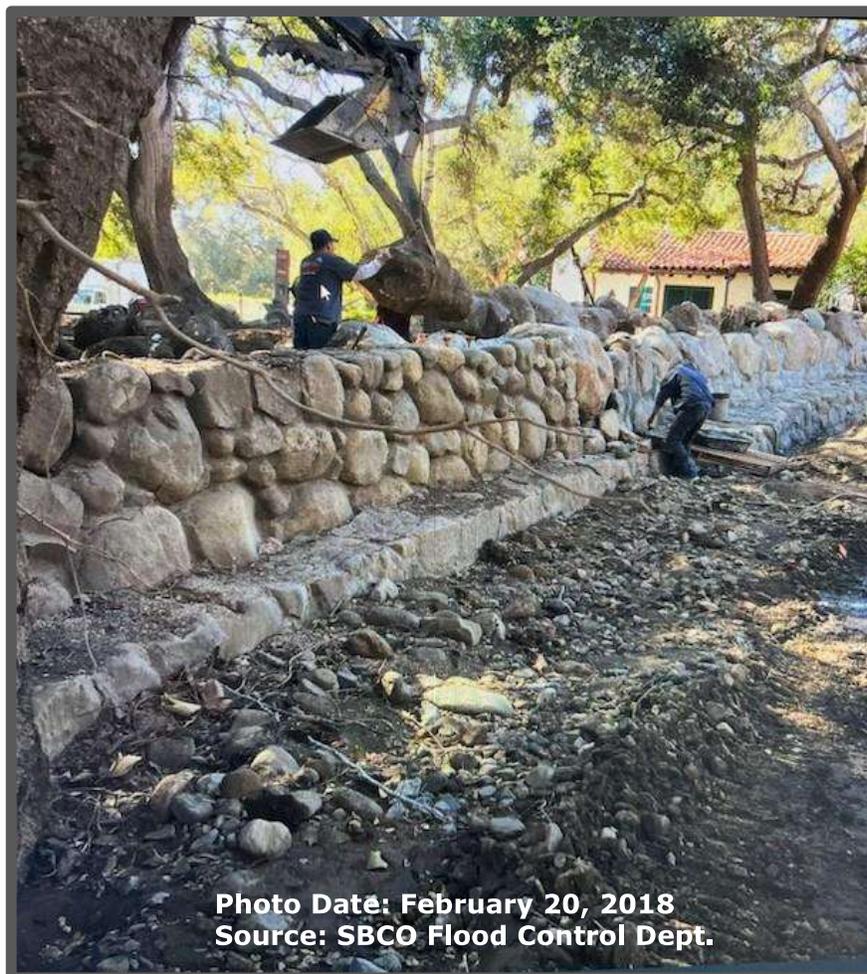


August 28, 2023

**BIOLOGICAL REPORT
AS-BUILT WALL REPAIR PROJECT
1690 San Leandro Lane (APN: 007-280-012)
Montecito, California**



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BIOLOGICAL ASSESSMENT
AS-BUILT WALL REPAIR PROJECT
1690 San Leandro Lane (APN: 007-280-012)
Montecito, California

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1.0 INTRODUCTION

This biological report describes the results of biological surveys performed at and adjacent to an existing grouted boulder wall on the western bank of San Ysidro Creek in the northeastern corner of the 1690 San Leandro Lane (APN: 007-280-012) parcel in Montecito, California. The property is 4.01 acres in size and is located within the County of Santa Barbara Montecito Community Plan (SBCO 1992) planning area, within the Coastal Zone (Figure 1). Watershed Environmental, Inc. prepared this report under contract to the property owner Promised Land LLC.

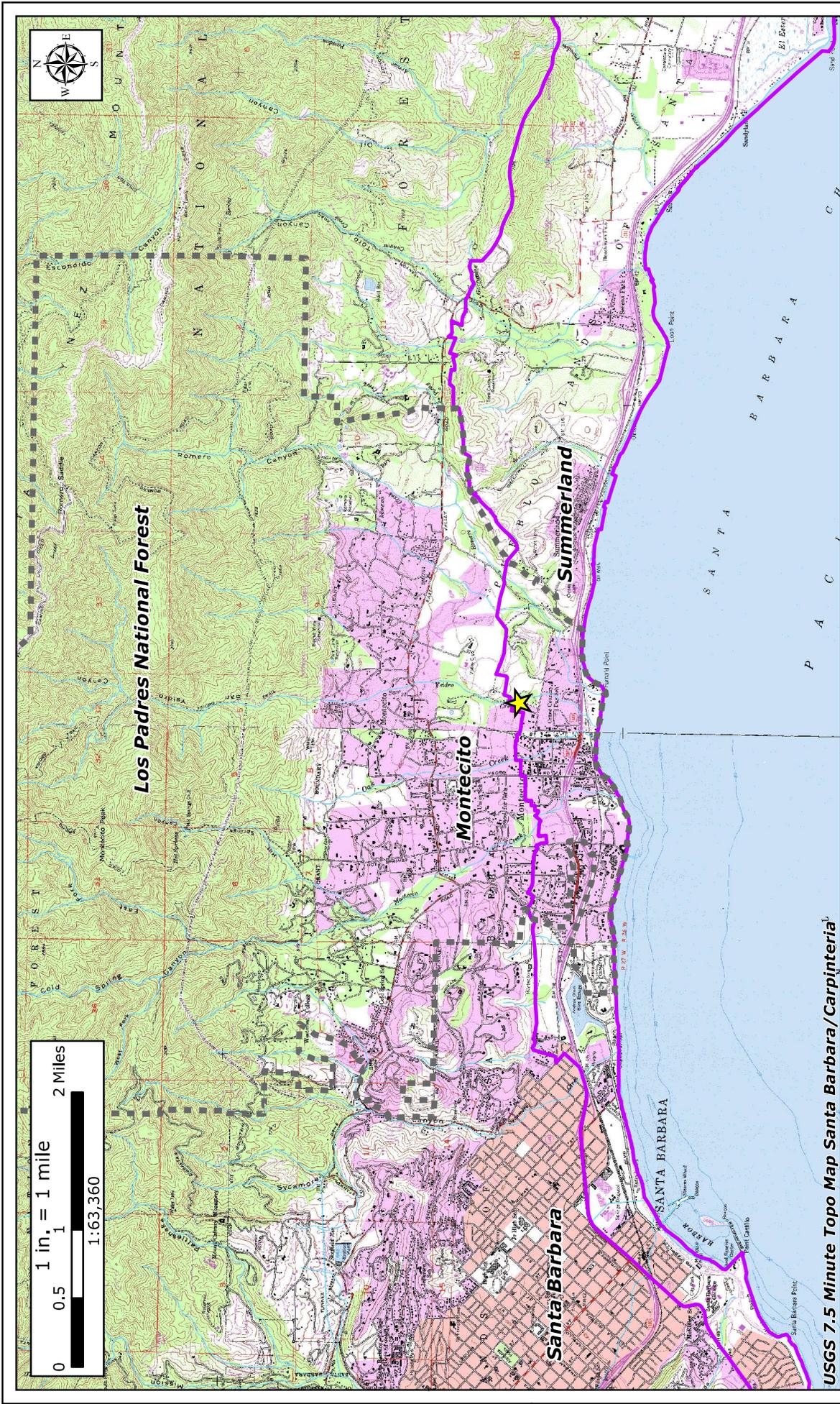
This report is designed for the County of Santa Barbara to use in its environmental review and permitting of an As-Built Wall Repair project on the western bank of San Ysidro Creek. Repairs were made to the existing grouted sandstone boulder wall by the previous property owner in February and March of 2018 after the January 9, 2018 Montecito mud/debris flow damaged the wall, the existing single-family residence, and deposited mud and debris over all of the 1690 San Leandro Lane property. The County of Santa Barbara Planning and Development Department issued a Notice of Violation to the current property owner on April 19, 2023 in response to a complaint received on March 10, 2023, despite the fact that repairs to wall were performed by the previous property owner more than 5 years ago. County zoning enforcement officer Paul Hannah performed a site visit on April 4, 2023 and determined that repairs to the wall occurred within County designated Environmentally Sensitive Habitat without a Coastal Development Permit (CDP). The County Coastal Zoning Ordinance requires that a CDP be obtained prior to reconstruction of structures damaged or destroyed by a natural disaster when that structure is within Environmentally Sensitive Habitat. The current property owner is seeking to resolve the Notice of Violation by obtaining an As-Built CDP authorizing the wall repairs that were made in 2018 by the previous property owner.

The Santa Barbara County Planning and Development Department is the lead agency for this project and is responsible for ensuring compliance with the California Environmental Quality Act (CEQA). This report provides the following: a description of the existing conditions in and adjacent to the repaired grouted sandstone boulder wall; an assessment of potential impacts to biological resources that occurred when the wall was repaired per the 2023 CEQA statutes and guidelines and the County of Santa Barbara 2021 *Environmental Thresholds and Guidelines Manual*; recommended biological mitigation measures to ensure project consistency with applicable Santa Barbara County Comprehensive Plan (SBCO 1979, amended 2010) and Montecito Community Plan biological resource protection policies and development standards; and an evaluation of project consistency with Federal and State biological resource protection statutes.

2.0 PROJECT DESCRIPTION

The grouted sandstone boulder wall is approximately 110 ft. long, 2 to 12 ft. tall and 7.5 to 15 ft. wide (Figure 2). It was repaired in February and March of 2018 after the January 9, 2018 Montecito mud/debris flow. Repairs to the damaged wall were performed using an excavator to pick up sandstone boulders and place them where they were needed. Repairs did not change the wall footprint.

The excavator used to repair the wall was staged behind (south) the wall and does not appear to have been used, operated, or staged in the creek bed itself. Hand labor crews



USGS 7.5 Minute Topo Map Santa Barbara/Carpinteria

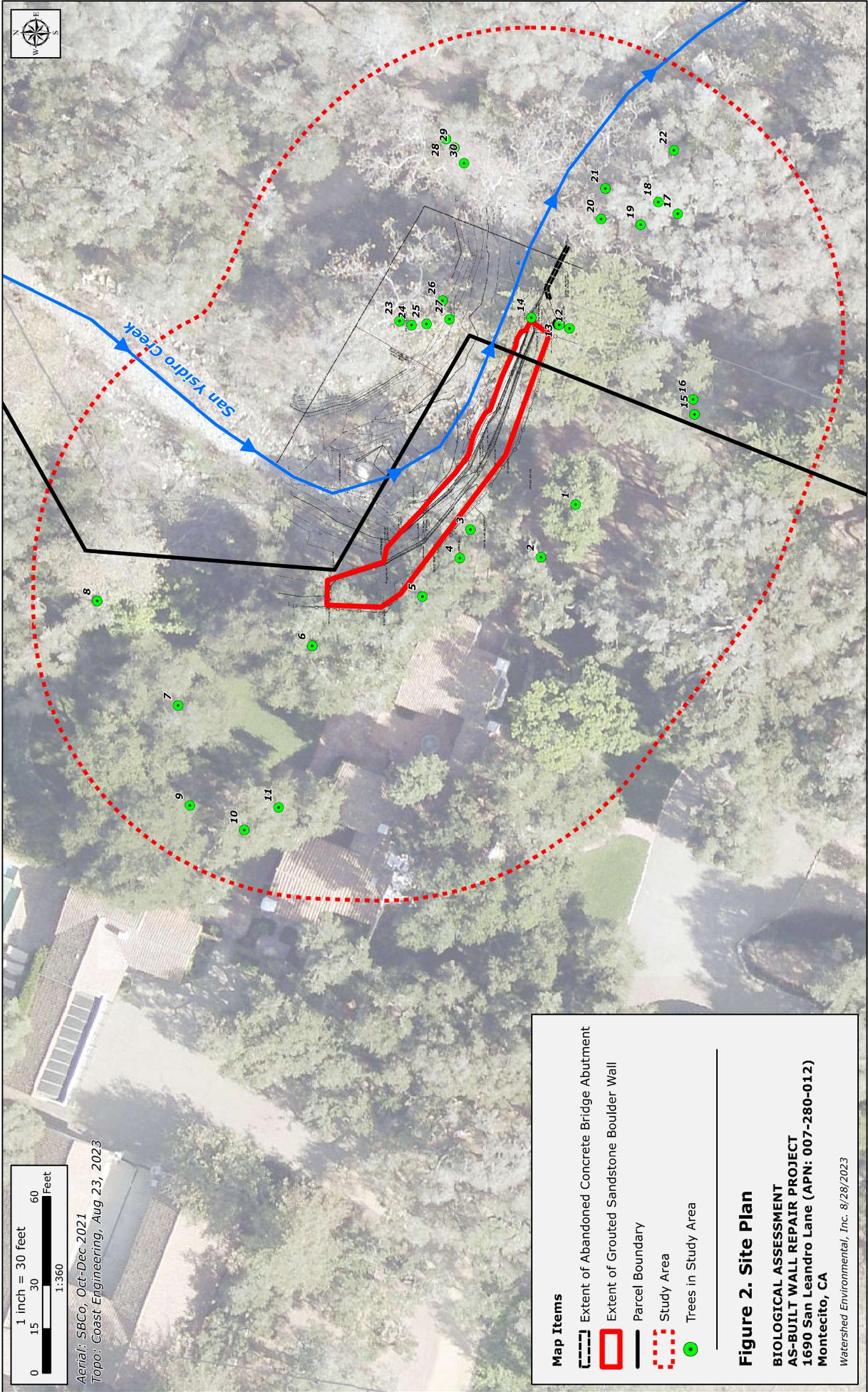
Legend

 Coastal Zone (SBCO)

 Project Location

 Montecito Community Plan

Figure 1. Location Map
BIOLOGICAL ASSESSMENT
AS-BUILT WALL REPAIR PROJECT
1690 San Leandro Lane (APN: 007-280-012), Montecito, CA



1 inch = 30 feet
 0 15 30 60 Feet
 1:360

Aerial: SBCo, Oct-Dec 2021
 Topo: Coast Engineering, Aug 23, 2023

Map Items

- Extent of Abandoned Concrete Bridge Abutment
- Extent of Grouted Sandstone Boulder Wall
- Parcel Boundary
- Study Area
- Trees in Study Area

Figure 2. Site Plan

BIOLOGICAL ASSESSMENT
AS-BUILT WALL REPAIR PROJECT
1690 San Leandro Lane (APN: 007-280-012)
Montecito, CA
 Watershed Environmental, Inc. 8/28/2023

used 5-gallon buckets of cement to grout the sandstone boulders in place. The wall was repaired while the County Flood Control Department and ACOE were operating heavy equipment in the creek bed to clear debris deposited by the January 2018 mud/debris flow.

The wall is directly adjacent (west) to an old abandoned concrete bridge abutment. Based on our review of historic aerial photographs from 1954 and 1972 (UCSB Map and Imagery Library 2023), there was a tree-lined driveway that ran from San Leandro Lane across San Ysidro Creek to the Dominguez Adobe (AKA the Cox/Boeseke Adobe) on the San Leandro Ranch, which is now a residential subdivision known as Ennisbrook. The grouted sandstone boulder wall was most likely originally built in the early 1900s to protect the bridge abutment and the driveway to the Dominguez Adobe.

Watershed Environmental was unable to determine the precise date when the wall was built, but we were able to obtain a photograph of the wall taken by the Santa Barbara County flood control department on April 2, 2014. The wall was covered in English ivy in 2014, but the trees in the background of the wall are still present today and are what Watershed Environmental Inc. personnel used to confirm that the 2014 photo is the same wall that was repaired in 2018.

3.0 SURVEY METHODS

Watershed Environmental, Inc. biologist Mark de la Garza and environmental/GIS analyst Dominick Burnham performed a survey of the wall and surrounding adjacent area on May 8 and July 28, 2023. The May 8th survey was performed between the hours of 10am and 1:30 pm and the July 28th survey was performed between 9:00 and 11:00 am. The weather at the time of the May 8th survey was clear and calm with a temperature of 66° F. Weather during the July 28th survey was 68° F with scattered high clouds.

Field surveys were performed on foot and consisted of walking through the creek bed and bank adjacent to the wall and walking through the landscaped portion of the property adjacent to the wall. Field notes were used to record flora and fauna observed in the project area. Vegetation and land cover mapping was performed on a 1-in.=25-ft.-scale field map with a Oct-Dec 2021 color aerial photograph background obtained from the County of Santa Barbara. The trunk diameter at breast height (DBH) of all trees with a trunk 6 inches or larger was measured with a forester's measuring tape 4.5 ft. above ground level and the trees were assigned unique identification numbers. Photographs of the areas surveyed were taken to document existing conditions and are provided in Attachment 1.

Botanical surveys followed the US Fish and Wildlife Service's *Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed, and Candidate Plants (USFWS 2001)*, and the California Department of Fish and Wildlife *Protocols for Surveying and Evaluating Impacts to Special-Status Native Plant Populations and Natural Communities (CDFW 2018)*. Wildlife surveys followed standard professional practices and the County of Santa Barbara's *Biological Survey Guidelines (SBCO 1995 revised 2021)*. Background biological information was obtained from the most recent August 2023 California Department of Fish and Wildlife California Natural Diversity Data Base (CDFW August 2023), and the County of Santa Barbara 2020 Environmentally Sensitive Habitat Geographic Information System Data (SBCO 2018 revised May 2020).

4.0 ENVIRONMENTAL SETTING

4.1 Land Use, Zoning and Parcel History

The 1690 San Leandro Lane property (APN: 007-280-012) is developed with a single-family residence, a barn, and a guest cottage. The single-family residence was built in 1919. The property is zoned 2-E-1 for single-family residential use, is in a designated "urban" area, and is within the Coastal Zone. The entire property is within a designated "Very High Fire Hazard Severity Zone" (California Assembly Bill 38 2023) and the eastern portion of the property is within the Federal Emergency Management Agency designated 100-year flood hazard zone (FEMA 2023).

The entire 1690 San Leandro Lane property was heavily impacted by the January 9, 2018 Montecito mud/debris flow. The damage was so bad that residents of the property were evacuated by helicopter from the roof of their home. Mud and debris covered the entire 4.01 acre property (Bessette-Kirton, Erin et. al. 2019.). The Parcel History Report (SBCO 2023) for this property shows that the previous property owners obtained a permit (18DIS-00127) on January 23, 2018 from the County of Santa to remove mud and debris from their property, but did not obtain a CDP to repair the grouted sandstone boulder wall on the creek bank.

4.2 Topography

Elevations on the property range from a high of 93 ft. along the northern property line to a low of 73 ft. along the southern property line. San Ysidro Creek flows through the northeast corner of the property and makes a sharp turn toward the east at the grouted sandstone boulder wall. The wall is located at an elevation of approximately 83-93 ft. and extends from the creek top of bank to the bottom of the creek bed.

4.3 Soils

Soils on the property are mapped by the Natural Resource Conservation Service (NRCS 2023) as Cortona stony loamy sand (ChC). This soil type occurs along major stream channels on 2 to 9 percent slopes and contains a very stony subsurface. It is classified as excessively drained with a medium runoff rate and a moderate to high overflow hazard. This soil type is not listed as hydric by the NRCS (NRCS 2019).

4.4 Watercourses & Wetlands

San Ysidro Creek flows through the northeast corner of the 1690 San Leandro Lane property. The creek headwaters begin in the Santa Ynez Mountains in the Los Padres National Forest. The creek flows in a north to south direction through Montecito and outlets into the Pacific Ocean approximately 2 miles south of the project site at Fernald Point. The United States Geological Survey (USGS) Carpinteria 7.5-minute topographic map depicts the section of San Ysidro Creek that flows through Montecito as a dashed blue line stream, indicating intermittent flow. The National Hydrography Dataset (USGS 2023) and the National Wetland Inventory (USFWS 2023) also depict the creek as an intermittent stream. There are no other drainage features, seeps, springs, or ponds on this property. During our May 8 and July 28, 2023 surveys, San Ysidro Creek was actively flowing. The creek bed and banks are natural with numerous large sandstone boulders in a cobble, sand, and gravel matrix. The creek banks are well defined with 8-12 ft. high nearly vertical banks.

The Santa Barbara County Flood Control Department and Army Corps of Engineers collaborated to remove debris from the bed and banks of San Ysidro Creek after the January 9, 2018 mud/debris flow. Large bulldozers and excavators were used to clear debris, and dump trucks were used to haul the debris offsite to several different disposal locations. The flood control department also built a large debris basin approximately 1.5 miles upstream of the 1690 San Leandro Lane property. The goal of this work was to restore the hydrologic capacity of the creek and reduce the potential for future flooding. As part of our background research for this report, we obtained photographs (see attachment 1) from the County Flood Control Department taken between February and April of 2018 while the Flood Control Department and ACOE were removed debris from the creek bed directly adjacent to the grouted sandstone boulder wall that at the time was being repaired.

4.5 Federally Designated Critical Habitat

As part of our background research for this project, we accessed the USFWS online critical habitat mapper to see if there is any federally designated critical habitat for threatened or endangered species on the 1690 San Leandro Lane property. The segment of San Ysidro Creek that flows through the northeastern corner of the property is federally designated critical habitat for endangered southern California steelhead DPS (*Oncorhynchus mykiss*). Critical habitat for the following federally threatened and endangered species exists within 5 miles of the property. Figure 4 depicts the location of critical habitat within 5 miles of the property and CNDDDB special status occurrence records within 3 miles of the property.

- **Arroyo toad (*Anaxyrus californicus*)** Status: endangered. Location: Santa Ynez River and Mono Creek in the Los Padres National Forest 5.05 mi. north of the project site.
- **California red-legged frog (*Rana draytonii*)** Status: threatened. Location: Los Padres National Forest Santa Ynez River Watershed approximately 3.4 mi. north of the project site.
- **Least Bell's vireo (*Vireo bellii pusillus*)** Status: endangered. Location: Santa Ynez River 4.15 miles north of the project site.
- **Southern California steelhead DPS (*Oncorhynchus mykiss*)** Status: endangered. Locations: San Ysidro Creek (on property), Montecito Creek (0.8 mi. west), Romero Creek (0.35 mi. south), Sycamore Creek (2.7 mi. west), Arroyo Paredon Creek (3.75 mi. east), and Mission Creek (3.85 mi. west).
- **Tidewater goby (*Eucyclogobius newberryi*)**. Status: endangered. Location: 3.75 mi. southeast of the project site in the lower reach of Arroyo Paredon Creek.
- **Western snowy plover (*Charadrius nivosus nivosus*)** Status: threatened. Location: 2.4 mi. southwest of the project site on East Beach in Santa Barbara.

4.6 County Designated Environmentally Sensitive Habitat

The County of Santa Barbara has mapped 0.43 acre (18,580 sq. ft.) of Environmentally Sensitive Habitat (ESH) in the northwestern corner of the 1690 San Leandro Lane property. The entire grouted sandstone boulder wall is located within County-mapped ESH. The existing vegetation on the property within the County-mapped ESH is coast live oak riparian woodland with a few large Monterey cypress trees and an understory that is currently comprised of non-native ornamental vines, herbs, and shrubs. However, in February and March of 2018 when the wall was repaired, all of the understory

vegetation adjacent to the wall had been destroyed by the January 9, 2018 Montecito mud/debris flow.

5.0 SURVEY RESULTS

5.1 Vegetation and Land Cover Types

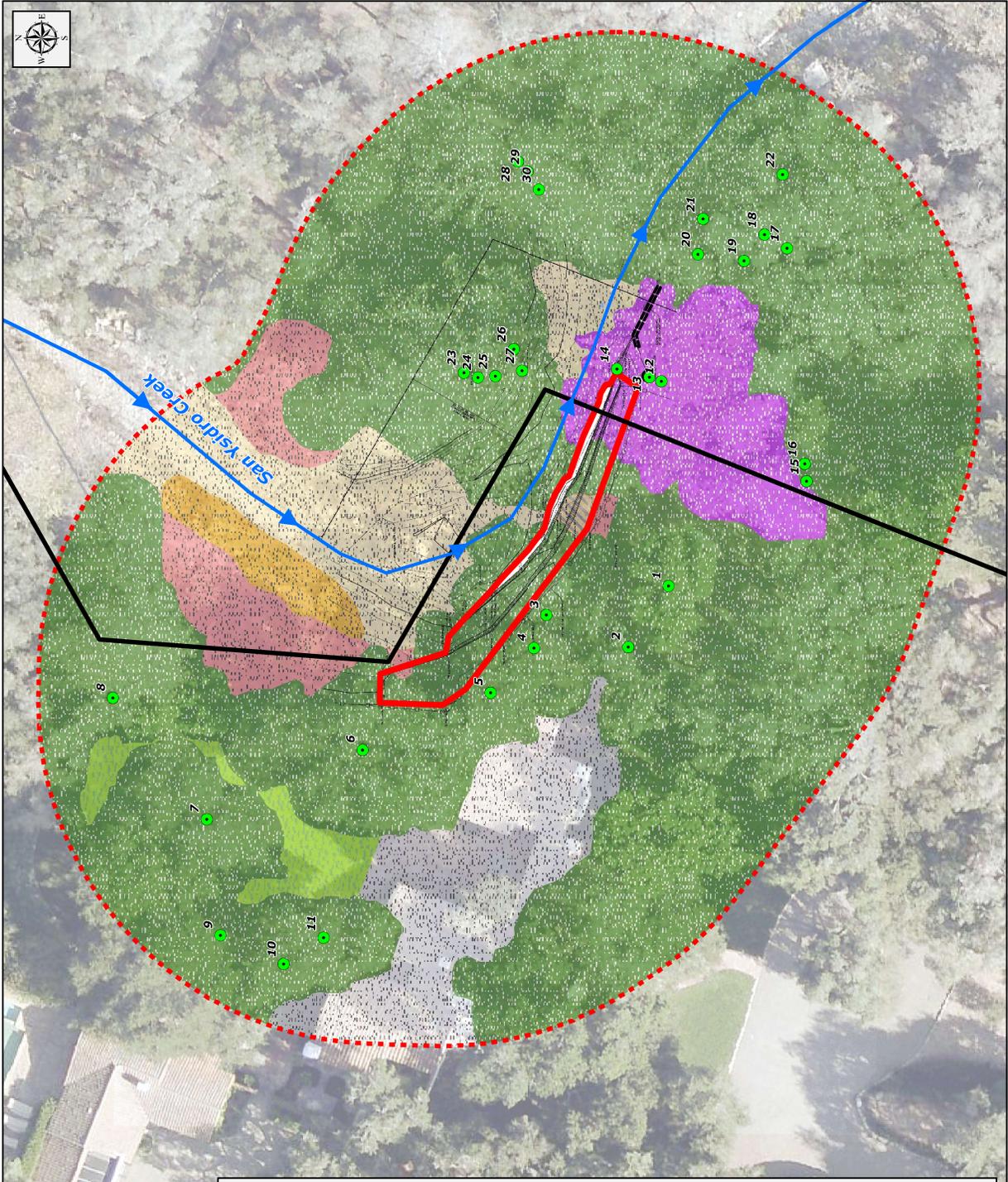
We performed vegetation and land cover mapping by identifying plant species and land cover types and mapping their aerial extent on a 1-in.=50-ft. color aerial photograph taken between October and December 2021. "Land cover" describes developed areas that contain no vegetation, referring to structures, roads, and paved surfaces. Vegetation type classification and nomenclature follow the *Manual of California Vegetation 2nd Edition* (2009 Sawyer et al.), which has 3 main categories:

1. **Forests and Woodlands** with a tree canopy of at least 10 percent over denser layers of shrubs and herbaceous species.
2. **Shrublands** with at least 10 percent shrub cover and less than 10 percent tree cover; herbaceous species may have total higher cover than shrubs.
3. **Herbaceous** dominated by graminoids (grasses) and forbs with less than 10 percent shrubs, sub-shrubs, and trees.

Environmentally sensitive habitats include: 1) habitat/vegetation types that the Santa Barbara County Comprehensive Plan (SBCO 1979, amended 2010) identifies as environmentally sensitive and 2) vegetation types that the CDFW California Natural Communities List (CDFW June 1, 2023) identifies as sensitive or rare with a rarity ranking of S3.2 or higher. Within our study area for this as-built wall project, we identified 5 different vegetation types and 4 land cover types (Table 1). Figure 3 depicts their extent and location.

Table 1. Existing Vegetation and Land Cover Types in Study Area

Vegetation Types	Area (sq. ft.)	Area (acres)
Arroyo Willow Riparian Scrub	869	0.02
Coast Live Oak Riparian Woodland	43,061	0.99
Monterey Cypress Individual Trees	3,487	0.08
Ornamental Vines and Shrubs	2,337	0.05
Turfgrass Lawn	906	0.02
Subtotal Vegetation	50,660	1.16
Land Cover Types	Area (sq. ft.)	Area (acres)
Boulder Cobble Creek Bed	4,079	0.09
Grouted Sandstone Boulder Wall	107	0.00
Patio & Walkways	1,519	0.03
Residence	2,520	0.06
Subtotal Land Cover	8,225	0.18
GRAND TOTAL VEGETATION AND LAND COVER TYPES	58,885	1.34



1 inch = 30 feet
 0 15 30 60 Feet
 1:360

Aerial: SBCo, Oct-Dec 2021
 Topo: Coast Engineering, Aug 23, 2023

Map Items

- Extent of Abandoned Concrete Bridge Abutment
- Extent of Grouted Sandstone Boulder Wall
- Parcel Boundary
- Study Area
- Trees in Study Area

Vegetation Types

- Arroyo Willow Riparian Scrub
- Coast Live Oak Riparian Woodland
- Monterey Cypress Individual Trees
- Ornamental Vines and Shrubs
- Turfgrass Lawn

Land Cover Types

- Boulder Cobble Creek Bed
- Grouted Sandstone Boulder Wall
- Patio & Walkways
- Residence

Figure 3. Existing Vegetation and Land Cover Types In Study Area
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 AS-BUILT WALL REPAIR PROJECT
 1690 San Leandro Lane (APN: 007-280-012)
 Montecito, CA
 Watershed Environmental, Inc. 8/28/2023

5.1.1 Description of Vegetation Types

Arroyo Willow Riparian Scrub: A small stand of arroyo willows exists in the study area on the western bank of San Ysidro approximately 30 ft. upstream of the grouted sandstone boulder wall. The trees in this stand are small and young and must have sprouted sometime after the January 9 Montecito mud/debris flow and subsequent clean-up efforts. The dominant species is arroyo willow (*Salix lasiolepis*) which is a large multi-branched native shrub. Understory vegetation growing beneath the shrub canopy includes crofton weed (*Ageratina adenophora*) and garden nasturtium (*Tropaeolum majus*). Applying the nomenclature rules in the 2009 *Manual of California Vegetation 2nd Edition* classification scheme, this vegetation stand meets the classification criteria to be called *Salix lasiolepis* shrubland Alliance with a non-native ornamental herbaceous understory association. This vegetation type is not listed by the CDFW as sensitive and CDFW has assigned this vegetation type a global rarity rank of G4 and state rarity rank of S4, meaning it is apparently secure at global and state levels (CDFW June 1, 2023). This vegetation type meets the County of Santa Barbara Montecito Community Plan criteria to be classified as ESH because it is riparian.

Western Sycamore-Coast Live Oak- Riparian Woodland: This vegetation type occurs along the banks of San Ysidro Creek and is dominated by coast live oak (*Quercus agrifolia*) and western sycamore trees (*Platanus racemosa*). There are 21 coast live oak, 5 western sycamore, and 1 California bay (*Umbellularia californica*) trees with trunk diameters 6-inches or larger measured at breast height in this vegetation type within the project study area. The understory vegetation beneath the tree canopy is comprised primarily of ornamental non-native species including: periwinkle (*Vinca major*), cape ivy (*Delairea odorata*), English ivy (*Hedera helix*), Catalina cherry (*Prunus ilicifolia* subsp. *lyonii*) and bay laurel (*Laurus nobilis*). Applying the nomenclature rules in the 2009 *Manual of California Vegetation 2nd Edition* classification scheme, this vegetation stand meets the classification criteria to be called *Platanus racemosa- Quercus agrifolia* Woodland Alliance with a non-native ornamental understory association. This vegetation type is listed by the CDFW as sensitive and CDFW has assigned this vegetation type a global rarity rank of G3 and state rarity rank of S3, meaning it is vulnerable at global and state levels (CDFW June 1, 2023). This vegetation type meets the County of Santa Barbara Montecito Community Plan criteria to be classified as ESH because it is riparian and listed as sensitive by CDFW.

Monterey Cypress Individual Trees: There are 3 large Monterey cypress (*Hesperocyparis macrocarpa*) trees growing in a row in the eastern portion of the study area within County of Santa Barbara-mapped ESH. These trees are native to coastal Monterey County but do not naturally occur in Santa Barbara County and must have been planted a long time ago by the previous property owners. The understory beneath these trees consists primarily of non-native ornamental vines, shrubs, and grasses. These Monterey cypress trees are ornamental landscape trees and therefore do not fit into the 2009 *Manual of California Vegetation 2nd Edition* classification scheme. Given their location, they are not part of a natural vegetation community and as such they do not have a global or state rarity ranking. The 3 Monterey cypress trees in the study area are not considered to be specimen trees and they do not meet the County of Santa Barbara Montecito Community Plan criteria to be classified as protected native trees.

Ornamental Vines and Shrubs: This vegetation type occurs along the western and eastern banks of San Ysidro Creek within the area mapped by the County as ESH. The dominant vine species are periwinkle (*Vinca major*) and cape ivy (*Delairea odorata*) and the dominant shrub species is pride of Madeira (*Echium candicans*). There are also a few

native poison oak (*Toxicodendron diversilobum*) shrubs and some mugwort (*Artemisia douglasiana*) shrubs growing among these non-native vines and shrubs. This ornamental vegetation does not fit into the 2009 *Manual of California Vegetation 2nd Edition* classification scheme and is not listed by the California Natural Diversity Data Base and, as such, it does not have a global or state rarity ranking.

Turfgrass Lawn: This vegetation type occurs in the western portion of the study area, west of the grouted sandstone boulder wall in the landscaped backyard of the 1690 San Leandro Lane existing single family residence. The turfgrass is a sod lawn comprised of a mixture of hybrid tall perennial fescue grasses. This ornamental vegetation does not fit into the 2009 *Manual of California Vegetation 2nd Edition* classification scheme and is not listed by the California Natural Diversity Data Base and, as such, it does not have a global or state rarity ranking.

5.1.2 Description of Land Cover Types

Boulder/Cobble Creek Bed: This land cover type occurs along the flow line of San Ysidro Creek. The vegetation in this area was destroyed by the January 9, 2018 mud/debris flow and the subsequent cleanup efforts. The absolute vegetation cover within areas mapped as boulder/cobble creek bed is less than 10 percent and is comprised of a few scattered native herbs including scarlet monkeyflower (*Erythranthe cardinalis*) and willow weed (*Persicaria lapathifolia*). This land cover type meets the Montecito Community Plan criteria to be classified as ESH because it occurs along the flowline of San Ysidro Creek.

Concrete Bridge Abutment: This landcover type occurs immediately adjacent (east) of the grouted sandstone boulder wall.

Grouted Sandstone Boulder Wall: This landcover type includes the grouted sandstone boulder wall.

Patio and Walkways: This landcover type occurs on the north side of the existing single-family residence within the fenced landscaped yard.

Residence: This landcover type includes the existing single-family residence located southwest of the grouted sandstone boulder wall.

5.2 Trees

As part of our field survey work, we identified and measured the trunk Diameter at Breast Height (DBH 4.5 ft. above ground level) of all trees within the study area. Table 2 contains an inventory of native trees in the As-Built Wall Repair project study area.

Table 2. Inventory of Trees Within the As-Built Wall Repair Project Study Area

ID	Species	Diameter at Breast Height (DBH in inches)	Status
1	California bay (<i>Umbellularia californica</i>)	29.8	Protected Native
2	coast live oak (<i>Quercus agrifolia</i>)	21.3	Protected Native
3	coast live oak (<i>Quercus agrifolia</i>)	15.8	Protected Native
4	coast live oak (<i>Quercus agrifolia</i>)	25.2	Protected Native
5	coast live oak (<i>Quercus agrifolia</i>)	23.0	Protected Native
6	coast live oak (<i>Quercus agrifolia</i>)	32.5	Protected Native
7	coast live oak (<i>Quercus agrifolia</i>)	24.8	Protected Native

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8	coast live oak (<i>Quercus agrifolia</i>)	22.7	Protected Native
9	coast live oak (<i>Quercus agrifolia</i>)	44.5	Protected Native
10	coast live oak (<i>Quercus agrifolia</i>)	15.8	Protected Native
11	coast live oak (<i>Quercus agrifolia</i>)	27.5	Protected Native
12	Monterey cypress (<i>Cupressus macrocarpa</i>)	22.2	Not Protected
13	Monterey cypress (<i>Cupressus macrocarpa</i>)	40.2	Not Protected
14	coast live oak (<i>Quercus agrifolia</i>)	25.0	Protected Native
15	Monterey cypress (<i>Cupressus macrocarpa</i>)	34.0	Not Protected
16	coast live oak (<i>Quercus agrifolia</i>)	19.6	Protected Native
17	coast live oak (<i>Quercus agrifolia</i>)	15.0	Protected Native
18	coast live oak (<i>Quercus agrifolia</i>)	22.0	Protected Native
19	coast live oak (<i>Quercus agrifolia</i>)	8.5	Protected Native
20	western sycamore (<i>Platanus racemosa</i>)	13.0, 12.7, 12.5	Protected Native
21	coast live oak (<i>Quercus agrifolia</i>)	13.0, 11.0, 11.0	Protected Native
22	coast live oak (<i>Quercus agrifolia</i>)	21.6	Protected Native
23	coast live oak (<i>Quercus agrifolia</i>)	22.5	Protected Native
24	coast live oak (<i>Quercus agrifolia</i>)	15.0	Protected Native
25	western sycamore (<i>Platanus racemosa</i>)	32.0, 14.0	Protected Native
26	coast live oak (<i>Quercus agrifolia</i>)	16.8	Protected Native
27	western sycamore (<i>Platanus racemosa</i>)	27.5	Protected Native
28	coast live oak (<i>Quercus agrifolia</i>)	22.3	Protected Native
29	western sycamore (<i>Platanus racemosa</i>)	19.5	Protected Native
30	western sycamore (<i>Platanus racemosa</i>)	20.5	Protected Native

5.3 Flora

We observed 51 species of plants in the project study area during performance of our May 8 and July 28, 2023 surveys (Table 3). Approximately 51 percent are native and 49 percent are non-native introduced species. The number of nonnative plant species is high but not unexpected, given the long history of residential land use in and adjacent to the study area.

Table 3. Vegetation Observed Within the As-Built Wall Repair Project Study Area

Common Name	Scientific Name	Native (N) Introduced (I)	Strata
arroyo willow	<i>Salix lasiolepis</i>	N	Shrub
bay laurel	<i>Laurus nobilis</i>	I	Shrub
big pod ceanothus	<i>Ceanothus megacarpus</i>	N	Shrub
bitter gooseberry	<i>Ribes amarum</i>	N	Shrub
black mustard	<i>Brassica nigra</i>	I	Herb
California bay	<i>Umbellularia californica</i>	N	Tree
California hedgenettle	<i>Stachys bullata</i>	N	Herb
California wildrose	<i>Rosa californica</i>	N	Shrub
canyon sunflower	<i>Venegasia carpesioides</i>	N	Herb
cape ivy	<i>Delairea odorata</i>	I	Vine
Catalina cherry	<i>Prunus ilicifolia</i> subsp. <i>lyonii</i>	N	Shrub
Catalina currant	<i>Ribes viburnifolium</i>	N	Shrub
coast live oak	<i>Quercus agrifolia</i> var. <i>agrifolia</i>	N	Tree

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coast morning-glory	<i>Calystegia macrostegia</i> <i>subsp. cyclostegia</i>	N	Vine
coffeeberry	<i>Frangula californica</i>	N	Shrub
cootamundra wattle	<i>Acacia baileyana</i>	I	Tree
cotoneaster	<i>Cotoneaster sp.</i>	I	Shrub
coyote bush	<i>Baccharis pilularis</i> <i>var. pilularis</i>	N	Shrub
creeping fig	<i>Ficus pumila</i>	I	Vine
creeping snowberry	<i>Symphoricarpos mollis</i>	I	Herb
crofton weed	<i>Ageratina adenophora</i>	I	Herb
Douglas' nightshade	<i>Solanum douglasii</i>	N	Shrub
English ivy	<i>Hedera helix</i>	I	Herb
fennel	<i>Foeniculum vulgare</i>	I	Herb
French broom	<i>Genista monspessulana</i>	I	Shrub
garden nasturtium	<i>Tropaeolum majus</i>	I	Herb
giant wildrye	<i>Elymus condensatus</i>	N	Herb
grape	<i>Vitis sp.</i>	I	Vine
greenspot nightshade	<i>Solanum douglasii</i>	N	Shrub
horseweed	<i>Erigeron canadensis</i>	N	Herb
jacaranda	<i>Jacaranda mimosifolia</i>	I	Tree
Japanese anemone	<i>Eriocapitella hupehensis</i> <i>Thalictrum fendleri</i> <i>var. polycarpum</i>	I	Herb
meadow rue		N	Herb
mock orange	<i>Pittosporum undulatum</i>	I	Tree
Monterey cypress	<i>Hesperocyparis macrocarpa</i>	N	Tree
mugwort	<i>Artemisia douglasiana</i>	I	Shrub
Pacific blackberry	<i>Rubus ursinus</i>	N	Vine
periwinkle	<i>Vinca major</i>	I	Herb
philodendron	<i>Thaumatococcus xanadu</i>	I	Herb
prickly sow-thistle	<i>Sonchus asper</i>	I	Herb
pride of Madeira	<i>Echium candicans</i>	I	Shrub
Santa Barbara daisy	<i>Erigeron karvinskianus</i>	I	Herb
scarlet monkeyflower	<i>Erythranthe cardinalis</i>	N	Herb
schefflera	<i>Schefflera arboricola</i>	I	Herb
smilo grass	<i>Stipa miliacea var. miliacea</i>	I	Herb
toyon	<i>Heteromeles arbutifolia</i>	N	Shrub
umbrella sedge	<i>Cyperus eragrostis</i>	N	Herb
western poison oak	<i>Toxicodendron diversilobum</i>	N	Shrub
western sycamore	<i>Platanus racemosa</i>	N	Tree
white heliotrope	<i>Heliotropium arborescens</i>	I	Herb
yerba del vibora	<i>Daucus pusillus</i>	N	Herb

5.4 Fauna

During performance of our May 8 and July 28, 2023 surveys, we observed 17 bird species, 1 reptile species and 1 amphibian species. Table 4 contains a list of wildlife species observed, expected, and with a potential to occur in the project study area.

Table 4. Wildlife Observed and Expected to Occur on the Property

Common Name	Scientific Name	Seasonal Status	Site Status
Amphibians			
arboreal salamander	<i>Aneides lugubris</i>	RB	P
black-bellied slender salamander	<i>Batrachoseps nigriventris</i>	RB	E
California tree frog	<i>Pseudacris cadaverina</i>	RB	E
coast range newt	<i>Taricha torosa</i>	RB	P
Ensatina	<i>Ensatina eschscholtzii</i>	RB	P
Pacific tree frog	<i>Pseudacris regilla</i>	RB	E
western toad	<i>Bufo boreas</i>	RB	E
Reptiles			
California mountain kingsnake	<i>Lampropeltis zonata</i>	RB	P
California nightsnake	<i>Hypsiglena torquata</i>	RB	P
California striped racer	<i>Masticophis lateralis</i>	RB	P
coast gartersnake	<i>Thamnophis elegans terrestris</i>	RB	E
coast horned lizard	<i>Phrynosoma coronatum</i>	RB	P
common king snake	<i>Lampropeltis getula californiae</i>	RB	E
coral-bellied ring-necked snake	<i>Diadophis punctatus modestus</i>	RB	P
Pacific gopher snake	<i>Pituophis catenifer</i>	RB	E
Nothern California legless lizard	<i>Anniella pulchra pulchra</i>	RB	P
southern alligator lizard	<i>Elgaria multicarinata</i>	RB	E
southern Pacific rattlesnake	<i>Crotalus oreganus helleri</i>	RB	E
western fence lizard	<i>Sceloporus occidentalis</i>	RB	O
western patchnose snake	<i>Salvadora hexalepis</i>	RB	P
western rattlesnake	<i>Crotalus viridis</i>	RB	P
western skink	<i>Eumeces skiltonianus</i>	RB	E
western yellow-bellied racer	<i>Coluber mormon</i>	RB	P
Fish			
Southern steelhead	<i>Oncorhynchus mykiss</i>	RB	P
Birds			
acorn woodpecker	<i>Melanerpes formicivorus</i>	RB	O
Allen's hummingbird	<i>Selasphorus sasin</i>	M	E
American crow	<i>Corvus brachyrhynchos</i>	RB	O
American goldfinch	<i>Carduelis tristis</i>	WV	E
American kestrel	<i>Falco sparverius</i>	RB	E
American robin	<i>Turdus migratorius</i>	WV	E
Anna's hummingbird	<i>Calypte anna</i>	RB	E
ash-throated flycatcher	<i>Myiarchus cinerascens</i>	SB	E
band-tailed pigeon	<i>Columba fasciata</i>	RB	E
barn owl	<i>Tyto alba</i>	RB	E
barn swallow	<i>Hirundo rustica</i>	SB	P

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Common Name	Scientific Name	Seasonal Status	Site Status
Bewick's wren	<i>Thryomanes bewickii</i>	RB	O
Bell's sage sparrow	<i>Artemisiospiza belli</i>	RB	P
black phoebe	<i>Sayornis nigricans</i>	RB	O
black-chinned hummingbird	<i>Archilochus alexandri</i>	M	P
black-headed grosbeak	<i>Pheucticus melanocephalus</i>	SB	P
blue-gray gnatcatcher	<i>Polioptila caerulea</i>	SB	P
Brewer's blackbird	<i>Euphagus cyanocephalus</i>	RB	E
brown-headed cowbird	<i>Molothrus ater</i>	SB	E
Bullock's oriole	<i>Icterus bullockii</i>	SB	P
Bushtit	<i>Psaltriparus minimus</i>	RB	P
California quail	<i>Callipepla californica</i>	RB	E
California thrasher	<i>Toxostoma redivivum</i>	RB	P
California towhee	<i>Pipilo crissalis</i>	RB	O
canyon wren	<i>Catherpes mexicanus</i>	RB	P
Cassin's kingbird	<i>Tyrannus vociferans</i>	RB	P
cedar waxwing	<i>Bombycilla cedrorum</i>	WV	P
cliff swallow	<i>Hirundo pyrrhonota</i>	SB	O
common yellowthroat	<i>Geothlypis trichas</i>	RB	E
Cooper's hawk	<i>Accipiter cooperii</i>	RB	P
Costa's hummingbird	<i>Calypte costae</i>	M	P
dark-eyed junco	<i>Junco hyemalis</i>	RB	O
downy woodpecker	<i>Picoides pubescens</i>	RB	P
Eurasian collared dove	<i>Streptopelia decaocto</i>	IB	E
European starling	<i>Sturnus vulgaris</i>	RB	E
ferruginous hawk	<i>Buteo regalis</i>	WV	P
fox sparrow	<i>Passerella iliacea</i>	WV	P
great horned owl	<i>Bubo virginianus</i>	RB	E
greater roadrunner	<i>Geococcyx californianus</i>	RB	P
hairy woodpecker	<i>Picoides villosus</i>	RB	P
hermit thrush	<i>Catharus guttatus</i>	WV	P
hermit warbler	<i>Dendroica occidentalis</i>	M	P
hooded oriole	<i>Icterus cucullatus</i>	SB	P
house finch	<i>Carpodacus mexicanus</i>	RB	O
house sparrow	<i>Passer domesticus</i>	I	E
house wren	<i>Troglodytes aedon</i>	RB	E
Hutton's vireo	<i>Vireo huttoni</i>	SB	P
lark sparrow	<i>Chondestes grammacus</i>	SB	P
Lawrence's goldfinch	<i>Carduelis lawrencei</i>	M	P
lazuli bunting	<i>Passerina amoena</i>	SB	P
lesser goldfinch	<i>Carduelis psaltria</i>	RB	E
Lincoln's sparrow	<i>Melospiza lincolnii</i>	WV	P
mallard	<i>Anas platyrhynchos</i>	RB	O
merlin	<i>Falco columbarius</i>	WV	P
mourning dove	<i>Zenaida macroura</i>	SB	O
northern flicker	<i>Colaptes auratus</i>	RB	E
northern harrier	<i>Circus cyaneus</i>	WV	P
northern mockingbird	<i>Mimus polyglottos</i>	RB	E
northern oriole	<i>Icterus bullockii</i>	M	P
Nuttall's woodpecker	<i>Picoides nuttallii</i>	RB	O
oak titmouse	<i>Bacolophus ridgwayi</i>	RB	O
Pacific-slope flycatcher	<i>Empidonax difficilis</i>	SB	P
Phainopepla	<i>Phainopepla nitens</i>	M	P
purple finch	<i>Carpodacus purpurus</i>	RB	P

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Common Name	Scientific Name	Seasonal Status	Site Status
red-breasted nuthatch	<i>Sitta canadensis</i>	WV	P
red-breasted sapsucker	<i>Sphyrapicus ruber</i>	WV	P
red-shouldered hawk	<i>Buteo lineatus</i>	RB	P
red-tailed hawk	<i>Buteo jamaicensis</i>	RB	O
rock pigeon	<i>Columba livia</i>	RB	E
ruby-crowned kinglet	<i>Regulus calendula</i>	WV	E
rufous hummingbird	<i>Selasphorus rufus</i>	M	E
Say's phoebe	<i>Sayornis saya</i>	RB	E
sharp-shinned hawk	<i>Accipiter striatus</i>	WV	P
song sparrow	<i>Melospiza melodia</i>	RB	E
spotted towhee	<i>Pipilo maculatus</i>	RB	O
Swainson's thrush	<i>Catharus ustulatus</i>	M	P
turkey vulture	<i>Cathartes aura</i>	V	O
western bluebird	<i>Sialia mexicana</i>	RB	E
western kingbird	<i>Tyrannus verticalis</i>	SB	P
western meadowlark	<i>Sturnella neglecta</i>	RB	P
western screech owl	<i>Otus kennicottii</i>	RB	P
western scrub jay	<i>Aphelocoma californica</i>	RB	O
western tanager	<i>Piranga ludoviciana</i>	M	P
western wood pewee	<i>Contopus sordidulus</i>	M	P
white-breasted nuthatch	<i>Sitta carolinensis</i>	RB	P
white-crowned sparrow	<i>Zonotrichia leucophrys</i>	WV	E
white-tailed kite	<i>Elanus leucurus</i>	RB	P
Wilson's warbler	<i>Wilsonia pusilla</i>	M	P
wrenit	<i>Chamaea fasciata</i>	RB	O
yellow-rumped warbler	<i>Dendroica coronata</i>	WV	E
Mammals			
American badger	<i>Taxidea taxus</i>	RB	P
big brown bat	<i>Eptesicus fuscus</i>	SB	P
big-eared woodrat	<i>Neotoma macrotis</i>	RB	E
black bear	<i>Ursus americanus</i>	RB	P
black-tailed jackrabbit	<i>Lepus californicus</i>	RB	P
bobcat	<i>Lynx rufus</i>	RB	P
Botta's pocket gopher	<i>Thomomys bottae</i>	RB	E
broad-footed mole	<i>Scapanus latimanus</i>	RB	P
brush mouse	<i>Peromyscus boylii</i>	RB	E
brush rabbit	<i>Sylvilagus bachmani</i>	RB	E
California ground squirrel	<i>Spermophilus beecheyi</i>	RB	E
California mouse	<i>Peromyscus californicus</i>	RB	E
California myotis	<i>Myotis californicus</i>	SB	P
California pocket mouse	<i>Chaetodipus californicus</i>	RB	E
California vole	<i>Microtus californicus</i>	RB	P
coyote	<i>Canis latrans</i>	V	E
deer mouse	<i>Peromyscus maniculatus</i>	RB	E
fox squirrel	<i>Sciurus niger</i>	RB	E
gray fox	<i>Urocyon cinereoargenteus</i>	RB	P
hoary bat	<i>Lasiurus cinereus</i>	RB	P
house mouse	<i>Mus musculus</i>	RB	E
long-eared myotis	<i>Myotis evotis</i>	RB	P
Merriam's chipmunk	<i>Eutamias merriami</i>	RB	E
mountain lion	<i>Felis concolor</i>	RB	P
mule deer	<i>Odocoileus hemionus</i>	RB	P
ornate shrew	<i>Sorex ornatus</i>	RB	P

Common Name	Scientific Name	Seasonal Status	Site Status
pallid bat	<i>Antrozous pallidus</i>	SB	P
raccoon	<i>Procyon lotor</i>	RB	E
ringtail	<i>Bassariscus astutus</i>	RB	P
striped skunk	<i>Mephitis mephitis</i>	V	E
Townsend's big-eared bat	<i>Plecotus townsendii</i>	RB	P
Virginia opossum	<i>Didelphis virginiana</i>	I	E
western grey squirrel	<i>Sciurus griseus</i>	RB	E
western harvest mouse	<i>Reithrodontomys megalotis</i>	RB	E

Codes
Seasonal Status: RB = Resident Breeder; SB = Summer Breeder; M = Migrant; V = Visitor; WV = Winter Visitor; I = Introduced Species
Site Status: E = Expected to occur; O = Observed on or in the immediate vicinity of the project site; P = Potential to occur

5.4.1 Migration Corridors and Wildlife Movement

The grouted sandstone boulder wall is located on the western bank of San Ysidro Creek. There is a 6 ft. high chain-link fence immediately south of the wall along the creek top-of-bank. The chain-link fence continues north on the western side of the creek along the top-of-bank for a distance of approximately 1,200 ft. on the two adjacent properties to the north. There are no fences, walls or barriers to wildlife movement on the eastern side of San Ysidro Creek in the Ennisbrook residential neighborhood. There is a public trail on the east side of San Ysidro Creek near the creek top-of-bank known as the Ennisbrook Trail.

The chain-link fence on the western side of San Ysidro Creek is a pre-existing fence that was damaged by the January 9, 2018 mud/debris flow and was replaced upon completion of clean-up efforts. This fence is a barrier to movement of large to medium size mammals such as black bear, mule deer, coyote, mountain lion, and bobcats which are known to occasionally use the San Ysidro Creek as a movement corridor. The grouted sandstone boulder wall is not considered to be an impediment to wildlife movement; terrestrial wildlife can easily climb the rough wall surface and/or go around the wall.

During performance of our May 8 and July 28, 2023 surveys, we did not see any evidence of a terrestrial wildlife migration or movement corridor (i.e., game trails, scat accumulations, or tracks) in the project study area. However, the segment of San Ysidro Creek that flows through the northeastern corner of the 1690 San Leandro Lane property is a migration corridor for federally endangered Southern California steelhead fish (*Oncorhynchus mykiss*) and is presumed to be a movement corridor for other aquatic or terrestrial wildlife.

5.5 Special-Status Species & Habitats

Sensitive species considered in this assessment are those protected by the federal Endangered Species Act and/or the California Endangered Species Act, along with those meeting the California Environmental Quality Act definition of "rare". This includes all endangered or threatened species, candidates for listing, CDFW Species of Special Concern, CDFW Fully Protected Species, plants and plants listed by the California Native Plant Society (CNPS) as List 1 or List 2, as well as plants listed by the Santa Barbara Botanic Garden (2007) as locally sensitive.

Sensitive habitats include all federally designated critical habitat for threatened and endangered wildlife species, environmentally sensitive habitat that meets the County Environmentally Sensitive Habitat criteria, and vegetation types listed as threatened (i.e., ranked S3.2 or higher) by the California Department of Fish and Wildlife (CDFW June 1, 2023).

Our review of the CDFW July 2023 California Natural Diversity Data Base (CNDDDB) revealed that there are 5 sensitive plant species and 11 sensitive wildlife species with occurrence records within 3 mi. of the project study area. The location of these occurrence records is provided in Figure 4. During performance of our May 8 and July 28, 2023 surveys, no special status plant or wildlife species were found.

Sensitive plant species known to occur within three miles of the project site (refer to Figure 4) include: late-flowered mariposa-lily (*Calochortus fimbriatus*), Nuttall's scrub oak (*Quercus dumosa*), Santa Barbara honeysuckle (*Lonicera subspicata* var. *subspicata*), Sonoran maiden fern (*Thelypteris puberula* var. *sonorensis*), and white-veined monardella (*Monardella hypoleuca* subsp. *hypoleuca*). Nuttall's scrub oak and Santa Barbara honeysuckle are large perennial shrubs that are listed by the California Native Plant Society (CNPS) as List 1B - rare, threatened, or endangered in California and elsewhere. Sonoran maiden fern is a large perennial fern that is listed by the CNPS as 2B - rare, threatened, or endangered in California but common elsewhere. Late-flowered mariposa lily and white-veined monardella are perennial herbs that are on the CNPS 1B list - rare, threatened, or endangered in California and elsewhere.

Sensitive wildlife species known to occur within three miles of the project site (refer to Figure 4) include: two federally endangered fish species—tidewater goby (*Eucyclogobius newberryi*) and southern steelhead (*Oncorhynchus mykiss*); four bird species—state threatened bank swallow (*Riparia riparia*), state threatened and CDFW fully protected species California black rail (*Laterallus jamaicensis coturniculus*), federally threatened and CDFW species of special concern western snowy plover (*Charadrius nivosus nivosus*), and CDFW species of special concern yellow rail (*Coturnicops noveboracensis*); four reptile and amphibian species—federally threatened California red-legged frog (*Rana draytonii*), coast horned lizard (*Phrynosoma blainvillii*), coast range newt (*Taricha torosa*), and western pond turtle (*Emys marmorata*), all of which are CDFW species of special concern; and one insect species—federal candidate endangered monarch butterfly (*Danaus plexippus*). Monarch butterflies were listed by the USFWS on December 15, 2020 as a "candidate" endangered or threatened species and as of this date are protected by the Federal Endangered Species Act. Monarch butterfly overwintering aggregation sites are also protected by California Fish and Game Code and by the County of Santa Barbara biological resource protection policies.

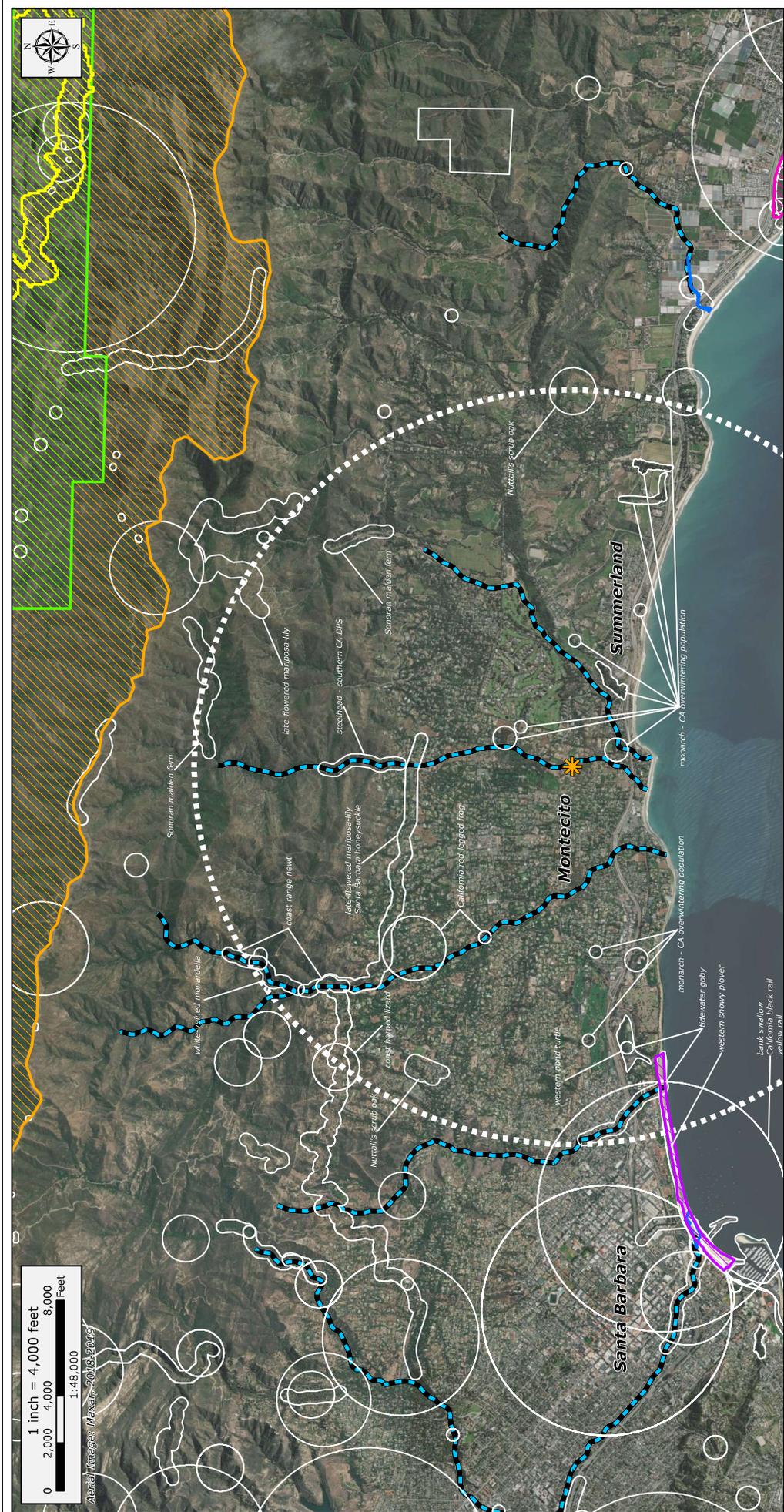


Figure 4. Sensitive Species and Designated Critical Habitat in Project Vicinity
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- US Fish & Wildlife Service (USFWS) Federal Critical Habitat**
- arroyo southwestern toad
 - southern steelhead
 - Ventura marsh milk-vetch
 - California red-legged frog
 - western snowy plover
 - least Bell's viro
 - tidewater goby

- California Natural Diversity Database (CDFW July 2023)**
- CNDDB Occurrence Records (in white)
 - Wall Location
 - 3 mi. Property Buffer

During performance of our May 8 and July 28, 2023 surveys, we did not find any state or federally listed endangered, threatened, or candidate wildlife species in the project study area, nor did we find any California species of special concern, watch list species, or fully protected species. We (Watershed Environmental Inc.) did not survey the study area in February and March of 2018 when the wall was repaired and since we were not there, we cannot definitively state that no special status species were impacted when the wall was repaired. However, given the damage that was done by the January 9, 2018 Montecito mud/debris flow and the massive clean-up and recovery effort that was underway at the time that the wall was repaired, we believe that it is highly unlikely that any special status species or critical habitat were impacted when the wall was repaired.

As part of our survey, we also searched for breeding bird activity and active bird nests, but none were found. Given the fact that this is an As-built Project and no new construction is proposed, the project does not have any potential to impact active bird nests protected by Federal Migratory Bird Treaty Act (Federal Register 2013) or raptor nests are protected by Section 3503.5 of the CDFW Code (2014).

6.0 POTENTIAL IMPACTS TO BIOLOGICAL RESOURCES

6.1 Local & State Guidelines

This section describes potential short- and long-term and temporary and permanent impacts to biological resources resulting from the as-built wall repair project. Short-term impacts are associated with repair of the wall, which occurred in February and March of 2018. Long-term impacts are those that persist after the wall was repaired. Temporary impacts include staging of equipment and materials adjacent to the wall while the wall was being repaired. Permanent impacts refer to placement of new structures in locations that were previously undeveloped.

Prior to project approval, the County (as the lead agency) is required to perform an environmental review in accordance with the California Environmental Quality Act. In this report, environmental effects are considered significant if they cause a substantial or potentially substantial adverse change in any of the existing physical conditions within the area affected by the project. To facilitate CEQA review, the County of Santa Barbara has adopted and published an *Environmental Thresholds and Guidelines Manual* (SBCO 1995 revised 2021), which contains thresholds for determination of impact significance to biological resources.

6.1.1 SBCO Environmental Thresholds & Guidelines

The County of Santa Barbara Environmental Thresholds and Guidelines Manual state that: Disturbance to habitats or species may be significant, based on substantial evidence in the record (not public controversy or speculation), if they substantially impact significant resources in the following ways:

1. Substantially reduce or eliminate species diversity or abundance
2. Substantially reduce or eliminate quantity or quality of nesting areas
3. Substantially limit reproductive capacity through losses of individuals or habitat
4. Substantially fragment, eliminate, or otherwise disrupt foraging areas and/or access to food sources
5. Substantially limit or fragment range and movement (geographic distribution of animals and/or seed dispersal routes)

6. Substantially interfere with natural processes, such as fire or flooding, upon which the habitat depends.

6.1.2 CEQA Guidelines

The CEQA guidelines state that a project will normally have a significant effect on the environment if it will:

- a) Conflict with adopted environmental plans and goals of the community where it is located;
- b) Substantially affect a rare or endangered species of animal or plant or the habitat of the species;
- c) Interfere substantially with the movement of any resident or migratory fish or wildlife species; and
- d) Substantially diminish habitat for fish, wildlife, or plants.

In addition, the CEQA Guidelines require a mandatory finding of significance if a "project has the potential to...reduce the number or restrict the range of an endangered, rare, or threatened species."

CEQA Title 14 Section 15380 defines the terms "**endangered**," "**rare**," or "**threatened**" as follows:

Endangered: When its survival and reproduction in the wild are in immediate jeopardy from one or more causes, including loss of habitat, change in habitat, overexploitation, competition, disease, or other factors.

Rare:

- a) Although not presently threatened with extinction, the species exists in such small numbers throughout all or a significant portion of its range that it may become endangered if its environment worsens.
- b) The species is likely to become endangered within the foreseeable future throughout all or a significant portion of its range and may be considered "threatened" as that term is used in the federal Endangered Species Act.

Species are presumed to be endangered, rare, or threatened if listed by the CDFW (Sections 670.2 or 670.5 Title 14, *California Code of Regulations*) or the USFWS (Title 50, *Code of Federal Regulations* Sections 17.11 or 17.12). A species not listed by the CDFW or USFWS may be considered in the CEQA review process if it can be shown to meet the above-listed criteria.

6.1.3 Impact Classification Categories

For CEQA purposes, we have categorized impacts into the following 5 categories:

Significant and Unavoidable: An impact that cannot be reduced to below the threshold level given reasonably available and feasible mitigation measures. Such an impact requires a Statement of Overriding Consideration to be issued if the project is approved per Sec. 15093 of the State CEQA guidelines.

Significant but Mitigable: An impact that can be reduced to below the threshold level given reasonably available and feasible mitigation measures.

Such an impact requires findings to be made under Sec. 15091 of the State CEQA guidelines.

Adverse but Less than Significant: An impact that may be adverse but does not exceed the threshold level and does not require mitigation measures. However, mitigation measures that could further lessen the environmental effect may be suggested if readily available and easily achievable.

Beneficial: An effect that would reduce existing environmental problems or hazards.

None, no impact: The biological resource evaluated would not be affected.

6.2 Impacts to Vegetation Communities

Repairs to the grouted sandstone boulder wall were performed in February and March of 2018 at a time when debris removal efforts from the January 9, 2018 Montecito mud/debris flow were actively in progress. Figure 5 depicts the extent of the mud/debris flow on the 1690 San Leandro Lane property and the adjacent 380 Santa Rosa Lane property. The mud/debris flow destroyed almost all of the herbaceous and shrub vegetation and badly damaged and destroyed many of the mature trees within the mud/debris flow area.

Repair of the damaged grouted sandstone boulder wall did not impact any native or non-native trees and did not require removal or disturbance of any understory herb or shrub vegetation. The vegetation in the creek bed north of the wall and the vegetation south of wall were destroyed by the mud/debris flow and subsequent cleanup efforts.

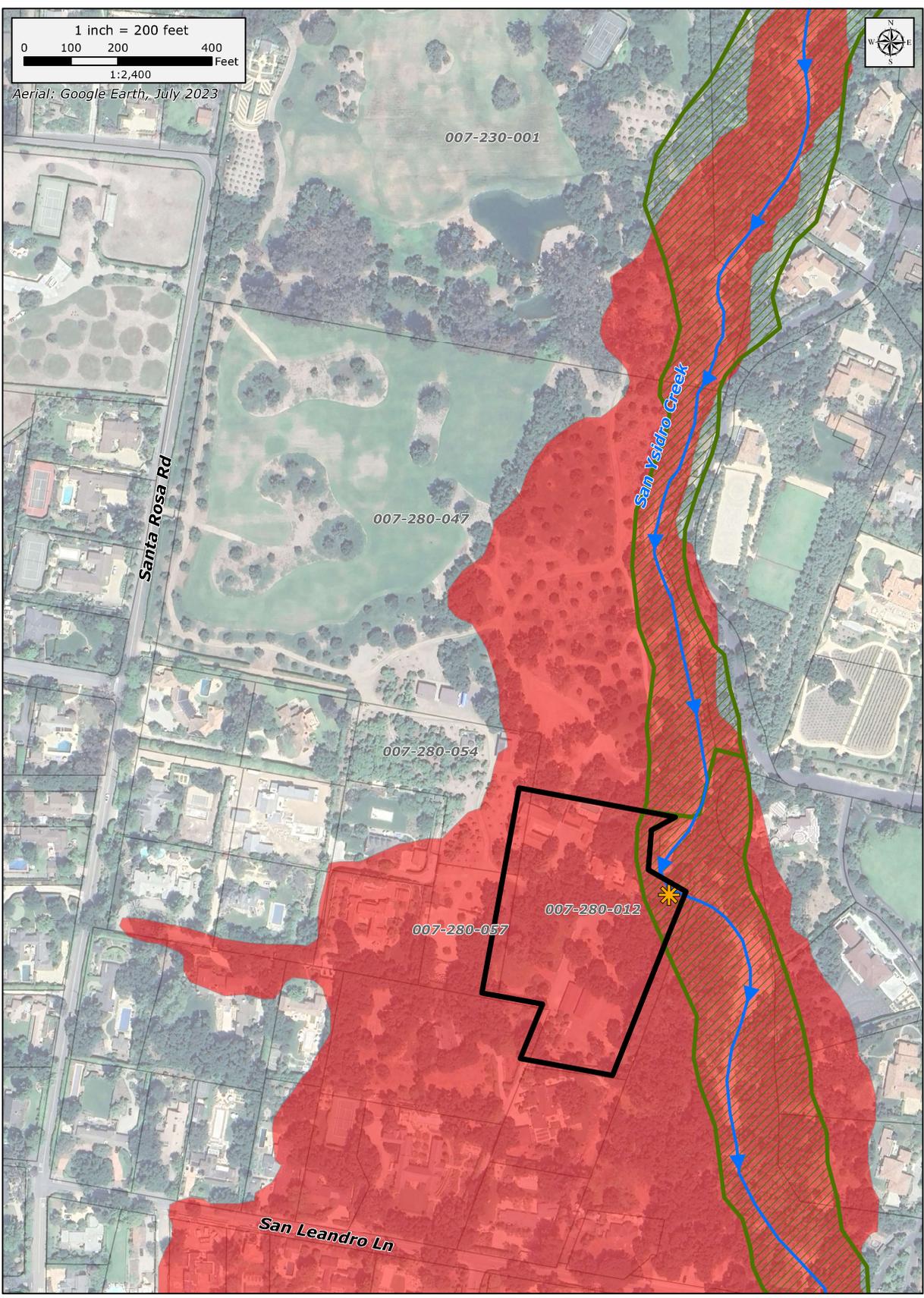
Impact 1. Vegetation Removal and Disturbance

Short-term impacts to vegetation in February and March 2018 when the grouted sandstone boulder wall was repaired are considered **Adverse but Less than Significant** because most vegetation, except for a few large trees, was destroyed by the January 9, 2018 Montecito mud/debris flow prior to repair of the wall. Equipment and materials used to repair the wall were staged in areas that were damaged and disturbed by the mud/debris flow and subsequent cleanup efforts. Upon completion of debris removal and wall repairs, the area disturbed by the mud/debris flow clean up efforts and the areas where wall repair equipment materials were staged were revegetated with non-invasive ornamental and native plant species as required by Montecito Community Plan Development Standard BIO-M-1.3.3.

Long-term impacts to vegetation caused by the continued existence of the repaired grouted sandstone boulder wall are considered **None, no impact**.

Impact 2. Removal & Disturbance of Protected Native Trees and/or Specimen Trees

The County of Santa Barbara considers all native trees that have a trunk DBH of 6-inches or greater to be protected trees, and healthy non-native trees that are unusually large to be protected as specimen trees. There are 27 protected native trees within the as-built wall repair project study area. We do not consider any of the non-native trees in the project study area to be specimen trees. Based on our review of photographs taken by the County Flood Control Department in February and March of 2018 when they were removing debris from the creek bed and the wall was being repaired, no native



1 inch = 200 feet
 0 100 200 400 Feet
 1:2,400

Aerial: Google Earth, July 2023



- Map Items**
- Approx. Limits of Debris Flow per USGS report, 2018
 - Parcel Boundary per Topo by Coast Engineering
 - County of Santa Barbara-mapped ESH
 - Wall Location

Figure 5. Area Damaged in the Project Vicinity by January 9, 2018 Montecito Mud/Debris Flow

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protected trees were removed or significantly disturbed during repair of the grouted sandstone boulder wall.

Short-term impacts to native protected trees in February and March of 2018 when the grouted sandstone boulder wall was repaired are considered **None, no impact** because repair of the wall did not require removal of any protected native trees and the temporary equipment and material staging area used by the contractor who repaired the wall did not significantly disturb any protected native trees.

Long-term impacts to native protected trees caused by the continued existence of the repaired grouted sandstone boulder wall are considered **None, no impact**.

6.3 Project Effects on Wildlife

A wide variety of wildlife species are expected to occur and have a potential to occur in the As-built wall repair project study area (refer to Table 4). Most of these species are not protected (i.e., endangered, threatened, or CDFW fully protected) or considered to be special-status (CDFW Species of Special Concern). We did not find any state or federally listed endangered, threatened, or candidate species in the project study area during performance of our May 8 and July 28, 2023 surveys. Nor did we find any CDFW species of special concern, watch list species, or fully protected species. We (Watershed Environmental Inc.) did not survey the study area in February and March of 2018 when the wall was repaired and since we were not there, we cannot definitively state that no special status species were impacted when the wall was repaired. However, given the extensive damage to property and wildlife habitat caused by the January 9, 2018 Montecito mud/debris flow and the massive clean-up and recovery effort that was underway at the time that the wall was repaired, we believe that it is highly unlikely that any special status species or critical habitat were impacted when the grouted sandstone boulder wall was repaired.

Impact 3. Direct and Indirect Impacts to Wildlife

Short-term direct and indirect impacts to wildlife in February and March 2018 when the grouted sandstone boulder wall was repaired are considered **Adverse but Less than Significant** because wall repairs occurred after the January 9, 2018 mud/debris flow caused extensive damage to property and wildlife habitat and the subsequent cleanup effort was actively being performed in the creek bed, on the 1690 San Leandro Lane property and on the adjacent properties north and south of the wall.

Long-term direct and indirect impacts to wildlife caused by the continued existence of the repaired grouted sandstone boulder wall are considered **None, no impact**.

Impact 4. Disturbance of Wildlife Species and Habitats Caused by Noise and Night Lighting

The wall was repaired in February and March of 2018. An excavator was staged behind (south) the wall and was used to lift sandstone boulders over the wall and place them where they were needed. A dump truck was used to move sandstone boulders to a temporary equipment and material staging area behind (south) the wall.

Short-term impacts to wildlife species and habitat caused by noise in February and March of 2018 when the grouted sandstone boulder wall was repaired are considered **Adverse but Less than Significant** because the only equipment used to repair the wall was an excavator and a dump truck which did not generate a substantial amount of noise. Wall repair occurred

at a time when a wide variety and a large number of heavy equipment was being operated by others in the project vicinity to cleanup and remove mud/debris deposited by the January 9, 2018 Montecito mud/debris flow.

Long-term impacts to wildlife species and habitat caused by noise are considered **None, no impact** because no additional work on the wall or maintenance activities are proposed as part of this as-built wall project.

Short-term impacts to wildlife from night lighting in February and March of 2018 when the grouted sandstone boulder wall was repaired are considered **None, no impact** because repairs to the wall only occurred during daylight hours, and no lights were used.

Long-term impacts to wildlife caused by night lighting are considered **None, no impact** because the grouted sandstone boulder wall is not lighted and there are no plans to install lights in the future.

Impact 5. Disturbance and/or Disruption of Protected Bird Nests

Active nests of 32 raptor species are protected by Section 3503.5 of CDFW Code (2014) and the active nests of 1,007 migratory bird species are protected by the Federal Migratory Bird Treaty Act (US Department of the Interior 2013).

Short-term impacts to protected bird nests in February and March of 2018 when the grouted sandstone boulder wall was repaired are considered **Adverse but Less than Significant** because it is extremely unlikely that any birds would nest in the area, given the habitat destruction caused by the January 9, 2018 Montecito mud/debris flow and the disturbance caused by heavy equipment being used to cleanup and remove debris in the creek bed and on the individual properties impacted by the mud/debris flow.

Long-term impacts to protected bird nests are considered **None, no impact** because no additional work on the wall or wall maintenance activities which could impact bird nests are proposed as part of this as-built wall project.

Impact 6. Wildlife Migration/Dispersal Corridors and Wildlife Movement

The as-built grouted sandstone boulder wall is not considered to be an impediment to wildlife movement; terrestrial wildlife can easily climb the rough wall surface and/or go around the wall. The wall does not obstruct creek flow and does not effect the ability of fish or other aquatic dependent wildlife species to use San Ysidro Creek as a migration corridor.

Short-term impacts to wildlife migration/dispersal corridors, and wildlife movement caused in February and March of 2018 when the grouted sandstone boulder wall was repaired are considered **None, no impact** because the equipment and materials used to repair the wall were staged behind (south) the wall in upland areas and did not obstruct creek flow or prevent wildlife movement.

Long-term impacts to wildlife migration/dispersal corridors, and wildlife movement are considered **None, no impact** because no additional work on the wall or wall maintenance activities are proposed that could impact wildlife movement.

6.4 Impacts to Special-Status Species

During performance of our May 8 and July 28, 2023 surveys, we did not find any special status plant or wildlife species in the as-built wall repair project study area. However,

based on the habitat types present in the study area, we determined that the following special-status wildlife species have a high to moderate potential to occur in the project study area:

Southern Steelhead (*Oncorhynchus mykiss irideus*). Status: Federally Endangered and California Candidate for Endangered species listing, has a high potential to occur in San Ysidro Creek and to use the creek as a migration corridor.

California Red-legged Frog (*Rana draytonii*). Status: Federally Threatened and CDFW Species of Special Concern, has a moderate potential to breed in the creek and to use the creek as a migration corridor.

Coast Range Newt (*Taricha torosa*). Status: CDFW Species of Special Concern, has a moderate potential to breed in the creek and to use the creek as a migration corridor.

Western pond turtle (*Emys marmorata*). Status: CDFW Species of Special Concern, has a moderate potential to breed in the creek and to use the creek as a migration corridor.

Impact 7. Special-Status Wildlife Species

Short-term impacts to special-status wildlife species in February and March of 2018 when the grouted sandstone boulder wall was repaired are considered **Adverse but Less than Significant** because it is extremely unlikely that any special status species were disturbed, harmed or killed by wall repair activities given the fact that the equipment and materials used to repair the wall were staged behind (south) the wall in upland areas, in an area that was severely impacted by the January 9, 2018 Montecito mud/debris flow and subsequent cleanup efforts.

Long-term impacts to special-status wildlife species are considered **None, no impact** because no additional work on the wall or wall maintenance activities are proposed that could impact special-status species.

Impact 8. Special-Status Plant Species

Short- and long-term impacts to special-status plant species are considered **None, no impact** because none were found in the as-built wall repair project study area, and no additional work on the wall or additional wall maintenance activities are proposed that could impact special status plant species in the future.

6.5 Impacts to County Designated Environmentally Sensitive Habitat

The grouted sandstone boulder wall that was repaired in February and March of 2018 is located entirely within County of Santa Barbara designated ESH riparian habitat. However, the January 9, 2018 Montecito mud/debris flow destroyed almost all of the herbaceous and shrub vegetation and damaged many of the mature trees within this ESH area. The riparian ESH habitat in the wall study area is slowly recovering and at the time of our May 8 and July 28, 2023 surveys still meets the Montecito Community Plan policy BIO-M-1.2 criteria to be classified as ESH.

Impact 9. Environmentally Sensitive Habitat

Short-term impacts to County-designed ESH in February and March of 2018 when the grouted sandstone boulder wall was repaired are considered **Adverse but Less than Significant** because although wall repairs occurred within County-designated ESH, wall repair did not involve removal of any ESH and the equipment and materials used to repair the wall was all staged behind (south) the wall in an area that was severely

impacted by the January 9, 2018 Montecito mud/debris flow and disturbed by the subsequent cleanup efforts.

Long-term impacts to County designated ESH are considered **None, no impact** because no additional work on the wall or wall maintenance activities are proposed that could impact ESH.

6.6 Impacts to Water Quality

Erosion causes sedimentation of creeks and degrades water quality. Suspended sediment harms aquatic biota and can smother invertebrates and amphibian eggs, elevate water temperatures, and decrease dissolved oxygen levels. The biggest potential for these problems is during the site development, grading, and construction phase of a project. Erosion and sediment transport risks continue until vegetation is reestablished and/or landscape materials have been installed and become established. This as-built wall repair project is unlike a normal repair or construction project because the wall was repaired after the project site and the adjacent surrounding area was severely impacted by the January 9, 2018 Montecito mud/debris flow and was subsequently disturbed by the cleanup efforts performed by the County Flood Control Department, the ACOE, and individual property owners. Wall repairs were performed in February and March of 2018 at a time when clean-efforts were underway throughout the area impacted by the Montecito mud/debris flow. The mud/debris flow severely degraded the water quality of the creeks that flow through Montecito and residual impacts to surface water quality are still occurring at this time and will likely take several decades for the water quality to recover to pre-mud/debris flow conditions.

Impact 10. Degradation of Water Quality

Short-term impacts to water quality in February and March of 2018 when the grouted sandstone boulder wall was repaired are considered **Adverse but Less than Significant** because the equipment and materials used to repair the wall were all staged behind (south) the wall away from the creek in an area that was severely impacted by the January 9, 2018 Montecito mud/debris flow and disturbed by the subsequent cleanup efforts.

Long-term impacts to water quality are considered **None, no impact** because no additional work on the wall or wall maintenance activities are proposed that could impact water quality.

7.0 RECOMMENDED MITIGATION MEASURES

The California Environmental Quality Act requires that feasible mitigation measures or alternatives be incorporated into the project description to avoid or mitigate effects to a point where clearly no significant effect on the environment will occur. The actual incorporation of mitigation into the project description depends on the type of CEQA document prepared, and can consist of applicant-proposed mitigation and/or lead agency permit condition requirements. In either case, mitigation measures are required for impacts identified as potentially significant but mitigable.

Our evaluation of potential impacts determined that all short-term and long-term impacts to biological resources were either **Adverse but Less than Significant** or **None, no impact**. We also determined that this as-built wall repair project is consistent with the Montecito Community Plan biological resource protection policies and

development standards and that no remedial actions, biological mitigation measures or design changes are necessary or needed.

8.0 CONCLUSIONS

Repairs to the existing grouted sandstone boulder wall were performed in February and March of 2018 after the January 9, 2018 Montecito mud/debris flow by the previous property owner as part of the natural disaster cleanup effort. The previous owner obtained a permit (18DIS-00127) on January 23, 2018 from the County of Santa to remove mud and debris from the property but did not obtain a CDP to repair the existing damaged grouted sandstone boulder wall located in ESH on the western bank of San Ysidro Creek. The County of Santa Barbara Planning and Development Department issued a Notice of Violation to the current property owner on April 19, 2023 for violation of the County Coastal Zoning Ordinance which requires that a Coastal Development Permit be obtained prior to reconstruction of structures damaged or destroyed by a natural disaster when that structure is within Environmentally Sensitive Habitat. The current property owner seeks to resolve the Notice of Violation by obtaining an As-Built CDP authorizing the wall repairs that were completed in 2018 by the previous property owner.

As part of our assessment, we evaluated potential project impacts to:

- Vegetation Removal and Disturbance,
- Removal & Disturbance of Protected Native Trees and/or Specimen Trees,
- Direct and Indirect Impacts to Wildlife,
- Disturbance of Wildlife Species and Habitats Caused by Noise and Night Lighting,
- Disturbance and/or Disruption of Protected Bird Nests,
- Wildlife Migration/Dispersal Corridors and Wildlife Movement,
- Special-Status Wildlife Species,
- Special Status Plant Species,
- Environmentally Sensitive Habitat, and
- Degradation of Water Quality.

All short- and long-term potential impacts were determined to be either **Adverse but Less than Significant** or **None, no impact** and that no new or retroactive biological mitigation measures are needed to reduce impacts to acceptable less than significant levels.

We also determined that this as-built wall repair project is consistent with the Montecito Community Plan biological resource protection policies and development standards and that no remedial actions or design changes are needed. The only thing needed to resolve the zoning violation is for the County of Santa Barbara to issue a Coastal Development Permit for the wall repairs that occurred in February and March of 2018.

If the County or other regulatory agencies reviewing this project have any questions or comments about this report, please contact the report author Mark de la Garza at 805 729-1070 or at mdelagarza@WatershedEnvironmental.com.

9.0 REFERENCES

- Bessette-Kirton, Erin et. al.** 2019. An evaluation of debris-flow runout model accuracy and complexity in Montecito, California: Towards a framework for regional inundation-hazard forecasting. Available online at: https://www.researchgate.net/publication/334205344_An_evaluation_of_debris-flow_runout_model_accuracy_and_complexity_in_Montecito_California_Towards_a_framework_for_regional_inundation-hazard_forecasting
- Brylski, P. V., P. W. Collins, E. D. Pierson, W. E. Rainey, and T. E. Kucera.** 1998. *Mammal Species of Special Concern in California*. Draft Final Report Prepared for the California Department of Fish and Game, Wildlife Management Division, Bird and Mammal Conservation Program, Sacramento, CA. Contract FG3146WM.
- Cal Fire** 2007. Fire Hazard Severity Zones of Santa Barbara County. Sacramento, California. Available online at: <https://egis.fire.ca.gov/FHSZ/>.
- California Assembly Bill 38.** 2023. Fire Hazard Severity Zones. Sacramento California. Available online at: <https://sbcfire.com/project/ca-assembly-bill-38-fire-hazard-severity-zones-map/>.
- California Department of Fish and Wildlife.** August 2023. California Natural Diversity Data Base (CNDDDB). CDFW: Sacramento, California. Available by subscription only.
- California Department of Fish and Wildlife.** July 2023. "Special Animals List." California Natural Diversity Data Base (CNDDDB).. The Resources Agency, CDFG: Sacramento, California. Available online at: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109406&inline>.
- California Department of Fish and Wildlife.** July 2023. "Special Vascular Plants, Bryophytes, and Lichens List." California Natural Diversity Data Base (CNDDDB). The Resources Agency, CDFG: Sacramento, California. Available online at: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109383&inline>.
- California Department of Fish and Wildlife.** June 1, 2023. "California Natural Communities List" Sacramento, California. Available online at: <https://wildlife.ca.gov/Data/VegCAMP/Natural-Communities>.
- California Department of Fish and Wildlife.** 2018. *Protocols for Surveying and Evaluating Impacts to Special-Status Native Plant Populations and Natural Communities*. Sacramento, California. Available online at: <https://www.wildlife.ca.gov/Conservation/Survey-Protocols#377281280-plants>.
- California Department of Fish and Wildlife.** 2014. "Section 3503 and 3503.5 - Protection of Birds' Nests." The Resources Agency, CDFW: Sacramento, California. <http://www.dfg.ca.gov/wildlife/nongame/regcode.html>.
- California Invasive Plant Council.** 2017. CAL-IPC Inventory, Berkeley, California. Available online at: <https://www.cal-ipc.org/plants/inventory/>.
- California Native Plant Society.** 2023. Inventory of Rare and Endangered Plants of California (online edition, v9.5). Website <http://www.rareplants.cnps.org>. Available online at: <http://www.rareplants.cnps.org/index.html>.
- California Natural Resources Agency** 2023. California Environmental Quality Act (CEQA) Statute and Guidelines. Sacramento, California. Available online at: https://www.califaep.org/statute_and_guidelines.php.

FEMA. 2023. 100-Year and 500-Year Flood Risk Zone Map. Federal Emergency Management Agency, Washington D.C. Available online at:
<https://sbcoem.maps.arcgis.com/apps/webappviewer/index.html?id=5acbb13b4f7f4e75af8431c78e95d695>

Federal Register. 2013. "General Provisions; Revised List of Migratory Birds; Final Rule." Vol. 78, No. 212. November 1. 50 CFR Parts 10 and 21. Department of the Interior, US Fish and Wildlife Service: Washington, DC. Available online at:
<https://www.fws.gov/migratorybirds/pdf/policies-and-regulations/MBTAListofBirdsFinalRule.pdf>.

Federal Register. 2005. "Designation of Critical Habitat for Seven Evolutionarily Significant Units of Pacific Salmon and Steelhead in California; Final Rule. Vol. 70, No. 170, September 2. National Oceanic and Atmospheric Administration: Washington, DC. Available online at: http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=2005_register&docid=fr02se05-20.

Garrett, K. L., and J. Dunn. 1981. *Birds of Southern California*. "Status and Distribution." Los Angeles Audubon Society: Los Angeles, California.

Grinnell, J., and A. H. Miller. 1944. "The Distribution of Birds of California." *Pacific Coast Avifauna* 27:1-608.

Google Earth. 1994-2021. Aerial photos.

Hall, E. R. 1981. *Mammals of North America*. Ronald Press: New York.

Ingles, L. 1965. *Mammals of the Pacific States*. Stanford University Press: Stanford, California.

Jameson, E. W., Jr., and H. J. Peeters. 2004. *Mammals of California*. California Natural History Guides No. 66. University of California Press: Berkeley, California.

Jepson Flora Project. 2023. *Jepson eFlora*. University of California at Berkeley: Berkeley, California. Available online at: <http://ucjeps.berkeley.edu/eflora/>.

Lehman, P. 2020. *The Birds of Santa Barbara County, California*. Santa Barbara. Available online at: <http://www.sbcobirding.com/lehmanbosbc.html>

National Audubon Society. 2007. "Audubon's Watch List." New York. Available online at:
http://www.audubon.org/sites/default/files/documents/watchlist2007_printable_list_populations.pdf.

National Marine Fisheries Service. 2012. Southern California Steelhead Recovery Plan. January 2012. Southwest Regional Office, Long Beach California. Available online at: <https://repository.library.noaa.gov/view/noaa/15988>.

Natural Resources Conservation Service. 2019. "Santa Barbara County – South Coastal Part Hydric Soils List: California." US Department of Agriculture: Washington, DC. Available online at:
https://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcseprd1316620.html.

Natural Resources Conservation Service. 2023. *Web Soil Survey 3.4.0*. Santa Barbara County South Coastal Area, US Department of Agriculture: Washington, DC. Available online at: <https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>.

Natural Resources Conservation Service. 2004. "Official Soil Series Descriptions." U.S. Department of Agriculture: Washington, DC. Available online at:
<http://soils.usda.gov/technical/classification/osd/index.html>.

Santa Barbara Botanic Garden. 2007. *Rare Plants of Santa Barbara County*. SBBG: Santa Barbara, California.

Santa Barbara County. 1995 revised 2021. *Environmental Thresholds and Guidelines Manual*. Originally adopted in 1995. Planning and Development Department, Santa Barbara, California.

Santa Barbara County. 2018 revised May 2020. *Digital Map of Environmentally Sensitive Habitat-GIS Database*. Santa Barbara, California.

Santa Barbara County Fire Department 2010. Development Standard No.6 Defensible Space. Santa Barbara, California. Available online at: <https://www.sbcfire.com/development-standards>.

Santa Barbara County. 1995 revised 2021. *Biological Survey Guidelines*. Planning and Development Department: Santa Barbara, California.

Santa Barbara County. 1979, amended 2010. Conservation Element, Santa Barbara County General Plan. County of Santa Barbara Planning and Development Department: Santa Barbara, California. Available online at: <https://cosantabarbara.app.box.com/s/t6t55tyoczhf6gx2kypz7wkao0464z>

Shuford, W. D. and T. Gardali. 2005. "Draft California Bird Species of Special Concern: A Ranked Assessment of Species, Subspecies, and Distinct Populations of Birds of Immediate Conservation Concern in California." Draft report to CDFW: Sacramento, California.

Smith, C. 1998. *A Flora of the Santa Barbara Region, California*. 2nd ed. Santa Barbara Botanic Garden & Capra Press: Santa Barbara, California.

Stebbins, R. C. 2003. *A Field Guide to Reptiles and Amphibians of Western North America*. 3rd ed. Houghton-Mifflin: Boston.

Stebbins, R. C. 1954. *Amphibians and Reptiles of Western North America*. McGraw-Hill: New York.

Stoecker Matt. Steelhead Assessment and Recovery Opportunities in Southern Santa Barbara County, California. Available online at: http://www.stoeckerecological.com/southern_santa_barbara_county-reports.html.

UCSB Map and Imagery Library 2023. Historic Aerial Photographs of Montecito 5/4/1954 flight CM-1-2, and 3/4/1972 Flight HB-TI_38. Santa Barbara, California. Available online at: https://mil.library.ucsb.edu/ap_indexes/FrameFinder/

US Department of Agriculture. 1981. *Soil Survey Santa Barbara County California South Coastal*. US Department of Agriculture, Soil Conservation Service: Washington, DC.

USFWS. 2023. "Critical Habitat Online Mapper, Critical Habitat for Threatened and Endangered Species." Washington, DC. Available online at: <https://fws.maps.arcgis.com/home/webmap/viewer.html?webmap=9d8de5e265ad4fe09893cf75b8dbfb77>.

USFWS. 2023. "Wetlands Online Mapper." National Wetland Inventory: Washington, DC. Available online at: <http://www.fws.gov/wetlands/Data/Mapper.html>.

USFWS. 2009. *Metadata for Wetlands and Deepwater Habitats of the Coterminous United States*. National Wetlands Inventory: Washington, DC. Available online at: http://wetlandsfws.er.usgs.gov/imf/sites/NWI_CONUS/CONUS_metadata/wetland_polys.htm.

USFWS. 2004. Title 50, *Code of Federal Regulations*. Sections 17.11 or 17.12. Available online at: http://www.access.gpo.gov/nara/cfr/waisidx_04/50cfr17_04.html.

USFWS. 2001. *Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed, and Candidate Plants*. Sacramento, California. Available online at: http://www.fws.gov/sacramento/es/documents/listed_plant_survey_guidelines.htm.

USGS. 2018. "Carpinteria, California 7.5-minute topographic map quadrangle." US Geological Survey: Washington, DC. Available online at: <https://www.pickatrail.com/topo-map/c/7.5x7.5/carpinteria-ca.html>.

USGS. 2023. National Hydrography Dataset. Accessed in GIS. US Geological Survey: Washington, DC. Available online at: <https://www.usgs.gov/core-science-systems/ngp/national-hydrography/access-national-hydrography-products>.

Watershed Environmental, Inc. 2001. "Watershed Map of Santa Barbara County." Prepared for Santa Barbara County Flood Control Department: Santa Barbara, California. Watershed Environmental, Inc.: Orcutt, California.

Williams, D. F. 1986. *Mammalian Species of Special Concern in California*. Administrative Report 86-1. State of California, The Resource Agency, Department of Fish and Game: Wildlife Management Division: Sacramento, California. Available online at: http://esrp.csustan.edu/resources/publications/pdf/mammalian_scc_ca_esrp5.pdf.

Zeiner, D. C., et al. (compiling eds.). 1990. *California's Wildlife, Vol. III: Mammals*. CDFG: Sacramento, California.

Zeiner, D. C., et al. (compiling eds.). 1988. *California's Wildlife, Vol. I: Amphibians and Reptiles*. CDFG: Sacramento, California.

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Photo 1. Repaired grouted sandstone boulder wall located on the western bank of San Ysidro Creek in the northeast corner of 1690 San Leandro Lane property. Abandoned concrete bridge abutment is to the left of the tree and sandstone boulder wall (view looking south taken 7/28/2023)



Photo 2. Abandoned concrete bridge abutment adjacent (southeast) of repaired grouted sandstone boulder wall (view looking southwest taken 7/28/2023)

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Photo 3. Repaired grouted sandstone boulder wall on western bank of San Ysidro Creek. (view looking west taken 5/8/2023)



Photo 4. Historic photo of grouted sandstone boulder covered in English ivy taken on 4/2/2014 by SBCO Flood Control Dept. Note: oak tree branch in upper right corner of photo is the same branch in the upper right corner of Photo 3 (view looking west taken 4/2/2014)

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Photo 5. Close up of a portion of the grouted sandstone boulder wall that was repaired. The cement grout in the repaired section is light gray. The color of the concrete grout in wall sections that were not repaired is white. (view looking south taken 5/8/2023)



Photo 6. Historic photo of grouted sandstone boulder being repaired taken on 2/20/2018 by SBCO Flood Control Dept. The excavator is staged behind (south) the wall and is lowering boulders into place. The workman in the center of the photo is grouting the joints between the boulders. (view looking west taken 2/20/2018)

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Photo 7. Historic photo of SBCO Flood Control Department and ACOE using heavy equipment on 2/20/2018 to clear debris from the bed of San Ysidro Creek near the 1690 San Leandro Lane grouted sandstone boulder wall (taken on 2/20/2018 by SBCO Flood Control Dept. view looking southeast)