the Project site prior to construction and during the appropriate time for identification (May-June). The survey shall be conducted by a botanist or qualified biologist in accordance with the USFWS General Rare Plant Survey Guidelines (USFWS 2002); the CDFW Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities (CDFW 2018); and the CNPS Botanical Survey Guidelines (CNPS 2001). If special-status plant species are not observed on the Proposed Project site, then Proposed Project activities may continue without additional survey or special-status plant species protection requirements. If any special-status species are observed during the rare plant survey and Proposed Project-related impacts to the special-status plant species are unavoidable, then consultation with CDFW may be required to develop a mitigation plan or additional avoidance and minimization measures. Additional protection measures for special-status plant species may include transplanting, seed collection, or avoidance.

B-2 – Minimize Vegetation Removal from Channel Bottom. The District shall minimize vegetation removal from the channel bottom to the least amount necessary to achieve the specific maintenance objectives for the reach (i.e., removing obstructive vegetation or silt trapping vegetation). Brushing and herbicide application for vegetation control on the channel bottom shall be conducted in a non-continuous, mosaic-like manner, to the extent feasible, allowing small patches of in-channel native vegetation to persist.

B-3 – Monitoring During Construction and Maintenance Activities. The District Biologist shall monitor construction and maintenance activities to ensure that the appropriate methods and limits are used. Results of the monitoring shall be documented in the annual post-maintenance report. These activities include brushing, herbicide application, channel shaping, desilting, bank stabilization by placing fill or grading banks, bank protection construction or repair, grade stabilizer construction or repair, pilot channel construction, and access ramp construction.

B-4 - Restore Temporarily Disturbed Areas. The District shall restore channel banks containing riparian or wetland vegetation that are temporarily disturbed by maintenance or construction activities associated with the following: channel shaping, placement of bank protection, ramp construction, and repair or construction of bank protection and grade stabilizers. Restoration objectives, methods, plant species, maintenance, and monitoring shall follow the Restoration Plan under development for agency approval. The restoration of channel bed habitats shall only occur if it would not conflict with the maintenance needs in the affected reach.

B-5 – Pre-Construction Biological Surveys and Avoidance Measures. Prior to construction, a pre-construction survey shall be conducted by a District Biologist for special-status wildlife within all areas of potential permanent or temporary disturbance. The pre-construction survey should take place no more than 7 days prior to the start of ground-disturbing activities. The pre-construction surveys should take place regardless of breeding season timing and should focus on identifying the presence of special-status wildlife species present on the Project site or that were identified as having a high potential to occur on the Project site. Should any special-status species be identified during the pre-construction survey, consultation to

develop suitable avoidance and minimization measures with the appropriate agency (USFWS, CDFW) may need to be undertaken.

B-6 – Construction Monitoring for Sensitive Species. The District Biologist shall monitor earth and vegetation disturbing maintenance activities located at and adjacent to locations where sensitive species are known to occur. The need for monitoring and the areas to be monitored shall be determined during the annual field assessment in the spring. The objective of the monitoring is to ensure that key habitat features or species locations are avoided.

B-7 – Post Maintenance Channel Bed Treatment. The District shall roughen the channel bed after channel maintenance to create microtopography that will encourage reestablishment of aquatic habitats over time. Pools and riffles shall be recreated in the work area if they were removed during maintenance, to the extent feasible. Modifications of the creek bed shall be consistent with geomorphological considerations identified through measure W-1.

B-8 – Pre-Construction Survey for Nesting Birds and Special-Status Avian Species: Where feasible, ground-disturbing activities, including vegetation removal, shall be conducted during the non-breeding season (approximately September 15 through January 14) to avoid violations of the MBTA and California Fish and Game Code §§ 3503, 3503.5 and 3513. If activities with the potential to disrupt nesting birds or the special-status avian species with potential to occur on the Proposed Project Site are scheduled to occur during the bird breeding season (February 1 through August 31 for songbirds and January 15 through July 31 for raptor species), a pre-construction survey for nesting birds and special-status avian species shall be conducted by a qualified biologist who is experienced in the identification of avian species and conducting nesting bird surveys. The survey shall include the Proposed Project Site and adjacent areas where Proposed Project activities have the potential to cause nest failure. The pre-construction survey shall be conducted no more than three days prior to the start of ground-disturbing activities (including vegetation removal) within the bird breeding season. If no nesting birds or special-status avian species are observed during the survey, site preparation and construction activities may begin. If nesting birds or raptors or special-status avian species are found to be present, avoidance or minimization measures shall be implemented to avoid potential Proposed Project-related impacts to the species. Avoidance and minimization measures shall be developed by the qualified biologist and may include non-disturbance buffers established around active nests until the biologist has determined that the nesting cycle is completed, seasonal work restrictions, or additional survey and monitoring requirements. The width of non-disturbance buffers established around active nests will be determined by the qualified biologist (300 feet is typically recommended for songbirds and 500 feet is typically recommended for raptors). Once nesting is deemed complete by the qualified biologist as determined through periodic nest monitoring, the non-disturbance buffer will be removed by the qualified biologist and Proposed Project work may resume in the area.

With the incorporation of these measures, residual impacts would be insignificant.

4.5 CULTURAL RESOURCES

Will the proposal:	Poten. Signif. and Unavoid.	Signif. But Mitigable	Insignif.	No Impact / Beneficial Impact	Reviewed Under Previous Document
a. Cause a substantial adverse change in the significance of any object, building, structure, area, place, record, or manuscript that qualifies as a historical resource as defined in CEQA Section 15064.5?			X		
b. Cause a substantial adverse change in the significance of a prehistoric or historic archaeological resource pursuant to CEQA Section 15064.5?			X		
c. Disturb any human remains, including those located outside of formal cemeteries?			X		

Will the proposal:	Poten. Signif. and Unavoid.	Signif. But Mitigable	Insignif.	No Impact / Beneficial Impact	Reviewed Under Previous Document
d. Cause a substantial adverse change in the significance of a tribal cultural resource, defined in the Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: 1) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or 2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.			X		

County Environmental Thresholds: Chapter 8 of the Santa Barbara County Environmental Thresholds and Guidelines Manual (2008, revised February 27, 2018) contains guidelines for the identification, significance evaluation, and mitigation of impacts to cultural resources, including archaeological, historic, and tribal cultural resources. In accordance with the requirements of CEQA, these guidelines specify that if a resource cannot be avoided, it must be evaluated for importance under specific CEQA criteria. CEQA Section 15064.5(a)(3)A-D contains the criteria for evaluating the importance of archaeological and historic resources. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the significance criteria for listing in the California Register of Historical Resources: (A) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage; (B) Is associated with the lives of persons important in our past; (C) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or (D) Has yielded, or may be likely to yield, information important in prehistory or history. The resource also must possess integrity of at least some of the following: location, design, setting, materials, workmanship, feeling, and association. For archaeological resources, the criterion usually applied is (D).

CEQA calls cultural resources that meet these criteria "historical resources". Specifically, a "historical resource" is a cultural resource listed in, or determined to be eligible for listing in, the California Register of Historical Resources, or included in or eligible for inclusion in a local register of historical resources, as defined in subdivision (k) of Section 5020.1, or deemed significant pursuant to criteria set forth in subdivision (g) of Section 5024.1. As such, any cultural resource that is evaluated as significant under CEQA criteria, whether it is an archaeological resource of historic or prehistoric age, a historic built environment resource, or a tribal cultural resource, is termed a "historical resource".

CEQA Guidelines Section 15064.5(b) states that "a project that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment." As defined in CEQA Guidelines Section 15064.5(b), substantial adverse change in the significance of an historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired. The significance of an historical resource is materially impaired when a project: (1) demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register of Historical Resources; (2) demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources; or (3) demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the California Register of Historical Resources as determined by a lead agency for purposes of CEQA.

For the built environment, a project that follows the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings or the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings (Weeks and Grimmer 1995), is generally considered as mitigated to an insignificant impact level on the historical resource.

Existing Setting:

For at least the past 10,000 years, the area that is now Santa Barbara County has been inhabited by Chumash Indians and their ancestors. Based on a Phase I cultural resources survey and a historic resources evaluation and report, and records on file at the CCIC (Central Coast Information Center of the University of California, Santa Barbara), cultural resources are not located in the vicinity of the proposed project. Based on a records search conducted at the CCIC on May 5, 2022, seven recorded cultural resources are located within 1-mile of the project site. A Phase 1 archaeological survey conducted by ECORP Consulting, Inc. on June 3, 2022 identified two resources within a portion of the Project Area proposed for development. BVDB-001 is a historic-period road known as Park Lane and BVDB-002 is a historic period culvert. The Project would not alter Park Lane (BVDB-001); therefore, BVDB-001 was not evaluated for the CRHR/NRHP. The Project would impact site BVDB-002. Consequently, ECORP evaluated the resource BVDB-002 using the CRHR and NRHP eligibility criteria and found it not eligible under any criteria.

Santa Barbara County initiated contact with the Native American Heritage Commission in June 2022 to solicit Tribal consultation contacts, pursuant to Public Resources Code (PRC) Section 21080.3.1 and in accordance with the provisions of Assembly Bill (AB) 52. On July 20, 2022, NAHC provided a response with nine Tribal contacts for notification. On August 8, 2022, Santa Barbara County submitted a formal notification of the decision to undertake a project and notification of consultation opportunity, along with a copy of the Cultural Resources Report, to the nine Tribal contacts identified by the NAHC.

Santa Barbara County received one response from the Santa Ynez Band of Chumash Indians Tribal Elders' Council, requesting formal consultation on the project. A consultation meeting with the Tribal Elders' Council Representative Dr Wendy Teeter, Santa Barbara County, and the cultural resources investigative team, was held on September 23, 2022. Dr. Teeter stated at the meeting that the Tribe had no additional concerns and concurred with the County's preparation of an IS/MND for the Project.

Impact Discussion:

(a, b, c, d) During the field survey, portions of the Project Area were inaccessible due to steep terrain and lack of access through private property. In cases where ground visibility is hindered by impervious or impenetrable surfaces, such as pavement, buildings, or structures, and where such circumstances prevent archaeological survey or testing by traditional field methods, other sources of information must be utilized in assessing the potential for archaeological deposits. A review of maps and records does not indicate a high potential for the presence of buried archaeological deposits. Additionally, the Project Area was heavily scoured during the 2018 debris flow, reducing the likelihood of archaeological resources to

remain intact. There is a low probability that the Project activities will encounter any intact buried deposits.

As discussed above in Existing Setting, no cultural resources that qualify as a potentially-significant cultural resource as defined by CEQA were identified within or adjacent to the Project Area. Additionally, the Project Site has a low potential for the presence of such resources. As a result, the Proposed Project would not cause a substantial adverse change in the significance of any historical resource, cause a substantial adverse change in the significance of a prehistoric or historic archaeological resource, disturb any human remains, or cause a substantial adverse change in the significance of a tribal cultural resource. In order to comply with cultural resource policies, the Project would be conditioned with a standard archaeological discovery clause which requires that any previously unidentified cultural resources discovered during construction and maintenance are treated in accordance with the County's Cultural Resources Guidelines and Mitigation Measure C-1 from the County's 2021 Updated Debris Maintenance and Management Plan. Impacts would be insignificant after mitigation.

Cumulative Impacts:

Since the project would not significantly impact cultural resources, it would not have a cumulatively considerable effect on the County's cultural resources with implementation of the mitigation measures described below.

Mitigation and Residual Impact:

The following mitigation measures would reduce the project's cultural resource impacts to an insignificant level:

C-1 – Unexpected Archeological Finds. If cultural materials are unexpectedly uncovered during construction or maintenance activities, the District shall immediately consult with a qualified archeologist who shall inspect the material and coordinate with the District to halt or redirect earth-disturbing maintenance work until the significance of the material is determined, and the location is cleared for further work.

With the incorporation of these measures, residual impacts would be insignificant.

4.6 ENERGY

Will the proposal result in:	Poten. Signif. and Unavoid.	Signif. But Mitigable	Insignif.	No Impact / Beneficial Impact	Reviewed Under Previous Document
a. Substantial increase in demand, especially during peak periods, upon existing sources of energy?			X		
b. Requirement for the development or extension of new sources of energy?			X		

Impact Discussion:

The County has not identified significance thresholds for electrical and/or natural gas service impacts (County of Santa Barbara Planning and Development 2021). Private electrical and natural gas utility companies provide service to customers in Central and Southern California, including the unincorporated areas of Santa Barbara County.

Impact Discussion:

(a, b) The Project is proposing the construction and maintenance of a new debris basin. The energy used for the Project would be the fuel necessary for construction activities and routine maintenance. This would result in a negligible net increase of fuel consumption for the County. Therefore, the Project would

not result in a substantial increase in energy demand upon existing sources of energy. No adverse impacts would occur.

Cumulative Impacts:

The Project's contribution to the regionally significant demand for energy is not considerable and is therefore insignificant.

Mitigation and Residual Impact:

No mitigation is required. Residual impacts would be insignificant.

4.7 FIRE PROTECTION

Will the proposal result in:	Poten. Signif. and Unavoid.	Signif. But Mitigable	Insignif.	No Impact / Beneficial Impact	Reviewed Under Previous Document
a. Introduction of development into an existing high fire hazard area or exposure of people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?				X	
b. Project-caused high fire hazard?				X	
c. Introduction of development into an area without adequate water pressure, fire hydrants or adequate access for fire fighting?				X	
d. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?				X	
e. Introduction of development that will substantially impair an adopted emergency response plan, emergency evacuation plan, or fire prevention techniques such as controlled burns or backfiring in high fire hazard areas?				X	
f. Development of structures beyond safe Fire Dept. response time?				X	

County Standards

The following County Fire Department standards are applied in evaluating impacts associated with the proposed development.

- The emergency response thresholds include Fire Department staff standards of one on-duty firefighter per 4,000 persons (generally 1 engine company per 12,000 people, assuming three firefighters/station). The emergency response time standard is approximately 5-6 minutes.
- Water supply thresholds include a requirement for 750 gpm at 20 psi for urban single family dwellings in urban and rural developed neighborhoods, and 500 gpm at 20 psi for dwellings in rural areas (lots larger than five acres).
- The ability of the County's engine companies to extinguish fires (based on maximum flow rates through hand held line) meets state and national standards assuming a 5,000 square foot structure. Therefore, in any portion of the Fire Department's response area, all structures over 5,000 square feet are an unprotected risk (a significant impact) and therefore should have internal fire sprinklers.

- Access road standards include a minimum width (depending on number of units served and whether parking would be allowed on either side of the road), with some narrowing allowed for driveways. Cul-de-sac diameters, turning radii and road grade must meet minimum Fire Department standards based on project type.
- Two means of egress may be needed and access must not be impeded by fire, flood, or earthquake. A potentially significant impact could occur in the event any of these standards is not adequately met.

Impact Discussion:

The Project is located within a State Responsibility Area and Very High Fire Hazard Area (CALFIRE 2022). The Proposed Project does not involve any new fire hazards and would comply with all applicable county standards. The Project is located in an area with an adequate response time from fire protective services and does not include housing or manned facilities. Additionally, the Project would not affect the amount of water or water pressure available for firefighting. Emergency road access would be maintained during construction and maintenance activities.

Mitigation and Residual Impact: No impacts are identified. No mitigation is necessary.

4.8 GEOLOGIC PROCESSES

Will the proposal result in:	Poten. Signif. and Unavoid.	Signif. But Mitigable	Insignif.	No Impact / Beneficial Impact	Reviewed Under Previous Document
a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving exposure to or production of unstable earth conditions such as landslides, earthquakes, liquefaction, soil creep, mudslides, ground failure (including expansive, compressible, collapsible soils), or similar hazards?				X	
b. Disruption, displacement, compaction or overcovering of the soil by cuts, fills or extensive grading?		X			
c. Exposure to or production of permanent changes in topography, such as bluff retreat or sea level rise?				X	
d. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				X	
e. Any increase in wind or water erosion of soils, either on or off the site?		X			
f. Changes in deposition or erosion of beach sands or dunes, or changes in siltation, deposition or erosion which may modify the channel of a river, or stream, or the bed of the ocean, or any bay, inlet or lake?				X	
g. The placement of septic disposal systems in impermeable soils with severe constraints to disposal of liquid effluent?				X	
h. Extraction of mineral or ore?				X	
i. Excessive grading on slopes of over 20%?				X	
j. Sand or gravel removal or loss of topsoil?		X			

Will the proposal result in:	Poten. Signif. and Unavoid.	Signif. But Mitigable	Insignif.	No Impact / Beneficial Impact	Reviewed Under Previous Document
k. Vibrations, from short-term construction or long-term operation, which may affect adjoining areas?			X		
l. Excessive spoils, tailings or over-burden?				X	

Chapter 10 of the Santa Barbara County Environmental Thresholds and Guidelines Manual (amended January 2021) contains guidelines for the identification, significance evaluation, and mitigation of impacts on the environment as described in Section 15064 of the State CEQA Guidelines. As the geologic conditions at a site can be variable over time, these guidelines are not fixed thresholds but rather used to determine whether further studies are required of site-specific conditions to assess geologic impacts.

1. The project site or any part of the project is located on land having substantial geologic constraints, as determined by the Planning and Development Department or the Public Works Department. Areas constrained by geology include parcels located near active or potentially active faults and property underlain by rock types associated with compressible/collapsible soils or susceptible to landslides or severe erosion. "Special Problems" areas designated by the Board of Supervisors have been established based on geologic constraints, flood hazards and other physical limitations to development.
2. The project results in potentially hazardous geologic conditions such as the construction of cut slopes exceeding a grade of 1.5 horizontal to 1 vertical.
3. The project proposes construction of a cut slope over 15 feet in height as measured from the lowest finished grade.
4. The project is located on slopes exceeding 20% grade.

Impact Discussion

(a) Potential to Result in Geologic Hazards. The Project Site is not underlain by any known fault but is within the vicinity of the Mission Ridge Fault. Compliance with existing project construction regulations would reduce potential ground shaking impacts caused by movement along a distant fault to a less than significant level. The Project would remove soils and sediment but not include construction of any new structures. Therefore, soil characteristics identified in the Seismic Safety and Safety Element would not affect the integrity of Project elements. Liquefaction potential in the area has been determined to be low. Any potential for expansive soils would be mitigated by the use of non-expansive engineered fill, if required. No impacts related to geologic hazards are identified.

(b, e, i, j.) Potential for Grading-Related Impacts**.** No grading on slopes of over 20% will take place. Grading within the Basin expansion area would expand the basin bottom and side slopes. No new structures would be constructed or inhabited above or on high slopes, and no residential, industrial, or commercial facilities would be constructed. All grading would be conducted according to plans designed by a licensed geotechnical engineer. Grading for Basin expansion would remove portions of vegetative cover and disturb the ground and sub-ground surface, thereby increasing the potential for short-term erosion and sedimentation impacts through wind and/or water erosion. Application of standard County grading and erosion control mitigation measure GEO-02 would ensure that the potential for the project to cause substantial erosion, sloughing, and sediment impacts would be reduced to insignificant with mitigation (b, e, j). No impacts would occur related to grading on slopes over 20% (i).

(c**.)** Exposure to Rising Sea Level. The Project is located approximately 4 miles inland and not located in proximity to coastal bluffs. It would not be impacted by bluff retreat or sea level rise. No impacts are identified.

(d, g, h, k, l.) Other Potential Geological Hazards. No paleontological resources or unique geologic features have been identified on the proposed project site, and the potential for their occurrence is considered minimal (Attachment 5). The Project would not use septic tanks. The Project would not involve mining. The Project would not result in excessive spoils, tailings or over-burden during construction or post-construction operation. No impacts are identified (d, g, h, l). Any vibration impacts from construction would be temporary. Long-term operation of the Project would not cause any vibrations that would affect adjoining areas. Therefore, impacts resulting from geological resource vibrations would be insignificant (k).

(f.) Potential Erosion and Sedimentation Impacts. During most storm flows, siltation, deposition, and erosion in Buena Vista Creek would be similar to existing conditions. During very large flow events or debris flows, sediment and debris would be deposited in the new debris basin. Material (or portions of it) that would have been carried downstream over the spillway of a full basin would be trapped with the expanded capacity. Therefore, changes in deposition or erosion or changes in siltation that would potentially modify the Buena Vista Creek channel would be beneficial.

Cumulative Impacts:

Since the Project would not result in significant geologic impacts after mitigation, and geologic impacts are typically localized in nature, it would not have a cumulatively considerable effect on geologic hazards within the County.

Mitigation and Residual Impact:

The following mitigation measures would reduce the project's geologic impacts to an insignificant level:

GEO-02: Erosion and Sediment Control Plan. Where required by the latest edition of the California Green Code and/or Chapter 14 of the Santa Barbara County Code, a Storm Water Pollution Prevention Plan (SWPPP), Storm Water Management Plan (SWMP) and/or an Erosion and Sediment Control Plan (ESCP) shall be implemented as part of the project. Grading and erosion and sediment control plans shall be designed to minimize erosion during construction and shall be implemented for the duration of the grading period and until re-graded acres have been stabilized by structures, long-term erosion control measures or permanent landscaping. The County shall submit the SWPPP, SWMP or ESCP using Best Management Practices (BMP) designed to stabilize the site, protect natural watercourses/creeks, prevent erosion, convey storm water runoff to existing drainage systems keeping contaminants and sediments onsite. The SWPPP or ESCP shall be a part of the Grading Plan submittal and will be reviewed by a Registered Civil Engineer.

Plan Requirements and Timing: The grading and SWPPP, SWMP, and/or ESCP shall be submitted for review and approved by the RWQCB. The plan shall be designed to address erosion, sediment, and pollution control during all phases of development of the site until all disturbed areas are permanently stabilized. The SWPPP requirements shall be implemented prior to commencement of grading throughout the year. The ESCP/SWMP requirements shall be implemented between November 1st and April 15th of each year as recommended by licensed geologists or engineers. Pollution control measures, however, shall be implemented year-round.

Monitoring: A designated inspector from the District shall perform site inspections throughout the construction phase.

With the incorporation of GEO-02, residual impacts would be insignificant.

4.9 HAZARDOUS MATERIALS/RISK OF UPSET

Will the proposal result in:	Poten. Signif. and Unavoid.	Signif. But Mitigable	Insignif.	No Impact / Beneficial Impact	Reviewed Under Previous Document
a. In the known history of this property, have there been any past uses, storage or discharge of hazardous materials (e.g., fuel or oil stored in underground tanks, pesticides, solvents or other chemicals)?				X	
b. The use, storage or distribution of hazardous or toxic materials?		X			
c. A risk of an explosion or the release of hazardous substances (e.g., oil, gas, biocides, bacteria, pesticides, chemicals or radiation) in the event of an accident or upset conditions?		X			
d. Possible interference with an emergency response plan or an emergency evacuation plan?				X	
e. The creation of a potential public health hazard?				X	
f. Public safety hazards (e.g., due to development near chemical or industrial activity, producing oil wells, toxic disposal sites, etc.)?				X	
g. Exposure to hazards from oil or gas pipelines or oil well facilities?				X	
h. The contamination of a public water supply?		X			

Threshold:

The County's safety threshold addresses involuntary public exposure from projects involving significant quantities of hazardous materials. The threshold addresses the likelihood and severity of potential accidents to determine whether the safety risks of a project exceed significant levels.

Impact Discussion:

a-h.) Potential Hazardous Materials/Risk of Upset Impacts No chemicals including oil, gas, biocides, bacteria, pesticides, or radiation have been identified on the Project Site. Construction activities would require temporary use of heavy equipment as well as the use of diesel fuel, oils, pesticides, or herbicides without long term onsite storage. With implementation of Mitigation Measures H-1 through H-8, impacts resulting from hazardous materials release would be reduced to a less than significant level. Therefore, no impact related to hazardous materials would occur.

Cumulative Impacts:

Since the project would not create significant impacts with respect to hazardous materials and/or risk of upset, it would not have a cumulatively considerable effect on safety within the County.

Mitigation and Residual Impact:

The following mitigation measures would reduce the project's effects regarding hazardous materials and/or risk of upset to an insignificant level:

H-1 – Reduce Sedimentation. The District shall minimize the amount of surface disturbance and vegetation removal to the extent feasible during all construction and maintenance activities in order to reduce the area of disturbed soils that could be eroded during winter runoff. No stockpiles or dewatering operations shall be established in the channel bed or basin bottom. All fill shall be compacted to reduce erosion. All disturbed banks and terraces above the low flow channel shall be seeded with appropriate riparian grasses and herbs and/or planted with willows, mule fat, or other woody plant species. The objectives of the seeding and/or planting are to stabilize these areas and reduce erosion. The selection of species to be used and the density of seeding or planting shall balance the need for maintaining channel capacity while meeting these objectives. If work must occur in a wetted channel that has continuous flow downstream of the work site, the District shall either temporarily divert streamflow around the work site, or provide temporary sediment containment downstream of the site. In addition, the District shall check silt fencing, diversions, and settling ponds twice a day.

H-2: Responsible Herbicide Application. To the extent feasible, the primary herbicide application each year shall occur during the months of August through November, when stream flows are minimal. Herbicides shall be applied by hand-held sprayers rather than from truck mounted sprayers to the extent feasible. The dilution and application of herbicides shall be conducted in strict accordance with all label recommendations, including all restrictions related to public health, worker safety, and the protection of aquatic organisms. Herbicides shall not be applied when winds at the application site exceed 5 miles per hour, within 12 hours of a forecasted rain event, or when vegetation surfaces are covered with water from recent rainfall or dew. Herbicides shall be applied carefully to plant surfaces in minimal effective amounts, minimizing drift to non-target plants and overspray onto the ground or to open water. Signs shall be placed to warn the public if herbicides are applied within 50 feet of any public recreation location, such as a trail, picnic spot, or other site of regular human activity. The signs shall remain for 48 hours after the application of the herbicide. Monitoring and Timing: The District staff will conduct and/or oversee the maintenance work to ensure that the appropriate herbicide application method is used by field crews, identify target vegetation, and place warning signs. Reporting: A summary of the maintenance work will be documented in the annual post maintenance report.

H-4: Prevent Accidental Spills and Leaks. The mixing and dispensing of herbicides and equipment fueling or maintenance shall not occur within a channel or a basin. Spill containment and clean-up procedures for herbicides and vehicle fuels and oils shall be developed by the District. All field personnel shall be trained and all field vehicles shall be equipped with appropriate materials. Monitoring and Timing: The District staff will conduct and/or oversee the maintenance work, and ensure that the appropriate spill avoidance and containment procedures are implemented. Reporting: Accidental spills or leaks, and the associated clean up, will be documented in the annual post maintenance report.

H-6: Public Education Regarding Creek Water Quality. The District shall prepare information brochures for residents located along maintained drainages that explain: (1) how the District applies herbicides in a responsible manner, and provides guidelines on how landowners can use herbicides for residential and commercial uses in a similarly responsible manner to minimize water quality impacts to the creeks; and (2) how landowners can reduce pollution to the creek from their activities by employing best management practices for landscape fertilization; disposal of household paints, hazardous materials and petroleum products; management of trash and landscaping debris; and handling of pet wastes. The brochure shall be prepared in coordination with Project Clean Water and mailed to affected areas on a 3-year rotating basis. It shall include the Project Clean Water phone numbers for technical assistance and for reporting illegal dumping. The brochure shall also include information on how landowners can make their land available for habitat restoration under the routine maintenance program. Monitoring and Timing. The District staff will complete the brochure within one year of the approval of the updated maintenance program. Reporting. The District shall summarize the number of mailings each year in the post-maintenance annual report.

H-7: Reporting Water Quality Incidents. The District shall train its maintenance crews to identify and report incidents or materials observed in the creeks during routine maintenance work that could cause significant water quality impacts, including illegal dumping of trash, pet waste, and green waste; homeless encampments; and drain outlets with evidence of poor water quality. The staff shall contact appropriate authorities in the County or affected municipalities. Monitoring and Timing. The District staff will make the

above observations during all maintenance work and record the observations on a form, and if possible, with photographs. Reporting. The District shall summarize the number of reports filed each year in the annual post-maintenance reports.

H-8: Reduce Overall Herbicide Use. The District shall make every feasible effort to reduce the overall amount of herbicides used in the maintenance program over the next ten years through more restrictive and selective applications, greater use of manual clearing, actions to reduce in channel obstructive vegetation through shading by new canopy trees, and coordination with the County's Integrated Pest Management Strategy to identify more environmentally friendly pesticides. The 1PM Strategy was adopted by the Board of Supervisors to promote the maintenance of the County's landscapes in way that protects and enhances natural resources and public health, while providing a framework for evaluating pesticide use by County Departments in pursuit of their missions. Monitoring and Timing. The District shall carefully consider the use of herbicides in each Annual Plan, and seek alternative methods. Reporting. The District shall report the amount of herbicides applied each year and the miles of drainages affected in the Annual Plan and annual post-maintenance report, including a cumulative account of past years.

With the incorporation of these measures, residual impacts would be insignificant.

4.10 LAND USE

Will the proposal result in:	**Poten. Signif. and Unavoid.**	**Signif. But Mitigable**	**Insignif.**	**No Impact / Beneficial Impact**	**Reviewed Under Previous Document**
a. Structures and/or land use incompatible with existing land use?				X	
b. Cause a significant environmental impact due to a conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?				X	
c. The induction of substantial unplanned population growth or concentration of population?				X	
d. The extension of sewer trunk lines or access roads with capacity to serve new development beyond this proposed project?				X	
e. Loss of existing affordable dwellings through demolition, conversion or removal?				X	
f. Displacement of substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				X	
g. Displacement of substantial numbers of people, necessitating the construction of replacement housing elsewhere?				X	
h. The loss of a substantial amount of open space?			X		

Will the proposal result in:	Poten. Signif. and Unavoid.	Signif. But Mitigable	Insignif.	No Impact / Beneficial Impact	Reviewed Under Previous Document
i. An economic or social effect that would result in a physical change? (i.e. Closure of a freeway ramp results in isolation of an area, businesses located in the vicinity close, neighborhood degenerates, and buildings deteriorate. Or, if construction of new freeway divides an existing community, the construction would be the physical change, but the economic/social effect on the community would be the basis for determining that the physical change would be significant.)				X	
j. Conflicts with adopted airport safety zones?				X	

Environmental Threshold: The Thresholds and Guidelines Manual contains no specific thresholds for land use. Generally, a potentially significant impact can occur if a project would result in substantial growth inducing effects or result in a physical change in conflict with County policies adopted for the purpose of avoiding or mitigating an environmental effect.

Impact Discussion:

The proposed project would not cause a physical change that conflicts with adopted environmental policies or regulations. The project is not growth inducing, and does not result in the loss of affordable housing, or a significant displacement of people. The Project would not involve the extension of a sewer trunk line and does not conflict with any airport safety zones. The Project is compatible with existing land uses. Therefore, no impact is anticipated for a-j except item h. The Project would temporarily close Buena Vista Trail immediately adjacent to the Project Site during construction for safety reasons. However, this closure would be temporary and there are a number of alternative trail options in the vicinity available for recreational use. Therefore, an insignificant impact is identified for item h.

Mitigation and Residual Impact: No impacts or insignificant impacts are identified. No mitigation is necessary.

4.11 NOISE

Will the proposal result in:	Poten. Signif. and Unavoid.	Signif. But Mitigable	Insignif.	No Impact / Beneficial Impact	Reviewed Under Previous Document
a. Long-term exposure of people to noise levels exceeding County thresholds (e.g. locating noise sensitive uses next to an airport)?		X			
b. Short-term exposure of people to noise levels exceeding County thresholds?		X			
c. Project-generated substantial increase in the ambient noise levels for adjoining areas (either day or night)?		X			

Setting/Threshold:

Noise is generally defined as unwanted or objectionable sound which is measured on a logarithmic scale and expressed in decibels (dB(A)). The duration of noise and the time period at which it occurs are important values in determining impacts on noise-sensitive land uses. The Community Noise Equivalent Level (CNEL) and Day-Night Average Level (L_{dn}) are noise indices which account for differences in intrusiveness between

day- and night-time uses. County noise thresholds are: 1) 65 dB(A) CNEL maximum for exterior exposure, 2) 45 dB(A) CNEL maximum for interior exposure of noise-sensitive uses, and 3) an increase in noise levels by 3 db(A) – either individually or cumulatively when combined with other noise-generating sources when the existing (ambient) noise levels already exceed 65 db(A) at outdoor living areas or 45db(A) at interior living areas. Noise-sensitive land uses include residential dwellings; transient lodging; hospitals and other long-term care facilities; public or private educational facilities; libraries, churches; and places of public assembly.

The Proposed Project site is located outside of 65 dB(A) noise contours for roadways, public facilities, airport approach and take-off zones. Surrounding noise-sensitive uses consist of residential land uses located to the south and west with the closest being directly adjacent to the western Project Site boundary.

Impact Discussion:

(a and c) The Project proposes the construction and routine maintenance of a debris basin. Long-term noise generated onsite would be attributed to routine maintenance activities that would consist of clearing vegetation. In order to reduce noise at the residence located directly adjacent to the Project Site, Mitigation Measure N-1 shall be imposed.

(b) Construction of the Proposed Project would temporarily generate noise that could impact adjacent sensitive receptors within 1,600 feet of the site. Noise-generating equipment that may be required include excavators, rock-breaking attachments, bulldozers, front-end loaders, drill rigs, concrete pumps, water trucks and haul trucks. The front-end loader, drill rig and trucks would generate the loudest noise during project construction, based on Figure 2 in the Noise Thresholds in the Santa Barbara County Environmental Thresholds Manual. However, noise generated from this equipment would not exceed the construction noise threshold of 95 dBA set forth in the manual. To reduce, potentially significant construction noise impacts, in accordance with the Santa Barbara County Environmental Thresholds Manual (2021), construction activities would be restricted with implementation of Mitigation Measure N-1. Implementation of Mitigation Measures N-1 and N-2 would reduce the impacts regarding short-term noise exposure and Project-generated increase in ambient noise levels to less than significant.

Cumulative Impacts:

The implementation of the Project is not anticipated to result in any substantial noise effects. Therefore, the Project would not contribute in a cumulatively considerable manner to noise impacts.

Mitigation and Residual Impact: The following mitigation measures would reduce the project's noise effects to an insignificant level:

N-1 – Minimize Noise. Construction and routine maintenance work shall be limited to weekdays and the hours of 7:00 am and 4:30 pm. Equipment and haul trucks shall be equipped with functioning and properly maintained muffler systems, including intake silencers where necessary. Additional reductions in noise emissions shall be provided, as feasible, by performing noisy operations, such as chipping and loading spoils into dump trucks on the banks, as far away as practicable from sensitive receptors.

N-2 – Minimize Rock-Breaking Noise at Adjacent Properties. Wherever feasible, rock-breaking will be performed with expansive clay-charges, which fracture rock without the need for a rock-breaker attachment. Use of the excavator with rock-breaker attachment will be minimized and deployed only for constrained instances. If needed, the rock-breaker will operated in minimal, concentrated time periods to accomplish the necessary excavation; long periods of continuous rock-breaking will be avoided, or the use of noise-dampening attachments will be implemented, to the maximum extent feasible.

With the incorporation of these measures, residual impacts would be insignificant.

4.12 PUBLIC FACILITIES

Will the proposal require or result in:	Poten. Signif. and Unavoid.	Signif. But Mitigable	Insignif.	No Impact / Beneficial Impact	Reviewed Under Previous Document
a. A need for new or altered police protection and/or health care services?				X	
b. Student generation exceeding school capacity?				X	
c. Significant amounts of solid waste or breach any federal, state, or local standards or thresholds relating to solid waste disposal and generation (including recycling facilities and existing landfill capacity)?				X	
d. The relocation or construction of new or expanded wastewater treatment facilities (sewer lines, lift-stations, etc.) the construction or relocation of which could cause significant environmental effects?				X	
e. The relocation or construction of new or expanded storm water drainage or water quality control facilities, the construction of which could cause significant environmental effects?				X	

Thresholds

(Schools) A significant level of school impacts is generally considered to occur when a project would generate sufficient students to require an additional classroom.

(Solid Waste) A project is considered to result in significant impacts to landfill capacity if it would generate 196 tons per year of solid waste (operational). This volume represents 5% of the expected average annual increase in waste generation and is therefore considered a significant portion of the remaining landfill capacity. In addition, construction and demolition waste from new construction, remodels and demolition/rebuilds is considered significant if it exceeds 350 tons. A project which generates between 40 and 196 tons per year of solid waste is considered to have an adverse cumulative effect on solid waste generation, and mitigation via a Solid Waste Management Plan is recommended.

Impact Discussion:

The Project does not include any housing or manned facilities. No new development is proposed and there would be no impact on existing police protection or health care services. Existing service levels would be sufficient to serve the Proposed Project. The proposed project would not generate solid waste in excess of County thresholds. The Project would not cause the need for new or altered sewer system facilities as it would not generate wastewater and therefore would not affect wastewater service capacity. The Proposed Project would create new impervious surfaces that could result in greater surface runoff from the site since there would be less open ground capable of absorbing rainwater. This increased surface runoff would be accommodated within the debris basin itself, being directed downstream south of the Project Site. No additional drainages or water quality control facilities would be necessary to serve the Project. Therefore, the Project would have no impact to public facilities.

Mitigation and Residual Impact: No impacts are identified. No mitigation is necessary.

4.13 RECREATION

Will the proposal result in:	Poten. Signif. and Unavoid.	Signif. But Mitigable	Insignif.	No Impact / Beneficial Impact	Reviewed Under Previous Document
a. Conflict with established recreational uses of the area?		X			
b. Conflict with biking, equestrian and hiking trails?		X			
c. Substantial impact on the quality or quantity of existing recreational opportunities (e.g., overuse of an area with constraints on numbers of people, vehicles, animals, etc. which might safely use the area)?		X			

Setting/Threshold: The Thresholds and Guidelines Manual contains no threshold for park and recreation impacts. However, the Board of Supervisors has established a minimum standard ratio of 4.7 acres of recreation/open space per 1,000 people to meet the needs of a community. The Santa Barbara County Parks Department maintains more than 900 acres of parks and open spaces, as well as 84 miles of trails and coastal access easements. The existing Buena Vista Trail and trailhead are located immediately adjacent to and east of the Project Site.

Impact Discussion:

(a-c) An established trail, Buena Vista Trail, runs through the eastern portion of the Project Site. Project improvements would provide a long-term beneficial impact by reducing the likelihood of trail washout from future flood events. As part of sediment removal activities, Mitigation Measure R-2 would require suitably sized sediments to be disposed of at local beaches. Temporary closure of the Buena Vista Trailhead for the duration of construction activities would not significantly reduce trail access in the area, as three other trails are present within 0.75-mile of the Project Site. No adverse impacts on the quality or quantity of existing recreational opportunities, either in the Project vicinity or County-wide, would occur. With implementation of Mitigation Measure R-1 and R-2, impacts to recreational facilities would be reduced to a less than significant level.

Mitigation and Residual Impact:

The following mitigation measures would reduce the project's recreation impacts to an insignificant level:

> **R–1 – Minimize Impacts to Trail and Park Users.** To the extent feasible, the District shall provide temporary detours for hikers using public trails that must be closed for maintenance work. All work areas shall be marked by signs, and by flagging if necessary to protect the public from hazardous conditions. The District shall notify appropriate County and City parks departments prior to initiating maintenance work in public parks. The work area shall be visibly marked, and measures taken to prevent public entry. If feasible, work shall be restricted to off-peak park hours. *For the Buena Vista Debris Basin project, a trail detour would be provided intermittently, if feasible, depending on the current status of ongoing work and safety considerations at the site. When feasible and safe for public access, a trail detour would be implemented for weekend use. Expected closure and opening dates would be posted on-site and notified to Montecito Trails Foundation to alert the public.
>
> **R-2: Disposal of Sediments at Beaches.** Sediments removed from debris basins or creeks on the South Coast during long-term maintenance of the basins and during routine maintenance of creeks, respectively, shall be disposed at local beaches to the extent feasible. Only suitably sized sediments shall be disposed at the beaches, as permitted by applicable regulatory agencies.

With the incorporation of these measures, residual impacts would be insignificant.

4.14 TRANSPORTATION

Will the proposal result in:	Poten. Signif. and Unavoid.	Signif. But Mitigable	Insignif.	No Impact / Beneficial Impact	Reviewed Under Previous Document
a. Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadways, bicycle, and pedestrian facilities?			X		
b. Conflict or be inconsistent with CEQA Guidelines Section 15064.3(b)?				X	
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				X	
d. Result in inadequate emergency access?			X		

Setting:

The public roadway that provides access to the Project Site is Park Lane, which transitions eastward to Bella Vista Drive.

Thresholds:

On December 28, 2018, the California Natural Resources Agency certified and adopted proposed revisions to CEQA Guidelines Section 15064.3 and Appendix G: Environmental Checklist Form, Section XVII, Transportation. Section 15064.3 includes new criteria for determining the significance of a project's transportation impacts. Specifically, Section 15064.3(a) states "vehicle miles traveled is the most appropriate measure of transportation impacts." Therefore, the following thresholds reflect the specific guidance set forth in CEQA Guidelines Section 15064.3 regarding estimating VMT and developing thresholds of significance for VMT and transportation impacts.

According to the County's Environmental Thresholds and Guidelines Manual, a significant transportation impact may occur when:

Potential Conflict with a Program, Plan, Ordinance, or Policy. The SBCAG's 2040 Regional Transportation Plan and Sustainable Communities Strategy (SBCAG, 013) and the County's Comprehensive Plan, zoning ordinances, capital improvement programs, and other planning documents contain transportation and circulation programs, plans, ordinances, and policies. A significant impact may occur if a project conflicts with the overall purpose of an applicable transportation and circulation program, plan, ordinance, or policy, including impacts to existing transit systems and bicycle and pedestrian networks pursuant to Public Resources Code Section 21099(b)(1).

Potential Impact to VMT. The County expresses thresholds of significance in relation to existing, or baseline, county VMT. Specifically, the County compares the existing, or baseline, County VMT (i.e., pre-construction) to a project's VMT. The County's Project-Level VMT Calculator incorporates screening criteria, thresholds of significance, mitigation measures, and data from the Santa Barbara County Association of Governments' (SBCAG) Regional Travel Demand Model (RTDM).
The screening criteria for land use projects is included in the table below:

Screening Category	
Small Projects	A project that generates 110 or fewer average daily trips
Locally Serving Projects	A project that has locally serving retail uses that are 50,000 square feet or less, such as specialty

	retail, shopping center, grocery/food store, bank/financial facilities, fitness center, restaurant, or café. If a project also contains a non-locally serving retail use(s), that use(s) must meet other applicable screening criteria.
Projects Located in a VMT Effected Area	A residential or office project that is located in an area that is already 15 percent below the county VMT (i.e., "VMT efficient area"). The County's Project-Level VMT Calculator determines whether a proposed residential or office project is located within a VMT efficient area.
Projects near Major Transit Stop	A project that is located within a ½ mile of a major transit stop or within a ½ mile of a bus stop on a high-quality transit corridor (HQTC). A major transit stop is a rail station or a bus stop with two or more intersecting bus routes with service frequency of 15 minutes or less during peak commute periods. A HQTC is a corridor with fixed route bus service with frequency of 15 minutes or less during peak commute periods. However, these screening criteria do not apply if project-specific or location-specific information indicates the project will still generate significant levels of VMT. Therefore, in addition to the screening criteria listed above, the project should also have the following characteristics: − Floor area ratio (FAR) of 0.75 or greater; − Consistent with the applicable SBCAG Sustainable Communities Strategy (as determined by the County); − Does not provide more parking than required by the County's Comprehensive Plan and zoning ordinances; and − Does not replace affordable housing units (units set aside for very low income1 and low income2 households) with a smaller number of moderate or high-income housing units.
Affordable Housing	A residential project that provides 100 percent affordable housing units (units set aside for very low income and low income households); if part of a larger development, only those units that meet the definition of affordable housing satisfy the screening criteria.

The County presumes that land use projects meeting any of the screening criteria, absent substantial evidence to the contrary, would have less than significant VMT impacts and would not require further analysis. Projects that do not meet any of the screening criteria require an analysis of VMT. VMT thresholds for land use projects are provided in the following table:

Project Type	Threshold for Determination of Significant VMT Impacts

Residential	Project VMT exceeds a level of 15 percent below existing county VMT for home-based VMT per resident.
Employment	Project VMT exceeds a level of 15 percent below existing county VMT for home-based work VMT per employee.
Regional Retail	Project VMT results in a net increase in total VMT.
Mixed-Use Projects	Evaluate each project component independently using the applicable threshold of significance above for each component (e.g., for a mixed-use project with residential and office uses, apply the residential and employment thresholds of significance for each component separately).
Other Land Use Types	For project types not listed above (e.g., school, sports or entertainment facility, park), the County will apply an absolute VMT threshold (e.g., total VMT or total roadway VMT) or efficiency-based VMT threshold (e.g., home-based VMT per resident, home-based work VMT per employee, or total VMT per service population). The applicable threshold will depend on the project's characteristics, including whether the project is locally or regionally serving. For projects that generally produce job-related travel (i.e., employment), the analysis can compare the project's VMT (i.e., home-based work VMT per employee) to existing county VMT. For projects that serve the region, the analysis can compare the project's total VMT to existing VMT, or compare the project's net increase in total VMT to the study area VMT.

Projects with VMT below the applicable threshold would normally result in a less than significant VMT impact and, therefore, would not require further analyses or studies. Projects with a VMT above the applicable threshold would normally result in a significant VMT impact and, therefore, would require further analyses and studies, and, if necessary, project modifications or mitigation measures. CEQA Guidelines Section 15064.3 establish VMT as the most appropriate measure of transportation impacts under CEQA.

Design Features and Hazards. A significant impact occurs if a project will increase roadway hazards. An increase could result from existing or proposed uses or geometric design features.

Emergency Access. A significant impact occurs if a project will potentially impede emergency access vehicles.

Impact Discussion:

(a) Potential Conflict with a Program, Plan, Ordinance, or Policy

The Proposed Project would generate vehicle trips during construction and maintenance activities. The majority of heavy-duty equipment would be staged onsite, reducing the need for daily vehicle trips to and from the Project Site. However, Project construction would require construction-related vehicle trips including construction workers travelling to and from the Project Site, haul trucks (including for export of excavated materials, as needed), and other trucks associated with equipment and material deliveries. Construction-generated trips would occur during the working hours of 7:00 a.m. to 4:30 p.m. Monday through Friday. No construction-generated trips would occur on weekends, District holidays or federal holidays.

Construction-related traffic would be short-term and would cease upon completion of construction activities. Upon completion of construction, maintenance activities at the debris basin would occur annually and as-needed after severe weather.

The Proposed Project involves construction and operation of flood control infrastructure, which would not conflict with adopted policies, plans, or programs addressing the circulation system, including public transit, bicycle, or pedestrian facilities. Given the minimal number of trips generated, construction and operational transportation impacts would be less than significant.

b. Potential Impact to VMT

CEQA Guidelines Section 15064.3(b) identifies criteria for evaluating transportation impacts. Specifically, the guidelines state vehicle miles traveled (VMT) exceeding an applicable threshold of significance may indicate a significant impact. According to Section 15064.3(b)(3) of the State CEQA guidelines, a lead agency may include a qualitative analysis of operational and construction traffic. As discussed below, the project is not expected to affect VMT in the project area. A VMT calculation is typically conducted on a daily or annual basis to determine operational usage of a project. Construction and maintenance activities associated the Proposed Project would result in a minimal, short-term increase in local traffic as a result of construction-related worker traffic, material and equipment deliveries, and other construction activities. VMT generated from construction-related traffic would cease once construction is completed, and VMT levels would return to pre-project conditions. VMT generated from this activity is anticipated to be below the 110 or fewer average daily trips for small projects in the County's VMT screening criteria. Therefore, no impacts associated with VMT would occur.

c. Design Features and Hazards

The Proposed Project would not include any new roadway design features, nor would it include any geometric design features; no sharp curves or dangerous intersections are proposed. Project components consist of sediment removal and regrading of the existing debris basin banks and culvert within their current footprint on District-owned property. The Project would not create or substantially increase a traffic hazard due to a design feature and therefore no impact would occur.

d. Emergency Access

Although Park Lane is the only access road to the residential properties adjacent to the Buena Vista Debris Basin, construction and staging of the Proposed Project would occur on District-owned property.

Temporary construction activities associated with the Proposed Project would be confined to the Project Site and would not physically impair access to other existing roadways within the Project vicinity. All construction staging areas would be onsite. Grading activities would stage onsite just prior to commencing work. Access to local residences would be maintained at all times.

No changes to the existing street system are proposed that could result in inadequate emergency access post-construction of the Project, nor would Project operations and maintenance introduce new activities or substantial operational traffic with the potential to result in inadequate emergency access. Therefore, the impact to related to emergency access during Project operation would be less than significant.

Cumulative Impacts:

The County's Environmental Thresholds were developed, in part, to define the point at which a project's contribution to a regionally significant impact constitutes a significant effect at the project level. In this instance, the Project has been found not to exceed the threshold of significance for transportation. Therefore, the project's contribution to the regionally significant transportation impacts is not considerable, and is insignificant.

Mitigation and Residual Impact: No mitigation is required. Residual impacts would be less than significant.

4.15 WATER RESOURCES/FLOODING

Will the proposal result in:	**Poten. Signif. and Unavoid.**	**Signif. But Mitigable**	**Insignif.**	**No Impact / Beneficial Impact**	**Reviewed Under Previous Document**
a. Changes in currents, or the course or direction of water movements, in either marine or fresh waters?				X	

Will the proposal result in:	Poten. Signif. and Unavoid.	Signif. But Mitigable	Insignif.	No Impact / Beneficial Impact	Reviewed Under Previous Document
b. Changes in percolation rates, drainage patterns or the rate and amount of surface water runoff?				X	
c. Change in the amount of surface water in any water body?				X	
d. Discharge, directly or through a storm drain system, into surface waters (including but not limited to wetlands, riparian areas, ponds, springs, creeks, streams, rivers, lakes, estuaries, tidal areas, bays, ocean, etc) or alteration of surface water quality, including but not limited to temperature, dissolved oxygen, turbidity, or thermal water pollution?				X	
e. Alterations to the course or flow of flood water or need for private or public flood control projects?				X	
f. Exposure of people or property to water related hazards such as flooding (placement of project in 100 year flood plain), accelerated runoff or tsunamis, sea level rise, or seawater intrusion?				X	
g. Alteration of the direction or rate of flow of groundwater?				X	
h. Change in the quantity of groundwater, either through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations or recharge interference?				X	
i. Overdraft or over-commitment of any groundwater basin? Or, a significant increase in the existing overdraft or over-commitment of any groundwater basin?				X	
j. The substantial degradation of groundwater quality including saltwater intrusion?				X	
k. Substantial reduction in the amount of water otherwise available for public water supplies?				X	
l. Introduction of storm water pollutants (e.g., oil, grease, pesticides, nutrients, sediments, pathogens, etc.) into groundwater or surface water?		X			

Water Resources Thresholds

A project is determined to have a significant effect on water resources if it would exceed established threshold values which have been set for each overdrafted groundwater basin. These values were determined based on an estimation of a basin's remaining life of available water storage. If the project's net new consumptive water use [total consumptive demand adjusted for recharge less discontinued historic use] exceeds the threshold adopted for the basin, the project's impacts on water resources are considered significant.

A project is also deemed to have a significant effect on water resources if a net increase in pumpage from a well would substantially affect production or quality from a nearby well.

Water Quality Thresholds:

A significant water quality impact is presumed to occur if the project:

- Is located within an urbanized area of the county and the project construction or redevelopment individually or as a part of a larger common plan of development or sale would disturb one (1) or more acres of land;
- Increases the amount of impervious surfaces on a site by 25% or more;
- Results in channelization or relocation of a natural drainage channel;
- Results in removal or reduction of riparian vegetation or other vegetation (excluding non-native vegetation removed for restoration projects) from the buffer zone of any streams, creeks or wetlands;
- Is an industrial facility that falls under one or more of categories of industrial activity regulated under the NPDES Phase I industrial storm water regulations (facilities with effluent limitation; manufacturing; mineral, metal, oil and gas, hazardous waste, treatment or disposal facilities; landfills; recycling facilities; steam electric plants; transportation facilities; treatment works; and light industrial activity);
- Discharges pollutants that exceed the water quality standards set forth in the applicable NPDES permit, the Regional Water Quality Control Board's (RWQCB) Basin Plan or otherwise impairs the beneficial uses[2] of a receiving water body;
- Results in a discharge of pollutants into an "impaired" water body that has been designated as such by the State Water Resources Control Board or the RWQCB under Section 303 (d) of the Federal Water Pollution Prevention and Control Act (i.e., the Clean Water Act); or
- Results in a discharge of pollutants of concern to a receiving water body, as identified by the RWQCB.

Impact Discussion

(a-e, g) The Project would involve earthwork and ground disturbing construction activities within the Buena Vista Channel basin. Construction activities such as grading could create temporary runoff and erosion. Application of standard County grading, erosion, and drainage-control measures in this section and GEO-1 in Section 4.8 would ensure that no significant increase of erosion or storm water runoff would occur. Project components would stabilize channel banks, to reduce sediment and debris accumulation in the long term. Therefore, impacts to water resources as a result of the Project would be beneficial.

(f) Predictions about the long-term effects of global climate change include rising sea levels due to melting of glaciers and thermal expansion. Rising sea levels could increase the incidence of flooding in coastal areas with altitudes at or near sea-level. Although the exact rate of future sea level rise is unknown, the Intergovernmental Panel on Climate Change has estimated that sea levels may rise between 50 and 90 centimeters (approximately 1.6-to-3 feet) by the year 2100.[3] Although the Project does involve lands near sea level, the Project Site is situated at a minimum altitude of 698 feet above current sea level.

[2] Beneficial uses for Santa Barbara County are identified by the Regional Water Quality Control Board in the Water Quality Control Plan for the Central Coastal Basin, or Basin Plan, and include (among others) recreation, agricultural supply, groundwater recharge, fresh water habitat, estuarine habitat, support for rare, threatened or endangered species, preservation of biological habitats of special significance.

[3] The Intergovernmental Panel on Climate Change is a scientific intergovernmental body set up by the World Meteorological Organization (WMO) and by the United Nations Environment Programme (UNEP).

Therefore, even if these rates of sea level rise are realized, the Project Site would remain well above sea level within that planning horizon.

The Proposed Project would reduce the risk of flooding by regulating the rate of onsite surface water runoff after previous fire seasons cleared or disturbed upstream vegetation. Therefore, impacts are considered beneficial.

(h-k) The Project would not require onsite pumping or groundwater extraction. Water for construction, including dust control, will be trucked to the site. The Project does not require septic or other sanitary facilities; during construction, portable chemical toilets will be provided. The Project's impact on water supplies is therefore insignificant.

(l) The Project could adversely affect surface water quality by increasing the volume and decreasing the quality of stormwater runoff. The Project would involve the use of herbicides. However, the Project would be expected to generate only minor amounts of storm water pollutants. Further discussion is included in Section 4.9, response b-h. With implementation of Mitigation Measures H-1 through H-8 in Section 4.9 and W-1 through W-9, below, impacts to water quality would be reduced to an insignificant level.

Cumulative Impacts:

The County's Environmental Thresholds were developed, in part, to define the point at which a project's contribution to a regionally significant impact constitutes a significant effect at the project level. In this instance, the project has been found not to exceed the threshold of significance for water resources. Therefore, the project's contribution to the regionally significant issues of water supplies and water quality is not considerable, and is insignificant.

Mitigation and Residual Impact:

The following mitigation measures would reduce the project's water resource impacts to an insignificant level:

W-1 - Maintenance Need Analysis. The District shall evaluate relevant hydraulic factors when determining the need, type, and extent of channel maintenance for non-exempt watercourses where natural geomorphic processes are largely intact. Key factors that shall be included in the evaluation include: (1) hydraulic benefits of maintaining the bankful channel (if present) dimensions, natural sinuosity, and natural channel bed roughness; and (2) potential adverse hydraulic effects of excessive brushing, channel shaping, equipment activity in the channel, and bank hardening. Hydraulic principles of creating and maintaining channel stability and sediment transport equilibrium shall be applied, if applicable. The analyses and determinations relevant to this issue shall be documented in the Annual Plan. Clear maintenance objectives with attainable benefits for the protection of life, property, and habitat shall be established for each project and presented in the Annual Plan. A primary objective of this measure is to minimize maintenance activities to the extent feasible, consistent with District's program objectives. Monitoring and Timing: The District staff will complete the analysis specified in the measure as part of the development of the Annual Maintenance Plan each spring. District personnel will conduct and/or oversee the maintenance work, and ensure that the results of the analysis are implemented. Reporting: The need analysis will be documented in the Annual Maintenance Plan. A summary of the maintenance work conducted will be documented in the annual post maintenance report.

W-2 - Extent of Desilting. The depth of channel desilting shall not cause bank undercutting or channel headcutting. The District shall make a field determination of the maximum depth of desilting based on channel capacity objectives, an evaluation of channel invert elevation and slope through the project reach, and a consideration of the maximum allowable bank length and slope that would cause bank instability. To the extent feasible, banks and bank vegetation shall not be disturbed or reconstructed during desilting to avoid destabilizing the banks. Monitoring and Timing: The District staff will complete the analysis specified in the measure as part of the development of the Annual Maintenance Plan each spring. District personnel will conduct and/or oversee the maintenance work, and ensure that the results of the analysis are implemented. Reporting: The planned extent of desilting will be documented in the Annual Maintenance Plan. A summary of the desilting work conducted will be documented in the annual post maintenance report.

W-3 - Post Desilting Restoration. After desilting, the District shall restore the channel geometry at the desilting site to a more natural state, as feasible, based on the channel shape, dimension, and slope upstream and downstream of the project site. The channel geometry shall be designed to enhance post-maintenance sedin1ent transport through the desilted reach. If banks are disturbed during desilting, they should be set at a slope that matches existing undisturbed banks and stabilized, to the extent feasible and taking into account available right of way. Monitoring and Timing: The District staff will conduct and/or oversee the maintenance work, and ensure that the measure is implemented. Reporting: A summary of the desilting restoration will be documented in the annual post maintenance report.

W-4 - Pilot Channel Construction. If it is necessary to construct a pilot channel or substantially modify an existing low flow channel, the District shall attempt to maintain the low flow channel length, width, slope, substrate, and sinuosity that are characteristic of the project reach, as determined by field observations of undisturbed low flow channels upstream and downstream of the project reach. Monitoring and Timing: The District staff will conduct and/or oversee the maintenance work, and ensure that the pilot channel construction is consistent with the measure. Repo1ting: A summary of the maintenance work will be documented in the annual post maintenance report.

W-5 - Bank Protection Methods. The construction of bank protection shall be limited to situations where bank stabilization is necessary because the banks are vulnerable to continued erosion which could cause a threat to critical public infrastructure, valuable habitat, or otherwise in the public interest and it has been determined that natural slope settling would not achieve the necessary stability. The District shall evaluate different types of bank protection methods, then select one that is most suitable based on the following order of decreasing preference: (1) vegetation stabilization only; (2) bio-technical methods in which vegetation is incorporated with natural type structural components such as woody branches, natural rock, logs, natural fibers and geotextiles, and biodegradable temporary geotextiles; (3) ungrouted rip rap with vegetation; (4) pipe and wire revetment while retaining vegetation; (5) grouted rip rap; and (6) concrete sackwalls, gabion walls, soil cement, and gunite. Only native plants common to the region shall be used in all bank protection projects. Hard bank protection such as grouted and ungrouted rip-rap, pipe and wire revetment, gunite, concrete sackwalls, gabion walls, and soil cement shall only be used if the District has determined that the above methods will not achieve the desired results, are not cost effective, are logistically or technically infeasible, and/or would create greater incidental environmental impacts. Incorporation of plant material into bank protection, and maintenance and monitoring of such plantings, shall follow the guidelines in the updated Routine Maintenance Program Restoration Plan. The installation of new bank protection shall not adversely affect the stability of nearby banks. Bank protection projects that exceed 150 linear feet at any one single location would be considered a separate project, not included in the routine maintenance program. Monitoring and Timing: The District staff will complete the analysis of alternative bank protection methods as part of the development of the Annual Maintenance Plan each spring. District personnel will conduct and/or oversee the maintenance work, and ensure that the appropriate method is implemented. Reporting: The analysis of alternative bank protection methods will be documented in the Annual Maintenance Plan. A summary of the maintenance work conducted will be documented in the annual post maintenance report.

W-6 - Removal of Giant Reed from Banks. If the District will remove a stand of mature giant reed from the bank for habitat restoration purposes, the following measures shall be implemented to ensure that the bank will remain stable after treatment. To the extent feasible, the least invasive method of giant reed removal shall be used, and the removal of native vegetation from the banks shall be minimized. The District shall stabilize the banks after giant teed removal using biotechnical methods that include native plants. This measure shall also apply if similarly large stands of other non-native plants are removed from banks. Monitoring and Timing: The District staff will conduct and/or oversee the maintenance work, and ensure that the appropriate weed removal and bank stabilization method is used. The latter will be identified in the Annual Maintenance Plan. Reporting: A summary of the maintenance work will be documented in the annual post maintenance report.

W-7 - New or Repaired Grade Stabilizers. Prior to installing a new grade stabilizer to control channel bed degradation, the District shall conduct the hydraulic analysis described in H-1. In addition, the District shall first consider stabilizer designs that use native ungrouted rock. The new structure shall not create a passage impediment for fish. This measure also applies to the repair or reconstruction of existing stabilizers. Detailed

plans for new and repaired grade stabilizers shall be presented in Annual Plans, including a consideration of alternative designs and justification for the selected design. Monitoring and Timing: The District staff will complete the analysis of alternative grade stabilizers as part of the development of the Annual Maintenance Plan each spring. District personnel will conduct and/or oversee the maintenance work, and ensure that the appropriate method is implemented, and that a vertical drop is avoided. Reporting: The analysis of alternative stabilizer designs will be documented in the Annual Maintenance Plan. A summary of the actual work conducted will be documented in the annual post maintenance report.

W-8 - Access Ramps. The distance between access ramps shall be determined by balancing the impacts of driving equipment on the channel bed versus creating extra access points. Access ramps shall be placed in areas with minimum potential for erosion. Access ways shall be sited, constructed, and maintained in a manner that minimizes disturbance to native vegetation, wildlife, and aquatic organisms. The width of all new ramps shall be minimized to the extent feasible. Unneeded access ramps shall be removed and restored to a natural condition. For ramps that will be used infrequently (e.g., every three years or more), the District shall seed or plant the ramp after each use with native species, compatible with adjacent vegetation and resistant to occasional vehicle use, to prevent infestations of noxious weeds. Permanent and frequently used ramps shall be stabilized with vegetation, as feasible, and designed to minimize unauthorized vehicle access. Monitoring and Timing: The District staff will conduct and/or oversee the maintenance work, and ensure that the ramp design is consistent with the mitigation measure. A description of the proposed ramp will be included in_ the annual maintenance plan. Reporting: A summary of the maintenance work will be documented in the annual post maintenance report.

W-9 - Landowner Information Regarding Bank Protection. The District shall provide information to landowners along creeks that wish to stabilize eroding banks on their property. The District shall prepare a guide for landowners that describes methods of bank protection, with an emphasis on bio-technical solutions. The booklet shall be written for an educated layperson and include clear diagrams about materials and installation methods. It shall also include discussions of hydraulic and biological impacts when considering bank protection, and permits required from local, state, and federal agencies. The District shall also make staff available to conduct site visits with property owners to provide guidance on an as-needed basis. Monitoring and Timing. The District staff will complete the guide manual within one year of the approval of the updated maintenance program reporting. The District shall summarize the number of guidebooks distributed, and the number of landowner meetings, in the post-maintenance annual report.

With the incorporation of these measures, residual impacts would be insignificant.

5.0 INFORMATION SOURCES

5.1 County Departments Consulted *(underline):*

Police, Fire, Public Works, Flood Control, Parks, Environmental Health, Special Districts, Regional Programs, Other : _____

5.2 Comprehensive Plan *(check those sources used):*

X	Seismic Safety/Safety Element	____	Conservation Element
X	Open Space Element	____	Noise Element
____	Coastal Plan and Maps	____	Circulation Element
____	ERME	____	

5.3 Other Sources *(check those sources used):*

X	Field work	X	Ag Preserve maps
X	Calculations	X	Flood Control maps
X	Project plans	X	Other technical references (reports, survey, etc.)
____	Traffic studies	X	Planning files, maps, reports
____	Records	X	Zoning maps
____	Grading plans	X	Soils maps/reports
____	Elevation, architectural renderings	X	Plant maps
X	Published geological map/reports	X	Archaeological maps and reports
X	Topographical maps	____	Other

_____

_____

6.0 PROJECT SPECIFIC *(short- and long-term)* AND CUMULATIVE IMPACT SUMMARY

The Proposed Project would not result in any short- or long-term impacts that cannot be mitigated to less than significant levels with implementation of the required mitigation measures identified in this Initial Study. There would be short-term impacts related to Project construction; however, with the implementation of the required mitigation measures, the contribution of the Project to adverse impacts would not be cumulatively considerable. The Project activities are intended to reduce the potential for debris flow events and associated flooding while the local watershed recovers from previous fire seasons. As such, the Project would result in long-term beneficial impacts with respect to downstream safety.

7.0 MANDATORY FINDINGS OF SIGNIFICANCE

Will the proposal result in:	Poten. Signif. and Unavoid.	Signif. But Mitigable	Insignif.	No Impact / Beneficial Impact	Reviewed Under Previous Document
1. Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, contribute significantly to greenhouse gas emissions or significantly increase energy consumption, or eliminate important examples of the major periods of California history or prehistory?		X			
2. Does the project have the potential to achieve short-term to the disadvantage of long-term environmental goals?				X	
3. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects and the effects of probable future projects.)		X			
4. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?				X	
5. Is there disagreement supported by facts, reasonable assumptions predicated upon facts and/or expert opinion supported by facts over the significance of an effect which would warrant investigation in an EIR ?				X	

1. With implementation of the required mitigation measures identified in this Initial Study, the Proposed Project would not have the potential to substantially affect individuals or populations of sensitive wildlife and plant species, contribute to cumulatively considerable GHG emissions, increase energy consumption, or affect important archeological, cultural or historic resources.
2. The proposed maintenance and construction activities could include infrequent use of light-duty trucks, power tools, generators, and heavy construction equipment, all of which would be fueled by gasoline and diesel. Use of these fuels would create a negligible demand on existing energy sources when considered in the context of regional supplies. However, given that the Proposed Project would not include any permanent development, there would be no long-term commitment of electricity, natural gas, or transportation fuels.
3. With implementation of the required mitigation measures identified in this Initial Study the potential environmental impacts of the Proposed Project would not be significant. When considered with other cumulative projects in the region, the Proposed Project would not contribute to a cumulatively considerable impact.
4. With implementation of the required mitigation measures identified herein the impacts to human beings associated with air quality, hazards and noise would not be significant. The temporary

construction activities serve as a County Flood Control Project in that they are intended to reduce the potential for debris flow events, accumulation, and associated flooding while the local watershed recovers from previous fire seasons. As such, the Proposed Construction activities would result in beneficial impacts with respect to downstream safety.

5. There is no known supportable disagreement or expert opinion that would warrant preparation of an EIR.

8.0 PROJECT ALTERNATIVES

No Project Alternatives are required as no significant, unmitigable impacts were identified.

9.0 INITIAL REVIEW OF PROJECT CONSISTENCY WITH APPLICABLE SUBDIVISION, ZONING AND COMPREHENSIVE PLAN REQUIREMENTS

The Project will be subject to all applicable requirements and policies under the Santa Barbara County Land Use and Development Code and the County's Comprehensive Plan as described below.

Zoning

The Project is located within the RMZ-40 zoning designation. The Proposed Project is consistent with the requirements of the Santa Barbara County Land Use and Development Code (Inland Zoning Ordinance). The RMZ-40 zoning of the Project Site allows for infrastructure uses.

Comprehensive Plan Policies

The Project is a public facilities project located within the MA-40 (Mountainous Area, 40-acre minimum parcel size) Comprehensive Plan land use designation. The following are a list of applicable policies found within the Santa Barbara Comprehensive Plan Land Use Element (Santa Barbara County 2016).

PUBLIC FACILITIES

1. a) The development of public facilities necessary to provide public service is appropriate within the defined Rural and Inner-Rural Areas

   b) When a public agency proposes that a facility be located in a Rural or Inner-Rural Area, especially when it may create any parcel(s) smaller than the minimum parcel size for the Area and the applicable land use designation(s), conformity with the Comprehensive Plan shall be determined in consideration of the following factors:

   I. Whether the public interest and necessity require the project, balancing potential inconsistencies with other elements and policies of the Comprehensive Plan; and

   II. Whether the project is planned and located in the manner that will be most compatible with the greatest public good and the least private injury; and

   III. Whether the property sought to be acquired is necessary for the project.

2. In cases where a specific Community Facility or Overlay Designation is applicable, a site providing regional public services within a Rural or Inner-Rural Area shall be given one of the following Designations: "Institution/Government Facility"; "Public Utility" (e.g., a wastewater treatment plant site); "Cemetery"; "Special Area"(e.g., for recognition and preservation of a historic or archaeologic site); or, "Waste Disposal Facility," Such designation shall be applied to a proposed site through amendment of the pertinent Land Use Element map, either concurrent with or following the acquisition of the site by the public agency and prior to any development pertaining to the facility.

3. Except in case of an emergency which threatens lives or the immediate safety of persons or property, environmental review for projects allowed under these Policies shall be conducted at the earliest feasible time and should be completed prior to acquisition of any site for a public facility. The site selection process shall include criteria to avoid areas having significant environmental constraints (for example, prime agricultural soils, areas of high aesthetic value such as Scenic Highway Corridors, public service/resource limitations, geologic or hydrologic hazards, important biological resources, cultural resources), unless the public agency determines that the location of the facility or use on a specific site having such constraints is necessary to satisfy the findings required in California Code of Civil Procedure Section 1245.230 (or successor statute), or is necessary for the protection of the public health, safety, or welfare.

HILLSIDE AND WATERSHED PROTECTION POLICIES

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

STREAMS AND CREEKS POLICIES

1. All permitted construction and grading within stream corridors shall be carried out in such a manner as to minimize impacts from increased runoff, sedimentation, biochemical degradation, or thermal pollution.

10.0 RECOMMENDATION BY P&D STAFF

On the basis of the Initial Study, the staff of Planning and Development:

____ Finds that the proposed project WILL NOT have a significant effect on the environment and, therefore, recommends that a Negative Declaration (ND) be prepared.

____ Finds that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures incorporated into the REVISED PROJECT DESCRIPTION would successfully mitigate the potentially significant impacts. Staff recommends the preparation of an ND. The ND finding is based on the assumption that mitigation measures will be acceptable to the applicant; if not acceptable a revised Initial Study finding for the preparation of an EIR may result.

____ Finds that the proposed project MAY have a significant effect on the environment, and recommends that an EIR be prepared.

____ Finds that from existing documents (previous EIRs, etc.) that a subsequent document (containing updated and site-specific information, etc.) pursuant to CEQA Sections 15162/15163/15164 should be prepared.

Potentially significant unavoidable adverse impact areas:

_____ With Public Hearing _____ Without Public Hearing

PREVIOUS DOCUMENT:

PROJECT EVALUATOR:_____ **DATE:**

11.0 DETERMINATION BY ENVIRONMENTAL HEARING OFFICER

_____ I agree with staff conclusions. Preparation of the appropriate document may proceed.
_____ I DO NOT agree with staff conclusions. The following actions will be taken:
_____ I require consultation and further information prior to making my determination.

SIGNATURE:_____ **INITIAL STUDY DATE**: _____

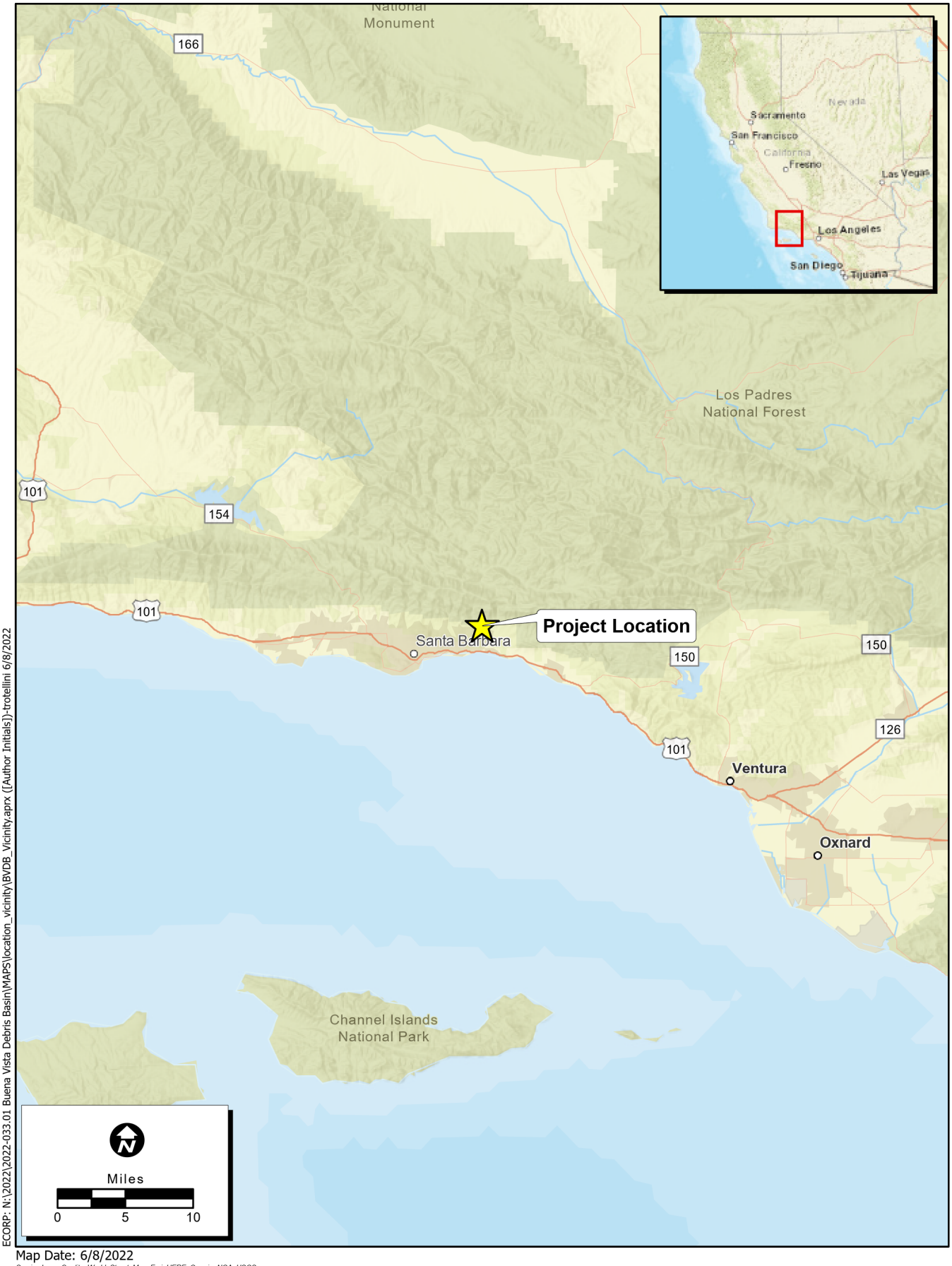
Optional: Remove if IS only:
SIGNATURE:_____ **NEGATIVE DECLARATION DATE**:_____

SIGNATURE:_____ **REVISION DATE:** _____

SIGNATURE:_____ **FINAL NEGATIVE DECLARATION DATE:** _____

12.0 ATTACHMENTS

1. Vicinity Map
2. Location Map
3. Site Plan
4. Representative Aerial Imagery
5. Biological Resource Report
6. Paleontological Records Search



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Map Date: 6/8/2022

Service Layer Credits: World_Street_Map: Esri, HERE, Garmin, NGA, USGS
World Street Map: California State Parks, Esri, HERE, Garmin, SafeGraph, FAO, METI/ NASA, USGS, Bureau of Land Management, EPA, NPS
World Hillshade: Esri, CGIAR, USGS

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Figure 1. Project Vicinity

2022-033.01 Buena Vista Debris Basin

Location: N:\2022\2022-033.01 Buena Vista Debris Basin\MAPS\location_vicinity\BVDB_Location.aprx ([Author Initials])-trotellini 6/8/2022

Map Date: 6/8/2022

Service Layer Credits: World Imagery: Maxar, Microsoft
Hybrid Reference Layer: Esri Community Maps Contributors, California State Parks, © OpenStreetMap, Microsoft, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDA

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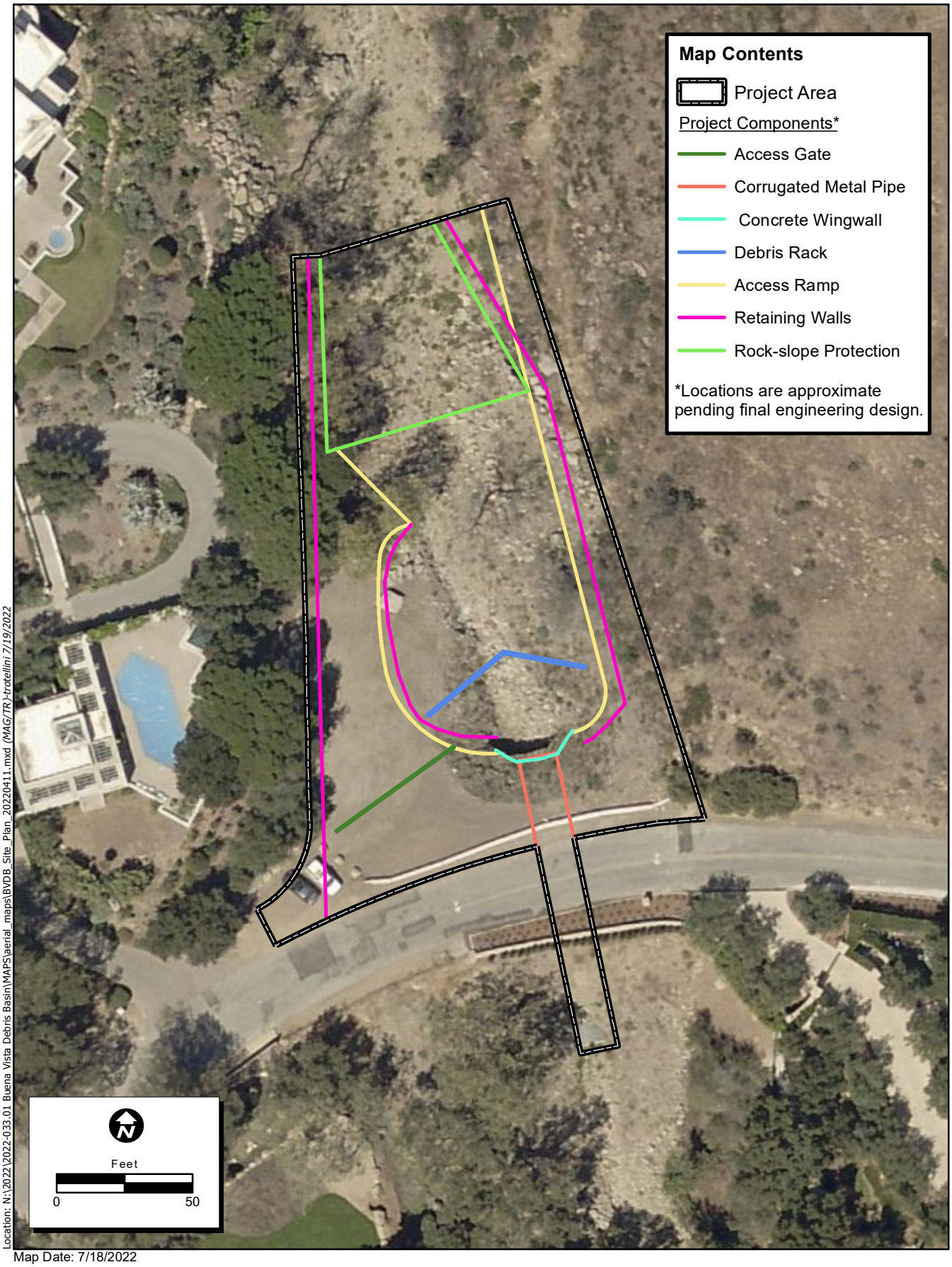
Figure 2. Project Location

2022-033.01 Buena Vista Debris Basin



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Map Date: 7/18/2022
Photo Source: Santa Barbara County (2018)

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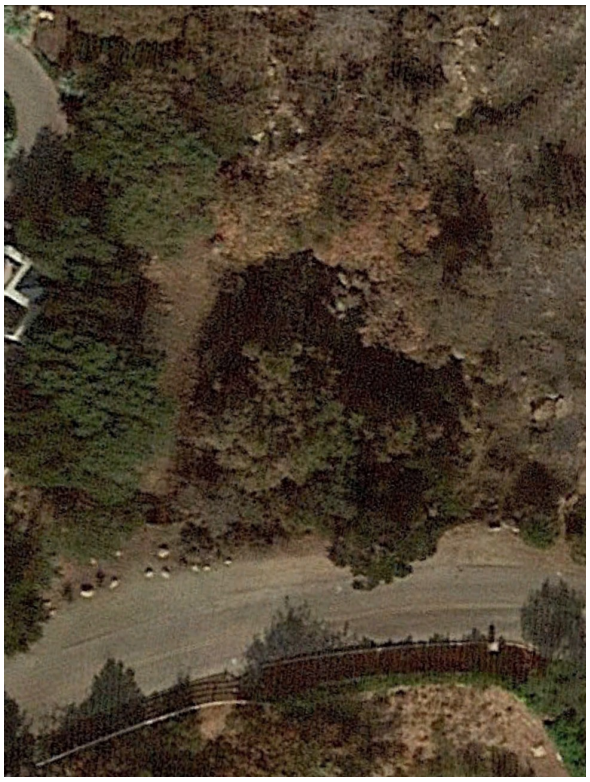
Attachment 3. Site Plan

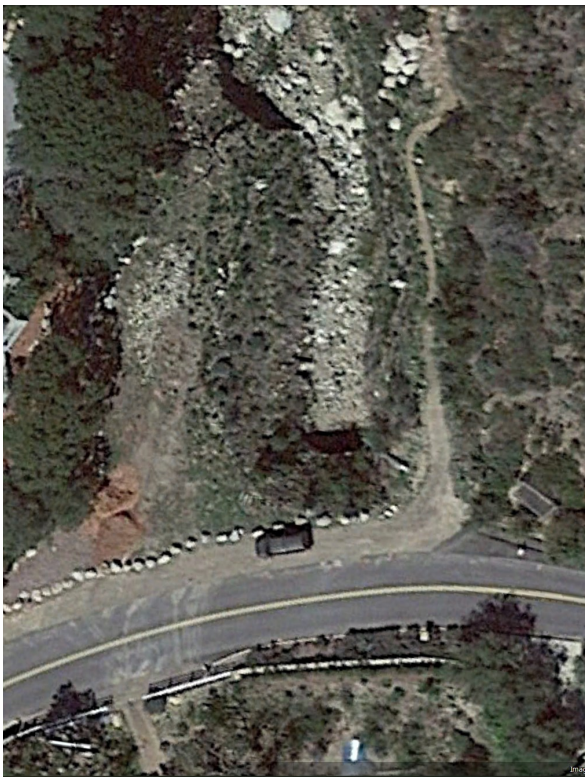
2022-033.01 Buena Vista Debris Basin



Pre-Flow Site Condition, December 2017

Post-Sediment Flow Site Condition, January 2018

Post-Action: Emergency Sediment Removal, April 2018



Current Site Condition, March 2022

P:\Projects\2022\2022-033.01 County of Santa Barbara PWD-Buena Vista Debris Basin MND TO1\CEQA\Draft\Attachments

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Map Date: 10/04/2022
Source: Google Earth 2022
Imagery Date: December 2017, January 2018, April 2018, March 2022

Attachment 4: Representative Aerial Imagery

2022-033.01 Buena Vista Creek Debris Basin

Attachment 5

Biological Technical Report for the Buena Vista Debris Basin Project

Santa Barbara County, California

Prepared For:

Santa Barbara County Flood Control District
130 East Victoria Street, Suite 200
Santa Barbara, California 93101

Prepared By:

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS
2861 Pullman Street
Santa Ana, California 92705

August 3, 2022

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LIST OF ACRONYMS AND ABBREVIATIONS

Term	Definition
Amsl	Above mean seal level
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CNPSEI	CNPS Electronic Inventory
CRPR	California Rare Plant Rank
CWA	Clean Water Act
DBH	Diameter At Breast Height
ESA	Endangered Species Act
GPS	Global Positioning System
HCP	Habitat Conservation Plan
HUC	Hydrologic Unit Code
ITP	Incidental Take Permit
MBTA	Migratory Bird Treaty Act
NCCP	Natural Community Conservation Plan
NHD	National Hydrology Dataset
NPPA	Native Plant Protection Act
NRCS	Natural Resources Conservation Service
NWI	National Wetland Inventory
OHWM	Ordinary High Water mark
Proposed Project	Buena Vista Debris Basin Project
RWQCB	Regional Water Quality Control Board
SAA	Streambed Alteration Agreement
SSAR	Society for the Study of Amphibians and Reptiles
SSC	Species of Special Concern
USACE	U.S. Army Corps of Engineers
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey

1.0 INTRODUCTION

ECORP Consulting, Inc. (ECORP) conducted a biological resources assessment to support the preparation of an Initial Study/Mitigated Negative Declaration for the Buena Vista Debris Basin Project (Proposed Project), which consists of the construction and operation of a new flood-control debris basin at Buena Vista Creek north of Park Lane in Montecito, California. The biological resources assessment, which included a literature review and field surveys (i.e., biological reconnaissance survey and preliminary aquatic resources delineation), documented existing biological conditions at the Proposed Project site. This report documents the findings of the biological resources assessment for the Proposed Project and was prepared in accordance with California Environmental Quality Act (CEQA) requirements.

1.1 Project Description and Location

The Proposed Project site is located at the Buena Vista Creek basin situated north of Park Lane in the unincorporated town of Montecito, Santa Barbara County, California (Figure 1). The Proposed Project site is bounded by developed residential property to the east and west and a public trailhead that runs adjacent and parallel to Buena Vista Creek (Figure 2). Surrounding land uses consist mainly of residential and recreational land use. The Proposed Project site, as depicted on the U.S. Geological Survey (USGS) "Carpinteria, California" 7.5-minute quadrangle lies within Section 9 of Township 4 North and Range 26 West. The elevation of the Project site is between 207-219 meters (679-720 feet) above mean sea level (amsl).

The Proposed Project would involve construction and operation of a new debris basin to increase retention of debris and to prevent damage and destruction of properties and infrastructure, to protect Park Lane, and to prevent damage to natural habitats downstream. The Proposed Project would involve excavation of the channel upstream of Park Lane to widen the creek channel. Appurtenant structures such as vertical walls, access ramps, fences, and gates, and possibly an in-stream grade-control structure would be constructed.

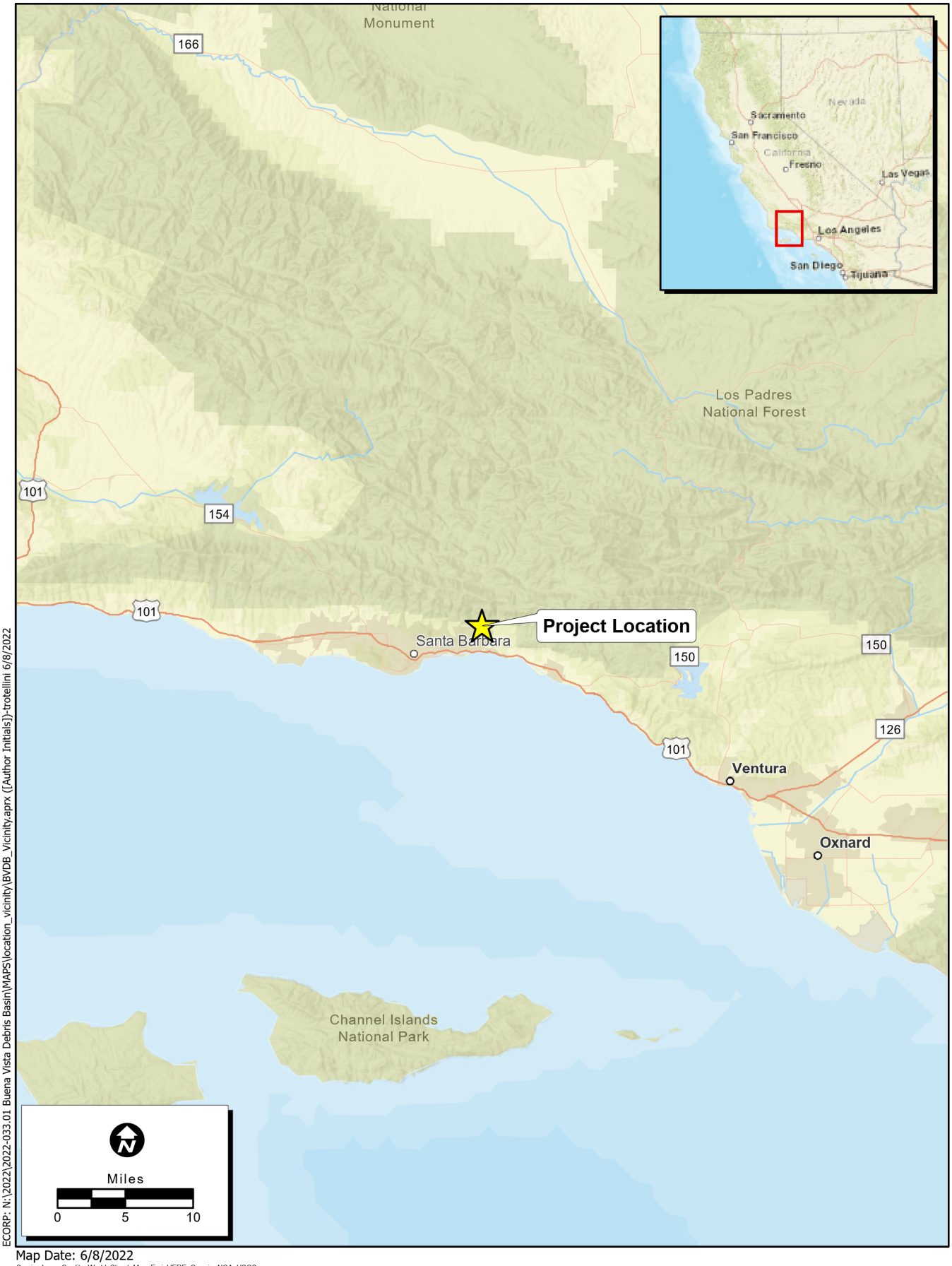
2.0 SPECIAL-STATUS SPECIES REGULATIONS

The biological reconnaissance survey was conducted to identify potential issues and ensure compliance with State and federal regulations regarding listed, protected, and sensitive species. The regulations are detailed below.

2.1 Federal Regulations

2.1.1 The Federal Endangered Species Act

The federal Endangered Species Act (ESA) protects plants and animals that are listed as endangered or threatened by the U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service. Section 9 of the ESA prohibits the taking of endangered wildlife, where taking is defined as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in such conduct" (50 Code of Federal Regulations [CFR] 17.3).



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Service Layer Credits: World_Street_Map: Esri, HERE, Garmin, NGA, USGS
World Street Map: California State Parks, Esri, HERE, Garmin, SafeGraph, FAO, METI/ NASA, USGS, Bureau of Land Management, EPA, NPS
World Hillshade: Esri, CGIAR, USGS

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Figure 1. Project Vicinity

2022-033.01 Buena Vista Debris Basin

Location: N:\2022\2022-033.01 Buena Vista Debris Basin\MAPS\location_vicinity\BVDB_Location.aprx ([Author Initials])-trotellini 6/8/2022

Map Date: 6/8/2022

Service Layer Credits: World Imagery: Maxar, Microsoft
Hybrid Reference Layer: Esri Community Maps Contributors, California State Parks, © OpenStreetMap, Microsoft, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDA

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Figure 2. Project Location

2022-033.01 Buena Vista Debris Basin

For plants, this statute governs removing, possessing, maliciously damaging, or destroying any endangered plant on federal land and removing, cutting, digging up, damaging, or destroying any endangered plant on non-federal land in knowing violation of state law (16 U.S. Code 1538). Under Section 7 of the ESA, federal agencies are required to consult with the USFWS if their actions, including permit approvals or funding, could adversely affect a listed (or proposed) species (including plants) or its critical habitat. Through consultation and the issuance of a biological opinion, the USFWS may issue an incidental take statement allowing take of the species that is incidental to an otherwise authorized activity provided the activity will not jeopardize the continued existence of the species. Section 10 of the ESA provides for issuance of incidental take permits (ITP) where no other federal actions are necessary provided a habitat conservation plan (HCP) is developed.

2.1.2 Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) implements international treaties between the U.S. and other nations devised to protect migratory birds, any of their parts, eggs, and nests from activities including hunting, pursuing, capturing, killing, selling, and shipping, unless expressly authorized in the regulations or by permit. As authorized by the MBTA, the USFWS issues permits to qualified applicants for the following types of activities: falconry, raptor propagation, scientific collecting, special purposes (rehabilitation, education, migratory game bird propagation, and salvage), take of depredating birds, taxidermy, and waterfowl sale and disposal. The regulations governing migratory bird permits can be found in 50 CFR Part 13 General Permit Procedures and 50 CFR Part 21 Migratory Bird Permits. The State of California has incorporated the protection of birds of prey in Sections 3800, 3513, and 3503.5 of the California Fish and Game Code.

2.1.3 Federal Clean Water Act

The purpose of the federal Clean Water Act (CWA) is to "restore and maintain the chemical, physical, and biological integrity of the nation's waters." Section 404 of the CWA prohibits the discharge of dredged or fill material into Waters of the U.S. without a permit from the U.S. Army Corps of Engineers (USACE). The definition of Waters of the U.S. includes rivers, streams, estuaries, the territorial seas, ponds, lakes, and wetlands. Wetlands are defined as those areas "that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (33 CFR 328.3 7b). The U.S. Environmental Protection Agency (USEPA) acts as a cooperating agency to set policy, guidance, and criteria for use in evaluation permit applications and also reviews USACE permit applications.

The USACE regulates *fill* or dredging of fill material within its jurisdictional features. *Fill material* means any material used for the primary purpose of replacing an aquatic area with dry land or changing the bottom elevation of a water body. Substantial impacts to wetlands may require an individual permit. Projects that only minimally affect wetlands may meet the conditions of one of the existing Nationwide Permits. A Water Quality Certification or waiver pursuant to Section 401 of the CWA is required for Section 404 permit actions; this certification or waiver is issued by the State Water Resources Control Board, administered by each of nine California Regional Water Quality Control Boards (RWQCB). The Santa Barbara region is administered by the Central Coast RWQCB (Region 3).

2.2 State and Local Regulations

2.2.1 California Endangered Species Act

The California ESA generally parallels the main provisions of the ESA but, unlike its federal counterpart, the California ESA applies the take prohibitions to species proposed for listing (called *candidates* by the State). Section 2080 of the California Fish and Game Code prohibits the taking, possession, purchase, sale, and import or export of endangered, threatened, or candidate species, unless otherwise authorized by permit or in the regulations. Take is defined in Section 86 of the California Fish and Game Code as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." The California ESA allows for take incidental to otherwise lawful development projects. State lead agencies are required to consult with the California Department of Fish and Wildlife (CDFW) to ensure that any action they undertake is not likely to jeopardize the continued existence of any endangered or threatened species or result in destruction or adverse modification of essential habitat.

2.2.2 Fully Protected Species

The State of California first began to designate species as *fully protected* prior to the creation of the federal and California ESAs. Lists of fully protected species were initially developed to provide protection to those animals that were rare or faced possible extinction, and included fish, amphibians and reptiles, birds, and mammals. Most fully protected species have since been listed as threatened or endangered under the federal and/or California ESAs. The regulations that implement the Fully Protected Species Statute (California Fish and Game Code § 4700) provide that fully protected species may not be taken or possessed at any time. Furthermore, CDFW prohibits any State agency from issuing ITPs for fully protected species, except for necessary scientific research.

2.2.3 Native Plant Protection Act

The Native Plant Protection Act (NPPA) of 1977 (California Fish and Game Code §§ 1900-1913) was created with the intent to "preserve, protect and enhance rare and endangered plants in this State." The NPPA is administered by CDFW. The California Fish and Game Commission (Commission) has the authority to designate native plants as *endangered* or *rare* and to protect endangered and rare plants from take. The California ESA of 1984 (California Fish and Game Code § 2050-2116) provided further protection for rare and endangered plant species, but the NPPA remains part of the California Fish and Game Code.

2.2.4 California Fish and Game Code

2.2.4.1 Streambed Alteration Agreement

Section 1602 of the California Fish and Game Code requires that a Notification of Lake or Streambed Alteration be submitted to CDFW for "any activity that may substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake." The CDFW reviews the proposed actions and, if necessary, submits to the Applicant a proposal for measures to protect affected fish and wildlife resources. The final proposal that is mutually agreed upon by CDFW and the Applicant is

the Streambed Alteration Agreement (SAA). Often, projects that require an SAA also require a permit from under Sections 401 and 404 of the CWA.

2.2.4.2 Migratory Birds

The CDFW enforces the protection of nongame native birds in §§ 3503, 3503.5, and 3800 of the California Fish and Game Code. Section 3513 of the California Fish and Game Code prohibits the possession or take of birds listed under the MBTA. These sections mandate the protection of California nongame native birds' nests and also make it unlawful to take these birds. All raptor species are protected from *take* pursuant to California Fish and Game Code § 3503.5 and are also protected at the federal level by the MBTA of 1918 (USFWS 1918).

2.2.5 California Environmental Quality Act Significance Criteria

Section 15064.7 of the CEQA Guidelines encourages local agencies to develop and publish the thresholds the agency uses in determining the significance of environmental effects caused by projects under its review. However, agencies may also rely upon the guidance provided by the expanded Initial Study checklist that would normally be considered significant. Based on these examples, impacts to biological resources would normally be considered significant if the project would:

- have a loss or disturbance to a unique, rare or threatened plant community; have a reduction in the numbers or restriction in the range of any unique, rare or threatened species of plants;
- have a reduction in the extent, diversity, or quality of native vegetation (including brush removal for fire prevention and flood control improvements);have an impact on non-native vegetation whether naturalized or horticultural if of habitat value;
- have a loss of healthy native specimen trees;
- introduce herbicides, pesticides, animal life, human habitation, non-native plants or other factors that would change or hamper the existing habitat;
- have a reduction in the numbers, a restriction in the range, or an impact to the critical habitat of any unique, rare, threatened or endangered species of animals;
- have a reduction in the diversity or numbers of animals onsite (including mammals, birds, reptiles, amphibians, fish or invertebrates);
- have a deterioration of existing fish or wildlife habitat (for foraging, breeding, roosting, nesting, etc.);
- introduce barriers to movement of any resident or migratory fish or wildlife species; and
- introduce any factors (light, fencing, noise, human presence and/or domestic animals) which could hinder the normal activities of wildlife.

2.2.6 County of Santa Barbara Environmental Thresholds

Santa Barbara County's Environmental Thresholds and Guidelines Manual (2008) includes guidelines for the assessment of biological resource impacts. The following thresholds are applicable to this project:

Wetlands: Projects which result in a net loss of important wetland area or wetland habitat value, either through direct or indirect impacts to wetland vegetation, degradation of water quality, or would threaten the continuity of wetland-dependent animal or plant species are considered to have a potentially significant effect on the environment. Projects which substantially interrupt wildlife access, use and dispersal in wetland areas would typically be considered to have a potentially significant impact. Projects which disrupt the hydrology of wetlands systems would be considered to have a potentially significant impact.

Riparian Habitats: Project created impacts may be considered significant due to: direct removal of riparian vegetation; disruption of riparian wildlife habitat, particularly animal dispersal corridors and or understory vegetation; or intrusion within the upland edge of the riparian canopy leading to potential disruption of animal migration, breeding, etc. through increased noise, light and glare, and human or domestic animal intrusion; or construction activity which disrupts critical time periods for fish and other wildlife species.

Oak Woodlands and Forests: Project created impacts may be considered significant due to habitat fragmentation, removal of understory, alteration to drainage patterns, disruption of the canopy, removal of a significant number of trees that would cause a break in the canopy, or disruption in animal movement in and through the woodland.

Individual Native Trees: Project created impacts may be considered significant due to the loss of 10% or more of the trees of biological value on a project site.

Other Rare Habitat Types: The Manual recognizes that not all habitat-types found in Santa Barbara County are addressed by the habitat-specific guidelines. Impacts to other habitat types or species may be considered significant, based on substantial evidence in the record, if they substantially: (1) reduce or eliminate species diversity or abundance; (2) reduce or eliminate the quality of nesting areas; (3) limit reproductive capacity through losses of individuals or habitat; (4) fragment, eliminate, or otherwise disrupt foraging areas and/or access to food sources; (5) limit or fragment range and movement; or (6) interfere with natural processes, such as fire or flooding, upon which the habitat depends.

An evaluation of whether an impact on biological resources would be substantial must consider both the resource itself and how that resource fits into a regional or local context. Substantial impacts would be those that would diminish, or result in the loss of, an important biological resource, or those that would obviously conflict with local, State, or federal resource conservation plans, goals, or regulations. Impacts are sometimes locally important but not significant according to CEQA. The reason is that although the impacts would result in an adverse alteration of existing conditions, they would not substantially diminish, or result in the permanent loss of an important resource on a population-wide or region-wide basis.

3.0 METHODS

3.1 Literature Review

Prior to conducting the biological reconnaissance survey, ECORP biologists performed a literature review using the CDFW's California Natural Diversity Database (CNDDB; CDFW 2022a) and the California Native Plant Society's (CNPS) Electronic Inventory (CNPSEI; CNPS 2022) to determine the special-status plant and wildlife species that have been documented near the Proposed Project site. ECORP searched the CNDDB and CNPSEI records within a 5-mile range of the Proposed Project site as depicted on USGS 7.5-minute Carpinteria topographic quadrangle, including the surrounding five topographic quadrangles (i.e., Santa Barbara, White Ledge Peak, Old Man Mountain, Hildreth Peak, and Little Pine Mountain). The CNDDB and CNPSEI contain records of reported occurrences of federally or State-listed endangered, threatened, proposed endangered or threatened species, California Species of Special Concern (SSC), and/or other special-status species or habitat that may occur within or near the Proposed Project. Additional information was gathered from the following sources and includes, but is not limited to:

- State and Federally Listed Endangered and Threatened Animals of California (CDFW 2022b);
- *The Jepson Manual: Vascular Plants of California* (Baldwin et al. 2012);
- *The Manual of California Vegetation, 2nd Edition* (Sawyer et al. 2009); and
- various online websites (e.g., Calflora 2022).

Using this information and observations in the field, a list of special-status plant and animal species that have the potential to occur on or near the Proposed Project site was generated. For the purposes of this assessment, special-status species are defined as plants or animals that:

- have been designated as either rare, threatened, or endangered by CDFW, CNPS, or the USFWS, and/or are protected under either the federal or California ESAs;
- are candidate species being considered or proposed for listing under these same acts;
- are fully protected by the California Fish and Game Code, §§ 3511, 4700, 5050, or 5515; and/or
- are of expressed concern to resource and regulatory agencies or local jurisdictions.

Special-status species reported for the region in the literature review or for which suitable habitat occurs on the site were assessed for their potential to occur within the Proposed Project site based on the following guidelines:

- **Present:** The species was observed on site during a site visit or focused survey.
- **High:** Habitat (including soils and elevation factors) for the species occurs within the Proposed Project site and a known occurrence has recently been recorded (within the last 20 years) within 5 miles of the area.

- **Moderate:** Habitat (including soils and elevation factors) for the species occurs within the Proposed Project site and a documented observation occurs within the database search, but not within 5 miles of the area; a historic documented observation (more than 20 years old) was recorded within 5 miles of the Project site; or a recently documented observation occurs within 5 miles of the area and marginal or limited amounts of habitat occurs in the Project site.
- **Low:** Limited or marginal habitat for the species occurs within the Proposed Project site and a recently documented observation occurs within the database search, but not within 5 miles of the area; a historic documented observation (more than 20 years old) was recorded within 5 miles of the Project site; or suitable habitat strongly associated with the species occurs on site, but no records or only historic records were found within the database search.
- **Presumed Absent:** Species was not observed during a site visit or focused surveys conducted in accordance with protocol guidelines at an appropriate time for identification; habitat (including soils and elevation factors) does not exist on site; or the known geographic range of the species does not include the Project site.

Note that location information on some special-status species may be of questionable accuracy or unavailable. Therefore, for survey purposes, the environmental factors associated with a species' occurrence requirements may be considered sufficient reason to give a species a positive potential for occurrence. In addition, just because a record of a species does not exist in the databases does not mean it does not occur. In many cases, records may not be present in the databases because an area has not been surveyed for that species.

A review of the Natural Resources Conservation Service (NRCS 2022), National Wetlands Inventory (NWI) (USFWS 2022), National Hydrology Dataset (NHD, USGS 2022a), and the corresponding USGS topographic maps was also conducted to determine if there were any blue line streams or drainages present on the Proposed Project site that potentially fall under the jurisdiction of either federal or State agencies.

3.2 Field Surveys

3.2.1 Biological Reconnaissance Survey

The biological reconnaissance survey was conducted by walking the entire Proposed Project site to determine the vegetation communities and wildlife habitats present on the site. The biologist documented the plant and animal species present on the Proposed Project site, and the location and condition of the Proposed Project site were assessed for the potential to provide habitat for special-status plant and wildlife species. Data were recorded on a Global Positioning System (GPS) unit, field notebooks, and/or maps. Photographs were also taken during the survey to provide visual representation of the conditions within the Proposed Project site. The Proposed Project site was also examined to assess its potential to facilitate wildlife movement or function as a movement corridor for wildlife moving throughout the region. In addition, the biologist documented the vegetation communities present on the Proposed Project site.

Plant and wildlife species, including any special-status species that were observed during the survey, were recorded. Plant nomenclature follows that of *The Jepson Manual: Vascular Plants of California* (Baldwin et al. 2012). Wildlife nomenclature follows Society for the Study of Amphibians and Reptiles (SSAR; 2017), *Check-list of North and Middle American Birds* (Chesser et al. 2021), and the *Revised Checklist of North American Mammals North of Mexico* (Bradley et al. 2014).

In instances where a special-status species was observed, the date, species, location and habitat, and GPS coordinates were recorded. The locations of special-status species observations were recorded using a handheld GPS in North American Datum 83, Universal Transverse Mercator coordinates, Zone 11S.

3.2.2 Aquatic Resources Delineation

ECORP biologists conducted a desktop review to identify potential streams, lakes, ponds, and other indications of jurisdictional resources on the Proposed Project site. This review does not constitute a formal jurisdictional delineation required under regulatory guidelines, but it is intended to provide information that will be useful for planning purposes.

This review followed guidelines of the entailed examination of historic and current aerial photography, NWI mapping (USFWS 2022), and the corresponding USGS Hydrology Mapping (USGS 2022b) to determine if there were any blue-line streams or drainages that potentially fall under the jurisdiction of either federal or state regulatory agencies. In addition, ECORP biologists examined the soils recorded in the NRCS Web Soil Survey (NRCS 2022) for the potential presence of hydric soils. The biologists used aerial imagery to digitize potential aquatic resources using ArcGIS™. The biologists then analyzed the imagery to identify signs of ordinary high water mark (OHWM), various differences in vegetative cover, the presence of breaks in the slope, and other indications of disturbances caused by water action.

After the literature review was completed, a jurisdictional waters delineation was conducted in accordance with the *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (Arid West Region Supplement) (USACE 2008). The boundaries of jurisdictional waters were delineated through standard field methods (e.g., paired sample set analyses) and aerial photograph interpretation. Field data were recorded on Wetland Determination Data Forms - Arid West Region (Appendix A). A color aerial Google Earth© image (photo date: May 17, 2020) was used to assist with mapping and ground-truthing. *Munsell Soil Color Charts* (Munsell Color 2009) and the Web Soil Survey (NRCS 2022) were used to aid in identifying hydric soils in the field. *The Jepson Manual, 2nd Edition* (Baldwin et al. 2012) was used for plant nomenclature and identification.

The field survey was conducted on May 10, 2022, by ECORP biologist Scott Taylor. The biologist walked accessible areas of the Proposed Project site to determine the location and extent of jurisdictional waters. Paired locations were sampled to evaluate whether or not the vegetation, hydrology, and soils data supported an aquatic resource determination. At each paired location, one point was located such that it was within the estimated aquatic resource area, and the other point was situated outside the limits of the estimated aquatic resource area. An additional non-paired location was sampled to document a marginal area that was determined to be upland as it lacked hydrophytic vegetation, hydric soils, and/or wetland hydrology. Jurisdictional waters within the Proposed Project site were recorded in the field using a post-

processing capable GPS unit with sub-meter accuracy (e.g., Juniper Geode™). Feature characteristics and measurements were recorded directly into the data dictionary in the GPS unit. Characteristics of mapped features were also documented in photographs. Non-wetland features identified as USACE-jurisdictional had observable, physical evidence of flowing water including OHWM, defined bed and bank, presence of a clear and natural line impressed on the bank, sediment deposits, wrack and/or litter/debris.

Within Title 14, California Code of Regulations, Section 1.72 a stream is defined as "For CDFW jurisdiction, the trees were mapped which could be considered as "a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life. This includes watercourses having a surface or subsurface flow that supports or has supported riparian vegetation." However, this definition does not specifically define the terms bed, channel or bank and does not define related features such as vegetation. It is therefore up to CDFW what constitutes a stream or its associated vegetation. ECORP has mapped limits of CDFW jurisdiction based on common practice and experience through notification processes with the CDFW.

Generally, the limits of CDFW streambeds are defined for this delineation as the limits from top-of-bank to top-of-bank. Vegetation associated with streambeds includes riparian shrubs and trees that are within this streambed area or that are directly adjacent. Trees with a diameter at breast height (DBH) of four inches or greater found within the CDFW jurisdictional areas were mapped along with the extent of their canopy and DBH. Canopy extent was mapped based on field observation and aerial mapping.

4.0 RESULTS

Summarized below are the results of the literature review, biological reconnaissance survey, and aquatic resources delineation, including site characteristics, vegetation communities, wildlife, special-status species, and special-status habitats (including any potential wildlife corridors).

4.1 Literature Review

The literature review and database searches resulted in records for 35 special-status plant species and 29 special-status wildlife species that could occur on and/or near the Proposed Project site.

4.1.1 Special-Status Plants and Wildlife

The literature review and database searches identified 35 special-status plant species and 29 special-status wildlife species that could occur near the Proposed Project site. A list was generated from the results of the literature review and the Proposed Project site was evaluated for suitable habitat that could support any of the special-status plant or wildlife species on the list.

4.1.2 U.S. Fish and Wildlife Service Designated Critical Habitat

The Proposed Project site is not located within any USFWS-designated critical habitat. No designated critical habitat is present within 10 miles of the Proposed Project site.

4.1.3 Aquatic Resources Delineation Literature Review

The Proposed Project site is within the Santa Barbara Coastal Watershed (Hydrologic Unit Code [HUC]-8 #18060013) (NRCS et al. 2022), and specifically within the Mission Creek-Frontal Santa Barbara Channel Subwatershed (HUC 12 180600130203). The Santa Barbara Coastal Watershed encompasses over 670 square miles (1,737 square kilometers) and falls within the coastal plain of Santa Barbara north to the ridgeline of the local mountains. The subwatershed encompasses about 40 percent of the total watershed. The most prominent stream features within the subwatershed are several named creeks, including Mission Creek, San Ysidro Creek, Romero Creek, and several others.

There is one primary aquatic resource within the Proposed Project site: an unnamed tributary to San Ysidro Creek. This tributary is mapped on the NWI and on the NHD as a blue-line stream. San Ysidro Creek is approximately 0.6 mile downstream from the Proposed Project site. From the analysis of aerial photographs of the Proposed Project site, presence of OHWM was apparent by the lack of vegetation within the local canyon bottom. Riparian vegetation also appeared to be present.

According to the Web Soil Survey (NRCS 2022), two soil units, or types, have been mapped within the Proposed Project site, both consisting of Maymen series soil subtypes. Of these two soil subtypes, neither contain hydric components nor are considered hydric. Maymen series soils occur on steeper mountain slopes and are derived from shale or conglomerate parent materials. These soils tend to be rocky and well-drained and have no capacity to retain moisture nor do they support a natural potential to support wetland soils.

4.2 Biological Reconnaissance Survey

The biological reconnaissance survey was conducted on May 10, 2022, by ECORP biologist Lauren Simpson. Ms. Simpson has extensive experience conducting reconnaissance- and protocol-level surveys for wildlife and plant species. Summarized below are the results of the biological reconnaissance survey, including site characteristics, plant communities, wildlife, special-status species, and special-status habitats (including any potential wildlife corridors). Weather conditions during the survey are summarized in Table 1.

Table 1. Weather Conditions During the Survey								
Date	Time		Temperature (˚F)		Cloud Cover (%)		Wind Speed (mph)	
	Start	End	Min	Max	Min	Max	Min	Max
5/10/2022	1115	1310	60	62	0	0	0-1	1-3

4.2.1 Property Characteristics

The Proposed Project site is surrounded by residential development and is situated north of Park Lane Road. The Buena Vista Creek basin itself was notably disturbed including the basin drainage, with a higher concentration of nonnative plants and greater evidence of disturbance on the west side of the drainage compared to the east side. Riparian habitat is present within the drainage with relatively young red willow (*Salix laevigata*) and mulefat (*Baccharis salicifolia*) present. The west side of the drainage has high densities of mustard species (*Brassica* sp.), and ornamental species such as oleander (*Nerium oleander)* present. The east side of the drainage primarily consists of coastal scrub habitat including California buckwheat (*Eriogonum fasciculatum*), black sage (*Salvia mellifera*), and white sage (*Salvia apiana*). The culvert that carries the drainage beneath Park Lane is made up of corrugated metal and does not have day-roosting habitat for bats. Night roosting habitat is present, but guano or signs of bats was not observed. Representative site photographs are presented in Appendix B.

4.2.2 Vegetation Communities and Land Cover Types

Native vegetation communities present on the Proposed Project site include California buckwheat and riparian woodland habitat, as well as laurel sumac scrub. Five vegetation communities: California Buckwheat – White Sage Scrub (*Eriogonum fasciculatum – Salvia apiana)* Shrubland Alliance, California Buckwheat – White Sage Scrub shrubland Alliance (Disturbed), Goodding's Willow – Red Willow Riparian Woodland and Forest, Goodding's Willow – Red Willow Riparian Woodland and Forest (Disturbed), Laurel Sumac Scrub (*Malosma laurina)* Shrubland Alliance, and two land cover types (Disturbed/Ruderal and Developed) were mapped within the Proposed Project limits (Figure 3). Table 2 summarizes the acreage of vegetation communities and land cover types that occur within the Proposed Project limits.

Table 2. Vegetation Communities and Land Cover Types Within the Proposed Project Limits	
	Amount (acres)
California Buckwheat – White Sage Scrub Shrubland Alliance	0.19
California Buckwheat – White Sage Scrub Shrubland Alliance (Disturbed)	0.09
Goodding's Willow-Red Willow Riparian Woodland and Forest	0.15
Goodding's Willow-Red Willow Riparian Woodland and Forest (Disturbed)	0.01
Laurel Sumac Scrub Shrubland Alliance	0.08

Table 2. Vegetation Communities and Land Cover Types Within the Proposed Project Limits	
	Amount (acres)
Disturbed/Ruderal	0.12
Developed	0.01
TOTAL:	0.65

4.2.2.1 California Buckwheat – White Sage Scrub Shrubland Alliance

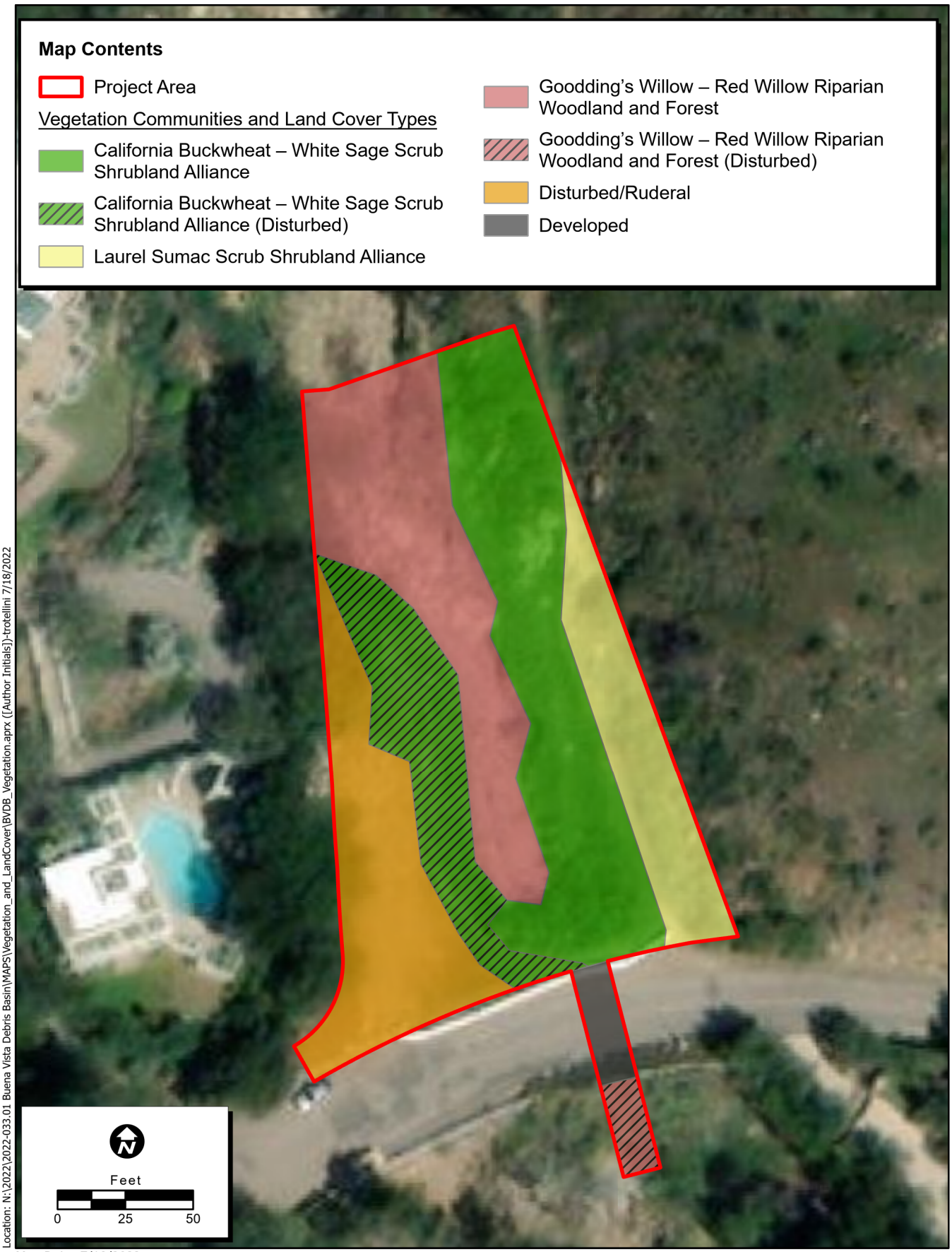
The California Buckwheat – White Sage Shrub Shrubland Alliance community was documented within the Project site and was characterized by California sagebrush (*Artemisia californica*), deerweed (*Acmispon glaber*), laurel sumac (*Malosma laurina*), California buckwheat, coastal goldenbrush (*Isocoma menziesii),* black sage, black elderberry (*Sambucus nigra*), monkeyflower (*Diplacus* sp.), and mulefat. This community made up 0.19 acre of the Proposed Project site and was identified in the eastern portion, primarily along the north and south corridor parallel to the hiking trail. This community occurs in areas of Canada, United States, and Mexico at elevations from 500 – 1,500 meters (1,640 - 4,921 feet) amsl, characterized by boulder south-facing slopes, where the soils are sandy loams.

4.2.2.2 California Buckwheat – White Sage Shrub Shrubland Alliance (Disturbed)

California Buckwheat – White Sage Shrub Shrubland Alliance (Disturbed) was documented within the Proposed Project site, approximately 0.09 acre occurs on the Project site. The California Buckwheat -White Sage Shrub Shrubland Alliance (Disturbed) mostly includes the same composition of plant species as California buckwheat-White Sage Shrub Shrubland Alliance community described above; however, nonnative species, including mustard species (*Brassica* sp.), have affected the community to the point where it is noticeably degraded. This community is present on the western portion of the Proposed Project site near the residentially developed area.

4.2.2.3 Laurel Sumac Scrub Shrubland Alliance

The Laurel Sumac Scrub Shrubland Alliance was documented within the Proposed Project, approximately 0.08 acre located along the eastern side of Buena Vista Trail. Laurel Sumac Scrub Shrubland Alliance was characterized by California sagebrush, monkeyflower, California buckwheat, black sage, and poison oak *(Toxicodendron diversilobum).*This community is found in areas of California and Baja California, Mexico at elevations from 5 - 400 meters (16 - 1,312 feet) amsl on steep slopes where the soils are shallow and fine textured.



Location: N:\2022\2022-033.01 Buena Vista Debris Basin\MAPS\Vegetation_and_LandCover\BVDB_Vegetation.aprx ([Author Initials])-trotellini 7/18/2022

Map Date: 7/18/2022

Service Layer Credits: World Imagery: Maxar, Microsoft

Figure 3. Vegetation Communities and Land Cover Types

2022-033.01 Buena Vista Debris Basin

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

4.2.2.4 Goodding's Willow – Red Willow Riparian Woodland and Forest

The Goodding's Willow – Red Willow Riparian Woodland and Forest community was documented within the Proposed Project along the center of the Project limits along the Buena Vista Creek drainage and was characterized by the western sycamore (*Platanus racemosa*), and shrubs/trees including, Goodding's willow (*Salix gooddingii*), red willow, mulefat, and black elderberry. This community made up approximately 0.15 acre of the Proposed Project site. This community is found in California, Arizona, New Mexico, Nevada, Texas, Utah, and Mexico, in areas along large rivers, canyons, and near water sources such as streams, seeps, springs, ditches, floodplains, and lake-edges, at elevations from 0 – 2,000 meters (0 - 6,562 feet) amsl.

4.2.2.5 Goodding's Willow – Red Willow Riparian Woodland and Forest (Disturbed)

Gooding's Willow-Red Willow Riparian Woodland and Forest (Disturbed) community was present within the Proposed Project site with approximately 0.01 acre located south of Park Lane Road. This community is dominated by Goodding's willow and red willow. Disturbance factors in this community was due to nearby development and apparent recent inundation that cleared the understory.

4.2.2.6 Disturbed/Ruderal

The Disturbed/Ruderal classification includes areas where the native vegetation community has been heavily influenced by human actions, recreational use, and nonnative plant growth. Disturbed/Ruderal is not a vegetation classification, but rather a land cover type and is not typically restricted to a known elevation. Disturbed/Ruderal areas were located within 0.12 acre of the Proposed Project site primarily adjacent to the residential areas to the southwest and most commonly included nonnative vegetation growth consisting of black mustard (*Brassica nigra*), mallows (*Malva* sp.), brome (*Bromus* sp.) grass and shrubs.

4.2.2.7 Developed

Areas designated as Developed have infrastructure present and any vegetation in the immediate surroundings represents ornamental landscaping. Developed is not a vegetation classification, but rather a land use type and is not typically restricted to a known elevation. Developed areas within the Proposed Project site are located on Park Lane Road and make up 0.01 acre.

4.2.3 Plants

Plant species observed on the Proposed Project site were typical of the coastal sage scrub and riparian communities as well as disturbed land present on the Proposed Project site for the time of the year in which the survey was conducted. Observed species included black elderberry, laurel sumac, poison oak, California buckwheat, chaparral whitethorn *(Ceanothus leucodermis*), California sagebrush, mulefat, western sycamore, oleander, mugwort (*Artemisia douglasiana),* tree mallow *(Lavatera pseufolavatera*), and coyote brush (*Baccharis pilularis*). A full list of plant species observed on and immediately adjacent to the Proposed Project site is included in Appendix C.

4.2.4 Wildlife

Wildlife species observed and detected on the Proposed Project site were characteristic of coastal sage scrub and riparian habitats. Bird species observed within the Proposed Project site included acorn woodpecker (*Melanerpes formicivorus*), house finch (*Haemorhous mexicanus*), California scrub-jay (*Aphelocoma californica*), spotted towhee (*Pipilo maculatus*), Wilson's warbler (*Cardellina pusilla*), and one raptor species, red-tailed hawk (*Buteo jamaicensis*). Two reptile species observed included western fence lizard (*Sceloporus occidentalis*), and California whiptail (*Aspidoscelis tigris mundus).* One mammal species, California ground squirrel (*Spermophilus beecheyi)* was observed during the site visit and evidence of raccoon (*Procyon lotor*) (scat) was documented during the Proposed Project site visit. Due to the level of human activity and the partially disturbed nature of the Proposed Project site, the property represents relative low-quality habitat for many wildlife species. A complete list of wildlife species observed on or immediately adjacent to the Proposed Project site is included in Appendix D.

4.2.5 Potential for Special-Status Plant and Wildlife Species to Occur on the Proposed Project Site

The literature review and database searches identified 35 special-status plant species and 29 special-status wildlife species that have been documented occur on or near the Proposed Project site. Appendix E contains a list of the special-status plant species with potential to occur on and/or near the Project site and Appendix F contains a list of the special-status wildlife species with potential to occur on and/or near the Project site.

4.2.5.1 Special-Status Plants

There were 35 special-status plant species that appeared in the literature review and database searches for the Proposed Project site (CDFW 2022a; CNPS 2022). A list was generated from the results of the literature review and the Proposed Project was evaluated for suitable habitat that could support any of the special-status plant species on the list. Descriptions of the California Rare Plant Rank (CRPR) designations are found in Table 3. Of the 35 special-status plants identified, three were determined to have a moderate potential to occur on the Proposed Project due to the presence of moderately suitable habitat in the small portions of disturbed coastal sage scrub and riparian communities. The remaining 32 plant species were identified to have a low potential to occur and/or are presumed absent from the Proposed Project site. The species with a moderate potential to occur are discussed in more detail below. A complete list of the 35 special-status plant species, with details regarding blooming periods, habitat requirements, and potential for occurrence designations, is included as Appendix E.

Table 3. CRPR Status Designations

List Designation	Meaning
1A	Plants Presumed Extirpated in California and Either Rare or Extinct Elsewhere
1B	Plants Rare, Threatened, or Endangered in California and Elsewhere

Table 3. CRPR Status Designations	
List Designation	**Meaning**
2A	Plants Presumed Extirpated in California, But Common Elsewhere
2B	Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere
3	Plants about which more information is needed; a review list
4	Plants of limited distribution; a watch list
List 1B, 2, and 4 extension meanings:	
.1	Seriously threatened in California (over 80 percent of occurrences threatened / high degree and immediacy of threat)
.2	Moderately threatened in California (20-80 percent occurrences threatened / moderate degree and immediacy of threat)

Note: According to CNPS (Skinner and Pavlik 1994), plants on Lists 1B and 2 meet definitions for listing as threatened or endangered under Section 1901, Chapter 10, of the California Fish and Game Code (California Department of Fish and Game 1984). This interpretation is inconsistent with other definitions.

4.2.5.2 Plant Species with a Moderate Potential to Occur

The following species have a moderate potential to occur on the Proposed Project site because either habitat for the species occurs onsite and a known occurrence has been reported in the database, but not within 5 miles of the site; a historic documented observation was recorded within 5 miles of the Proposed Project site; or a known recently documented occurrence has been reported within 5 miles of the site and marginal or limited amounts of habitat occurs onsite.

Nuttall's Scrub Oak

Nuttall's scrub oak (*Quercus dumosa*) is a CRPR 1B.1 species indicating that this plant is rare and seriously threatened in California (CNPS 2022). The Nuttall's scrub oak is known to occur at elevations between 50 - 1,310 meters (164 - 4,298 feet) amsl and blooms from May to August. It is found in chaparral, coastal scrub habitats and closed-cone coniferous forests. Suitable habitat for this species is present within small portions of Laurel Sumac Scrub Shrubland Alliance and coastal scrub communities. Nine recent CNDDB records occur within 5 miles of site, the closest record of this species was identified 2 miles east of the Proposed Project site in Montecito County in 2010 (Occurrence number 89; CDFW 2022). Potential habitat for this species was identified on the east and west sides of the basin drainage which consists of coastal sage scrub habitat, specifically within the black and white sage, and buckwheat.

Late-Flowered Mariposa Lily

Late-flowered mariposa lily (*Calochortus fimbriatus*) is a CRPR 1B.2 plant species indicating that this plant is rare and is fairly threatened in California. This species is known to occur at elevations between 275 - 1,905 meters (902 - 6,250 feet) amsl and flowers between June and August. Late-flowered mariposa lily is

known to occur in chaparral, riparian, and cismontane woodland, often in serpentinite soils. The closest record of this species was documented 0.44 mile southwest from Proposed Project site near Mountain Drive in 1929 (Occurrence number 32). Four records of this species were documented approximately 4 miles northeast and northwest from the Proposed Project site in 2011 (Occurrence numbers 59, 60, 61 and 62; CDFW 2022). Potential habitat for this species was identified on the east and west sides of the basin drainage which consists of coastal sage habitat, specifically black and white sage, and buckwheat and within the basin drainage which consists of red willow riparian habitat.

Santa Barbara Honeysuckle

Santa Barbara honeysuckle *(Lonicera subspicata* var. *subspicata*) is a CRPR 1B.2 plant species. This species is known to occur in elevations between 35 - 3,280 meters (115 - 10,761 feet), and typically flowers between May and August, but can begin to flower as early as February and/or late as December. The Santa Barbara honeysuckle is known to occur in chaparral, coastal scrub, and cismontane woodland habitats. The closest record of this species was documented 0.44 miles southwest from the Proposed Project site on Mountain Drive in Santa Barbara (Occurrence number 3). The most recent record of this species was recorded 2.01 miles east of the Proposed Project site near Buell Reservoir, Montecito in 2010 (Occurrence number 18) (CDFW 2022). Potential habitat for this species was identified on the east and west sides of the basin drainage which consists of coastal sage habitat, specifically within the black and white sage, and buckwheat.

4.2.5.3 Plant Species with a Low Potential to Occur

The following species were determined to have a low potential to occur on the Proposed Project site because limited or marginal habitat for these species occurs within the Proposed Project site and a recently documented observation occurs within the database search, but not within 5 miles of the area; a historic documented observation (more than 20 years old) was recorded within 5 miles of the Proposed Project site; or suitable habitat strongly associated with the species occurs onsite, but no records or only historic records were found within the database search.

- Catalina mariposa lily (*Calochortus catalinae*), CRPR 4.2;
- Monkey-flower (*Diplacus* sp.), CRPR 4.2;
- Small-flowering morning-glory (*Convolvulus simulans*), CRPR 4.2;
- Paniculate tarplant (*Deinandra paniculata*), CRPR 4.2;
- Vernal barley (*Hordeum intercedens*), CRPR 1B.3;
- Mesa horkelia (*Horkelia cuneata* var. *puberula)* CRPR 1B.1;
- Southern California black walnut (*Juglans californica),* CRPR 4.2;
- Fragan's pitcher sage (*Lepechinia fragrans*), CRPR 4.2;
- Ocellated Humboldt lily (*Lilium humboldtii* ssp. o*cellatum*), CRPR 4.2;

- Carmel Valley malacothrix (*Malacothrix saxatilis* var. *arachnoidea*), CRPR 1B.3;
- White-veined monardella (*Monardella hypoleuca* ssp. *hypoleuca)*, CRPR 2B.2;
- Aparejo grass (*Muhlenbergia utilis*), CRPR 1B.1; federally listed as endangered; state listed as threatened;
- Chaparral nolina (*Nolina cismontana*), CRPR 1B.1;
- Hoffman's bitter gooseberry (*Ribes amarum* var. *hoffmannii*), CRPR 3;
- Black-flowered figwort (*Scrophularia atrata*), CRPR 1B.2;
- Southern jewel-flower (*Streptanthus campestris*), CRPR 1B.3;
- Sonoran maiden fern (*Thelypteris puberula* var. *sonorensis);* CRPR 2B.2; and
- Santa Ynez false lupine (*Thermopsis macrophylla*), CRPR 1B.3;

4.2.5.4 Plant Species Presumed Absent

The following species are presumed absent from the Proposed Project site due to the lack of suitable habitat, soil type, and/or elevation range at the site:

- Douglas' fiddleneck (*Amsinckia douglasiana*), CRPR 4.2;
- Mile's milkvetch (*Astragalus didymocarpus* var. *milesianus*), CRPR 1B.2;
- Ventura march milk-vetch (*Astragalus pycnostachyus* var. *lanosissimus*), CRPR 1B.1;
- Coulter's saltbush (*Atriplex coulteri*), CRPR 1B.2;
- Davidson's saltscale (*Atriplex serenana* var. *davidsonii*), CRPR 1B.2;
- Palmer's mariposa lily (*Calochortus palmeri* var. *palmeri*), CRPR 1B.2;
- Santa Barbara morning-glory (*Calystegia sepium* ssp. b*inghamiae*), CRPR 1A;
- Southern tarplant (*Centromadia parryi* ssp. a*ustralis*), CRPR 1B.2;
- Umbrella larkspur (*Delphinium umbraculorum*), CRPR 4.2;
- Southwestern spiny rush (*Juncus acutus* ssp. *leopoldii*), CRPR 4.2;
- Coulter's goldfields (*Lasthenia glabrata* ssp. *coulteri),* CRPR 1B.2;
- Gambel's water Cress (*Nasturtium gambelii),* CRPR 1B.2;
- Michael's rein orchid (*Piperia michaelii),* CRPR 4.2; and
- Woolly seablite (*Suaeda taxifolia),* CRPR 4.2.

4.2.5.5 Special-Status Wildlife

Of the 29 special-status wildlife species identified in the literature review, three were found to have a moderate potential to occur and the remaining 26 species were identified to have a low potential to occur and/or are presumed absent from the Proposed Project site. Sensitive wildlife species with potential to occur in the area were not observed during the reconnaissance survey. The species with a moderate potential to occur are discussed in more detail below. A complete list of the 29 special-status wildlife species, with details regarding habitat requirements and potential for occurrence designations, is included as Appendix F.

4.2.5.6 Wildlife Species with a Moderate Potential to Occur

The following species have a moderate potential to occur on the Proposed Project site because either habitat for the species occurs onsite and a known occurrence has been reported in the database, but not within 5 miles of the site; a historic documented observation was recorded within 5 miles of the Proposed Project site; or a known recently documented occurrence has been reported within 5 miles of the site and marginal or limited amounts of habitat occurs onsite.

San Diego desert woodrat

The San Diego desert woodrat (*Neotoma lepida intermedia*) is a CDFW SSC. It is found in a variety of habitats including coastal scrub, chaparral, and sandy desert habitats of Southern California from San Diego County to San Luis Obispo County. It prefers moderate to dense canopies, particularly abundant in rock outcrops, rocky cliffs, and slopes. This desert woodrat may also be found in woodlands of Joshua trees (*Yucca brevifolia*) or pinyon pine (*Pinus monophyla*). Food plants include buckwheat, California sagebrush, mustard, coast live oak, chamise (*Adenostoma fasciculatum*), cholla (*Cylindropuntia* sp.), creosote bush (*Larrea tridentata*), and prickly pear (*Opuntia littoralis*). Suitable habitat (including California buckwheat scrub and laurel sumac scrub) occur within the Proposed Project site. No rock outcrops and rocky cliffs and slopes were present. Moderate to dense canopies and food plants (coast live oak, California buckwheat, California sagebrush, and mustard) were present throughout the Proposed Project site. Two historic occurrences have been documented more than 5 miles away from site in 1992 (Occurrence numbers 21 and 22; CDFW 2022).

Coast Horned Lizard

The coast horned lizard (*Phrynosoma blainvillii)* is a CDFW SSC. This species frequents a wide variety of habitats (e.g., open areas of valleys, foothills, and semiarid mountains with sandy soil and low vegetation including chaparral, woodlands, and grasslands). However, this species is most common in lowlands along sandy washes with scattered low bushes, and prefers open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of insects including harvester ants which were present during Proposed Project site visit. The Proposed Project site consists of suitable sycamore woodland habitats; however, these habitats have been disrupted by nonnative vegetative growth and the 2018 wildfires. Two historic records have been documented within 5 miles of the Proposed Project site (Occurrence numbers 896 and 898). The closest record of this species was documented approximately 3 miles west of the

Proposed Project site near a residential area which had not been built but graded for development in 1981(Occurrence number 896; CDFW 2022).

Yellow Warbler

The yellow warbler (*Dendroica petechia*) is a CDFW SSC. This species frequents a variety of habitats including riparian woodland, especially those with willows, open scrub, gardens, thickets that are often near water and roadsides across north America. The Proposed Project site consists of suitable riparian woodland, particularly within the willows that are present onsite. There has been one sighting of this species greater than 5 miles away from the Proposed Project Site (Occurrence number 97) (CDFW 2022).

4.2.5.7 Wildlife Species with a Low Potential to Occur

The following species have a low potential to occur on the Project site because limited or marginal habitat for the species occurs within the Project site and a recently documented observation occurs within the database search, but not within five miles of the area; a historic documented observation (more than 20 years old) was recorded within five miles of the Project site; or suitable habitat strongly associated with the species occurs on site, but no records or only historic records were found within the database search.

- Monarch butterfly (*Danaus plexippus* pop. 1), federally considered a Candidate species, CDFW SSC;
- Arroyo toad (*Anaxyrus californicus*), federally listed as Endangered, CDFW SSC;
- California red-legged frog (*Rana draytonii*), federally listed as Threatened; CDFW SSC;
- Coast range newt *(Taricha torosa),* CDFW SSC;
- Northern California legless lizard (*Anniella pulchra*), CDFW SSC;
- California legless lizard (*Anniella* spp*.),* CDFW SSC;
- Coastal whiptail (*Aspidoscelis tigris stejnegeri);* CDFW SSC;
- Western pond turtle *(Emys marmorata);* CDFW SSC;
- Coast patch-nosed snake (*Salvadora hexalepis virgultea*); CDFW SSC;
- Two-striped gartersnake (*Thamnophis hammondii*); CDFW SSC;
- Southwestern willow flycatcher (*Empidonax traillii extimus*); federally and CDFW listed as Endangered;
- Belding's savannah sparrow (*Passerculus sandwichensis beldingi);* CDFW listed as Endangered;
- Least Bell's vireo (*Vireo bellii pusillus);* federally and CDFW listed as Endangered;
- Townsend's big-eared bat (*Corynorhinus townsendii*); CDFW SSC; and
- Big free-tailed bat (*Nyctinomops macrotis*); CDFW SSC

4.2.5.8 Wildlife Species Presumed Absent

The following species are presumed absent from the Proposed Project site due to the lack of suitable habitat on the Project site:

- Tidewater goby (*Eucyclogobius newberryi*), federally listed as Endangered, CDFW SSC;
- Steelhead-southern California Distinct Population Segment (*Oncorhynchus mykiss irideus*), federally listed as Endangered;
- Foothill yellow-legged frog (*Rana boylii*), CDFW listed as Endangered;
- Western snowy plover (*Charadrius alexandrines nivosus),* federally listed as Endangered;
- Yellow rail (*Coturnicops noveboracensis*), CDFW SSC;
- White-tailed kite (*Elanus leucurus)*, CDFW Fully Protected;
- California condor (*Gymnogyps californianus*), federally and CDFW listed as Endangered; CDFW Fully Protected;
- California black rail (*Laterallus jamaicensis coturniculus*), CDFW listed as Threatened and Fully Protected;
- Light-footed Ridgway's rail (*Rallus obsoletus levipes*), federally and CDFW listed as Threatened; CDFW Fully Protected;
- Bank swallow (*Riparia riparia*), CDFW listed as Threatened; and
- California least tern (*Sternula antillarum browni*), federally and CDFW listed as Endangered, CDFW Fully Protected.

4.2.6 Aquatic Resources Delineation

Potentially jurisdictional Waters of the USACE and RWQCB, along with habitat potentially jurisdictional to CDFW have been mapped within the Proposed Project site, consisting of ephemeral stream and associated riparian habitat features (Goodding's Willow-Red Willow Riparian Woodland and Forest). Aquatic resources that were identified in this study are further described below and depicted within Figure 4. These results are subject to agency verification.

Site photographs that provide an overview of this delineation are included within the appendices for this document. A list of plant species observed within the Proposed Project site is included as Appendix C; the wetland determination data forms are included as Appendix A.

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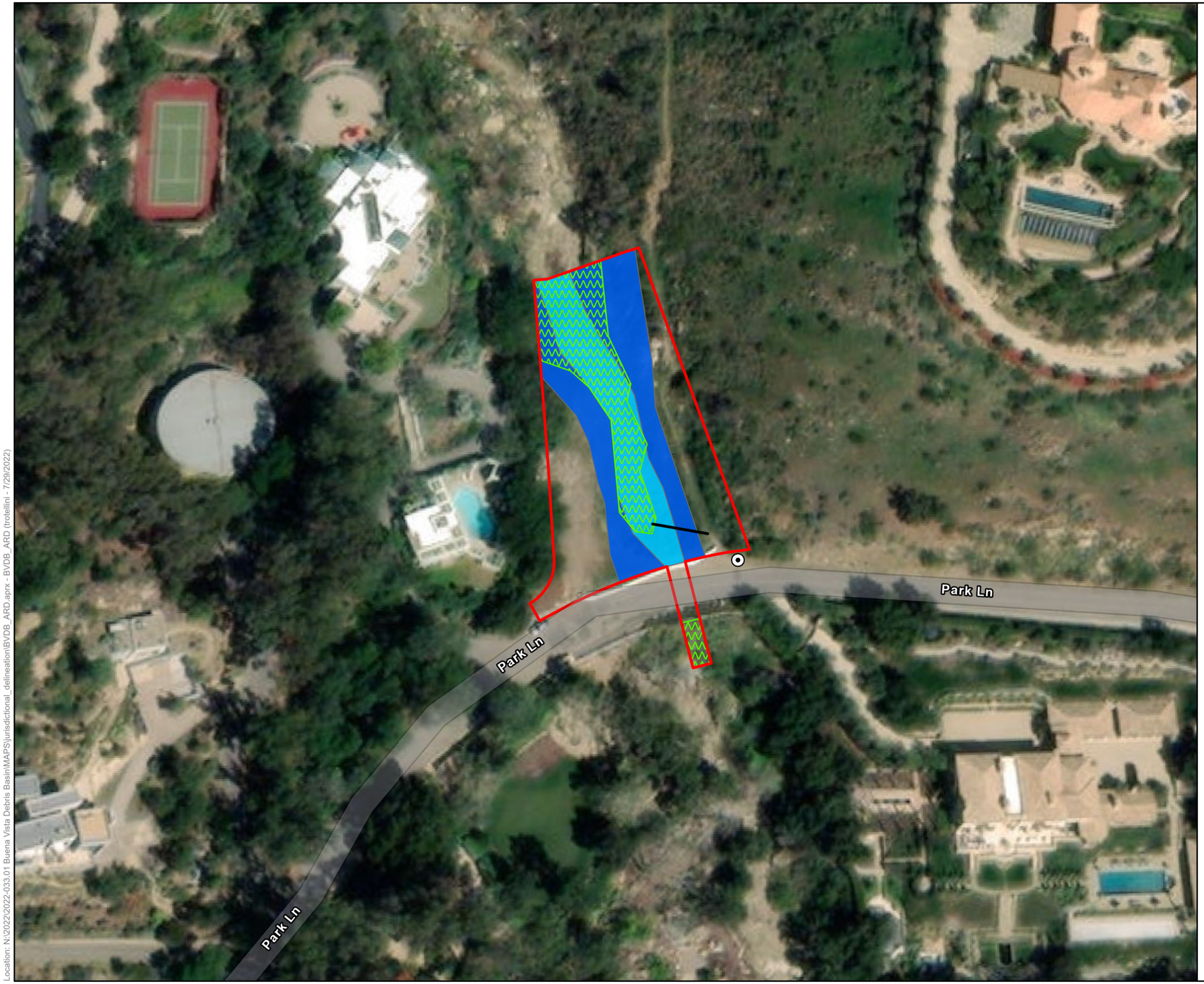

Map Contents

- Project Area - 0.65 Acres
- Above Ground Culvert Pipe
- Culverts

USACE Jurisdiction

- OHWM - 0.145 Acres

CDFW Jurisdiction

- Streambed - 0.365 Acres
- Riparian - 0.163 Acres

Maxar, Microsoft, Bureau of Land Management, Esri, HERE, Garmin, NGA, USGS, NPS, Esri Community Maps Contributors, California State Parks, © OpenStreetMap, Microsoft, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDA

Location: N:\2022\2022-033.01 Buena Vista Debris Basin\MAPS\jurisdictional_delineation\BVDB_ARD.aprx - BVDB_ARD (trotellini - 7/29/2022)

Map Date: 7/29/2022

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Scale in Feet
0 75

Figure 4. Aquatic Resources Delineation

2022-033.01 Buena Vista Debris Basin

4.2.6.1 Wetland Waters of the U.S.

There were no suspected federal wetlands present within the Proposed Project site, although one area was sampled due to its supporting apparent persistent urban runoff and the presence of aquatic plant life (algae). This location was at the outfall below the culvert that traverses underneath Park Lane and the water presence was likely due to steady, localized irrigation runoff.

Both the vegetation and soils lacked indicators of hydric characteristics, whereas the hydrology of the area was evidenced by presence of surface water (A1) and biotic crust (B12). Therefore, the location did not meet all three criteria to be delineated as a wetlandOther Waters of the U.S.

The channel running through the Proposed Project site is considered to be an ephemeral stream, which flows during and immediately after storm events. There was little evidence presence of extended flows in the area, other than the presence of irrigation runoff. Limits of the stream channel were mapped in accordance with the presence of OHWM, evidenced by bed-and-bank topography, scouring of vegetation consistent with water movement through an area, and the changes in vegetative cover between the sides of the overall channel and the channel bottom. The ephemeral stream accounts for a total of 0.145 acre (6,316 square feet) and 234 linear feet of the Proposed Project site. CDFW-Jurisdiction

The feature was identified as CDFW-jurisdiction because it had a defined streambed or channel with defined banks, with an associated floodplain, and likely supports several wildlife species. Generally, the CDFW jurisdictional limits were defined by the upper limits of the overall channel, or top of the banks. Other CDFW jurisdiction includes the riparian habitat that is present, Goodding's Willow-Red Willow Riparian Woodland and Forest. This vegetation community is described in greater detail above. CDFW streambed and associated riparian habitat accounts for a total of 0.3657 acre (15,900 square feet) and 0.163 acre (7,100 square feet), respectively, of the Proposed Project site.

4.2.7 Raptors and Migratory Birds

Suitable nesting habitat for numerous species of migratory birds protected under the federal MBTA and California Fish and Game Code is present on the Proposed Project site in some of the shrubs and trees present onsite. Therefore, nesting birds could use the Proposed Project site during the nesting bird season (typically February 1 through August 31).

4.2.8 Wildlife Movement Corridors, Linkages, and Significant Ecological Areas

The concept of habitat corridors addresses the linkage between large blocks of habitat that allow the safe movement of mammals and other wildlife species from one habitat area to another. The definition of a corridor varies, but corridors may include such areas as greenbelts, refuge systems, underpasses, and biogeographic land bridges. In general, a corridor is described as a linear habitat, embedded in a dissimilar matrix, which connects two or more large blocks of habitat. Wildlife movement corridors are critical for the survivorship of ecological systems for several reasons. Corridors can connect water, food, and cover sources, spatially linking these three resources with wildlife in different areas. In addition, wildlife movement between habitat areas provides for the potential of genetic exchange between wildlife species populations, thereby maintaining genetic variability and adaptability to maximize the success of

wildlife responses to changing environmental conditions. This is especially critical for small populations subject to loss of variability from genetic drift and effects of inbreeding. The nature of corridor usage and wildlife movement patterns vary greatly among species.

The Proposed Project site was assessed for its ability to function as a wildlife corridor. The Proposed Project site does not provide many wildlife movement opportunities, but it is situated along a basin drainage that runs north to south, under Park Lane Road that could be considered a movement corridor for wildlife. The Proposed Project is surrounded by some residential and recreational use, but it is open enough to facilitate wildlife movement through the area.

5.0 IMPACT ANALYSIS

Although design of the Proposed Project has not been finalized, implementation of the Proposed Project has the potential to impact 0.65 acre of habitat and land cover types during construction and maintenance, including 0.19 acre of California Buckwheat-White Sage Scrub Shrubland Alliance, 0.09 acre of California Buckwheat-White Sage Scrub Shrubland Alliance (Disturbed), 0.15 acre of Goodding's Willow-Red Willow Riparian Woodland and Forest, 0.01 acre of Goodding's Willow-Red Willow Riparian Woodland and Forest (Disturbed), 0.08 acre of Laurel Sumac Scrub Shrubland Alliance, 0.12 acre of Disturbed/Ruderal, and 0.01 acre of Developed. This section discusses the direct impacts of the Proposed Project. Direct impacts entail those which destroy or displace a species or its habitat. These impacts can occur in association with Proposed Project construction due to grading, paving, and other disturbances associated with general construction activities.

Potential indirect impacts are those which occur due to the proximity of a disturbance or development to a species or its habitat. These impacts occur over the short term, during construction, and over the long term due to proximity of the new Proposed Project features. Examples of indirect impacts include habitat fragmentation or degradation, nonnative species introduction, runoff, alteration of a wildlife species' normal behaviors and activities, and increased human intrusion into habitat. The magnitude of an indirect impact can be as significant as that of a direct impact, depending on the circumstances. The following sections present impacts to sensitive biological resources resulting from Proposed Project activities.

5.1 Special-Status Species

5.1.1 Special-Status Plants

Vegetation communities on the Proposed Project site consisted of coastal sage scrub and riparian woodland with evidence of disturbance. Results of the literature review and reconnaissance-level survey identified thirty-five special-status plant species that occur in the vicinity of the Proposed Project site. Of these thirty-five special-status plants, three special-status plant species have a moderate potential to occur (Nuttall's scrub oak, late-flowered mariposa lily, and Santa Barbara honeysuckle) and eighteen species have a low potential to occur on the Proposed Project site. No special status plant species have a high potential to occur on the site. If present, direct impacts to rare or special-status plant species may occur as a result of the Proposed Project in the form of mortality or injury due to ground disturbing and vegetation removal activities. If present in the areas adjacent to the Proposed Project site, indirect impacts

to rare or special-status plant species may occur due to habitat degradation and increased dust. Impacts to rare plant species would be *less than significant* with the implementation of Mitigation Measures BIO-1, 2, 3, and 4. The Mitigation Measures for the Proposed Project are discussed in Section 6 below.

5.1.2 Special-Status Wildlife Species

The results of the literature review and reconnaissance-level survey identified 29 wildlife species with potential to occur on or adjacent to the Proposed Project site. Of those 29 species, three species (San Diego desert woodrat, coast horned lizard, and yellow warbler) were determined to have a moderate potential to occur on the Proposed Project site. If present, direct impacts to special-status wildlife species may occur as a result of the Proposed Project in the form of mortality or injury due to ground disturbing and vegetation removal activities. However, these species are of lower levels of sensitivity (SSC) and the site is not expected to support large numbers of either species. Therefore, impacts to these species due to the Project implementation, though adverse, would not be expected to be significant under CEQA.

Fifteen special-status wildlife species have a low potential to occur (monarch butterfly, arroyo toad, California red-legged frog, coast range newt, northern California legless lizard, California legless lizard, coastal whiptail, western pond turtle, coast patch-nosed snake, two-striped garter snake, southwestern willow flycatcher, Belding's savannah sparrow, least Bell's vireo, Townsend's big-eared bat, and big free-tailed bat). Of these fifteen species, six of these species that have low potential to occur and are considered to be of higher sensitivity (monarch, arroyo toad, California red-legged frog, southwestern willow flycatcher, Belding's savannah sparrow, and least Bell's vireo). Although these species are not expected to occur on or adjacent to the Project site, impacts could occur in the form of injury or mortality, loss of habitat, ground vibrations, increased human activity, and noise. For these six species, any direct or indirect impacts to them due to Project implementation would be considered significant under CEQA due to their higher level of sensitivity. Implementation of Mitigation Measures BIO-2, 3, 4, and 5 will reduce impacts to a level that is less than significant.

5.1.2.1 Raptors and Migratory Birds

The vegetation within the Proposed Project site and adjacent to the site could provide nesting habitat for nesting birds and raptors protected by the MBTA and California Fish and Game Code, and also provides foraging habitat for songbird and raptor species. If construction of the Proposed Project occurs during the bird breeding season (typically February 1 through August 31 for passerines and January 15 through July 31 for raptors), ground-disturbing construction activities could directly affect MBTA-protected birds and their nests through the removal of habitat on the Proposed Project site, and indirectly through increased noise, ground vibrations, and increased human activity. Implementation of Mitigation Measures BIO-2, 3, 4, and 5 will reduce impacts to a level that is less than significant.

5.2 Sensitive Natural Communities

The Project site consisted of California Buckwheat – White Sage Scrub Scrubland, California Buckwheat – White Sage Scrub Scrubland (Disturbed), Goodding's Willow – Red Willow Riparian Woodland and Forest, Goodding's Willow – Red Willow Riparian Woodland and Forest (Disturbed), Laurel Sumac Scrub Shrubland, and two land cover types (Disturbed/Ruderal and Developed). The riparian habitat has the

potential to provide habitat for special-status wildlife species and nesting birds, it is jurisdictional to CDFW and is considered to be a sensitive natural community. Project-related impacts to this community may include removal, loss of habitat, and habitat degradation. It is recommended that this area be completely avoided to prevent Project-related impacts to the riparian vegetation. If impacts to this area are unavoidable, regulatory permitting will be required with CDFW and potentially with the USACE and RWQCB. Implementation of Mitigation Measures BIO-2, 3, 6, 7, and 8 will reduce impacts to a level that is less than significant.

5.3 State and Federally Protected Wetlands and Waters of the United States

Aquatic resources in the Project site consist of 0.145 acre of USACE/RWQCB jurisdiction and 0.528 acre of CDFW jurisdiction including an unnamed ephemeral stream and associated riparian habitat areas (Goodding's Willow – Red Willow Riparian Woodland and Forest). Impacts to these resources are expected to be subject to Section 404 permitting with the USACE, Section 401 Water Quality Certification permitting with the RWQCB and Lake and Streambed Alteration Agreement permitting under Section 1600 of the California Fish and Game Code with the CDFW.

The acreages presented in this report represent a calculated estimation of the extent of jurisdictional areas within the Proposed Project site and they are subject to modification following agency review and/or the verification process. Regulatory permitting described above along with implementation of Mitigation Measures BIO-2, 3, 6, 7, and 8 will reduce impacts to wetlands and waters of the United States to a level that is less than significant.

5.4 Wildlife Corridors and Nursery Sites

The Project site is located within and adjacent to areas containing existing disturbances (e.g., paved and dirt roads and residential developments). The Project site is disturbed and provides little cover; however, the culvert under Park Lane Road may allow for local movement of wildlife. No migratory wildlife corridors or native wildlife nursery sites were identified within the Project site. Therefore, no impacts to wildlife corridors or nursery sites are expected to occur during the development of the Project site.

5.5 Habitat Conservation Plans and Natural Community Conservation Plans

The Project site is not located within an HCP or NCCP. Therefore, development of the Project site will not conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or State HCP and no impacts to HCP or NCCP are expected to occur during the development of the Project site.

6.0 MITIGATION MEASURES AND RECOMMENDATIONS

6.1 Mitigation Measures

The following recommended mitigation measures are provided based on the impacts analysis presented above and would reduce impacts to sensitive biological resources to a *less than significant* level.

BIO-1 - Rare Plant Surveys: Rare plant surveys shall be conducted within suitable habitat on the Proposed Project site during the appropriate blooming periods (i.e., between March and August) following sufficient rainfall during the previous wet season for the special-status plant species with potential to occur on or immediately adjacent to the Proposed Project site. The target species would include, but not be limited to, Nuttall's scrub oak, late-flowered mariposa lily, and Santa Barbara honeysuckle. Multiple surveys will likely need to occur to ensure all special-status plant species are detectable during their appropriate blooming periods. The surveys shall be conducted by a botanist or qualified biologist in accordance with the USFWS General Rare Plant Survey Guidelines (USFWS 2002); the CDFW Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities (CDFW 2018); and the CNPS Botanical Survey Guidelines (CNPS 2001). If special-status plant species are not observed on the Proposed Project site, then Proposed Project activities may continue without additional survey or special-status plant species protection requirements. If any special-status species are observed during the rare plant surveys and Proposed Project-related impacts to the special-status plant species are unavoidable, then consultation with CDFW may be required to develop a mitigation plan or additional avoidance and minimization measures. Additional protection measures for special-status plant species may include transplanting, seed collection, or avoidance.

BIO-2 - Construction Monitoring During Maintenance Activities. The District Biologist shall monitor maintenance activities daily to ensure that the appropriate methods and limits are used. Results of the monitoring shall be documented in the annual post-maintenance report. These activities include brushing, herbicide application, channel shaping, desilting, bank stabilization by placing fill or grading banks, bank protection construction or repair, grade stabilizer construction or repair, pilot channel construction, and access ramp construction.

BIO- 3 – Construction Monitoring for Sensitive Species. The District Biologist shall monitor, on a daily basis, earth and vegetation disturbing maintenance activities located at and adjacent to locations where sensitive species are known to occur. The need for monitoring and the areas to be monitored shall be determined during the annual field assessment in the spring. The objective of the monitoring is to ensure that key habitat features or species locations are avoided.

BIO-4 – Pre-Construction Biological Surveys and Avoidance Measures. A District biologist shall inspect all maintenance areas in creeks and basins during the annual spring field assessments (April and May) to determine if any sensitive plants, fish, or wildlife species are present, or habitats for these species are present. If the species are present, the District shall modify maintenance activities to avoid removal or substantial disturbance of the key habitat areas or features. Avoidance and impact minimization measures shall be described in the Annual Plan for each maintenance project. If a rare plant could be affected, the District shall relocate the plant by cultivation or seeding methods to a suitable nearby site. If a sensitive fish or wildlife species will be present at a maintenance site during the work period, the District shall schedule the work to avoid the species, if possible. If avoidance is not feasible, the District shall attempt to relocate the species or population with approval from the California Department of Fish and Game, US Fish and Wildlife Service or National Marine Fisheries Service, as appropriate. This measure applies to all currently known sensitive species that occur in maintained drainages and basins, as well as species that are determined to be sensitive in the future. Endangered species experts with handling permits shall be

consulted during relocation efforts to provide additional assurances that relocation is effective. Such consultation shall include assistance in field efforts, as warranted.

BIO-5 Pre-Construction Survey for Nesting Birds and Special-Status Avian Species: Where feasible, ground-disturbing activities, including vegetation removal, shall be conducted during the non-breeding season (approximately September 1 through January 14) to avoid violations of the MBTA and California Fish and Game Code §§ 3503, 3503.5 and 3513. If activities with the potential to disrupt nesting birds or the special-status avian species with potential to occur on the Proposed Project Site are scheduled to occur during the bird breeding season (February 1 through August 31 for songbirds and January 15 through July 31 for raptor species), a pre-construction survey for nesting birds and special-status avian species shall be conducted by a qualified biologist who is experienced in the identification of avian species and conducting nesting bird surveys. The survey shall include the Proposed Project Site and adjacent areas where Proposed Project activities have the potential to cause nest failure. The pre-construction survey shall be conducted no more than three days prior to the start of ground-disturbing activities (including vegetation removal) within the bird breeding season. If no nesting birds or special-status avian species are observed during the survey, site preparation and construction activities may begin. If nesting birds or raptors or special-status avian species are found to be present, avoidance or minimization measures shall be implemented to avoid potential Proposed Project-related impacts to the species. Avoidance and minimization measures shall be developed by the qualified biologist and may include non-disturbance buffers established around active nests until the biologist has determined that the nesting cycle is completed, seasonal work restrictions, or additional survey and monitoring requirements. The width of non-disturbance buffers established around active nests will be determined by the qualified biologist (300 feet is typically recommended for songbirds and 500 feet is typically recommended for raptors). Once nesting is deemed complete by the qualified biologist as determined through periodic nest monitoring, the non-disturbance buffer will be removed by the qualified biologist and Proposed Project work may resume in the area.

BIO-6 – Minimize Vegetation Removal from Channel Bottom. The District shall minimize vegetation removal from the channel bottom to the least amount necessary to achieve the specific maintenance objectives for the reach (i.e., removing obstructive vegetation or silt trapping vegetation). Brushing and herbicide application for vegetation control on the channel bottom shall be conducted in a non-continuous, mosaic-like manner, to the extent feasible, allowing small patches of in-channel native vegetation to persist.

BIO-7 - Restore Temporarily Disturbed Areas. The District shall restore channel banks containing riparian or wetland vegetation that are temporarily disturbed by maintenance or construction activities associated with the following: channel shaping, placement of bank protection, ramp construction, and repair or construction of bank protection and grade stabilizers. Restoration objectives, methods, plant species, maintenance, and monitoring shall follow the guidelines in the updated restoration plan described in the Program Environmental Impact Report. The restoration of channel bed habitats shall only occur if it would not conflict with the maintenance needs in the affected reach.

BIO-8 – Post Maintenance Channel Bed Treatment. The District shall roughen the channel bed after channel desilting maintenance to create microtopography that will encourage reestablishment of aquatic

habitats over time. Pools and riffles shall be recreated in the work area if they were removed during maintenance, to the extent feasible. Modifications of the creek bed shall be consistent with considerations identified through Measure H-1.

6.2 Recommendations

The following recommendations best management practices are not mitigation measures pursuant to CEQA but are recommended to further reduce impacts to species that have potential to occur on the property, or to comply with existing laws and/or regulations:

- Confine all work activities to a pre-determined work area.
- To prevent inadvertent entrapment of wildlife during the construction phase of a Project, all excavated, steep-walled holes or trenches more than 2 feet deep should be covered at the close of each working day by plywood or similar materials. If the trenches cannot be closed, one or more escape ramps constructed of earthen fill or wooden planks shall be installed. Before such holes or trenches are filled, they should be thoroughly inspected for trapped animals.
- Wildlife are often attracted to burrow- or den-like structures such as pipes and may enter stored pipes and become trapped or injured. To prevent wildlife use of these structures, all construction pipes, culverts, or similar structures with a diameter of 4 inches or greater should be capped while stored onsite.
- All food-related trash items such as wrappers, cans, bottles, and food scraps should be disposed of in securely closed containers and removed at least once a week from the construction or Project site.
- Use of rodenticides and herbicides on the Project site should be restricted. This is necessary to prevent primary or secondary poisoning of wildlife, and the depletion of prey populations on which they depend. All uses of such compounds should observe label and other restrictions mandated by the USEPA, California Department of Food and Agriculture, and other state and federal legislation. If rodent control must be conducted, zinc phosphide should be used because of a proven lower risk to predatory wildlife.
- Regulatory permitting with the USACE, RWQCB and CDFW is legally required prior to ground disturbance within the stream channel and removal of associated stream vegetation. Note that during the permitting process additional recommendations as well as additional mitigation measures may be identified

7.0 CERTIFICATION

I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this biological evaluation, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief. Field work conducted for this assessment was performed by me or under my direct supervision. I certify that I have not signed a non-disclosure or consultant confidentiality agreement with the Project applicant or the applicant's representative and that I have no financial interest in the Project.

SIGNED:  DATE: 8/3/2022

Lauren Simpson
Staff Biologist
ECORP Consulting, Inc.

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LIST OF APPENDICES

APPENDIX A

Arid West Wetland Determination Data Forms

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Buena Vista Debris Basin City/County: Santa Barbara Sampling Date: 05/10/2022

Applicant/Owner: County of Santa Barbara State: CA Sampling Point: 1

Investigator(s): Scott Taylor Section, Township, Range: Unsectioned, T4N, R26W

Landform (hillslope, terrace, etc.): Semi-natural channel Local relief (concave, convex, none): concave Slope (%): 3-5

Subregion (LRR): LRR-C Lat: 34.448638 Long: -119.610914 Datum: NAD 1983

Soil Map Unit Name: Maymen Stoney Fine Sandy Loam, 30-75 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____ No _____	**Is the Sampled Area within a Wetland?** Yes _____ No _____
Hydric Soil Present?	Yes _____ No _____	
Wetland Hydrology Present?	Yes _____ No _____	

Remarks:

Site has several urban influences, such as escaped landscaped plants, channelization and big culvert under Park Lane. Confined, single channel.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. N/A			
2.			
3.			
4.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: 220 sq. ft.)			
1. Helianthus annuus	10	Y	FACU
2. Sipta novaicaeae	1	N	UPL
3.			
4.			
5.			
	11 = Total Cover		
Herb Stratum (Plot size: 220 sq. ft.)			
1. Nicotiana glauca	20	Y	FAC
2. Hischfeldia incana	10	Y	UPL
3. Artemisia douglasiana	1	N	FAC
4. Calystegia macrostegia	1	N	UPL
5.			
6.			
7.			
8.			
	32 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1. N/A	0	N/A	N/A
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum 60 % Cover of Biotic Crust 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 33 percent (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species 0	x 1 = 0
FACW species 0	x 2 = 0
FAC species 21	x 3 = 63
FACU species 10	x 4 = 40
UPL species 12	x 5 = 60
Column Totals: 43 (A)	163 (B)

Prevalence Index = B/A = 3.8

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No ✓

Remarks:

SOIL

Sampling Point: 1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ✓

Remarks:

No indicators present. Water flows over cement in this location and into sand. No pit dug. Heavy degradation present in channel, evidenced by large boulders and relatively little sand.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ✓ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ✓ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ✓ No _____ Depth (inches): <1"

Water Table Present? Yes _____ No ✓ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No ✓ Depth (inches): _____

Wetland Hydrology Present? Yes ✓ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Probably landscape runoff has caused the indicators, but elsewhere in the channel there were other OHWM indicators present such as bed and bank

APPENDIX B

Representative Site Photos

Representative Site Photographs

Photo 1. View of Buena Vista drainage facing south.

Photo 2. View of Buena Vista drainage facing north.

Photo 3. View of west side of drainage depicting coastal sage scrub with disturbance from non-native vegetation growth, black mustard (*Brassica nigra*).

Photo 4. View of Buena Vista site facing northwest.

Photo 5. View of east side of drainage that is primarily made up of California buckwheat (*Eriogonum fasciculatum*), black sage (*Salvia mellifera*), and white sage (*Salvia apiana*).

Photo 6. View of red Willow Riparian Woodland habitat in the drainage.

Figure 7. Laurel sumac (*Malosma laurina*) scrub on nearby trail.

Photo 8. View of culvert beneath Park Lane facing south.

Photo 9. View of the vegetation present on the southeast side of the culvert facing northeast.

Photo 10. View of ornamental plants south of Park Lane located west of the drainage.

APPENDIX C

Plant Species Observed

SCIENTIFIC NAME	COMMON NAME
ANGIOSPERMS (DICOTYLEDONS)	
ADOXAMEAE	**ELDERBERRY FAMILY**
Sambucus nigra	Black elderberry
ANACARDIACEAE	**SUMAC OR CASHER FAMILY**
Malosma laurina	Laurel sumac
Toxicodendron diversilobum	Poison oak
APIACEAE	**CARROT FAMILY**
*Foeniculum vulgare**	Wild fennel
APOCYNACEAE	**DOGBANE FAMILY**
*Nerium oleander**	Oleander
ASTERACEAE	**SUNFLOWER FAMILY**
*Ageratina adenophora**	Eupatory
Artemisia californica	California sagebrush
Artemisia douglasiana	Mugwort
Baccharis pilularis	Coyote brush
Baccharis salicifolia	Mulefat
*Carduus pycnocephalus**	Italian thistle
Delairea odorata (= Senecio mikanioides)*	Cape-ivy
Ericameria sp.	North American shrub
Encelia californica	California bush sunflower
Eriophyllum confertiflorum	Golden yarrow
Isocoma menziesii	Coastal goldenbrush
Matricaria discoidea (= M. matricarioides)	Pineapple weed
Venegasia carpesioides	Canyon sunflower
BORAGINACEAE	**BORAGE FAMILY**
Cryptantha sp.	Cryptantha
*Echium candicans**	Pride of Madeira
Phacelia cicutaria	Caterpillar phacelia
Phacelia distans	Distant phacelia
Phacelia grandiflora	Large-flowered phacelia
BRASSICAECEAE	**MUSTARD FAMILY**
*Brassica nigra**	Black mustard
CONVOLVULACEAE	**MORNING-GLORY FAMILY**
Convolvulus simulans	Small-flowering morning glory
EQUISETACEAE	**HORSETAIL FAMILY**
Equisetum sp.	Horsetail
FABACEAE	**LEGUME FAMILY**
Acmispon glaber (= Lotus scoparius)	Deerweed

SCIENTIFIC NAME	COMMON NAME
Acacia sp.	Acacia
*Lotus corniculatus**	Birdfoot trefoil
LAMIACEAE	**MINT FAMILY**
Salvia apiana	White sage
Salvia mellifera	Black sage
GERANIACEAE	**GERANIUM FAMILY**
*Erodium cicutarium**	Red-stemmed filatree
MALVACEA	**MALLOW FAMILY**
Lavatera maritima	Tree mallow
ONAGRACEAE	**EVENING PRIMROSE FAMILY**
Epilobium canum	California fuchsia
OXALIDACEAE	**OXALIS FAMILY**
Oxalis sp.	Wood-sorrel
PAPAVERACEAE	**POPPY FAMILY**
Eschscholzia californica	California poppy
PHRYMACEAE	**LOPSEED FAMILY**
Diplacus sp.	Monkey flower
PLATANACEAE	**SYCAMORE FAMILY**
Platanus racemosa	Western sycamore
POLYGONACEAE	**BUCKWHEAT FAMILY**
Eriogonum fasciculatum	California buckwheat
RHAMNACEAE	**BUCKTHORN FAMILY**
Ceanothus leucodermis	Chaparral whitethorn
Ceanothus spinosus	Green bark ceanothus
ROSACEAE	**ROSE FAMILY**
Cercocarpus betuloides	Birch-leaf mountain-mahogany
SALICACEAE	**WILLOW FAMILY**
Salix laevigata	Red willow
Salix gooddinii	Goodding's willow
SOLANACEAE	**NIGHTSHADE FAMILY**
*Nicotiana glauca**	Tree tobacco
Solanum sp.	Nightshade
Solanum douglasii	Douglas' nightshade
Solanum xanti	Chaparral nightshade
ANGIOSPERMS (MONOCOTYLEDONS)	
POACEAE	**GRASS FAMILY**
Bromus sp.	Brome grass
*Pennisetum villosum**	Fountain grass
Stipa miliacea var. miliacea (= Piptatherum miliaceum)*	Smilo grass

*Nonnative species

APPENDIX D

Wildlife Species Observed

SCIENTIFIC NAME	COMMON NAME
REPTILIA	**REPTILES**
IGUANIDAE	**IGUANIDS**
Sceloporus occidentalis	Western fence lizard
TELIIDAE	**WHIPTAIL LIZARDS**
Aspidoscelis tigris mundus	Coastal whiptail lizard
AVES	**BIRDS**
ACCIPITRIDAE	**EAGLES AND HAWKS**
Buteo jamaicensis	Red-tailed Hawk
CATHARTIDAE	**VULTURES**
Cathartes aura	Turkey vulture
CORVIDAE	**JAYS AND CROWS**
Aphelocoma californica	California scrub-jay
FRINGILLIDAE	**FINCHES**
Haemorhous mexicanus	House finch
Spinus psaltria	Lesser goldfinch
PARULIDAE	**WOOD WARBLERS**
Cardellina pusilla	Wilson's warbler
Geothlypis trichas	Common yellowthroat
PASSERELLIDAE	**TOWHEES AND SPARROWS**
Pipilo crissalis	California towhee
Pipilo maculatus	Spotted towhee
PICIDAE	**WOODPERCKERS & ALLIES**
Melanerpes formicivorus	Acorn woodpecker
TROCHILIDAE	**HUMMINGBIRDS**
Calypte anna	Anna's hummingbird
TROGLODYTIDAE	**WRENS**
Troglodytes aedon	House wren
TYRANNIDAE	**TYRANT FLYCATCHERS**
Empidonax difficilis	Pacific-slope flycatcher
Myiarchus cinerascens	Ash-throated flycatcher
MAMMALIA	**MAMMALS**
PROCYONIDAE	**RACCOONS**
Procyon lotor	Common raccoon
SCIURIDAE	**SQUIRRELS**
Spermophilus beecheyi	California ground squirrel

APPENDIX E

Potential for Occurrence of Sensitive Plant Species

Scientific Name **Common Name**	**Status**		**Bloom Period & Elevation (meters)**	**Habitat Requirements**	**Potential for Occurrence**
Amsinckia douglasiana Douglas' fiddleneck	Fed: Ca: CNPS:	None None 4.2	Mar. – May 0-1950	Occurs in cismontane woodlands, valley, and foothill grassland, in dry Monterey shale soil.	**Presumed absent.** No suitable cismontane woodland and foothill grassland was identified during habitat assessment. There are no records on this species within a five-mile radius (CDFW and USFWS 2022).
Astragalus didymocarpus **var. *milesianus*** Miles' milk-vetch	Fed: Ca: CNPS:	None None 1B.2	Mar.– June 20-90	Occurs in coastal scrub habitats. Often found in clay soils. Threatened by development.	**Presumed absent.** The Project site is outside of the elevation range of this species. The closest record of this species was documented 4.71 miles north of Project site, 0.2 mile from intersection with Mono Silt Road in 1961 (CDFW 2022).
Astragalus pycnostachyus **var. *lanosissimus*** Ventura Marsh milk-vetch	Fed: Ca: CNPS:	**END** **END** 1B.1	(Jun.) Aug.– Oct. 1-35	Occurs in coastal dunes, coastal scrub communities, marshes and swamps (edges, coastal salt, brackish). Threatened by development.	**Presumed absent.** The Project site is outside of the elevation range of this species. Most recent record of this species was documented in Ventura County in 1911 (CDFW 2022).
Atriplex coulteri Coulter's saltbush	Fed: Ca: CNPS:	None None 1B.2	Mar. – Oct. 10-1510	Occurs in coastal bluff scrub, coastal dunes, coastal scrub, and valley and foothill grassland habitats. Often found in clay or alkaline soils.	**Presumed absent:** No suitable coastal dune, valley, grassland habitat, or clay and alkaline soils were identified during habitat assessment. Most recent record of this species was documented in 1956 (CDFW 2022).
Atriplex serenana var. ***davidsonii*** Davidson's saltscale	Fed: Ca: CNPS:	None None 1B.2	Apr.– Oct. 35-655	Occurs in coastal bluff scrub and coastal scrub habitats. Often found in alkaline areas.	**Presumed Absent:** No suitable coastal or alkaline soils were identified during the habitat assessment. There are no records on this species within a five-mile radius (CDFW and USFWS 2022).
Calochortus catalinae Catalina mariposa lily	Fed: Ca: CNPS:	none none 4.2	Feb. – June 15-700	Cismontane woodland, chaparral, coastal scrub, valley and foothill grasslands.	**Low.** Limited chaparral, coastal scrub, and valley foothill grasslands. There are no records on this species within a five-mile radius (CDFW and USFWS 2022).

Scientific Name **Common Name**	**Status**		**Bloom Period & Elevation (meters)**	**Habitat Requirements**	**Potential for Occurrence**
Calochortus fimbriatus late-flowered mariposa lily	Fed: Ca: CNPS:	None None 1B.2	June – Aug. 275-1905	Occurs in chaparral, cismontane woodland, and riparian woodland, often in serpentinite soils.	**Moderate.** Suitable chaparral and riparian woodland habitat identified during habitat assessment. The closest record of this species was documented 0.44 miles southwest from Project site near Mountain Drive The most recent records of this species were documented approx. 4 miles from Project site in 2011 (4 occurrences; CDFW 2022).
Calochortus palmeri* var. *palmeri Palmer's mariposa lily	Fed: Ca: CNPS:	None None 1B.2	Apr. – July 710-2390	Occurs in chaparral, lower montane coniferous forest, and meadows and seeps in mesic soils.	**Presumed absent.** The Project site is outside of the elevation range of this species. The closest record of this species was documented 2.88 miles northeast from Project site in Carpinteria in 1981 (CDFW 2022).
Calystegia sepium* ssp. *binghamiae Santa Barbara morning-glory	Fed: Ca: CNPS:	None None 1A	Aug. 5-15	Occurs in marshes and swamps, typically coastal. Only known to be found in Santa Barbara, presumed extirpated from wetland modifications.	**Presumed absent.** The Project site is outside of the elevation range of this species. Last record of this species was documented in 1886 (CDFW 2022).
Centromadia parryi* ssp. *australis southern tarplant	Fed: Ca: CNPS:	None None 1B.2	May – Nov. 0-1575	Occurs in margins of marshes and swamps, in vernally mesic valley and foothill grassland, and vernal pools.	**Presumed Absent:** No suitable marsh, swamp, or vernal pool was identified during habitat assessment. Most recent observation of this species was documented in 1974 (CDFW 2022).
Clinopodium mimuloides monkey-flower savory	Fed: Ca: CNPS:	none none 4.2	Mar. – July 120-1075	Occurs in chaparral, cismontane woodland, coastal scrub, riparian woodland, and valley and foothill grassland. Often found in rocky, gabbroic, or metavolcanic soils.	**Low.** Limited suitable chaparral, coastal scrub, riparian woodland, specifically red willow trees, and rocky terrain were identified during habitat assessment. There are no records on this species within a five-mile radius (CDFW and USFWS 2022).

Scientific Name **Common Name**	**Status**		**Bloom Period & Elevation (meters)**	**Habitat Requirements**	**Potential for Occurrence**
Convolvulus simulans Small-flowering morning-glory	Fed: Ca: CNPS:	none none 4.2	Mar. – July 30-740	Occurs in coastal scrub, openings in chaparral, valley and foothill grasslands. Clay soils, serpentinite seeps.	**Low.** Limited coastal scrub and chaparral communities were identified during habitat assessment. There are no records on this species within a five-mile radius (CDFW and USFWS 2022).
Deinandra paniculata paniculate tarplant	Fed: Ca: CNPS:	none none 4.2	Apr. – Nov. (Mar. – Dec.) 25-940	Occurs in coastal scrub, valley and foothill grassland, and vernal pools usually in vernal mesic and sometimes in sandy soils.	**Low.** Limited coastal scrub was identified during habitat assessment. There are no records on this species within a five-mile radius (CDFW and USFWS 2022).
Delphinium umbraculorum umbrella larkspur	Fed: Ca: CNPS:	None None 1B.3	Apr. – June 400-1600	Occurs in cismontane woodland habitats and chaparral forests. Possibly threated by grazing.	**Presumed absent.** The Project site is outside of the elevation range of this species. Most recent observation of this species was documented in 1962 (CDFW 2022).
Hordeum intercedens vernal barley	Fed: Ca: CNPS:	None None 3.2	Mar. – June 5-1000	Occurs in coastal dunes, coastal scrub, saline flats and depressions in valley and foothill grassland, and vernal pools.	**Low.** Limited suitable coastal scrub was identified during habitat assessment. There are no records on this species within a five-mile radius (CDFW and USFWS 2022).
Horkelia cuneata* var. *puberula mesa horkelia	Fed: Ca: CNPS:	None None 1B.1	Feb. – Sept. 230-2660	Typically occurs in maritime chaparral, cismontane woodland, and coastal scrub in sandy or gravelly soils.	**Low:** Suitable limited chaparral and coastal scrub identified during habitat assessment. The closest record of this species was documented 2.76 miles west of the Project site near Cold Spring Trail in 1974 (CDFW 2022).
Juglans californica Southern California black walnut	Fed: Ca: CNPS:	none none 4.2	Mar. – Aug. 50-900	Occurs in chaparral, cismontane woodland, coastal scrub, and riparian woodland, often alluvial soils.	**Low.** Suitable chaparral, coastal scrub, riparian woodland and alluvial soils were identified during habitat assessment. There are no records on this species within a five-mile radius (CDFW and USFWS 2022).

Scientific Name **Common Name**	**Status**		**Bloom Period & Elevation (meters)**	**Habitat Requirements**	**Potential for Occurrence**
Juncus acutus ssp. ***leopoldii*** Southwestern spiny rush	Fed: Ca: CNPS:	none none 4.2	Mar. – June 3-900	Coastal mesic dunes, meadows and alkaline seeps, coastal salt marshes and swamps.	**Presumed absent.** No suitable habitat was identified during habitat assessment. There are no records on this species within a five-mile radius (CDFW and USFWS 2022).
Lasthenia glabrata* ssp. *coulteri Coulter's goldfields	Fed: Ca: CNPS:	None None 1B.2	Feb. – June 5-4005	Occurs in coastal salt marshes and swamps, playas, and vernal pools.	**Presumed Absent.** No coastal salt marsh, swamp, playas, or vernal pool habitats are present. There are no records on this species within a five-mile radius (CDFW and USFWS 2022).
Lepechinia fragrans fragrant pitcher sage	Fed: Ca: CNPS:	none none 4.2	Mar. – Oct. 20-1310	Occurs in chaparral habitats. Known from the Santa Monica Mountains from near Triunfo Pass.	**Low.** Limited suitable chaparral was identified during habitat assessment. There are no records on this species within a five-mile radius (CDFW and USFWS 2022).
Lilium humboldtii ssp. ocellatum ocellated Humboldt lily	Fed: Ca: CNPS:	none none 4.2	Mar. – Aug. 30-1800	Occurs in openings in chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, and riparian woodland.	**Low.** Suitable chaparral, coastal scrub and riparian woodland was identified during habitat assessment. There are no records on this species within a five-mile radius (CDFW and USFWS 2022).
Lonicera subspicata* var. *subspicata Santa Barbara honeysuckle	Fed: Ca: CNPS:	None None 1B.2	(Feb) May– Aug. (Dec) 35-3280	Occurs in chaparral, cismontane woodland, and coastal scrub habitats.	**Moderate.** Suitable chaparral and coastal scrub habitat were identified during habitat assessment. The closest record of this species was documented 0.44 miles southwest from Project site on Mountain Drive in Santa Barbara. The most recent record of this species was recorded 2.01 miles east of the Project site near Buell Reservoir, Montecito in 2010 (CDFW 2022).
Malacothrix saxatilis* var. *arachnoidea Carmel Valley malacothrix	Fed: Ca: CNPS:	None None 1B.3	(Mar) June– Dec. 80-3400	Occurs in rocky chaparral and coastal scrub habitats.	**Low.** Suitable limited chaparral habitat was identified during habitat assessment. The most recent record of this species was documented in 1982 (CDFW 2022).

Scientific Name **Common Name**	**Status**		**Bloom Period & Elevation (meters)**	**Habitat Requirements**	**Potential for Occurrence**
Monardella hypoleuca* ssp. *hypoleuca white-veined monardella	Fed: Ca: CNPS:	None None 2B.2	(Apr) May – Aug. (Sep. – Dec.) 165-5005	Occurs in chaparral and cismontane woodland habitats.	**Low.** Suitable limited chaparral habitat was identified during habitat assessment. The closest record of this species was identified in 1.66 miles northeast of Project site on Juncal Road in the Santa Ynez mountains in 1964 (CDFW 2022).
Muhlenbergia utilis Aparejo grass	Fed: Ca: CNPS:	**END THR** 1B.1	Mar. – Oct. 80-7630	Occurs in chaparral, cismontane woodland, coastal scrub, marshes and swamps, and meadows and seep habitats. Sometimes found in alkaline or serpentinite.	**Low.** Suitable limited or marginal chaparral habitat was identified during habitat assessment. The most recent record of this species was documented in Murrieta Canyon in 1964 (CDFW 2022).
Nasturtium gambelii Gambel's water cress	Fed: Ca: CNPS:	None None 1B.2	Apr. – Sep. 15-1085	Occurs in marshes and swamp habitats. Often in areas of freshwater or brackish water.	**Presumed absent.** No suitable marsh, swamp, or brackish water habitat was identified during habitat assessment. The closest record of this species was documented 4.27 miles west of the project site in Santa Barbara County in 1886 (CDFW 2022).
Nolina cismontana chaparral nolina	Fed: Ca: CNPS:	None None 1B.1	(Mar) May – July 460-4185	Occurs in chaparral and coastal scrub habitats. Often found in areas with sandstone or gabbro.	**Low:** Suitable limited chaparral and coastal scrub habitat was identified during habitat assessment. No record of this species is documented within a 5-mile radius (CDFW and USFWS 2022).
Piperia michaelii Michael's rein orchid	Fed: Ca: CNPS:	None None 4.2	Apr. – Aug. 3-915	Occurs in coastal bluff scruff, chaparral, cismontane forest, closed cone coniferous forest, coastal scrub and lower coniferous montane forest.	**Presumed absent.** No suitable habitat was identified during habitat assessment. No record of this species is documented within a 5-mile radius (CDFW and USFWS 2022).

Scientific Name **Common Name**	**Status**		**Bloom Period & Elevation (meters)**	**Habitat Requirements**	**Potential for Occurrence**
Quercus dumosa Nuttall's scrub oak	Fed: Ca: CNPS:	None None 1B.1	Feb. – Apr (May –Aug.) 50-1310	Occurs in chaparral, closed-cone coniferous forest, and coastal scrub habitats.	**Moderate:** Suitable chaparral and coastal scrub habitat was identified during habitat assessment. The closest record of this species was identified 2 miles east of the project site in Montecito in 2010 (CDFW 2022).
Ribes amarum **var. *hoffmanni*** Hoffman's bitter gooseberry	Fed: Ca: CNPS:	None None 3	Mar. – April 5-1190	Occurs in chaparral and riparian woodland habitat. This species is common in the Santa Ynez mountains.	**Low.** Suitable chaparral and riparian habitat were identified during habitat assessment. No record of this species is documented within a 5-mile radius (CDFW and USFWS 2022).
Scrophularia atrata black-flowered figwort	Fed: Ca: CNPS:	None None 1B.2	Mar. – July 35-1640	Occurs in chaparral, closed-cone coniferous forest, coastal dunes, coastal scrub, and riparian scrub habitats.	**Low:** Suitable limited coastal sage scrub habitat identified during habitat assessment. The closest record of this species was documented 3.12 miles northeast in Escondido Canyon at Escondido Spring in 1962 (CDFFW 2022).
Streptanthus campestris southern jewel-flower	Fed: Ca: CNPS:	None None 1B.3	Apr. – Jul 900-2300	Occurs in rocky areas of chaparral, lower montane coniferous forest, and pinyon and juniper woodland.	**Low.** Limited chaparral habitat was identified during habitat assessment. Most recent record of this species was documented in Ventura County in 1994 (CDFW 2022).
Suaeda taxifolia woolly seablite	Fed: Ca: CNPS:	none none 4.2	Jan. – Dec. 0-50	Occurs in coastal dunes, coastal bluff scrub, margins of coastal salt marshes and swamps.	**Presumed absent.** The Project site is outside of the elevation range of this species. No record of this species is documented within a 5-mile radius (CDFW and USFWS 2022).
Thelypteris puberula var. sonorensis Sonoran maiden fern	Fed: Ca: CNPS:	None None 2B.2	Jan. – Sept. 165-2000	Occurs in wetland-riparian, meadows and seeps.	**Low:** Suitable limited riparian habitat was identified during habitat assessment. The closest and most recent record of this species was documented 1.46 miles northeast from Project site on Romero Canyon Trail in the Santa Ynez Mountains in 2011 (CDFW 2022).

Scientific Name Common Name	Status		Bloom Period & Elevation (meters)	Habitat Requirements	Potential for Occurrence
Thermopsis macrophylla Santa Ynez false lupine	Fed: Ca: CNPS:	None None 1B.3	Apr. – June 425-1400	Occurs in chaparral, typically in disturbed areas with granitic and sandy subterrain. Threatened by fire suppression, nan-native plants, recreational activities and road maintenance.	**Low.** Limited disturbed chaparral habitat and ideal elevation was identified during habitat assessment. The most recent record of this species was documented in 1955 (CDFW 2022).

Federal Designations:
(Federal Endangered Species Act, USFWS)

END: federally listed, endangered
THR: federally listed, threatened
CAN: Candidate

State designations:
(California Endangered Species Act, CDFW)

END: state-listed, endangered
THR: state-listed, threatened
CAN: Candidate

APPENDIX F

Potential for Occurrence of Wildlife Species

Scientific Name **Common Name**	**Status**		**Habitat**	**Potential for Occurrence**
INVERTEBRATES				
***Danaus plexippus* pop. 1** monarch butterfly (overwintering population)	Fed: Ca:	**CAN** none	Roosts in wind-protected tree groves (Coastal California conifer, Eucalyptus) from Northern Mendocino to Baja California.	**Low.** Limited or marginal habitat is present. No suitable wind-protected tree groves or eucalyptus trees on site. Ten recent observations of this species have been logged into CNDDB within 5 miles of the site. The closest observation was 0.9 miles from the Project site.
FISH				
Eucyclogobius newberryi tidewater goby	Fed: Ca:	**END** none	Lower reaches of streams, upper portions of large bays, and small coastal lagoons. Occurs in fresh to brackish water.	**Presumed absent.** Limited and low-quality habitat on site in scattered portions of creek; however, portions were too small and non-contiguous to provide habitat conducive to the species. The nearest recent sighting of this species was 3.22 miles southwest of the site.
Oncorhynchus mykiss irideus pop. 10 steelhead - southern California DPS	Fed: Ca:	**END** none	Typically occurs in slow water streams or rivers.	**Presumed absent**. Creek on site provides limited and low-quality habitat in scattered portions of creek; however, portions were too small and non-contiguous to provide habitat conducive to the species. Most of creek on the site was unsuitable due to shallow depth, relatively high gradient, thick filamentous algae, and large amounts of debris. Creek has run dry in the past years and does not provide a permanent flowing stream. There was one recent record of this species within 5 miles of the site, which took place 0.58 miles west of the Project site.

Scientific Name **Common Name**	**Status**		**Habitat**	**Potential for Occurrence**
AMPHIBIANS				
Anaxyrus californicus arroyo toad	Fed: Ca:	**END** SSC	Sandy banks of rivers, arroyos, and streams with shallow sandy pools. Also found in riparian woodlands or uplands adjacent to arroyos.	**Low.** Limited and low-quality habitat exists in and along the narrow creek. Site provides a creek with adjacent riparian oak woodland and upland habitat; however, it had limited amounts of arroyos, sandy banks, and no pools. The nearest record was 3.88 miles north of the Project site.
Rana draytonii California red-legged frog	Fed: Ca:	**THR** SSC	Found near water features such as ponds or streams in humid forests, grasslands, coastal scrub, and woodlands.	**Low.** Limited suitable habitat on site. Creek is dry and lacks pools suitable for the species. The nearest record was 1.85 miles west of the Project site .
Rana boylii Foothill yellow-legged frog	Fed: Ca:	none **END**	Found near rocky streams like valley-foothill hardwood, hardwood-conifer- riparian, ponderosa pine, mixed conifer, coastal scrub, mixed chaparral and wet meadows.	**Presumed Absent.** No suitable ponds, pools, or lake habitat was present on the Project site. Five recent records, the nearest of which was 3.41 miles northeast of the site.
Taricha torosa coast range newt	Fed: Ca:	none SSC	Upland areas including grasslands, forests, and woodlands. Burrows in soil or wood debris.	**Low.** Marginal habitat exists in the red willow riparian woodlands on the site. The nearest recent sighting took place 2.36 miles west of the Project site.
REPTILES				
Anniella pulchra northern California legless lizard	Fed: Ca:	none SSC	Typically occurs in moist warm loose soil with plant cover in sparsely vegetated areas of beach dunes, chaparral, pine-oak woodlands, desert scrub, sandy washes, and stream terraces with sycamores, cottonwoods, or oaks.	**Low**. Limited habitat available on the Project site. Two recent and eleven historic records found in a 7-quad search. Nearest sighting was 4.27 miles west of the Project site.
***Anniella* spp.** California legless lizard	Fed: Ca:	none SSC	Coastal sand dunes, and variety of interior habitats including sandy washes and alluvial fans. Occurs in moist warm loose soil with plant cover and sparsely vegetated beach dunes, pine-oak woodlands, desert scrub, chaparral, and stream terraces. Sometimes found in suburban gardens.	**Low**. Limited habitat available on the Project site. One recent and eight historic sightings of this species. The nearest sighting of this species was 3.84 miles southeast of the Project site .

Scientific Name **Common Name**	**Status**		**Habitat**	**Potential for Occurrence**
Aspidoscelis tigris stejnegeri coastal whiptail	Fed: Ca:	none SSC	Arid habitats including chaparral, woodlands, and dry riparian areas.	**Present.** Limited habitat available on the Project site. One recent sighting of this species within 5 miles of the Project site.
Phrynosoma blainvillii coast horned lizard	Fed: Ca:	none SSC	Frequents a wide variety of habitats (Open areas of valleys, foothills, and semiarid mountains with sandy soil and low vegetation including chaparral, woodlands, and grasslands), most common in lowlands along sandy washes with scattered low bushes. Prefers open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of harvester ants and other insects.	**Moderate.** Red willow riparian woodland habitats located throughout the site provide suitable habitat for the species; however, these habitats were disturbed from past fires and nonnative vegetation. Harvester ants were also present. Four historic records within 5 miles.
Emys marmorata western pond turtle	Fed: Ca:	none SSC	Rivers, creeks, small lakes and ponds, marshes, unlined irrigation canals, and reservoirs; including both permanent and intermittent waters and occasionally brackish waters. Often bask on logs, vegetation mats or rocks.	**Low.** Limited and marginal intermittent creek was identified on site. Thirteen recent and three historic records within 5 miles. The closest record takes place 3.39 miles southwest.
Salvadora hexalepis virgultea coast patch-nosed snake	Fed: Ca:	none SSC	Found in coastal chaparral, desert scrub, washes, sandy flats and rocky areas. Will take refuge under bushes, rock crevices and other animal burrows.	**Low.** Limited habitat is available on the Project site. Five historic records of the species, the closest of which is 2.18 miles north of the site.
Thamnophis hammondii two-striped gartersnake	Fed: Ca:	none SSC	Typically occurs near permanent or semi-permanent water in a variety of habitats including chaparral and oak woodland.	**Low.** Limited and marginal riparian habitat was identified during habitat assessment. Two recent and six historic observations of this species in a 7-quad search.
BIRDS				
Charadrius alexandrinus nivosus western snowy plover	Fed: Ca:	**THR** SSC	Sandy beaches, salt pond levees & shores of large alkali lakes. Needs sandy, gravelly or friable soils for nesting. Known protected population in the Tajuana Estuary.	**Presumed absent.** The Project site does not contain suitable habitat for the species. One recent and one historic record within 5 miles of the site. The nearer of the two was 3.63 miles southwest of the Project site .

Scientific Name **Common Name**	**Status**		**Habitat**	**Potential for Occurrence**
Coturnicops noveboracensis yellow rail	Fed: Ca:	none SSC	Typically occurs in freshwater marshlands.	**Presumed absent.** The Project site does not contain marshland habitat. The nearest observation of this species was 3.68 miles southwest of the Project site.
Elanus leucurus white-tailed kite (nesting)	Fed: Ca:	none FP	Open habitat in lowlands including savanna, open woodlands, marshes, and agricultural fields. Nests in trees near a marsh.	**Presumed absent.** The site is outside the current breeding range. No recent records in vicinity, only one historic record more than 5 miles away.
Empidonax traillii extimus southwestern willow flycatcher (nesting)	Fed: Ca:	**END** **END**	Breeds in riparian forests. Nests are often placed in dense vegetation along streams or rivers including willow.	**Low.** Red willow riparian woodland onsite is early successional and not dense enough to be suitable for this species. No recent records in vicinity, three historic. Closest one was 4.51 miles north of the site.
Gymnogyps californianus California condor	Fed: Ca:	**END** **END, FP**	Occurs in large areas of remote country that is suitable for foraging, roosting and nesting. Seen resting on large trees, snags, isolated rocky outcrops and cliffs.	**Presumed absent.** There is no suitable habitat for this species onsite. Project site is located within the San Gabriel mountains. Rocky cliffs on the site provide suitable nesting habitat. Two historical records more than 5 miles away.
Laterallus jamaicensis coturniculus California black rail	Fed: Ca:	none **THR, FP**	Coastal and estuarine saltmarshes especially dominated by pickleweed and matted salt grass. Freshwater marshes with shallow and stable water levels and flat shorelines.	**Presumed absent.** There is no suitable habitat for this species. One historic record occurs 3.68 miles southwest of the Project site.
Passerculus sandwichensis beldingi Belding's savannah sparrow	Fed: Ca:	none **END**	Salt marshes, especially with pickleweed. Nests on ground at higher levels of marsh, out of the reach of high tides.	**Low.** Coastal sage scrub habitat was present on the Project site though no marshes on site**.** Only one historic occurrence 4.81 miles southeast of the Project site.
Rallus obsoletus levipes light-footed Ridgway's rail	Fed: Ca:	**END** **END, FP**	Occurs in shallow water where mudflats are present for foraging and found nesting within mash vegetation.	**Presumed absent.** The Project site does not contain suitable habitat. One recent observation has been made greater than 5 miles away from the Project site.

Scientific Name **Common Name**	**Status**		**Habitat**	**Potential for Occurrence**
Riparia riparia bank swallow (nesting)	Fed: Ca:	none **THR**	Open and semi-open habitats, such as fields or marshes, often near flowing water. Nests in colonies in vertical banks of sand or dirt along a water body typically in lowland areas.	**Presumed absent.** The Project site is outside of the current breeding range for the species. There have been two historical flyover sightings of this species, one of which was within 5 miles of the site.
Dendroica petechia yellow warbler (nesting)	Fed: Ca:	none SSC	Riparian woodlands especially with willows, open scrub, gardens, and thickets often near water.	**Moderate.** Suitable riparian woodland, particularly willows are present onsite. There has been one sighting of this species greater than 5 miles away from the Project site.
Sternula antillarum browni California least tern	Fed: Ca:	**END** **END, FP**	Occurs along the coast near undisturbed vegetated sandy or gravelly ground. Prefers habitat with very low vegetation densities.	**Presumed absent.** No suitable habitat was present onsite. One historical record of this species within 5 miles of the Project site exists.
Vireo bellii pusillus least Bell's vireo (nesting)	Fed: Ca:	**END** **END**	Summer resident of southern California in low riparian in vicinity of water or in dry river bottoms; below 2000 ft. Riparian woodlands and willow-cottonwood forests particularly with streamside thickets and dense brush. Usually nests in willow, mulefat, mesquite.	**Low**: Habitat does exist for this species on the Project site; however, the red willow riparian woodland habitat is early successional and sparse. One recent and three historical records of this species appear within a 7-Quad search of the Project area. The nearest observation was 4.16 miles north of the Project site.
MAMMALIA				
Corynorhinus townsendii Townsend's big-eared bat	Fed: Ca:	none SSC	Western desert scrub and dry uplands, but also pine and deciduous forests along the Pacific coast. Forages in a wide variety of habitats including forested and edge habitats, and riparian areas. Requires spacious areas with broad and open surfaces for roosting. Mainly roosts in abandoned mines or caves with little to no disturbance but may also use abandoned buildings, bridges, or other crevices.	**Low.** No suitable roosting habitat was present, but limited and marginal foraging habitat was present. No recent records within five miles. Two historic records within 5 miles. The closer one was 4.47 miles to the southeast of the Project site.

Scientific Name **Common Name**	**Status**		**Habitat**	**Potential for Occurrence**
Neotoma lepida intermedia San Diego desert woodrat	Fed: Ca:	none SSC	Found in a variety of habitats including coastal scrub, chaparral, and sandy desert habitats of Southern California from San Diego County to San Luis Obispo County. Prefers moderate to dense canopies. Particularly abundant in rock outcrops & rocky cliffs & slopes. May also be found in woodlands of Joshua trees or pinyon-juniper pine. Food plants include buckwheat, sagebrush, mustard, oak, chamise, cholla, creosote bush, and prickly pear.	**Moderate.** Suitable scrub (including California buckwheat scrub) and chaparral habitats occur across the site. No rock outcrops and rocky cliffs and slopes were present. Moderate to dense canopies and food plants (coast live oak, California buckwheat, California sagebrush, and mustard) were present throughout the site; however, no middens were observed. Two historic occurrences more than 5 miles away from site.
Nyctinomops macrotis big free-tailed bat	Fed: Ca:	none SSC	Roosts in cliff crevices, and less often in buildings, caves, and tree cavities. Occurs in rocky areas of rugged and hilly country including woodlands, evergreen forests, river floodplain-arroyo habitats, and desert scrub.	**Low.** The site is located in rugged and hilly country and includes coast live oak woodlands. No roosting habitat is present onsite. Marginal roosting habitat was present in the tree cavities, snags, and buildings. Limited one historic record more than 9 miles south of site.

Federal Designations (Federal Endangered Species Act, USFWS)

END: federally listed, endangered
THR: federally listed, threatened
DL: federally delisted

State designations: (California Endangered Species Act, CDFW)

END: state-listed, endangered
THR: state-listed, threatened
SSC: California Species of Special Concern
FP: Fully Protected species

Source: California Natural Diversity Data Base (CNDDB) California Native Plant Society Electronic Inventory (CNPSEI) Sunland, Mint Canyon, San Fernando, Van Nuys, Agua Dulce, Burbank, Acton, Condor Peak, and Pasadena .7.5-minute topographic quadrangles.

Attachment 6

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Research & Collections

e-mail: paleorecords@nhm.org

June 25, 2022

ECORP Consulting, Inc.
Attn: Niranjala Kottachchi

re: Paleontological resources for the Santa Barbara Debris Basin Project (2022-033.01)

Dear Niranjala:

I have conducted a thorough search of our paleontology collection records for the locality and specimen data for proposed development at the Santa Barbara Debris Basin project area as outlined on the portion of the Carpinteria USGS topographic quadrangle map that you sent to me via e-mail on June 14, 2022. We do not have any fossil localities that lie directly within the proposed project area, but we do have fossil localities from the same sedimentary deposits that occur in the proposed project area, either at the surface or at depth.

The following table shows the closest known localities in the collection of the Natural History Museum of Los Angeles County (NHMLA).

Locality Number	Location	Formation	Taxa	Depth
LACM IP 26982	Carpinteria Creek; 0.5 mile up creek from Carpinteria Plain; approximately 3.2 miles north of Rincon Point	Coldwater Sandstone	densely packed mollusc bed	surface
LACM IP 27015	north side of Santa Ynez River; within 1000 feet of 3500 feet north; 300 feet west of SE corner section 1; T5N; R29W; San Marcos Pass quad	Coldwater Sandstone	Invertebrates including *Venericardia*	surface
LACM IP 41115	Along Hwy 33 north of Cherry Canyon Rd and Sandstone camp	Coldwater Sandstone	Invertebrates	Unknown
LACM IP 16672	Along Highway 33; above Adobe Creek	Coldwater Sandstone	Invertebrates	Unknown
LACM IP	Carpinteria Creek;	Coldwater	densely packed mollusc bed	surface

26982	0.5 mile up creek from Carpinteria Plain; approximately 3.2 miles north of Rincon Point	Sandstone		
LACM IP 27015	north side of Santa Ynez River; within 1000 feet of 3500 feet north; 300 feet west of SE corner section 1; T5N; R29W; San Marcos Pass quad	Coldwater Sandstone	Invertebrates including *Venericardia*	surface

VP, Vertebrate Paleontology; IP, Invertebrate Paleontology; bgs, below ground surface

This records search covers only the records of the NHMLA. It is not intended as a paleontological assessment of the project area for the purposes of CEQA or NEPA. Potentially fossil-bearing units are present in the project area, either at the surface or in the subsurface. As such, NHMLA recommends that a full paleontological assessment of the project area be conducted by a paleontologist meeting Bureau of Land Management or Society of Vertebrate Paleontology standards.

Sincerely,

Alyssa Bell, Ph.D.
Natural History Museum of Los Angeles County

enclosure: invoice