

**BIOLOGICAL RESOURCES REPORT FOR THE
FALLBROOK SELF STORAGE PROJECT
PROJECT ID # PDS2025-STP-25-008
SAN DIEGO COUNTY, CALIFORNIA**

Project Proponent:

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SECTION 1.0 – SUMMARY

This Biological Resources Report has been completed by Chambers Group, Inc. (Chambers Group) to describe the potential for impacts to biological resources associated with construction of the proposed Fallbrook Self Storage Project (Project or Proposed Project). The Project proposes developing a self-storage facility at 1305 East Mission Road (APN: 105-410-018) in Fallbrook, CA. The Project will be comprised of nine one-story buildings and one two-story building, totaling up to 140,000 square feet of gross floor area. Vehicular access is provided along an existing access road within a north-south easement abutting the western property boundary. The Project proposes paving a private road within this access easement. A 24-foot-wide fire lane loops around the interior buildings of the site. Additionally, the Project proposes two detention basins on the northernmost portion of the site. The Project would also include approximately 88,880 square feet of new paved area, including the proposed onsite roads and parking spaces, as well as paving the offsite private road on the west side of the Project site. The Survey Area for the biological resources survey consisted of the 5.26-acre parcel, plus a 50-ft. wide road corridor from the parcel to East Mission Road, for a total of 6.08 acres.

Chambers Group biologists Matt Speegle and Heather Clayton conducted a literature review, reconnaissance-level survey, site assessment for special status species, and jurisdictional waters assessment within the Survey Area to document existing biological conditions of the site, identify and assess potentially jurisdictional waters, and determine the potential for occurrence (PFO) of special status species. The survey was conducted on foot throughout the Survey Area on December 4, 2024. All plant and wildlife species and vegetation communities observed within the Survey Area were recorded. Due to the presence of a drainage potentially subject to regulatory agency jurisdiction, Chambers Group biologist Laurie Gorman conducted jurisdictional delineation survey on January 24, 2025.

The Survey Area occurs within the San Diego draft North County Multiple Species Conservation Program (NCMSCP) planning area boundary, outside of the Priority Conservation Area (PCA). As such, the Survey Area was evaluated for biological resource impacts in accordance with *County of San Diego Guidelines for Determining Significance and Report Format and Content Requirements – Biological Resources* (County Guidelines; County of San Diego 2010). Results from the survey documented seven vegetation communities/land cover types. The Survey Area contains Coast Live Oak Woodland, which is considered sensitive according to the County Guidelines and will be subject to mitigation ratios for impacts. The Survey Area does not occur within areas mapped as Critical Habitat by the United States Fish and Wildlife Service (USFWS).

One drainage potentially subject to United States Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and California Department of Fish and Wildlife (CDFW) jurisdiction was mapped within the Survey Area. This drainage crosses through a concrete culvert under an existing land bridge. Impacts to this drainage may be subject to regulatory permitting requirements. No wetlands subject to USACE, RWQCB, CDFW, or the San Diego County Resource Protection Ordinance (RPO) were found within the Survey Area.

The proposed Project site contains habitat suitable to support nesting birds protected by the Migratory Bird Treaty Act (MBTA) and Sections 3503 and 3503.5 of the California Department of Fish and Game (CDFG) Code. No special status species were observed or detected during the biological reconnaissance survey. A total of 66 special status plant species and 20 special status wildlife species were evaluated for their PFO. Based on habitat present and recent occurrences of the species documented in the Project vicinity, it was determined that one CA Candidate Endangered species, Crotch's bumble bee (*Bombus*

crotchii), has a moderate PFO; focused surveys were recommended for this species and were completed by Chambers Group during the 2025 colony active period. The focused surveys were negative (see Appendix F: Crotch's Bumble Bee Focused Survey Results); therefore, Crotch's bumble bee can be considered absent from the Project site. The remaining 85 species that were evaluated for their PFO were determined to be absent from the Survey Area based off the findings of the literature review and biological reconnaissance survey.

SECTION 2.0 – INTRODUCTION, PROJECT BACKGROUND, LOCATION, AND SETTING

Chambers Group was retained by the Boulder Ridge Capital to conduct a literature review, biological reconnaissance survey, and jurisdictional delineation of waters for the proposed Project. The purpose of these studies was to identify vegetation communities, document habitats and soil types that could support special status species, determine the PFO of special status species, and record existing plant and animal species observed or detected within the Survey Area. The biological reconnaissance survey and delineation were conducted to support the RWQCB 401 Certification, CDFW 1600 Streambed Alteration Agreement, and USACE 404 permit applications for vegetation removal and maintenance activities within the Project site. Information contained in this document has been prepared in accordance with accepted scientific and technical standards that are consistent with the requirements of the USFWS and CDFW.

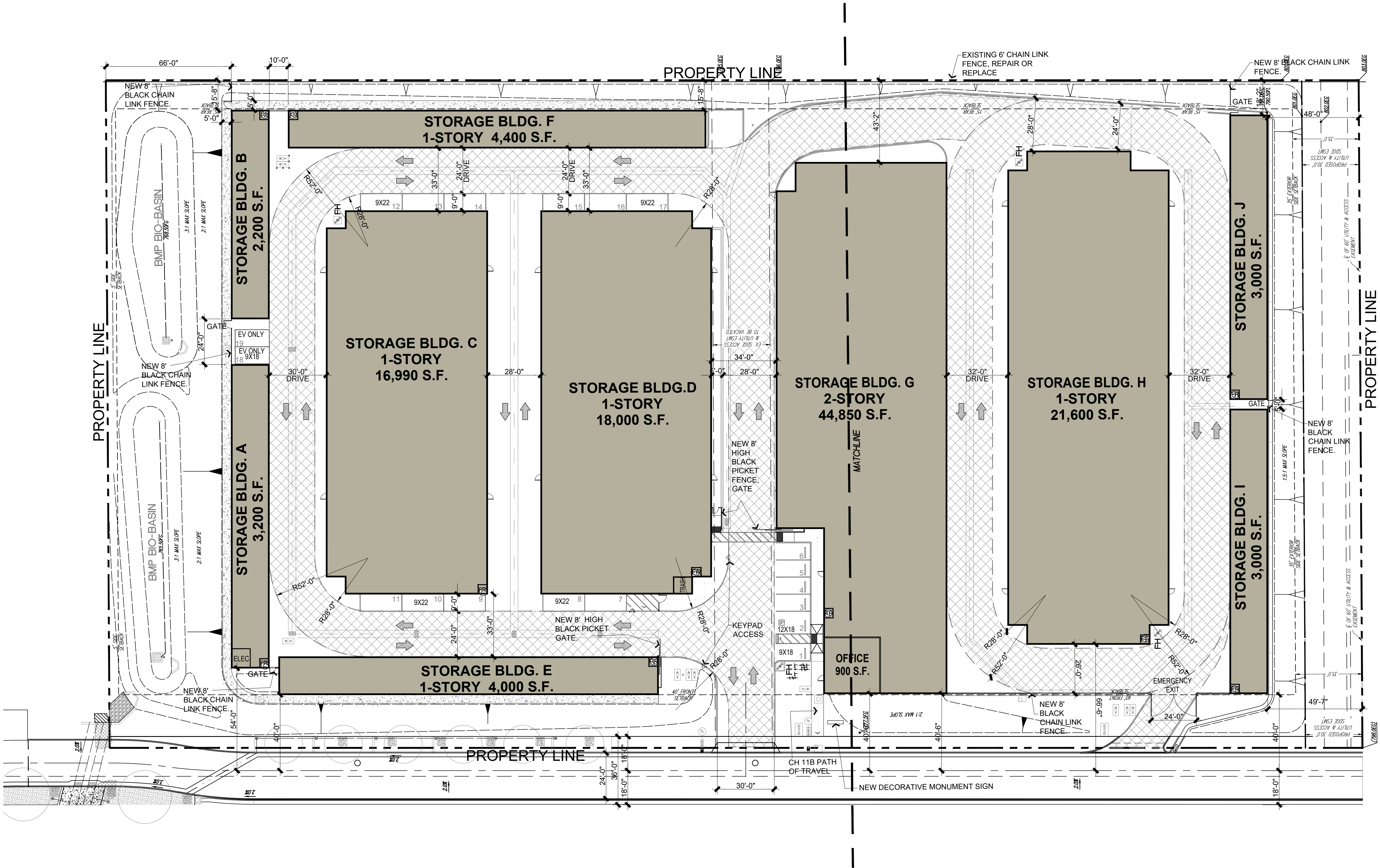
2.1 PROJECT BACKGROUND

The Project proposes developing a self-storage facility at 1305 East Mission Road (APN: 105-410-018) in Fallbrook, CA. The Project will be comprised of nine one-story buildings and one two-story building, totaling up to 140,000 square feet of gross floor area (Figure 1: Site Plan). Vehicular access is provided along an existing access road within a north-south easement abutting the western property boundary. The Project proposes paving a private road within this access easement. A 24-foot-wide fire lane loops around the interior buildings of the site. Additionally, the Project proposes two detention basins on the northernmost portion of the site. The Project would also include approximately 88,880 square feet of new paved area, including the proposed onsite roads and parking spaces, as well as paving the offsite private road on the west side of the Project site.

2.2 PROJECT LOCATION

The proposed Project encompasses approximately 6.08 acres in Fallbrook within northeastern San Diego County, approximately 500 feet southeast of the intersection of East Mission Road and Industrial Way (Figure 2: Project Location and Vicinity Map). The Survey Area for the biological resources survey consisted of the 5.26-acre parcel, plus a 50-ft. wide road corridor from the parcel to East Mission Road, for a total of 6.08 acres. The elevation within the Survey Area ranges from 775 to 808 feet above mean sea level (amsl). The Project site is located in Township 9 South, Range 3 West, Section 14 within the Temecula United States Geological Survey (USGS) 7.5-minute quadrangle (USGS 1992). The proposed Project site is located in within the San Diego County's draft NCMSCP, outside of a PCA (SanGIS 2024) (Figure 3: Regional Context Map).

The Project site is bordered by commercial development to the west, a battery storage facility to the east, residential development to the north, and vacant lots totaling approximately 7 acres to the south. The Project is further surrounded by commercial and residential development; this development abuts large open space areas, including the Santa Margarita River Trail Reserve, Santa Margarita Canyon Preserve, and Santa Margarita Ecological Reserve approximately one mile to the north and Naval Weapons Station Fallbrook approximately 1.3 miles to the west. Moderately dense development continues for 3.5 miles east until Interstate 15 and 5.5 miles southeast until Highway 76, where land use transitions to rural development, farming, and agriculture. Land use south of the Project site becomes a mix of residential development and agriculture until Highway 76, followed by primarily residential development within the City of Vista south of Highway 76.



SITE DATA			
ZONE	INDUSTRIAL (M52)		
LOT AREA	±5.37 ACRES (232,122 SF)		
DEVELOPMENT STANDARDS			
SETBACKS	REQUIRED	PROVIDED	
FRONT	60'	VARIES	
SIDE	0'	VARIES	
REAR	15'	VARIES	
LOT COVERAGE	N/A	(100,757 SF)	
FAR	N/A	.53 (123,788 SF)	
TOTAL UNITS		869 UNITS	
PARKING	3 SPACES MIN. AT OFFICE 0.015 PARKING SPACE PER 1 STORAGE UNIT STORAGE = 13 TOTAL REQUIRED = 16	19 SPACES	
BUILDING AREA TABULATIONS (Square Feet) GROSS FLOOR AREA			
LEVEL	SELF STORAGE	OFFICE	TOTAL
BUILDING A (1-STORY)	3,200		3,200
BUILDING B (1-STORY)	2,200		2,200
BUILDING C (1-STORY)	16,990		16,990
BUILDING D (1-STORY)	18,000		18,000
BUILDING E (1-STORY)	4,000		4,000
BUILDING F (1-STORY)	4,400		4,400
BUILDING G (2-STORY)	44,850	900	45,750
BUILDING H (1-STORY)	21,600		21,600
BUILDING I (1-STORY)	3,000		3,000
BUILDING J (1-STORY)	3,000		3,000
TOTAL GROSS SQ. FT.:	121,240	900	122,140
ESTIMATED NET RENTABLE	±100,000 SQUARE FEET		

BUILDING CONSTRUCTION TYPE: IIB
OCCUPANCY CLASSIFICATION: S-1.
BUILDINGS ARE EQUIPPED WITH AUTOMATIC FIRE SPRINKLER SYSTEM IN ACCORDANCE WITH NFPA 13, AND S.D. FIRE CODE 903.2. BUILDINGS TO BE EQUIPPED WITH SUPERVISOR FIRE ALARM SYSTEM.
ELECTRIC ACCESS GATES TO HAVE KNOX BOX SWITCH AND OPTICOM. NON-ELECTRIC GATES WILL PROVIDE KNOX PAD LOCK.

MISSION ROAD SELF STORAGE
FALLBROOK, CA

FIGURE 1: SITE PLAN

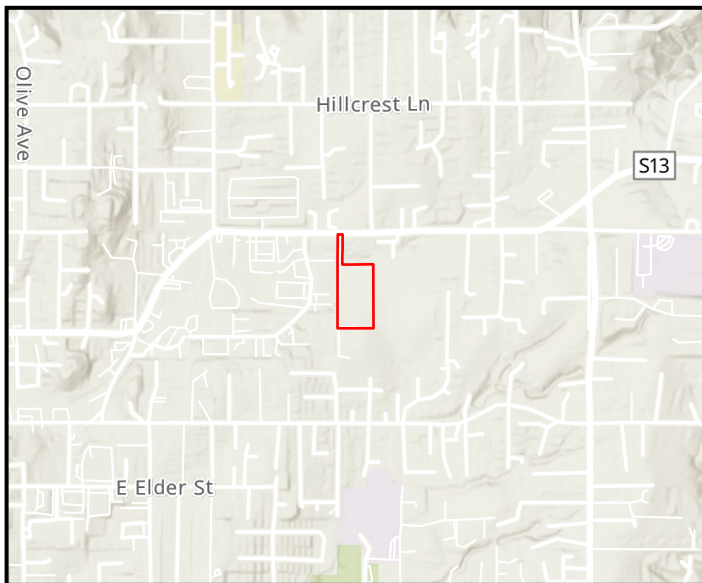
NORTH

SCHEME C

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JOB NUMBER: 24-719
SCALE: 1"=30'-0"
DATE: 08/25/2025



 Project Location

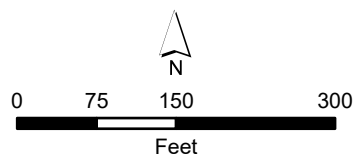


Figure 2
Fallbrook Self-Storage
Project Location and Vicinity

SECTION 3.0 – APPLICABLE REGULATIONS

The following federal and state, and local regulations and policies pertain to biological resources and are relevant to the Proposed Project.

3.1 FEDERAL

The following are federal policies that apply to the Proposed Project.

3.1.1 Clean Water Act

The purpose of the 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 fill material into waters of the United States without a permit from the USACE. The definition of waters of the United States 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 groundwater 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 Code of Federal Regulations [CFR] § 328.3(b)). The goals and standards of the CWA are enforced through permit provisions. The United States Environmental Protection Agency also has authority over wetlands and may override a USACE permit.

When a project may create impacts for wetlands, the project requires a permit or a waiver. 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.

The State of California (State) regulates discharge of material into waters of the State pursuant to Section 401 of the CWA and the California Porter-Cologne Water Quality Control Act (California Water Code, Division 7, §13000 et seq.). A Water Quality Certification or waiver pursuant to Section 401 of the CWA is required from the RWQCB for Section 404 permit actions.

Clean Water Rule

On September 12, 2019, the Environmental Protection Agency (EPA) and Department of the Army signed a final rule to repeal the 2015 Clean Water Rule (2015 Rule) and re-codify the regulatory text defining “waters of the United States” that existed prior to the 2015 Rule. The new regulations went into effect on December 23, 2019. One of the proposed changes includes ephemeral features that contain water only during or in response to rainfall would no longer be considered “waters of the United States” under the jurisdiction of the USACE. On August 28, 2019, the Office of Administrative Law approved the State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to “waters of the State”. The procedures went into effect on May 28, 2020. Under these new regulations, the State Water Resources Control Board and its nine RWQCBs will assert jurisdiction over all existing “waters of the United States”, and all waters that would have been considered “waters of the United States” under the 2015 Rule. Thus, the “waters of the United States” that would no longer be under USACE jurisdiction would be under RWQCB jurisdiction.

The EPA and USACE are in receipt of the United States District Court for the District of Arizona’s August 30, 2021, order vacating and remanding the Navigable Waters Protection Rule in the case of *Pascua Yaqui Tribe v. United States Environmental Protection Agency*. On October 22, 2019, the EPA and USACE

published a final rule to repeal the 2015 Clean Water Rule: Definition of “Waters of the United States” (“2015 Rule”), which amended portions of the CFR, and to restore the regulatory text that existed prior to the 2015 Rule. The final “Revised Definition of ‘Waters of the United States’” rule (the “2023 Rule”) became effective on March 20, 2023.

On May 25, 2023, the U.S. Supreme Court issued its ruling in *Sackett v. Environmental Protection Agency*, holding the Clean Water Act’s definition of “waters of the United States” extends to only those “wetlands with a continuous surface connection to bodies that are ‘waters of the United States’ in their own right,” so that they are “indistinguishable” from those waters.

On August 29, 2023, the USEPA and USACE issued a final rule to amend the January 2023 Rule, which conformed the definition of “waters of the United States,” to the U.S. Supreme Court’s May 25, 2023, decision in the case of *Sackett v. Environmental Protection Agency*. Key aspects of the regulatory text were amended to conform to the Court’s decision. The Conforming Rule 2023 became effective on September 8, 2023.

Therefore, this JD is consistent with the 2023 Conforming Rule and includes measurement of the OHWM to determine Waters of the United States (WoUS).

3.1.2 Endangered Species Act of 1973

When a private project that has no federal funding and for which no federal action is required may affect a listed species, the private applicant may receive authorization for incidental take of species listed under the Endangered Species Act (ESA). In these situations, Section 10 of the ESA provides for issuance of incidental take permits (ITPs) to private entities with the development of a habitat conservation plan (HCP). An ITP allows take of the species that is incidental to another authorized activity.

3.1.3 Migratory Bird Treaty Act, as Amended

The MBTA of 1918, as amended (16 USC 703-711), provides legal protection for almost all bird species occurring in, migrating through, or spending a portion of their life cycle in North America by restricting the killing, taking, collecting, and selling or purchasing of native bird species or their parts, nests, or eggs. The USFWS determined it was illegal under the MBTA to directly kill or destroy an active nest (nest with eggs or nestlings) of, nearly any bird species (with the exception of non-native species through the MBTA Reform Act of 2004). Certain game bird species are allowed to be hunted for specific periods determined by federal and state governments. The intent of the MBTA is to eliminate any commercial market for migratory birds, feathers, or bird parts, especially for eagles and other birds of prey. 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, such as 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 Title 50, Part 13 (General Permit Procedures) and Part 21 (Migratory Bird Permits) of the CFR.

3.2 STATE

The following sections detail specific California State regulations that are applicable to the Proposed Project.

3.2.1 California Endangered Species Act

The California Endangered Species Act (CESA; California Fish and Wildlife Code Sections 2050-2116) parallels the FESA. As a responsible agency, CDFW has regulatory authority over species State listed as endangered and threatened. The State Legislature encourages cooperative and simultaneous findings between State and federal agencies. Consultation with CDFW is required for projects with the potential to affect listed or candidate species. CDFW would determine whether a reasonable alternative would be required for the conservation of the species. CESA prohibits the “take” of these species unless an ITP is granted. Under California Fish and Wildlife Code Section 2081 (ITP), CDFW can authorize the “take” of a listed species (with exception to fully protected species) if the “take” of the listed species is incidental to carrying out an otherwise lawful project that has been approved under the California Environmental Quality Act (CEQA). Section 2080.1 allows for “take” once an applicant obtains a federal ITP which can be approved (Consistency Determination letter) within 30 days by the CDFW Director. If the federal Incidental Take Statement is determined not to be consistent with CESA, then application for a State ITP (2081) is required.

CDFW has designated certain species native to California as Species of Special Concern to “focus attention on wildlife at conservation risk by the Department, other State, local and federal governmental entities, regulators, land managers, planners, consulting biologists, and others; stimulate research on poorly known species; achieve conservation and recovery of wildlife before they meet CESA criteria for listing as threatened or endangered.”

3.2.2 Sections 1600-1602 of the California Fish and Wildlife Code

Pursuant to Division 2, Chapter 6, Sections 1600-1602 of the CDFW Code, regulates all diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake, which supports fish or wildlife. CDFW defines a “stream” (including creeks and rivers) 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 surface or subsurface flow that supports or has supported riparian vegetation.” CDFW’s definition of “lake” includes “natural lakes or man-made reservoirs.” Features were delineated by measuring the outer width and length boundaries, consisting of either the top of bank (TOB) measurement or the extent of associated riparian or wetland vegetation (whichever is greater).

3.2.3 California Environmental Quality Act

The CEQA (Public Resources Code, Sections 21000-21177) requires that State and local agencies consider environmental consequences and project alternatives before a decision is made to implement a project requiring State or local government approval, financing, or participation by the State of California. In addition, CEQA requires the identification of ways to avoid or reduce environmental degradation or prevent environmental damage by requiring implementation of feasible alternatives or mitigation measures.

3.2.4 California 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 the CDFW. The California Fish and Game Commission has the authority to designate native plants as “endangered” or “rare” and to protect them from take. Rare plants protected by CDFW generally include species with California Rare Plant Ranking (CRPR) 1A, 1B, 2A, and 2B of the California Native Plant Society (CNPS) Inventory of Rare and Endangered Vascular Plants of California. In addition, sometimes CRPR 3 and 4 plants are considered rare if the population has local significance in the area and is impacted by a project. Section 1913(b) includes a specific provision to allow for the incidental removal of endangered or rare plant species, if not otherwise salvaged by CDFW, within a Right of Way (ROW) to allow a public utility to fulfill its obligation to provide service to the public.

When the CESA was passed in 1984, it expanded on the original NPPA, enhanced legal protection for plants, and created the categories of “threatened” and “endangered” species to parallel the FESA. The CESA converted all rare wildlife to threatened species under the NPPA, but did not do so for rare plants, which resulted in three listing categories for plants in California: rare, threatened, and endangered. The NPPA remains part of the California Fish and Game Code, and mitigation measures for impacts to rare plants are specified in a formal agreement between the CDFW and a project proponent.

3.2.5 Porter-Cologne Water Quality Control Act

The State of California regulates discharge of material into waters of the State pursuant to Section 401 of the CWA and the California Porter-Cologne Water Quality Control Act (California Water Code, Division 7, §13000 et seq.). The Porter-Cologne Water Quality Control Act of 1966 (California Water Code §§ 13000-13999.10) mandates that activities that may affect waters of the State shall be regulated to attain the highest quality. The State Water Resources Control Board (SWRCB) and the local RWQCB are the relevant permitting agencies. RWQCB provides regulations for a “non-degradation policy” that are especially protective of areas with high water quality. Porter-Cologne reserves the right for the State of California to regulate activities that could affect the quantity and/or quality of surface and/or ground waters, including isolated wetlands, within the State. The SWRCB and its nine RWQCBs will assert jurisdiction over all existing “waters of the United States”, and all waters that would have been considered “waters of the United States” under the 2015 Rule. If the project is proposed to discharge into waters of the State, a Waste Discharge Requirements (WDR), or a waiver to WDRs, must be filed before beginning discharge.

3.3 LOCAL

3.3.1 San Diego County Resource Protection Ordinance

San Diego County’s RPO establishes controls on development to protect sensitive lands including wetlands, floodplains, steep slopes, sensitive biological habitats, and prehistoric and historic sites. The RPO limits amount of disturbance to these features to prevent degradation and loss of sensitive lands while preserving the ability of affected property owners to make reasonable use of their land subject to the conditions of the RPO. Projects containing sensitive lands according to RPO definitions are subject to permitted uses and development criteria, unless they fall under an exemption (County of San Diego 2012). The County Guidelines establish mitigation criteria for impacts to sensitive biological habitat (County of San Diego 2010). Furthermore, if coastal sage scrub habitat is present at a project site, a Habitat Loss Permit (HLP) is required under the RPO.

County of San Diego: Multiple Species Conservation Programs

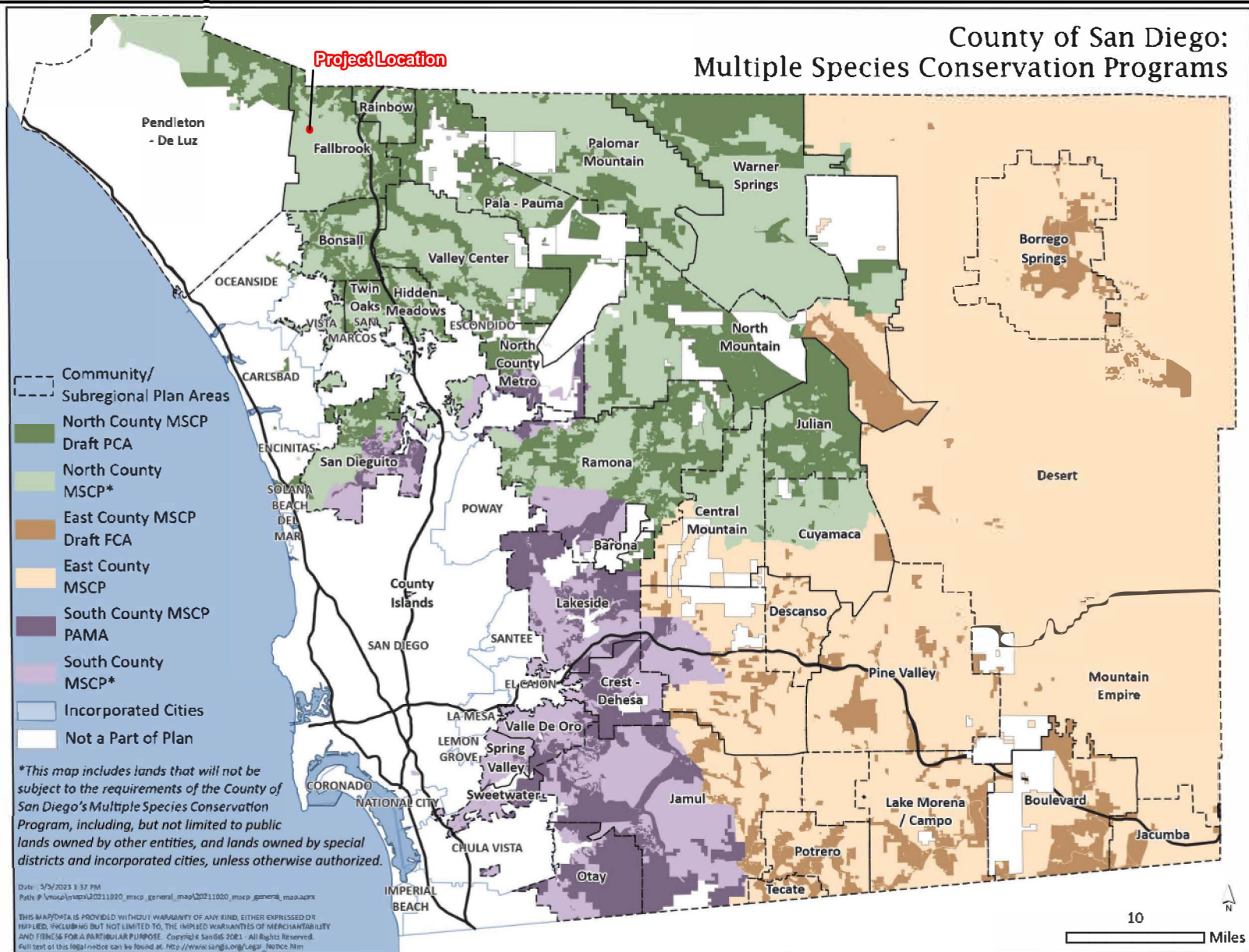


Figure 3
Fallbrook Self-Storage
Regional Context

SECTION 4.0 – METHODOLOGY

4.1 LITERATURE REVIEW

Prior to conducting the field survey, soil maps for San Diego County were referenced from the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey (USDA 2024) to determine the types of soil found within the Survey Area. Soils were characterized in accordance with categories set forth by the USDA NRCS.

For the purpose of determining hydrologic connectivity to a Traditional Navigable Waters (TNW), the most recent records of the USFWS National Wetlands Inventory (NWI; USFWS 2024a) data, USGS National Hydrography Dataset (NHD) blue-lined drainages (USGS 2024), Google Earth aerial imagery (Google Earth LLC 2024), USGS aerial imagery (USGS 2022), and USGS topographic maps (USGS 1992) were reviewed; and all features were inspected in the field on- and off-site for true connectivity.

The most recent records of the California Natural Diversity Database (CNDDB) managed by CDFW (2024), the USFWS sensitive species database (USFWS 2024a), the USFWS Critical Habitat Report (USFWS 2024c), the California Native Plant Society's Electronic Inventory (CNPSEI) of Rare and Endangered Vascular Plants of California (CNPS 2024), and other industry professional references were reviewed for the following quadrangles containing and surrounding the Project within a 5-mile radius: *Fallbrook, Temecula, Morro Hills, and Bonsall*, California (CDFW 2024). These databases contain records of reported occurrences of federal- and/or state-listed endangered or threatened species, California Species of Concern (SSC), or otherwise special status species or habitats. In addition, the USFWS's Information for Planning and Conservation (IPaC) site was searched for federally listed threatened and/or endangered species known to occur in the vicinity of the Survey Area and critical habitat that may overlap with the Survey Area (USFWS 2024d).

4.2 JURISDICTIONAL WATERS

Chambers Group biologist Laurie Gorman performed field investigations within the Survey Area on January 24, 2025 to delineate potential waters, including wetlands. Potential USACE / RWQCB / CDFW jurisdictional areas identified during the literature search and aerial image analysis were field checked for the presence of definable channels, soils, wetland vegetation, riparian habitat, and hydrology. Photographs of the potentially jurisdictional waters are provided in Appendix A: Site Photographs.

4.2.1 Drainages

Each drainage was examined in the field, and the channel banks were examined for signs of flow, terraces, drift deposits and other indicators that would determine the location of the OHWM. Climate and flow frequency were considered during the survey effort. Data were collected electronically with ESRI ArcGIS Collector and hand-written onto an OHWM data sheet (provided as Appendix D: OHWM Datasheet). Areas of potential jurisdiction were mapped to calculate acreage of potential impacts for Project activities including road improvements.

4.2.2 Hydrological Connectivity

Rainfall in the general Project vicinity was below normal for the start of the winter rain season during which the survey being conducted. According to the National Oceanic and Atmospheric Administration

(NOAA) weather data (NOAA 2024), the total precipitation for the general area from October to November 2024 was approximately 0.16 inches, while the average from October to November in the prior five years was 2.08 inches. Therefore, historic aerial imagery (Google Earth LLC 2024) was reviewed for indications of surface saturation and hydrological connectivity over time.

4.2.3 Potential Wetlands

Potential wetlands were evaluated using the methodology set forth in the *1987 Corps of Engineers Wetlands Delineation Manual* (1987 Wetland Manual; USACE 1987), the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (version 2.0)* (2008 Arid West Supplement; USACE 2008), and the San Diego County RPO (County of San Diego 2012). The methods set forth in the 1987 Wetland Manual and the 2008 Arid West Supplement involve the delineation of wetlands based on the presence of three wetland parameters: a predominance of hydrophytic vegetation, wetland hydrology, and hydric soils. USACE jurisdiction requires the presence of all three parameters, while RWQCB and CDFW jurisdictions require the presence of two: wetland hydrology plus either hydrophytic vegetation or hydric soils. Under the San Diego County RPO, a wetland is defined as having one of the three parameters. More specifically, a RPO wetland is defined as having or more of the following characteristics: 1) at least periodically, the land supports a predominance of hydrophytes (plants whose habitat is water or very wet places); 2) the substratum is predominantly undrained hydric soil; or 3) an ephemeral or perennial stream is present, whose substratum is predominantly non-soil and such lands contribute substantially to the biological functions or values of wetlands in the drainage system.

These wetland parameters are discussed in greater detail below.

Hydrophytic Vegetation

Hydrophytic vegetation is defined as “the sum total of macrophytic plant life growing in water or on a substrate that is at least periodically deficient in oxygen as a result of excessive water content” (USACE 1987). The potential wetland areas were surveyed by walking through the Survey Area and making observations of areas exhibiting characteristics of jurisdictional wetlands.

Areas supporting plant life potentially indicative of wetlands were evaluated in the field according to current USACE wetland delineation procedures described in the 1987 Wetland Manual (USACE 1987) and the 2008 Arid West Supplement (USACE 2008). The dominant and subdominant plant species present in the sample pits of these potential wetland areas were identified and their wetland indicator status noted based on the current National Wetland Plant List (USACE 2024). The list was referenced to classify identified plants using the following categories: obligate wetland (OBL; almost always occurs in wetlands), facultative wetland (FACW; usually occurs in wetlands but occasionally found in non-wetlands), facultative (FAC; equally likely to occur in wetlands and non-wetlands), facultative upland (FACU; usually occurs in non-wetlands but occasionally found in wetlands), and obligate upland (UPL; almost always occurs in non-wetlands).

Plant species and absolute cover values would be recorded by stratum (i.e., tree, sapling/shrub, herb, woody vine) and evaluated for dominance and prevalence according to guidelines in the *1987 Wetland Manual* and *2008 Arid West Supplement guidelines* (USACE 1987, 2008). Plant species naming conventions follow the *Jepson Manual, Second Edition* (Baldwin et al. 2012). Vegetation communities follow the naming convention in *A Manual of California Vegetation* (Sawyer et al. 2009).

Hydric Soils

A hydric soil is a soil that is saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions that favor the growth and regeneration of hydrophytic vegetation (USACE 1987). Hydric soil indicators are formed predominantly by the accumulation or loss of iron, manganese, sulfur, or carbon compounds (USACE 2008) due to periods of anaerobic conditions in the soil. The hydric soil criterion is considered satisfied at a location if soils in the area can be inferred to have a high groundwater table, show evidence of prolonged soil saturation, or contain indicators suggesting a long-term reducing environment in the upper 18 inches of the soil profile are present.

Potential hydric soils were investigated within the Survey Area. Sample soil pit locations were selected, and a hole was dug to a typical depth of 18 inches (unless prevented by some occluding material) or occasionally deeper to determine soil color, evidence of soil saturation, depth to shallow groundwater, and indicators of a reducing soil environment (e.g., redox concentrations or pore linings, gleyed soils, hydrogen sulfide odor). Soil matrix colors were classified using Munsell Soil-Color Charts (Munsell Color 2009).

Wetland Hydrology

The presence of wetland hydrology indicators confirm that inundation or saturation has occurred on a site but may not provide information about the timing, duration, or frequency of the event. Hydrology features are generally the most ephemeral of the three wetland parameters (USACE 2008).

Hydrologic information for the Survey Area was obtained by reviewing USGS topographic maps (USGS 1992) and aerial imagery (USGS 2022) and by directly observing hydrology indicators in the field. The wetland hydrology criterion is considered satisfied at a location if, based upon the conclusions inferred from the field observations, an area has a high probability of being periodically inundated or has soils saturated to the surface at some time during the growing season to develop anaerobic conditions in the surface soil environment, especially the root zone (USACE 1987). If at least one primary indicator or at least two secondary indicators are found at a sample pit, the wetland hydrology criterion is considered satisfied.

4.3 BIOLOGICAL RESOURCES SURVEY

Chambers Group biologists Matt Speegle and Heather Clayton conducted a biological reconnaissance survey within the approximately 6.08-acre Survey Area to identify the PFO of special status species, vegetation communities, or habitats that could support special status species. The survey was conducted on foot throughout the Survey Area between 1030 and 1400 hours on December 4, 2024. Weather conditions during the survey included temperatures ranging from 70 to 74 degrees Fahrenheit, 5 to 15 percent cloud cover, no precipitation, and wind speeds ranging from 3 to 7 miles per hour during the survey. Photographs of the Survey Area were taken to document existing conditions (Appendix A: Site Photographs).

4.3.1 Vegetation

Vegetation communities within the Survey Area were identified, qualitatively described, and mapped onto an aerial photograph. Acreage of impacts to vegetation communities were calculated, as described in Section 4. Vegetation communities were determined in accordance with the *Manual of California*

Vegetation, Second Edition (Sawyer et al. 2009). Plant nomenclature follows that of *The Jepson Manual, Second Edition* (Baldwin et al. 2012). All plant species observed within the Survey Area were recorded. A comprehensive list of the plant species observed during the survey is provided in Appendix B: Plant Species Observed.

4.3.2 Wildlife

All wildlife and wildlife signs observed and detected, including tracks, scat, carcasses, burrows, excavations, and vocalizations, were recorded. Additional survey time was spent in those habitats most likely to be utilized by wildlife (i.e., native vegetation, wildlife trails, etc.) or in habitats with the potential to support state- and/or federal-listed or otherwise special status species. Notes were made on the general habitat types, species observed, and the conditions of the Survey Area. A comprehensive list of the wildlife species observed/detected during the survey is provided in Appendix C: Wildlife Species Observed/Detected.

SECTION 5.0 – RESULTS

5.1 SOILS

The Survey Area is located within the USDA NRCS CA638 (San Diego County Area). Based on the results of the database search (USDA 2024), three soil types are known to occur in the Survey Area (Figure 4: USDA Soils Map), as described below.

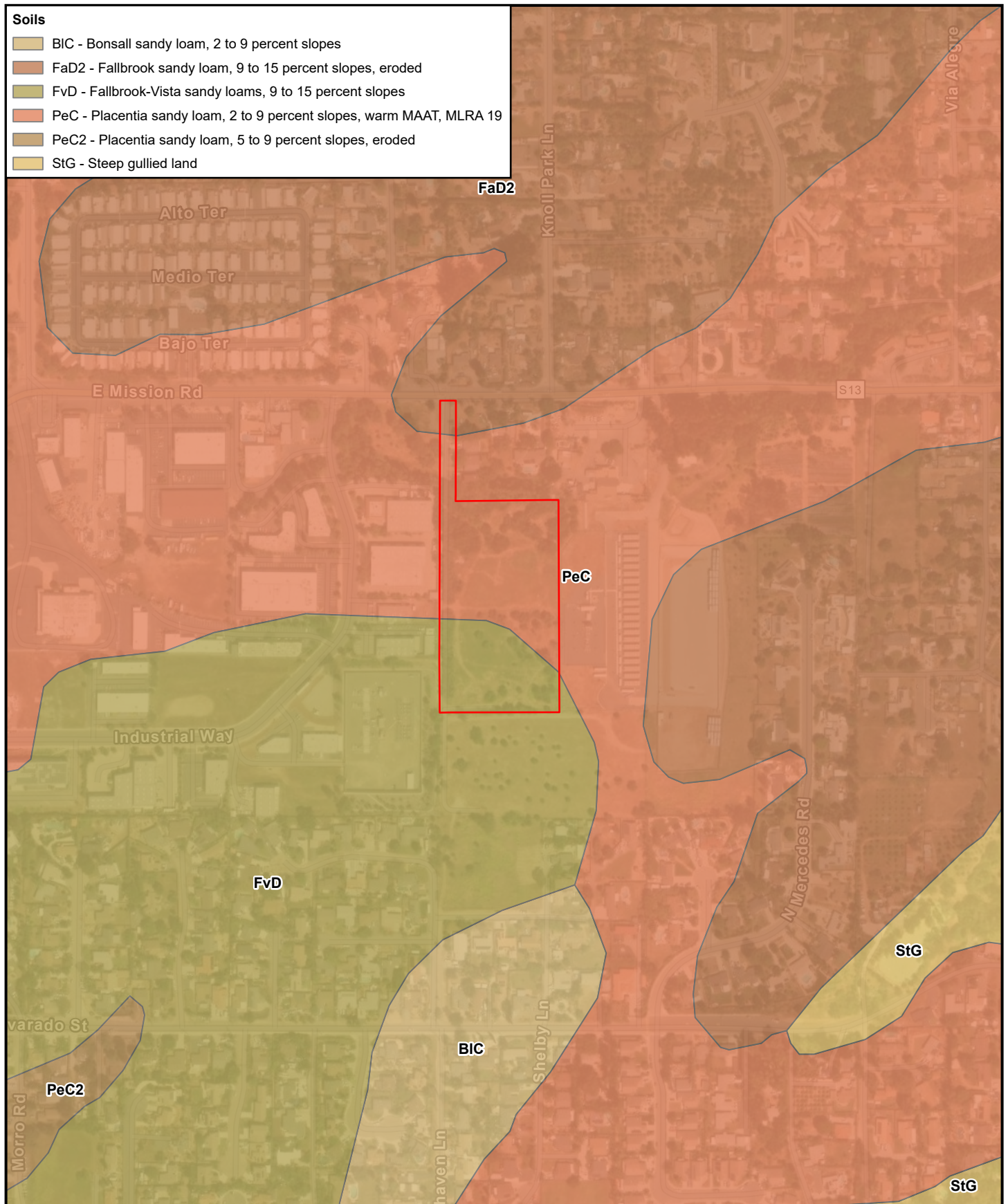
Fallbrook-Vista sandy loams, 9 to 15 percent slopes, occur in the southern portion of the Survey Area. They are well drained soils typically found in convex positions at elevations from 200 to 3,900 feet amsl. The soil profiles are composed of sandy loam, loam, sandy clay loam, coarse sandy loam, and weathered bedrock residuum weathered from granodiorite or grus derived from granodiorite and/or grus derived from quartz-diorite. These soils are not hydric and typically have moderately high to high permeability resulting in low to high runoff. The soil depth is 20 to 60 inches to paralithic bedrock.

Placentia sandy loam, 2 to 9 percent slopes, warm mean annual soil temperature (MAAT), Major Land Resource Area (MLRA) 19, occurs in the northern portion of the Survey Area. This well drained soil is typically found in linear or convex positions at elevations from 150 to 2,950 feet amsl. The soil profiles are composed of sandy loam, sandy clay, and sandy clay loam alluvium derived from granitoid. These soils are not hydric and typically have moderately low to moderately high permeability resulting in low runoff. The soil depth is more than 80 inches to bedrock.

Fallbrook sandy loam, 9 to 15 percent slopes, eroded, occurs within the Survey Area along the northern portion of the existing access road that connects to East Mission Road. This well drained soil is typically found in convex positions at elevations from 200 to 3,500 feet amsl. The soil profiles are composed of loam, sandy loam, sandy clay loam, and weathered bedrock derived from residuum weathered from granodiorite. These soils are not hydric and typically have moderately high permeability resulting in high runoff. The soil depth is 40 to 60 inches to paralithic bedrock.

Soils

- BIC - Bonsall sandy loam, 2 to 9 percent slopes
- FaD2 - Fallbrook sandy loam, 9 to 15 percent slopes, eroded
- FvD - Fallbrook-Vista sandy loams, 9 to 15 percent slopes
- PeC - Placentia sandy loam, 2 to 9 percent slopes, warm MAAT, MLRA 19
- PeC2 - Placentia sandy loam, 5 to 9 percent slopes, eroded
- StG - Steep gullied land



Project Location

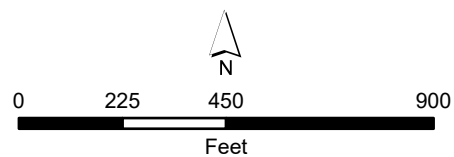


Figure 4
Fallbrook Self-Storage
Soils

5.2 POTENTIAL JURISDICTIONAL WATERS

The findings of the database review and field delineation of jurisdictional waters are described below. The regulatory agencies would determine the presence of jurisdictional waters.

5.2.1 Non-Wetland Waters

The Survey Area is located within the O'Neill Lake-Santa Margarita River Sub-watershed (HUC12 180703020504) which covers approximately 27,879 acres of the Upper San Diego Watershed (Figure 5: Watersheds Map). The Survey Area is within the foothills of the Jamul Mountains, a part of the Peninsular Mountain Ranges. According to the NWI and NHD databases (Figure 6: NWI and NHD Map), an ephemeral drainage has been documented crossing the existing access road within the Survey Area. The historic path of this drainage was mapped in the NWI and NHD as receiving water from foothills to the northeast. Water flows through the Survey Area, then southwest towards Naval Weapons Station Fallbrook where it feeds into a larger perennial creek which connects with Lake O'Neill on Camp Pendelton. Lake O'Neill continues into the Santa Margarita River, which flows southwest until it reaches the Santa Margarita Marsh just north of Oceanside, San Diego, ultimately terminating in the Pacific Ocean. The historic path of this drainage appears to be highly manipulated by development downstream, immediately southwest of the Survey Area, resulting in a man-made underground connector system.

This NWI/NHD-mapped drainage was observed during the field survey, crossing underneath the bare ground portion of the existing access road within the Survey Area through a concrete box culvert. Water from the Survey Area fed westward into a concrete culvert just outside of the Survey Area which consisted of two round openings approximately three feet in diameter. A metal pump was present in the streambed within the Survey Area, downstream of the access road crossing. Evidence of the Ordinary High-Water Mark (OHWM) was observed at an average of 2 feet in width and 1 foot in depth and covered approximately 0.002 acre within the Survey Area (see Appendix D: OHWM Datasheet). Water staining was present within the downstream culvert up to one foot in height. Bank to Bank (B2B) features of this drainage were measured at 4 feet in width and 3 feet in depth and covered approximately 0.005 acre within the Survey Area. The drainage banks were secured with concrete blocks, riprap, and bricks. Minimal vegetation was present within the streambed other than leaf litter from overhanging trees. Standing water measuring 1-1.5 feet deep was present in the drainage, with the deeper portions on either side of the concrete box culvert due to erosion. Red swamp crayfish (*Procambarus clarkii*) were observed in the water downstream of the bridge. No wetland or riparian vegetation was observed within or on the banks of this drainage. A high level of human disturbance was evident; there was scattered trash and metal debris in and around the drainage banks in addition to the man-made bank revetment described above.

Potential USACE Jurisdiction

For the purposes of USACE jurisdiction only, this jurisdictional delineation has been prepared as a Preliminary Jurisdictional Delineation. The Preliminary Jurisdictional Delineation Form is provided in Appendix E.

The USACE regulates discharge of dredged and/or fill material into WoUS. These waters include wetland and non-wetland bodies of water that meet specific criteria, outlined in Section 2 – Applicable Regulations. USACE regulatory jurisdiction pursuant to Section 404 of the CWA is founded on whether the water could be identified by the 2023 Conforming Rule. This connection may be direct or indirect to a stream channel with a RPW or TNW.

Based on the database review and field observations during the delineation, the drainage present within the Survey Area is presumed to be WoUS. As defined by the OHWMs, a total of 0.002 acre of presumed non-wetland WoUS are present within the Survey Area and are potentially under the jurisdiction of the USACE (Figure 7: Jurisdictional Delineation Results Map).

Potential RWQCB Jurisdiction

RWQCB jurisdiction includes all USACE jurisdictional areas, OHWMs or High Water Marks (HWMs) in non-Relatively Permanent Water, isolated wetlands, and any other features that have an effect on surface or subsurface water quality within California. The RWQCB has jurisdiction over surface waters, which may be identified as ephemeral waters, including those indicated by a change in the average sediment texture, a change in vegetation cover, and/or a break in bank slope.

As defined by the OHWMs, a total of 0.002 acre of potential non-wetland waters of the State are present within the Impact Area and are potentially under the jurisdiction of the RWQCB (Figure 7: Jurisdictional Delineation Results Map).

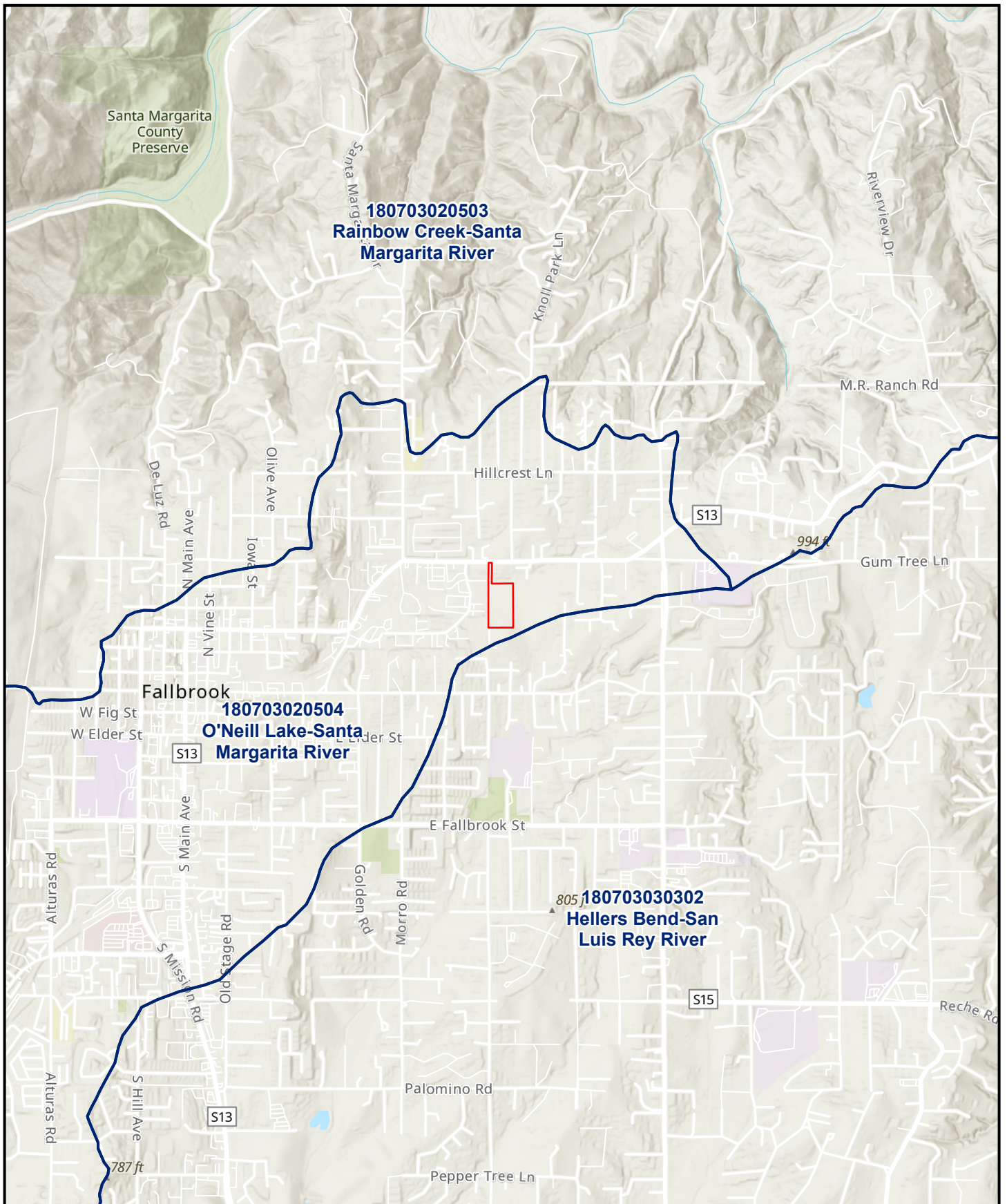
Potential CDFW Jurisdiction

CDFW regulates all diversions, obstruction, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake which supports fish or wildlife, including supporting vegetation.

As defined by the BTB measurements, a total of 0.005 acre of potential non-wetland waters of the State are present within the Impact Area and potentially under the jurisdiction of CDFW (Figure 7: Jurisdictional Delineation Results Map).

5.2.2 Wetland Waters

No potential wetlands were previously documented within the Survey Area by the NHD or NWI. In addition, no wetland vegetation or hydrological indicators were observed during the field surveys. A test pit was dug within the drainage described above; hydric soils were not detected. Therefore, the Survey Area lacks potential wetlands subject to regulatory agency jurisdiction under the USACE, RWQCB, CDFW, or San Diego County RPO.



- ▭ Project Location
- ▭ Watershed (HUC-12)

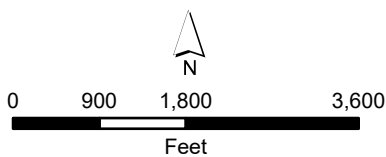


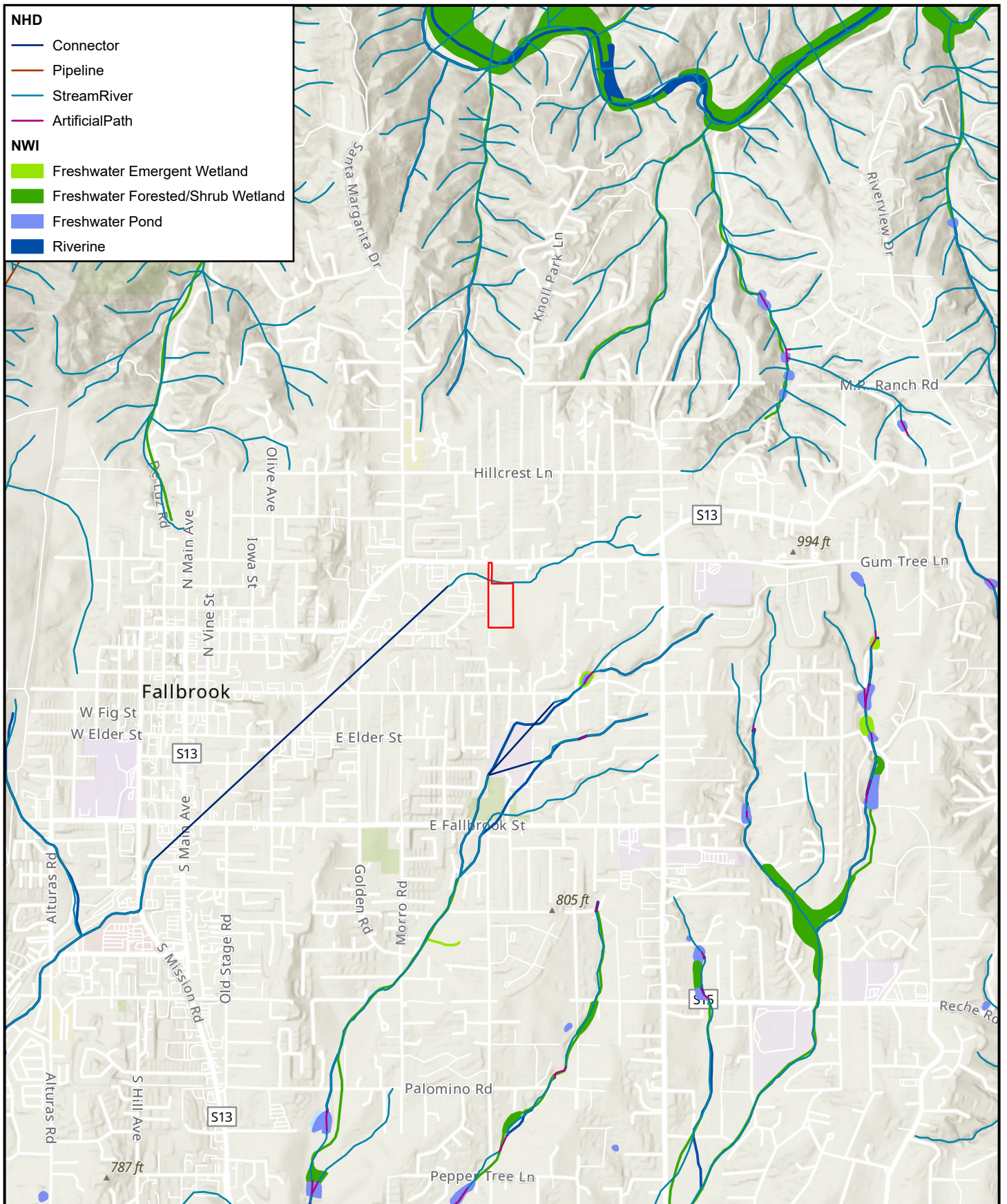
Figure 5
Fallbrook Self-Storage
Watersheds

NHD

- Connector
- Pipeline
- Stream/River
- Artificial Path

NWI

- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Riverine



Project Location

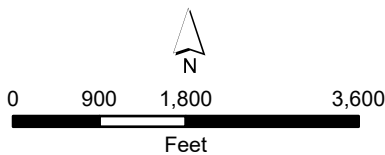
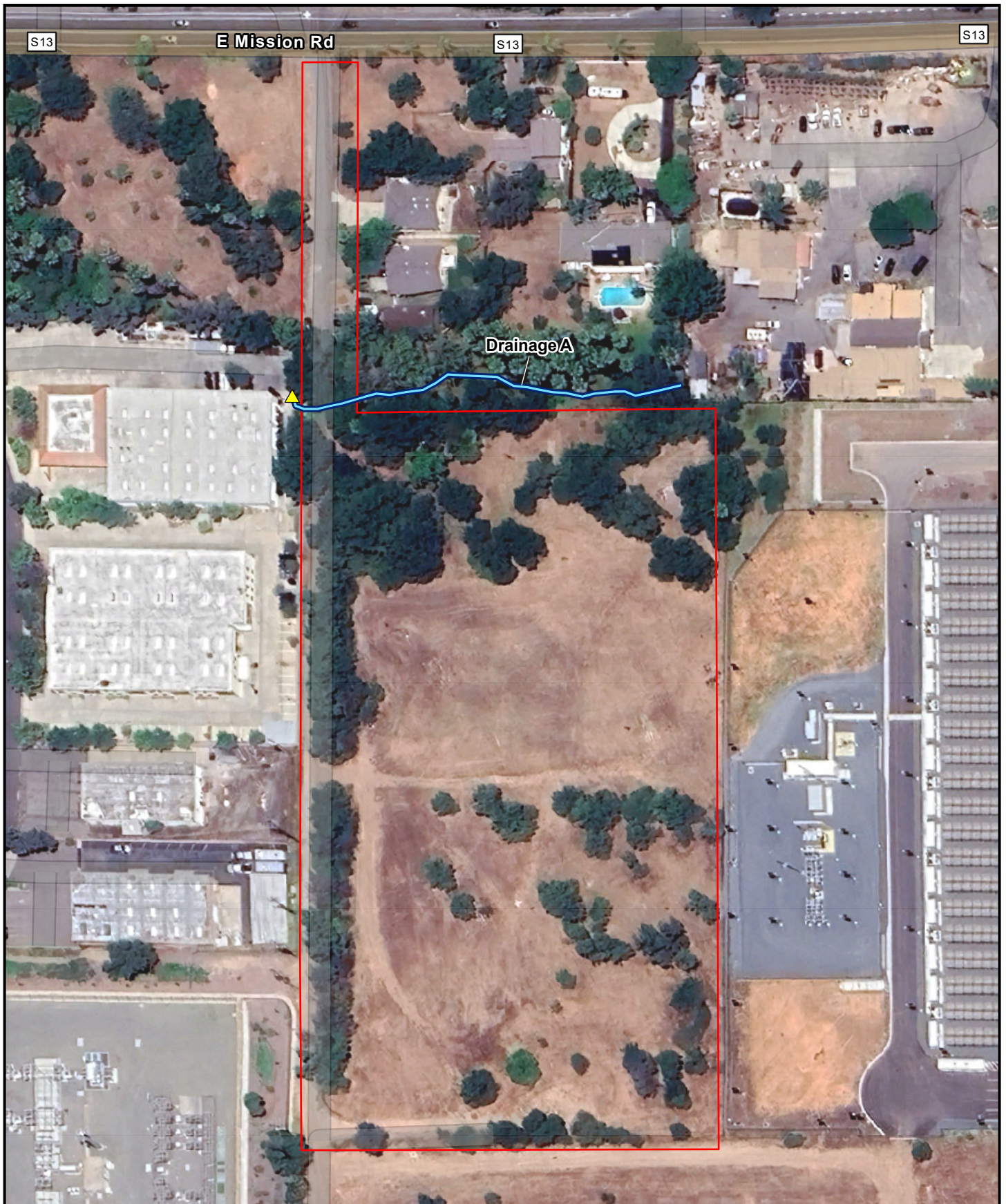


Figure 6
Fallbrook Self-Storage
NWI and NHD



- Project Location
- Jurisdictional Delineation Results
- ▲ Culvert
- Bank to Bank
- Ordinary High Water Mark

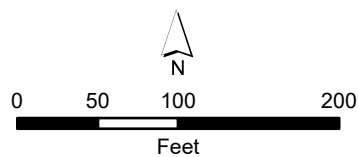


Figure 7
Fallbrook Self-Storage
Jurisdictional Delineation Results

5.3 HABITATS / VEGETATION COMMUNITIES

The Survey Area was dominated by non-native plant species that appear to get frequently mowed. Scattered trees were present throughout the Survey Area. Seven vegetation communities/land cover types (Coast Live Oak Woodland, Olive Tree, Escaped Ornamental, Ornamental Landscaping, Disturbed, Bare Ground and Developed) were identified within the Survey Area (Table 1). These vegetation communities/land cover types are described in the following subsections and a map showing their distribution within the Survey Area is provided in Figure 8: Vegetation Communities Map.

Table 1: Vegetation Communities and Land Cover Types Occurring Within the Survey Area

Vegetation Community/Land Cover Type (Sawyer et al. 2009)	County Guidelines Community (County of San Diego 2010)	Survey Area (Acres)
Coast Live Oak Woodland	Coast Live Oak Woodland (71160)	0.97
Olive Tree	Orchards and Vineyards (18100)	0.90
Escaped Ornamental	Disturbed Habitat (11300)	0.18
Ornamental Landscaping	Urban/Developed (12000)	0.05
Disturbed	Disturbed Habitat (11300)	3.23
Bare Ground	Disturbed Habitat (11300)	0.61
Developed	Urban/Developed (12000)	0.14
Total		6.08

5.3.1 Coast Live Oak Woodland

Coast Live Oak Woodland is found in alluvial terraces, canyon bottoms, stream banks, slopes, and flats with soils that are deep, sandy, or loamy with high organic matter (Sawyer et al. 2009). Within Coast Live Oak Woodland, coast live oak (*Quercus agrifolia*) may be dominant or co-dominant in the tree canopy with southern California black walnut (*Juglans californica*), bigleaf maple (*Acer macrophyllum*), blue oak (*Quercus douglasii*), Engelmann oak (*Quercus engelmannii*), black oak (*Quercus kelloggii*), valley oak (*Quercus lobata*) and California bay (*Umbellularia californica*). Membership rules for this community state that coast live oak must be greater than 50 percent relative cover in the tree canopy and if California bay trees are present, then those must be less than 33 percent relative cover in the tree canopy (Keeler-Wolf et al. 2003, Evens and San. 2004, Keeler-Wolf and Evens 2006). The canopy is open to continuous, with a shrub layer that is sparse to intermittent and an herbaceous layer that is sparse or grassy (Sawyer et al. 2009).

Coast Live Oak Woodland is present within 0.97 acre of the Survey Area. This community occurs primarily on the northern end of the parcel boundary, with small patches also present on the southern edge of the Survey Area and along the access road. Native plant species found within the Survey Area typical of this vegetation community include: coast live oak, southern California black walnut, laurel sumac (*Malosma laurina*), and blue elderberry (*Sambucus mexicana*). Desert wild grape (*Vitis girdiana*) and California fan palm (*Washingtonia filifera*) are also found in the understory along the drainage within the Survey Area. Non-native species included: English ivy (*Hedera helix*), castor-bean (*Ricinus communis*) and Shamel ash (*Fraxinus uhdei*). Under the County Guidelines, this community is equivalent to the Coast Live Oak Woodland (71160) community which is considered a sensitive habitat and subject to a 3:1 mitigation ratio. Coast Live Oak Woodland along the Project access road north of the drainage will be avoided. No impacts

are proposed to trees within the public right-of-way. Therefore, out of 0.97 acre of Coast Live Oak Woodland mapped within the Survey Area, 0.05 acre of this community will be avoided, and 0.92 acre will be subject to mitigation.

5.3.2 Olive Tree

Olive (*Olea europaea*) trees are often planted as trees, groves, and windbreaks; they can be naturalized on uplands or bottomlands and adjacent to stream courses, lakes, or levees. Areas of Olive Tree vegetation have olive as dominant in the tree canopy of this mapped community. Understories in groves of these fast-growing, long-lived trees are usually depauperate. A buildup of allelopathic chemicals in the soil and high volumes of debris inhibit the establishment of other plants, though sometimes other non-natives, such as English ivy, clamber extensively in stands. Trees are generally less than 33 feet in height, with an intermittent to continuous canopy. The herbaceous layer is sparse (Sawyer et al. 2009).

Olive Tree vegetation is present within 0.90 acre along the western boundary, central portion, and southeastern corner of the Survey Area. Native species found within the Survey Area typical of this plant community include: wild cucumber (*Mara macrocarpa*) and toyon. This community was dominated by non-native olive trees. Under the County Guidelines, this community is equivalent to the Orchards and Vineyards (18100) community which is not considered a sensitive habitat. Therefore, no mitigation is required for proposed impacts to this community.

5.3.3 Escaped Ornamental

Escaped Ornamental vegetation includes areas where the vegetation is dominated by non-native horticultural plants similar to an Ornamental Landscaping community as described by Gray and Bramlet (1992). However, unlike landscaped vegetation, a community that has been mapped as Escaped Ornamental typically has a species composition consisting of introduced trees and shrubs that have not been deliberately planted for landscaping purposes and are not being maintained with regular trimming and irrigation. The vegetation likely has been spread to the site by animal dispersal or the plants are relics of a historic landscaping setting.

Escaped Ornamental is present within 0.18 acre of the Survey Area. Species identified within this community include: non-native red gum (*Eucalyptus camaldulensis*), pomegranate (*Punica granatum*), Indian fig (*Opuntia ficus-indica*), Mexican fan palm (*Washingtonia robusta*), California fan palm, bay fig (*Ficus macrophylla*), bottlebrush (*Melaleuca viminalis*), jacaranda (*Jacaranda mimosifolia*), jade plant (*Crassula ovata*), bougainvillea (*Bougainvillea spectabilis*), Peruvian pepper tree (*Schinus molle*), Brazilian pepper tree (*Schinus terebinthefolius*), giant yucca (*Yucca elephantipes*), fire stick tree (*Euphorbia tirucalli*), pride of Bolivia (*Tipuana tipu*), loquat (*Eriobotrya japonica*), pride of Maedeira (*Echium candicans*), strawberry guava (*Psidium cattleianum*), and Mandarin orange (*Citrus sp.*). Under the County Guidelines, this community is equivalent to the Disturbed Habitat (11300) community which is not considered a sensitive habitat. Therefore, no mitigation is required for proposed impacts to this community.

5.3.4 Ornamental Landscaping

Ornamental Landscaping includes areas where the vegetation is dominated by non-native horticultural plants (Gray and Bramlet 1992). Typically, the species composition consists of introduced trees, shrubs, flowers and turf grass.

Ornamental Landscaping is present within 0.05 acre of the Survey Area. Plant species found on the Survey Area typical of this community include: hortensia (*Hydrangea* sp.), non-native red gum, California sycamore (*Platanus racemosa*), Mexican fan palm, jade plant, bougainvillea, and Brazilian pepper tree. Under the County Guidelines, this community is equivalent to the Urban/Developed (12000) community which is not considered a sensitive habitat. Therefore, no mitigation is required for proposed impacts to this community.

5.3.5 Disturbed

Disturbed areas are characterized by land that has been permanently altered by human activity such as grading and/or regular clearing for fuel management or land that shows evidence of being built upon. Intense anthropogenic disturbance precludes the survival of most native or naturalized vegetation; vegetation is dominated by non-native, weedy species such as Russian thistle (*Salsola tragus*), telegraph weed (*Heterotheca grandiflora*), horehound (*Marrubium vulgare*), and sow-thistle (*Sonchus oleraceus*) that are adapted to frequent disturbance. Disturbed areas do not provide moderate or high quality foraging habitat for raptors and lack future biological value for species other than those that persist in urban environments (County of San Diego 2002 and 2010).

Disturbed areas are present within 3.23 acres of the Survey Area. This portion of the Survey Area has undergone repeated mowing for fuel management, is dominated by non-native vegetation, and contains areas impacted by grading, trash dumping, and homeless encampments. Native plant species identified within the portion of the Survey Area are pioneering herbaceous species that readily colonize disturbed ground which are typically found in temporary, often frequently disturbed habitats; these species include: western ragweed (*Ambrosia psilostachya*), small-flowered nightshade (*Solanum americanum*), and telegraph weed. Non-native species include: foxtail chess (*Bromus madritensis*), shortpod mustard (*Hirschfeldia incana*), tocalote (*Centaurea melitensis*), horehound, flax-leaved horseweed (*Erigeron bonariensis*), turkey-mullein (*Croton setiger*), panic veldt grass (*Ehrharta erecta*), wild oats (*Avena* sp.), curly dock (*Rumex crispus*), Mediterranean schismus (*Schismus barbatus*), rough pigweed (*Amaranthus retroflexus*), tree tobacco (*Nicotiana glauca*), bur clover (*Medicago polymorpha*), Italian thistle (*Carduus pycnocephalus*), and scarlet pimpernel (*Lysimachia arvensis*). Under the County Guidelines, Disturbed Habitat (11300) is not considered a sensitive habitat. Therefore, no mitigation is required for proposed impacts to this community.

5.3.6 Bare Ground

Bare Ground areas are present throughout the Survey Area, mainly as dirt roads and former trails that contained compacted soils and little to no vegetation. There are 0.61 acre of Bare Ground areas within the Survey Area. Under the County Guidelines, this land cover type is equivalent to the Disturbed Habitat (11300) community which is not considered a sensitive habitat. Therefore, no mitigation is required for proposed impacts to this community.

5.3.7 Developed

Developed areas are present within Survey Area as pavement along the northern portion of the existing access road and buildings on the east side of the road. There are 0.14 acre of Developed areas on the Survey Area. Under the County Guidelines, this land cover type is equivalent to the Urban/Developed (12000) community which is not considered a sensitive habitat. Therefore, no mitigation is required for proposed impacts to this community.

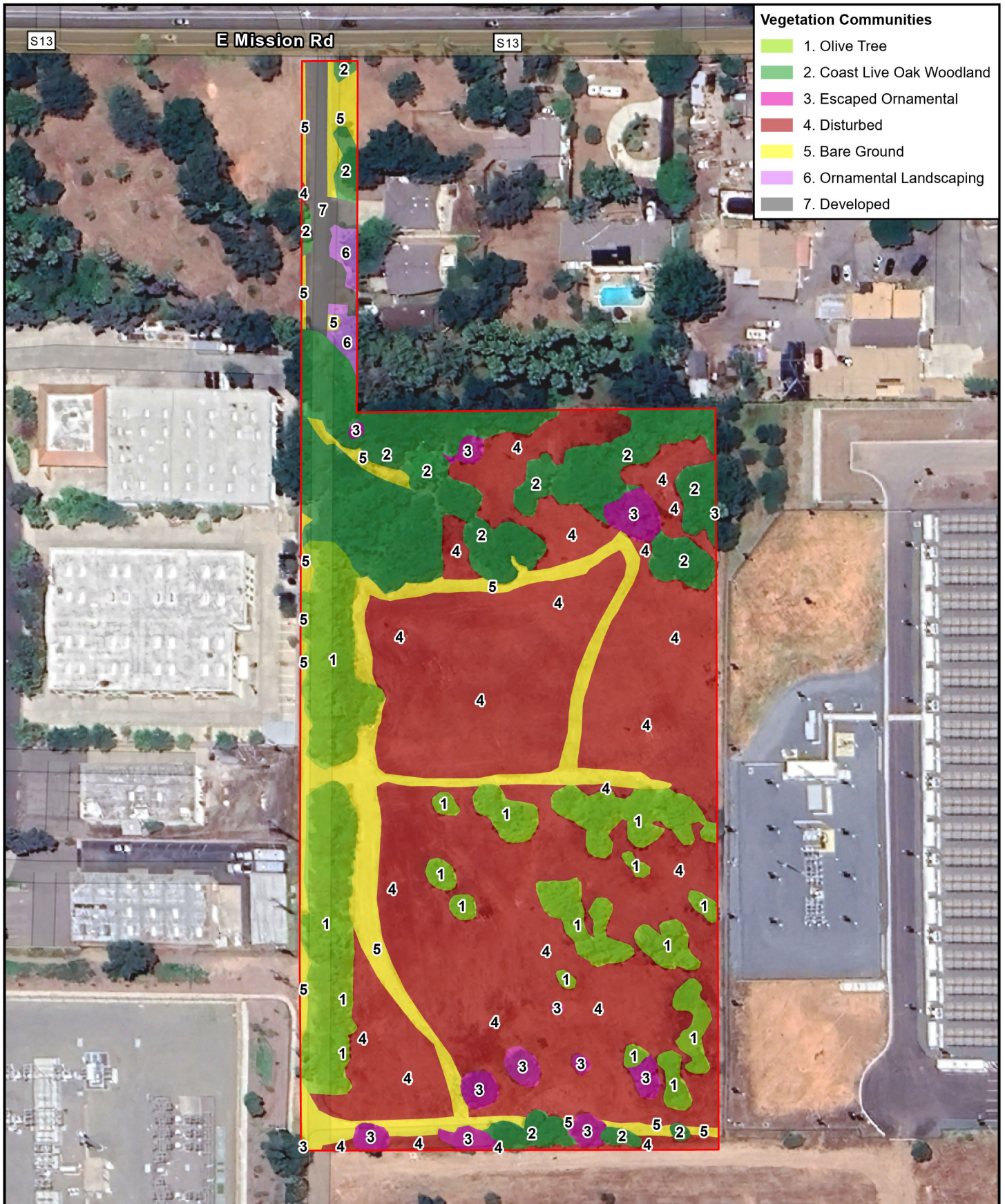


Figure 8
Fallbrook Self-Storage
Vegetation Communities

5.4 SPECIAL STATUS SPECIES

The following information is a list of abbreviations used to help determine the significance of biological special status resources potentially occurring within the Survey Area.

California Rare Plant Rank (CRPR)

- CRPR 1A = Plants presumed extinct in California.
- CRPR 1B = Plants rare and endangered in California and throughout their range.
- CRPR 2 = Plants rare, threatened or endangered in California but more common elsewhere in their range.
- CRPR 3 = Plants about which we need more information; a review list.

CRPR Extensions

- 0.1 = Seriously endangered in California (greater than 80 percent of occurrences threatened/high degree and immediacy of threat).
- 0.2 = Fairly endangered in California (20-80 percent of occurrences threatened).
- 0.3 = Not very endangered in California (less than 20 percent of occurrences threatened).

Federal

- FE = Federally listed; Endangered
- FT = Federally listed; Threatened
- FC = Federal Candidate for listing

State

- ST = State listed; Threatened
- SE = State listed; Endangered
- RARE = State listed; Rare (Listed "Rare" animals have been re-designated as Threatened, but Rare plants have retained the Rare designation.)
- SSC = California Species of Special Concern

Factors used to determine the PFO included the quality of habitat, elevation, soil type, and the results of the field survey. In addition, the location of prior CNDDDB records of occurrence was used as additional data, but because the CNDDDB is a positive-sighting database, these data were used only in support of the analysis from the previously identified factors. The criteria used to evaluate the PFO of special status species within the Survey Area are outlined in Table 2.

Table 2: Criteria for Evaluating Special Status Species Potential for Occurrence (PFO)

PFO*	CRITERIA**
Absent:	Species is restricted to habitats or environmental conditions that do not occur within the Survey Area.
Low:	Historical records for this species do not exist within the immediate vicinity (approximately 5 miles) of the Survey Area, and/or habitats or environmental conditions needed to support the species are of poor quality.
Moderate:	Either a historical record exists of the species within the immediate vicinity of the Survey Area (approximately 3 miles) and marginal habitat exists on the Survey Area, or the habitat requirements or environmental conditions associated with the species occur within the Survey Area, but no historical records exist within 5 miles of the Survey Area.
High:	Both a historical record exists of the species within the Survey Area or its immediate vicinity (approximately 1 mile), and the habitat requirements and environmental conditions associated with the species occur within the Survey Area.
Present:	Species was detected within the Survey Area at the time of the survey.

* PFO: Potential for Occurrence

**Criteria in Table 2 is utilized to determine PFO based upon a literature review and biological reconnaissance survey. This PFO is updated based on results of focused surveys, if conducted.

5.4.1 Special Status Plant Species

Database searches (CDFW 2024; CNPS 2024; USFWS 2024b) resulted in a list of 66 special status plant species, 16 of which have been documented to historically occur within a 5-mile vicinity of the Survey Area (Figure 9: Special Status Species Historical Occurrences Map). Following the literature review and biological reconnaissance survey, it was determined that all the 66 special status plant species can be considered **Absent** from the Survey Area, as described below.

Based on the literature review and biological reconnaissance survey, the following 66 plant species were considered **Absent** from the Survey Area due to lack of suitable habitat/soils, frequent mowing, presence of disturbed and non-native vegetation, and/or because they grow outside the elevation range of the Survey Area. Furthermore, these species were not observed during the biological reconnaissance survey.

- chaparral sand-verbena (*Abronia villosa* var. *aurita*) – CRPR 1B.1
- Yucaipa onion (*Allium marvinii*) – CRPR 1B.2
- Munz's onion (*Allium munzii*) – FE, CT, CRPR 1B.1
- alkali marsh aster (*Almutaster pauciflorus*) – CRPR 2B.2
- San Diego ambrosia (*Ambrosia pumila*) – FE, CRPR 1B.1
- Rock Creek broomrape (*Aphyllon validum* subsp. *validum*) – CRPR 1B.2
- rainbow manzanita (*Arctostaphylos rainbowensis*) – CRPR 1B.1
- Jaeger's milkvetch (*Astragalus pachypus* var. *jaegeri*) – CRPR 1B.1
- south coast saltscale (*Atriplex pacifica*) – CRPR 1B.2
- Parish's brittlescale (*Atriplex parishii*) – CRPR 1B.1

- California ayenia (*Ayenia compacta*) – CRPR 2B.3
- Nevin's barberry (*Berberis nevinii*) – FE, CE, CRPR 1B.1
- thread-leaved brodiaea (*Brodiaea filifolia*) – **FT, CE**, CRPR 1B.1
- Orcutt's brodiaea (*Brodiaea orcuttii*) – CRPR 1B.1
- Santa Rosa Basalt brodiaea (*Brodiaea santarosae*) – CRPR 1B.2
- intermediate mariposa-lily (*Calochortus weedii* var. *intermedius*) – CRPR 1B.2
- Lewis' evening-primrose (*Camissoniopsis lewisii*) – CRPR 3
- Vail Lake ceanothus (*Ceanothus ophiocylus*) – **FT, CE**, CRPR 1B.1
- Pendleton ceanothus (*Ceanothus pendletonensis*) – CRPR 1B.2
- southern tarplant (*Centromadia parryi* subsp. *australis*) – CRPR 1B.1
- smooth tarplant (*Centromadia pungens* subsp. *laevis*) – CRPR 1B.1
- Orcutt's pincushion (*Chaenactis glabriuscula* var. *orcuttiana*) – CRPR 1B.1
- Parry's spineflower (*Chorizanthe parryi* var. *parryi*) – CRPR 1B.1
- knotweed spineflower (*Chorizanthe polygonoides* var. *longispina*) – CRPR 1B.2
- delicate clarkia (*Clarkia delicata*) – CRPR 1B.2
- San Miguel savory (*Clinopodium chandleri*) – CRPR 1B.2
- summer holly (*Comarostaphylis diversifolia* subsp. *diversifolia*) – CRPR 1B.2
- Wiggins' cryptantha (*Cryptantha wigginsii*) – CRPR 1B.2
- slender-horned spineflower (*Dodecahema leptoceras*) – **FE, CE**, CRPR 1B.1
- banner dudleya (*Dudleya alainae*) – CRPR 3.2
- many-stemmed dudleya (*Dudleya multicaulis*) – CRPR 1B.2
- sticky dudleya (*Dudleya viscida*) – CRPR 1B.2
- San Diego button-celery (*Eryngium aristulatum* var. *parishii*) – **FE, CE**, CRPR 1B.1
- Pendleton button-celery (*Eryngium pendletonense*) – CRPR 1B.1
- coast wallflower (*Erysimum ammophilum*) – CRPR 1B.2
- Campbell's liverwort (*Geothallus tuberosus*) – CRPR 1B.1
- Mission Canyon bluecup (*Githopsis diffusa* subsp. *filicaulis*) – CRPR 3.1
- Tecate cypress (*Hesperocyparis forbesii*) – CRPR 1B.1
- vernal barley (*Hordeum intercedens*) – CRPR 3.2
- Mesa horkelia (*Horkelia cuneata* var. *puberula*) – CRPR 1B.1
- Ramona horkelia (*Horkelia truncata*) – CRPR 1B.3
- Lucia rush (*Juncus luciensis*) – CRPR 1B.2
- Coulter's goldfields (*Lasthenia glabrata* subsp. *coulteri*) – CRPR 1B.1
- heart-leaf pitcher sage (*Lepechinia cardiophylla*) – CRPR 1B.2
- lemon lily (*Lilium parryi*) – CRPR 1B.2
- Parish's meadowfoam (*Limnanthes alba* subsp. *parishii*) – **CE**, CRPR 1B.2
- Shevock's copper moss (*Mielichhoferia shevockii*) – CRPR 1B.2
- intermediate monardella (*Monardella hypoleuca* subsp. *intermedia*) – CRPR 1B.3
- Hall's monardella (*Monardella macrantha* subsp. *hallii*) – CRPR 1B.3
- little mouseltail (*Myosurus minimus* subsp. *apus*) – CRPR 3.1
- spreading navarretia (*Navarretia fossalis*) – **FT**, CRPR 1B.1
- prostrate vernal pool navarretia (*Navarretia prostrata*) – CRPR 1B.2
- chaparral nolina (*Nolina cismontana*) – CRPR 1B.2
- California Orcutt grass (*Orcuttia californica*) – **FE, CE**, CRPR 1B.1
- Gander's ragwort (*Packera ganderi*) – **CR**, CRPR 1B.2
- white rabbit-tobacco (*Pseudognaphalium leucocephalum*) – CRPR 2B.2
- Latimer's woodland-gilia (*Saltugilia latimeri*) – CRPR 1B.2

- southern mountains skullcap (*Scutellaria bolanderi* subsp. *austromontana*) – CRPR 1B.2
- chaparral ragwort (*Senecio aphanactis*) – CRPR 2B.2
- Hammitt's claycress (*Sibaropsis hammittii*) – CRPR 1B.2
- salt spring checkerbloom (*Sidalcea neomexicana*) – CRPR 2B.2
- bottle liverwort (*Sphaerocarpos drewiae*) – CRPR 1B.1
- San Bernardino aster (*Symphyotrichum defoliatum*) – CRPR 1B.2
- Parry's tetracoccus (*Tetracoccus dioicus*) – CRPR 1B.2
- woven-spored lichen (*Texosporium sancti-jacobi*) – CRPR 3
- California screw moss (*Tortula californica*) – CRPR 1B.2

5.4.2 Special Status Wildlife

Database searches (CDFW 2024; USFWS 2024b and 2024d) resulted in a list of 20 federal- and/or state-listed endangered or threatened, or California Species of Special Concern (SSC), that may potentially occur within the Survey Area (Figure 9: Special Status Species Historical Occurrences Map). Following the literature review, biological reconnaissance survey, and focused Crotch's bumble bee surveys, it was determined that all 20 species can be considered **Absent** from the Survey Area, as described below.

Based on the literature review and biological reconnaissance survey, the following 13 wildlife species can be considered **Absent** from the Survey Area due to a lack of suitable habitat within the Survey Area. Furthermore, these species were not observed during the biological reconnaissance survey.

- arroyo chub (*Gila orcuttii*) – SSC
- arroyo toad (*Anaxyrus californicus*) – **FE**, SSC
- coast horned lizard (*Phrynosoma blainvillii*) – SSC
- coastal cactus wren (*Campylorhynchus brunneicapillus sandiegensis*) – SSC
- coastal whiptail (*Aspidoscelis tigris stejnegeri*) – SSC
- pallid bat (*Antrozous pallidus*) – SSC
- red-diamond rattlesnake (*Crotalus ruber*) - SSC
- San Diego desert woodrat (*Neotoma lepida intermedia*) – SSC
- southwestern pond turtle (*Actinemys pallida*) – SSC
- southwestern willow flycatcher (*Empidonax traillii extimus*) – **FE**, **SE (nesting)**
- Swainson's hawk (*Buteo swainsoni*) – **ST (nesting)**
- western mastiff bat (*Eumops perotis californicus*) – SSC
- western spadefoot (*Spea hammondi*) – SSC

Based on the literature review alone, the following two species were considered to have a moderate PFO due to historical records recording both species observed within 1 mile of the Survey Area. However, following the biological reconnaissance survey, both species can be considered **Absent** due to a lack of suitable habitat. Furthermore, these species were not observed during the biological reconnaissance survey.

- southern California legless lizard (*Anniella stebbinsi*) – SSC
- tricolored blackbird (*Agelaius tricolor*) – **ST**, SSC (nesting colony)

A project scoping letter from the County of San Diego Planning and Development Services (PDS) dated September 6, 2024, required that a site assessment and/or focused surveys be performed for five special status species due to the potential presence of suitable habitat. During the biological reconnaissance

survey, Chambers Group biologists performed a site assessment for these species and determined that the following four species can be considered **Absent** due to a lack of suitable habitat, nesting opportunities, foraging requirements, and/or historical occurrences within 5 miles of the Survey Area. Focused surveys are therefore not recommended for these species. These species were not observed during the biological reconnaissance survey:

- burrowing owl (*Athene cunicularia hypogaea*) – SSC
- coastal California gnatcatcher (*Poliophtila californica californica*) – FT, SSC
- least Bell's vireo (*Vireo bellii pusillus*) – FE, SE (nesting)
- Stephens' kangaroo rat (*Neotoma lepida intermedia*) – FT, CT

The following species was considered to have a moderate potential to occur, based on suitable foraging and nesting habitat present onsite as well as recorded occurrences in the Project vicinity. However, this species was not detected during focused surveys conducted in 2025; therefore, this species can be considered **Absent** from the Survey Area:

- Crotch's bumble bee (*Bombus crotchii*) – CA Candidate Endangered

Habitat requirements, range, identifying characteristics, and threats to these five species are described below:

Crotch's Bumble Bee

The Crotch's bumble bee is a candidate to be state listed as endangered. This species occurs primarily in California, including the Mediterranean region, Pacific Coast, Western Desert, Great Valley, and adjacent foothills through most of southwestern California. It has also been documented in southwest Nevada, near the California border. This species was historically common in the Central Valley of California; however, it now appears to be absent from most of the region, particularly in the center of its historic range. This species is classified as a short- or medium-tongued species that generally has a black and yellow pattern on its body. Queens and workers (females) have a black head and thorax, with yellow on the dorsal anterior thorax and sometimes yellow on the scutellum, whereas males have yellow hair on their faces (and very large eyes) with a broad black stripe mid-thorax. The female abdomen has an alternating pattern of yellow, black, and sometimes orange whereas the front of the male abdomen is yellow, and the rest of their abdomen is predominantly black and reddish yellow (iNaturalist 2024a). Food plants for this species primarily include plants of the *Asclepias*, *Chaenactis*, *Lupinus*, *Medicago*, *Phacelia*, and *Salvia* genera. The Crotch's bumble bee inhabits open grasslands, shrublands, chaparral, desert margins including Joshua tree and creosote scrub, and semi-urban settings and nests underground (CDFW 2022). Primary threats to Crotch's bumble bee include agricultural infestation and rapid urbanization. Other threats include climate change (leading to increasing aridity), pesticide use, pathogens from managed pollinators, competition with non-native bee species, and reduced genetic diversity (Hatfield et. al. 2015). The queen flight season for the Crotch's bumble bee is from February through March, and the colony active period, when detection probability is highest, is April through August (CDFW 2023).

Based on the literature search, no records of occurrence for Crotch's bumble bee have been documented within 5 miles of the Survey Area (USFWS 2024b; USFWS 2024d; CDFW 2024). However, there have been several sightings of the species recorded within 5 miles of the Survey Area on the crowdsourced species identification system and organism occurrence recording tool, iNaturalist.org (iNat). The closest sightings on iNat were under 2 miles to the south, southwest, and west of the Survey Area (iNaturalist 2024b-f,

2025a, 2025b) which have been vetted by iNat scientists (i.e., considered “Research Grade”) through photographs taken by the observers. The Survey Area contains suitable habitat to support this species due to presence of friable soils and numerous burrows which could provide nesting habitat. Flowering plants within the site, including patches of ornamental species and shortpod mustard, provide potential food sources. Based on the results of the biological reconnaissance survey and recent iNat sightings, this species was considered to have moderate PFO within the Survey Area. Focused surveys were subsequently conducted in 2025 by Chambers Group following CDFW’s *Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species* (CDFW 2023). Crotch’s bumble bee was not detected during the focused surveys (see Appendix F: Crotch’s Bumble Bee Focused Survey Results). Therefore, this species can be considered **Absent** from the Survey Area.

Burrowing owl

The burrowing owl is an SSC and became a candidate under the California Endangered Species Act in October 2024. It is broadly distributed across the western United States, with populations in Florida and Central and South America. The burrowing owl breeds in open plains from western Canada and the western United States, Mexico through Central America and into South America to Argentina (Klute et al. 2003). This species inhabits dry, open, native or non-native grasslands, steppe, deserts, and other arid environments with low-growing and low-density vegetation (Ehrlich 1988). It may occupy golf courses, cemeteries, road rights-of way, airstrips, abandoned buildings, irrigation ditches, and vacant lots with holes or cracks suitable for use as burrows (Transportation and Land Management Agency [TLMA] 2006). Burrowing owls typically use burrows made by mammals such as California ground squirrels (*Spermophilus beecheyi*), foxes, or badgers (Trulio 1997). When burrows are scarce, the burrowing owl may use man-made structures such as openings beneath cement or asphalt pavement, pipes, culverts, and nest boxes (TLMA 2006). Burrowing owls often are found within, under, or in close proximity to man-made structures. Prey sources for this species include small rodents, arthropods such as spiders, crickets, centipedes, and grasshoppers, smaller birds, amphibians, reptiles, and carrion. Burrowing owl populations are threatened by loss of nesting burrows, habitat loss, intensive cultivation of grasslands, insecticides such as Carbofuran and contaminated prey, and mortality from motor vehicles (Poulin 2020).

Based on the literature review, no historical records of occurrence for burrowing owl have been documented within 5 miles of the Survey Area (USFWS 2024b; CDFW 2024). The Survey Area lacks suitable habitat for burrowing owl and no burrowing owls, suitable burrows, or sign were observed during the site assessment. This species is considered **Absent** from the Survey Area.

Coastal California gnatcatcher

The coastal California gnatcatcher is a federally threatened species and an SSC. The range of this subspecies extends from southern California west of the Peninsular and Transverse ranges south into northwestern Baja California, Mexico. The gnatcatcher has a short and slender bill; tail is mostly black with white edges, grayish overall, back and wings grey with brown tinge and a white eye ring. Breeding males have a black cap. It is a permanent resident of Diegan, Riversidian, and Venturan sage scrub sub-associations found from sea level to 2,500 feet in elevation. The species lives and breeds within California sagebrush (*Artemisia californica*)-dominant habitats and mixed scrub habitats with lesser percentages of this favored shrub (Atwood and Bontrager 2020). The subspecies generally begins nest building in mid-March, dependent on winter precipitation, with most nesting attempts completed by mid-July (Grishaver et al. 1998). Coastal California gnatcatchers primarily feed upon beetles, bugs, caterpillars, spiders, and

grasshoppers. The largest threat to the species is the loss of coastal sage scrub habitat and habitat fragmentation; other threats include wildfires and nest parasitism (Atwood and Bontrager 2020).

There are 156 documented occurrences of coastal California gnatcatcher within 5 miles of the Survey Area (CDFW 2024 and USFWS 2024b), with the closest occurrence being on Naval Weapons Station Fallbrook approximately 1.6 miles west of the Survey Area (USFWS 2024b) and Critical Habitat for this species is mapped within approximately 0.68 miles of the Survey Area (USFWS 2024c; Figure 10: Critical Habitat Map). However, the Survey Area lacks suitable habitat to support this species. This species is considered **Absent** from the Survey Area.

least Bell's vireo

The least Bell's vireo (nesting) is a federal- and state-listed endangered subspecies of the Bell's vireo. This small passerine subspecies has a breeding range that is restricted to lower elevations of coastal California and northwestern Baja California, Mexico with a few inland populations (Franzreb 1989). Its winter range extends into southern Baja California, Mexico (R. Hutto, pers. comm., cited in Franzreb 1989). This bird is approximately 4.3 to 4.7 inches in length with an overall drab appearance consisting of brownish grey upperparts and a whitish underside, and a faint white eye-ring. Its unique song most easily identifies it. The least Bell's vireo typically nests in willows (*Salix* spp.) and other riparian trees or shrubs, and typically nests three to six feet above the ground. This species requires densely vegetated riparian habitat along streams and rivers during the breeding season, which occurs from April to July, and foraging in habitat adjacent to its nesting territory, which is typically riparian or chaparral (Gray and Greaves 1984; Franzreb 1989; USFWS 1994). Least Bell's vireos forage by gleaning insects from the leaves of trees and shrubs. The major threats and subsequent factors in the decline of least Bell's vireo populations are the loss of riparian habitat from urban and agricultural development, overgrazing, flood control projects and logging operations, exotic plant invasion, and nest parasitism by the brown-headed cowbird (Brown 1993, Franzreb 1989, Kus et al. 2022). The introduction of the invasive shot hole borer (*Euwallacea* spp.), which has infested and killed large numbers of willow trees in native riparian habitat, poses an emerging threat to the Arizona Bell's vireo (Kus et al. 2022). Despite historic least Bell's vireo population losses followed by federal protection in 1986, recent trends indicate that populations are increasing with populations returning to parts of their former range and colonizing some new areas (USFWS 1998). With numbers having declined to approximately 300 territorial males in 1986 (USFWS 1998), the population has rebounded to 3,000 territorial males in 2006 (USFWS 2006).

There are 128 documented occurrences of least Bell's vireo within 5 miles of the Survey Area (CDFW 2024 and USFWS 2024b), with the closest occurrence being from along Ostrich Farm Creek approximately 1.6 miles south of the Survey Area (CDFW 2024; USFWS 2024b). Critical Habitat for this species is mapped within approximately 0.74 miles of the Survey Area (USFWS 2024c; Figure 10: Critical Habitat Map). However, the Survey Area lacks suitable habitat to support this species. This species is considered **Absent** from the Survey Area.

Stephens' kangaroo rat

The Stephens' kangaroo rat is a federally endangered and state threatened species. It can be found in areas of western Riverside, and northern and central San Diego counties; it is a medium-sized, dusky-colored kangaroo rat, with purely white fur on the underside, and lateral white tail stripes (USFWS 1997). It inhabits open grasslands and sparse areas of Riversidian Sage Scrub (RSS) with both native and non-native plants, such as goldfields (*Lasthenia californica*), filaree (*Erodium cicutarium*), foxtail fescue (*Vulpea*

megalaria), and red brome (*Bromus rubens*) (BLM 2012). The Stephens' kangaroo rat also inhabits sparse RSS with brittlebush (*Encelia farinosa*), California sagebrush (*Artemesia californica*), and California buckwheat (*Eriogonum fasciculatum*) (BLM 2012). This species can be found from approximately 180 to 4,100 feet amsl. Although it can burrow into firm soils, it prefers areas with well-drained, gravelly or sandy soils for digging its burrows. Diet is primarily seeds and they forage almost entirely at night. This species generally breeds in winter and spring. Common predators of the Stephen's kangaroo rat include foxes, snakes, owls, coyotes, and feral cats. Threats to this species includes habitat loss and fragmentation as a result of increased urban and agricultural development; with increases in urban development within this species range, increased off-highway vehicle activity, use of rodenticides, and increases in feral cat populations further threatens this species (USFWS 1997; United States Fish & Wildlife Service 2024e).

There are 66 documented occurrences of Stephens' kangaroo rat within 5 miles of the Survey Area (CDFW 2024 and USFWS 2024b), with the closest occurrence being at the Fallbrook Regional Airport project site within the City of Fallbrook, approximately 1.93 miles southwest of the Survey Area (USFWS 2024b). However, the Survey Area lacks suitable habitat to support this species. This species is considered **Absent** from the Survey Area.

Animals

1. arroyo chub
2. arroyo toad
3. cactus wren
4. coast horned lizard
5. coastal cactus wren
6. coastal California gnatcatcher
7. coastal whiptail
8. least Bell's vireo
9. pallid bat
10. red-diamond rattlesnake

11. San Diego desert woodrat
12. Southern California legless lizard
13. southwestern pond turtle
14. southwestern willow flycatcher
15. Stephens' kangaroo rat
16. Swainson's hawk
17. tricolored blackbird
18. western spadefoot

Plants

19. Yuma myotis
20. chaparral nolina

21. chaparral sand-verbena
22. Coulter's goldfields
23. Orcutt's pincushion
24. Parry's tetracoccus
25. Payson's jewelflower
26. Robinson's pepper-grass
27. Shevock's copper moss
28. sticky dudleya
29. summer holly
30. white rabbit-tobacco
31. Yucaipa onion

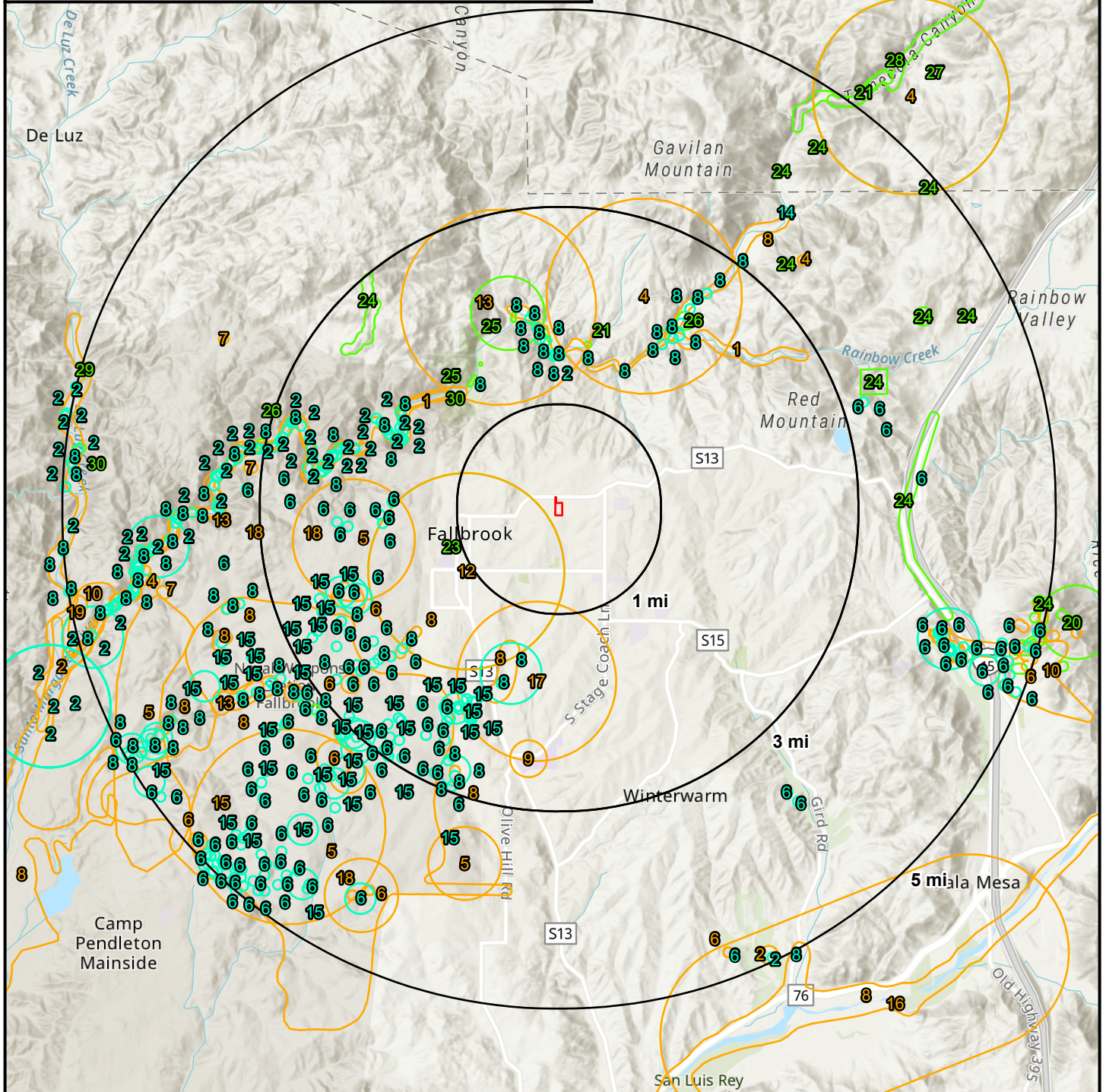


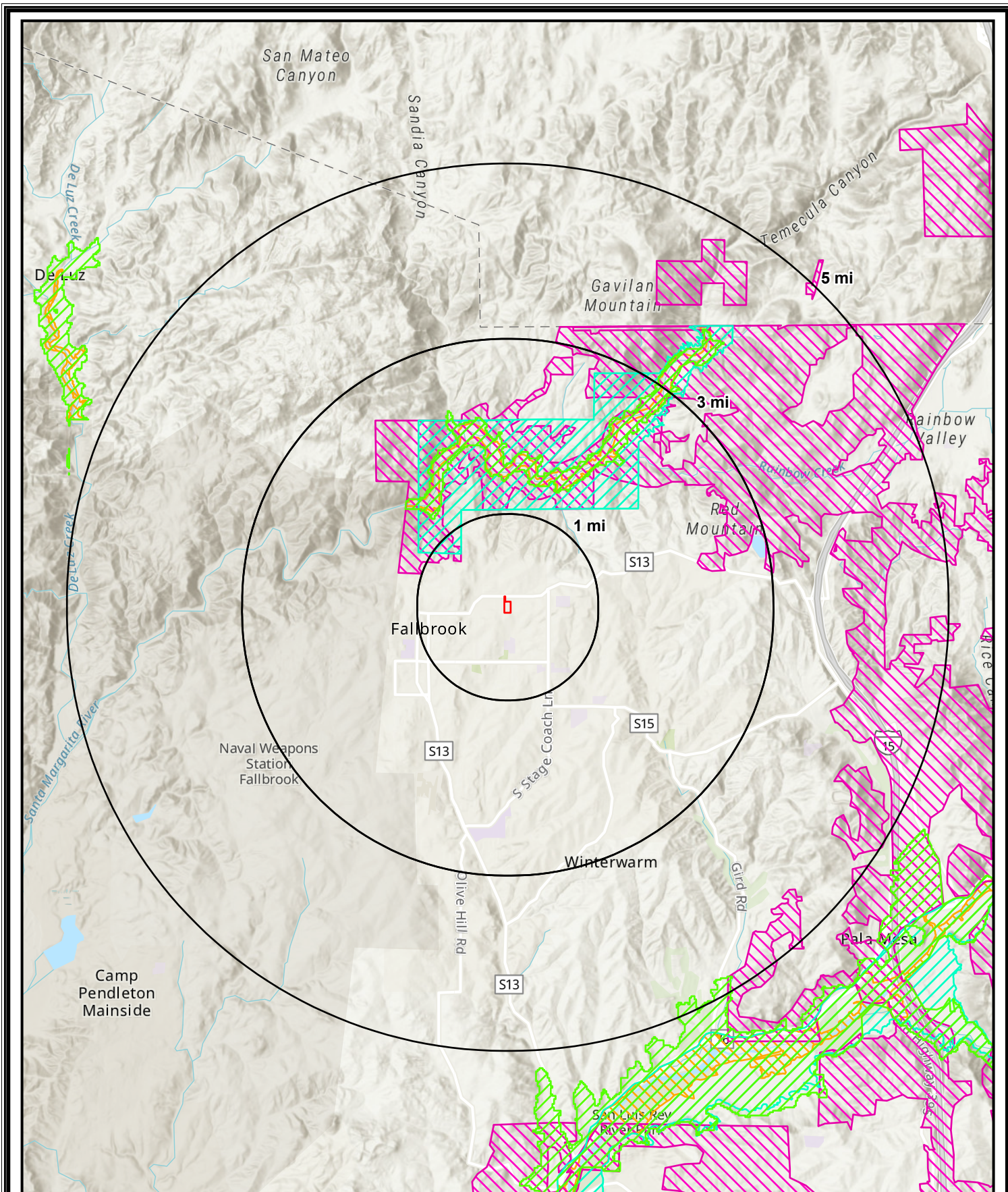
Figure 9
Fallbrook Self-Storage
Special Status Species Historical Occurrences

5.5 USFWS CRITICAL HABITAT

USFWS Critical Habitat is defined as areas of land, water, and air space containing the physical and biological features essential for the survival and recovery of endangered and threatened species. Designated Critical Habitat includes sites for breeding and rearing, movement or migration, feeding, roosting, cover, and shelter. Designated Critical Habitats require special management and protection of existing resources, including water quality and quantity, host animals and plants, food availability, pollinators, sunlight, and specific soil types. Designated Critical Habitat delineates all suitable habitat, occupied or not, that is essential to the survival and recovery of the species. The Survey Area is not located within designated USFWS Critical Habitat. The closest Critical Habitat to the Survey Area is for least Bell's vireo located approximately 0.74 miles northwest, coastal California gnatcatcher approximately 0.68 miles northwest, arroyo toad approximately 1.24 miles north, and southwestern willow flycatcher approximately 1.29 miles north (USFWS 2024c; Figure 10: Critical Habitat Map). No impacts to USFWS designated Critical Habitat are anticipated.

5.6 OTHER UNIQUE FEATURES / RESOURCES

The Survey Area is situated on a gentle, north-facing slope surrounded by commercial and residential development. An expansive wildlife movement corridor that connects habitat from the Pacific Ocean to the Anza Borrego Desert comes within approximately 1 mile west, northwest, and north of the Survey Area. This corridor follows designated ecological reserves along the Santa Margarita River, connecting open space within Camp Pendleton and Naval Weapons Station Fallbrook west and northwest of the Survey Area to Mt. Olympus County Preserve northeast of the Survey Area. Although there is a low potential for wildlife to occur within the Survey Area during dispersal, the Survey Area is surrounded by development and is not expected to provide significant connectivity between open space areas. Therefore, the Survey Area is not expected to function as a wildlife movement corridor.



- Project Location
USFWS Critical Habitat
 Arroyo (=arroyo southwestern) toad
 Coastal California gnatcatcher
 Least Bell's vireo
 Southwestern willow flycatcher

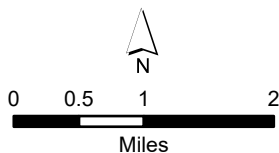


Figure 10
Fallbrook Self-Storage
Critical Habitat

SECTION 6.0 – SIGNIFICANCE OF PROJECT IMPACTS AND PROPOSED MITIGATION

6.1 DIRECT IMPACTS

6.1.1 Jurisdictional Waters

One drainage subject to potential USACE, RWQCB, and CDFW jurisdiction is present within the Survey Area. The drainage crosses through a concrete culvert underneath an existing dirt access road.

- As defined by the OHWMs, a total of 0.002 acre of presumed non-wetland WoUS are present within the Survey Area and are presumed to be under the jurisdiction of the USACE.
- As defined by the OHWMs, a total of 0.002 acre of potential non-wetland waters of the State are present within the Impact Area and are potentially under the jurisdiction of the RWQCB.
- As defined by the BTB measurements, a total of 0.005 acre of potential non-wetland waters of the State are present within the Impact Area and potentially under the jurisdiction of CDFW. No riparian or wetland vegetation was observed within the drainage.

Potential impacts to waters for road improvements would be temporary in nature, and impacts are expected to be minimal (up to 0.005 acre under CDFW jurisdiction, and up to 0.002 acre under USACE and RWQCB jurisdiction). The water feature, including the size and water capacity, would be restored to pre-construction conditions. The water feature lacks riparian and wetland vegetation. In order to avoid and minimize temporary impacts during construction, such as the potential for runoff downstream of the proposed Project site, installation of Best Management Practices (BMPs) such as straw wattles and sandbags within the streambed downstream of construction are recommended. Regulatory permits will be obtained if required, or evidence that permits are not required will be provided.

6.1.2 Sensitive Vegetation, Plants, and Wildlife

Impacts to sensitive vegetation would be considered significant but will be fully mitigated in accordance with mitigation ratios set forth by the County Guidelines. A total of 0.97 acre of Coast Live Oak Woodland (71160), a sensitive vegetation community under the County Guidelines, occurs within the Survey Area, 0.05 acre of which will be avoided. Impacts to the remaining 0.92 acre of Coast Live Oak Woodland (71160) will be subject to a mitigation ratio of 3:1 under the County Guidelines; therefore, a total of 2.76 acres of mitigation would be required. Mitigation will be accomplished through the purchase of mitigation credits from a CDFW-approved mitigation bank.

No special status plant or wildlife species were observed or detected during the biological reconnaissance survey. One CA Candidate Endangered species, Crotch's bumble bee, was considered to have a moderate PFO within the Survey Area based on the biological reconnaissance survey and recent iNat sightings. Focused surveys were recommended for Crotch's bumble bee, following survey guidance from CDFW (CDFW 2024) to determine the presence or absence of this species at the Project site. Chambers Group subsequently conducted Crotch's bumble bee focused surveys during the 2025 colony active period. The focused surveys were negative; therefore, Crotch's bumble bee can be considered absent from the Project site. Focused survey results are valid for one year. A pre-construction survey for Crotch's bumble bee is recommended by a biologist knowledgeable in the identification of the species prior vegetation removal and ground disturbing activities. If Crotch's bumble bee is identified onsite, CDFW will be notified, and the

biologist will walk transects through the Project site in search of potential Crotch's bumble bee nests. If a potential Crotch's bumble bee nest is identified in the proposed Project impact area, appropriate measures will be established through coordination with CDFW and the County. The remaining 19 special status wildlife species and all 66 special status plant species that were evaluated for their PFO were determined to be absent from the Survey Area based on the results of the literature review and biological reconnaissance survey.

Vegetation within the Survey Area provides potential habitat for nesting birds protected under the MBTA. To minimize potential impacts to nesting birds, vegetation removal should take place outside of the avian nesting season (generally February 15 to August 31), to the greatest extent practicable. If construction activities occur during the nesting season, a preconstruction nesting bird survey should be conducted prior to vegetation removal and initial ground disturbing activities to locate any active avian nests within or adjacent to active staging and work areas. A buffer zone around active nests should be determined by a biologist familiar with avian species known to occur in the proposed Project area to avoid impacts to the active nest. The buffer should be delineated with flagging and/or stakes as appropriate to facilitate avoidance of the nest and maintained during construction activities. Once nesting activities have ceased (i.e., the nest has fledged or failed naturally), the buffer may be removed.

6.2 INDIRECT AND CUMULATIVE IMPACTS

The Survey Area is surrounded by existing development that does not provide habitat to support special status species; therefore, indirect impacts as a result of the Project are not anticipated.

Cumulative impacts to sensitive vegetation communities would be considered significant but will be fully mitigated in accordance with mitigation ratios set forth by the County Guidelines, as described under Section 6.1.2.

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APPENDIX A – SITE PHOTOGRAPHS



APPENDIX A – SITE PHOTOGRAPHS



Photo 1

Overview of the southern end of the Survey Area, with Disturbed habitat bordered by Coast Live Oak Woodland and Olive Tree vegetation. Photo facing north on December 4, 2024.



Photo 2

Overview of the southeastern corner of the Survey Area, showing Disturbed habitat with dispersed Coast Live Oak Woodland and Olive Tree vegetation. Photo facing northwest on December 4, 2024.

APPENDIX A – SITE PHOTOGRAPHS



Photo 3

Olive trees surrounded by Disturbed habitat on the eastern edge of the Survey Area with patches of Bare Ground and Disturbed habitat. Photo facing southwest on December 4, 2024.



Photo 4

Olive Tree vegetation lining the western edge of the Survey Area along a dirt road. Photo facing northwest on December 4, 2024.

APPENDIX A – SITE PHOTOGRAPHS



Photo 5

Coast Live Oak Woodland interspersed with Escaped Ornamental and Disturbed habitat on the northern side of the parcel boundary within Survey Area. Photo facing northeast on December 4, 2024.



Photo 6

Coast Live Oak Woodland adjacent to Escaped Ornamental vegetation in the northeastern corner of the parcel within the Survey Area. Photo facing north on December 4, 2024.

APPENDIX A – SITE PHOTOGRAPHS



Photo 7

Coast Live Oak Woodland on the northern edge of the parcel within the Survey Area. Photo facing south on December 4, 2024.



Photo 8

Overview of Coast Live Oak Woodland and location where the existing dirt access road crosses over a drainage. The access road becomes paved north of the drainage crossing; the transition to pavement is visible in the background of the photograph. Photo facing north on January 24, 2025.

APPENDIX A – SITE PHOTOGRAPHS



Photo 9

Close-up view of Disturbed habitat in the northern portion of the parcel within the Survey Area. Photo facing east on July 29, 2025.



Photo 10

View of a Bare Ground and Disturbed habitat just south of Coast Live Oak Woodland and east of Olive Tree vegetation communities. Photo facing east on July 29, 2025.

APPENDIX A – SITE PHOTOGRAPHS



Photo 11

View of drainage within the Survey area, just upstream of the road crossing. Water enters the Survey Area from a private residence to the east. Photo facing east on January 24, 2025.



Photo 12

View of access road crossing over the drainage. Water flows underneath the access road through a concrete box culvert. Concrete blocks and riprap line the stream bank. Photo facing northwest on January 24, 2025.

APPENDIX A – SITE PHOTOGRAPHS



Photo 13

View of drainage downstream of the access road crossing. Standing water and metal pump visible in the stream bed. Photo facing northwest on January 24, 2025.



Photo 14

View of drainage crossing over the dirt access road and the concrete culvert downstream. The culvert is just west of the Survey Area. Photo facing south on January 24, 2025.

APPENDIX B – PLANT SPECIES OBSERVED



APPENDIX B – PLANT SPECIES OBSERVED

Scientific Name	Common Name
ANGIOSPERMS (EUDICOTS)	
VIBURNACEAE	MUSKROOT FAMILY
<i>Sambucus mexicana</i>	blue elderberry
AMARANTHACEAE	AMARANTH FAMILY
<i>Amaranthus retroflexus</i> *	rough pigweed
ANACARDIACEAE	SUMAC OR CASHEW FAMILY
<i>Malosma laurina</i>	laurel sumac
<i>Schinus molle</i> *	Peruvian pepper tree
<i>Schinus terebinthifolia</i> *	Brazilian pepper tree
ARALIACEAE	GINSENG FAMILY
<i>Hedera helix</i> *	English ivy
ASTERACEAE	SUNFLOWER FAMILY
<i>Ambrosia psilostachya</i>	western ragweed
<i>Carduus pycnocephalus</i> subsp. <i>pycnocephalus</i> *	Italian thistle
<i>Centaurea melitensis</i> *	toçalote
<i>Erigeron bonariensis</i> *	flax-leaved horseweed
<i>Heterotheca grandiflora</i>	telegraph weed
<i>Pseudognaphalium californicum</i>	California everlasting
BIGNONIACEAE	BIGNONIA FAMILY
<i>Jacaranda mimosifolia</i> *+	jacaranda
BORAGINACEAE	BORAGE FAMILY
<i>Echium candicans</i> *	pride of Madeira
BRASSICACEAE	MUSTARD FAMILY
<i>Hirschfeldia incana</i> *	shortpod mustard
CACTACEAE	CACTUS FAMILY
<i>Opuntia ficus-indica</i> *	Indian fig
CRASSULACEAE	STONECROP FAMILY
<i>Crassula ovata</i> *+	jade plant
CUCURBITACEAE	GOURD FAMILY
<i>Marah macrocarpa</i>	wild cucumber
EUPHORBIACEAE	SPURGE FAMILY
<i>Croton setiger</i>	turkey-mullein
<i>Euphorbia tirucalli</i> *+	fire stick tree
<i>Ricinus communis</i> *	castor-bean
FABACEAE	LEGUME FAMILY
<i>Medicago polymorpha</i> *	bur clover
<i>Tipuana tipu</i> *+	tipu

Scientific Name	Common Name
FAGACEAE	OAK FAMILY
<i>Quercus agrifolia</i>	coast live oak
JUGLANDACEAE	WALNUT FAMILY
<i>Juglans californica</i>	southern California black walnut
LAMIACEAE	MINT FAMILY
<i>Marrubium vulgare</i> *	horehound
MORACEAE	MULBERRY FAMILY
<i>Ficus macrophylla</i> *+	Moreton bay fig
MYRSINACEAE	MYRSINE FAMILY
<i>Lysimachia arvensis</i> *	scarlet pimpernel
MYRTACEAE	MYRTLE FAMILY
<i>Eucalyptus camaldulensis</i> *	red gum
<i>Melaleuca viminalis</i> *+	bottlebrush
<i>Psidium cattleianum</i> *+	strawberry guava
NYCTAGINACEAE	FOUR O'CLOCK FAMILY
<i>Bougainvillea spectabilis</i> *+	bougainvillea
OLEACEAE	OLIVE FAMILY
<i>Fraxinus uhdei</i> *	shamel ash
<i>Olea europaea</i> *	olive
POLYGONACEAE	BUCKWHEAT FAMILY
<i>Rumex crispus</i> *	curly dock
PUNICACEAE	POMEGRANATE FAMILY
<i>Punica granatum</i> *+	pomegranate
ROSACEAE	ROSE FAMILY
<i>Eriobotrya japonica</i> *+	loquat
<i>Heteromeles arbutifolia</i>	toyon
RUTACEAE	RUE FAMILY
<i>Citrus sp.</i> * +	Mandarin orange
SOLANACEAE	NIGHTSHADE FAMILY
<i>Nicotiana glauca</i> *	tree tobacco
<i>Solanum americanum</i>	small-flowered nightshade
VITACEAE	GRAPE FAMILY
<i>Vitis girdiana</i>	desert wild grape
ANGIOSPERMS (MONOCOTS)	
AGAVACEAE	AGAVE FAMILY
<i>Yucca elephantipes</i> *+	giant yucca
ARECACEAE	PALM FAMILY
<i>Washingtonia filifera</i> +	California fan palm
<i>Washingtonia robusta</i> *	Mexican fan palm

Scientific Name	Common Name
POACEAE	GRASS FAMILY
<i>Avena</i> sp. *	wild oat
<i>Bromus madritensis</i> *	foxtail chess
<i>Ehrharta erecta</i> *	panic veldt grass
<i>Schismus barbatus</i> *	Mediterranean schismus
*Non-Native Species, +Ornamental, Unlikely to be Invasive	

APPENDIX C – WILDLIFE SPECIES OBSERVED/DETECTED



APPENDIX C – WILDLIFE SPECIES OBSERVED/DETECTED

Scientific Name	Common Name
CLASS CAMBARIDAE	CRUSTACEANS
PHRYNOSOMATIDAE	ZEBRA-TAILED, EARLESS, FRINGE-TOED, SPINY, TREE, SIDE-BLOTCHED, AND HORNED LIZARDS
<i>Procambarus clarkii</i>	red swamp crawfish
CLASS REPTILIA	REPTILES
PHRYNOSOMATIDAE	ZEBRA-TAILED, EARLESS, FRINGE-TOED, SPINY, TREE, SIDE-BLOTCHED, AND HORNED LIZARDS
<i>Sceloporus occidentalis</i>	western fence lizard
CLASS AVES	BIRDS
CATHARTIDAE	NEW WORLD VULTURES
<i>Cathartes aura</i>	turkey vulture
COLUMBIDAE	PIGEONS & DOVES
<i>Zenaida macroura</i>	mourning dove
TROCHILIDAE	HUMMINGBIRDS
<i>Calypte anna</i>	Anna's hummingbird
TYRANNIDAE	TYRANT FLYCATCHERS
<i>Sayornis nigricans</i>	black phoebe
<i>Sayornis saya</i>	Say's phoebe
CORVIDAE	JAYS & CROWS
<i>Corvus corax</i>	common raven
AEGITHALIDAE	BUSHTITS
<i>Psaltiriparus minimus</i>	bushtit
MIMIDAE	MOCKINGBIRDS, THRASHERS
<i>Mimus polyglottos</i>	northern mockingbird
PARULIDAE	WOOD WARBLERS
<i>Setophaga coronata</i>	yellow-rumped warbler
PASSERELLIDAE	NEW WORLD SPARROWS
<i>Melospiza crissalis</i>	California towhee
<i>Zonotrichia leucophrys</i>	white-crowned sparrow
FRINGILLIDAE	FINCHES
<i>Haemorhous mexicanus</i>	house finch
CLASS MAMMALIA	MAMMALS
SCIURIDAE	SQUIRRELS
<i>Spermophilus beecheyi</i>	California ground squirrel
MURIDAE	MICE, RATS, AND VOLES
<i>Neotoma fuscipes</i>	dusky-footed woodrat
FELIDAE	CATS
<i>Felis catus</i>	domestic cat
CANIDAE	WOLVES & FOXES
<i>Canis familiaris</i>	domestic dog

APPENDIX D – OHWM DATASHEET



U.S. Army Corps of Engineers (USACE) RAPID ORDINARY HIGH WATER MARK (OHWM) FIELD IDENTIFICATION DATA SHEET The proponent agency is Headquarters USACE CECW-CO-R.		From Approved - OMB No. 0710-OHWM Expires: xx-xx-xxxx			
AGENCY DISCLOSURE NOTICE The public reporting burden for this collection of information, 0710-OHWM, is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or burden reduction suggestions to the Department of Defense, Washington Headquarters Services, at whs.mc-alex.esd.mbx.dd-dod-information-collections@mail.mil . Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.					
Project ID #: 21516	Site Name: Fallbrook Self Storage	Date and Time: 1/24/2025, 2:00pm			
Location (lat/long): 33.386687, -117.236329		Investigator(s): Laurie Gorman			
Step 1 Site overview from remote and online resources Check boxes for online resources used to evaluate site: ☐ gage data ☐ LiDAR ☐ geologic maps ☒ climatic data ☒ satellite imagery ☐ land use maps ☒ aerial photos ☒ topographic maps ☐ Other: _____		Describe land use and flow conditions from online resources. Were there any recent extreme events (floods or drought)? The historic path of this drainage was mapped in the NWI and NHD as receiving water from foothills to the northeast. Water flows through the Survey Area, then southwest towards Naval Weapons Station Fallbrook where it feeds into a larger perennial creek which connects with Lake O'Neill on Camp Pendleton. Lake O'Neill continues into the Santa Margarita River, which flows southwest until it reaches the Santa Margarita Marsh just north of Oceanside, San Diego, ultimately terminating in the Pacific Ocean. The historic path of this drainage appears to be highly manipulated by development downstream, immediately southwest of the Survey Area, resulting in a man-made underground connector system. No evidence was found of extreme events such as flood or drought.			
Step 2 Site conditions during field assessment. First look for changes in channel shape, depositional and erosional features, and changes in vegetation and sediment type, size, density, and distribution. Make note of natural or man-made disturbances that would affect flow and channel form, such as bridges, riprap, landslides, rockfalls etc. There is an existing dirt land bridge for a dirt access road, over a 2.5-ft. wide concrete box culvert. Water flows from a residential property that borders the east side of the Project site, westward through the box culvert and enters a concrete culvert that consists of two round 4-ft. diameter openings just west of the Project site. Evidence of human disturbance is present in the form of trash within the stream bed. A concrete pump is present in the stream bed downstream of the access road crossing. Berm within Project site reinforced by concrete bricks and riprap on either side of bridge.					
Step 3 Check the boxes next to the indicators used to identify the location of the OHWM. OHWM is at a transition point , therefore some indicators that are used to determine location may be just below and above the OHWM. From the drop-down menu next to each indicator, select the appropriate location of the indicator by selecting either just below 'b', at 'x', or just above 'a' the OHWM. OHWM. Go to page 2 to describe overall rationale for location of OHWM, write any additional observations, and to attach a photo log.					
Geomorphic indicators <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%; vertical-align: top;"> ☒ Break in slope: ☒ on the bank: ☐ undercut bank: ☐ valley bottom: ☐ Other: _____ ☒ Shelving: ☐ shelf at top of bank: ☐ natural levee: ☒ man-made berms or levees: ☐ other berms: _____ </td> <td style="width: 33%; vertical-align: top;"> ☐ Channel bar: ☐ shelving (berms) on bar: ☐ unvegetated: ☐ vegetation transition (go to veg. indicators) ☐ sediment transition (go to sed. indicators) ☐ upper limit of deposition on bar: ☐ Instream bedforms and other bedload transport evidence: ☐ deposition bedload indicators (e.g., imbricated clasts, gravel sheets, etc.) ☐ bedforms (e.g., poofs, riffles, steps, etc.): </td> <td style="width: 34%; vertical-align: top;"> ☐ erosional bedload indicators (e.g., obstacle marks, scour, smoothing, etc.) ☐ Secondary channels: Sediment indicators ☐ Soil development: ☐ Changes in character of soil: ☐ Mudcracks: ☐ Changes in particle-sized distribution: ☐ transition from _____ to _____ ☐ upper limit of sand-sized particles ☐ silt deposits: </td> </tr> </table>			☒ Break in slope: ☒ on the bank: ☐ undercut bank: ☐ valley bottom: ☐ Other: _____ ☒ Shelving: ☐ shelf at top of bank: ☐ natural levee: ☒ man-made berms or levees: ☐ other berms: _____	☐ Channel bar: ☐ shelving (berms) on bar: ☐ unvegetated: ☐ vegetation transition (go to veg. indicators) ☐ sediment transition (go to sed. indicators) ☐ upper limit of deposition on bar: ☐ Instream bedforms and other bedload transport evidence: ☐ deposition bedload indicators (e.g., imbricated clasts, gravel sheets, etc.) ☐ bedforms (e.g., poofs, riffles, steps, etc.):	☐ erosional bedload indicators (e.g., obstacle marks, scour, smoothing, etc.) ☐ Secondary channels: Sediment indicators ☐ Soil development: ☐ Changes in character of soil: ☐ Mudcracks: ☐ Changes in particle-sized distribution: ☐ transition from _____ to _____ ☐ upper limit of sand-sized particles ☐ silt deposits:
☒ Break in slope: ☒ on the bank: ☐ undercut bank: ☐ valley bottom: ☐ Other: _____ ☒ Shelving: ☐ shelf at top of bank: ☐ natural levee: ☒ man-made berms or levees: ☐ other berms: _____	☐ Channel bar: ☐ shelving (berms) on bar: ☐ unvegetated: ☐ vegetation transition (go to veg. indicators) ☐ sediment transition (go to sed. indicators) ☐ upper limit of deposition on bar: ☐ Instream bedforms and other bedload transport evidence: ☐ deposition bedload indicators (e.g., imbricated clasts, gravel sheets, etc.) ☐ bedforms (e.g., poofs, riffles, steps, etc.):	☐ erosional bedload indicators (e.g., obstacle marks, scour, smoothing, etc.) ☐ Secondary channels: Sediment indicators ☐ Soil development: ☐ Changes in character of soil: ☐ Mudcracks: ☐ Changes in particle-sized distribution: ☐ transition from _____ to _____ ☐ upper limit of sand-sized particles ☐ silt deposits:			
Vegetation Indicators <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%; vertical-align: top;"> ☒ Change in vegetation type and/or density: Check the appropriate boxes and select the general vegetation change (e.g., <i>graminoids to woody shrubs</i>). Describe the vegetation transition looking from the middle of the channel, up the banks, and into the floodplain. ☒ vegetation absent to: ☐ moss to: </td> <td style="width: 33%; vertical-align: top;"> ☐ forbs to: ☐ graminoids to: ☐ woody shrubs to: ☐ deciduous trees to: ☐ coniferous trees to: ☐ Vegetation matted down and/or bent: </td> <td style="width: 34%; vertical-align: top;"> ☐ Exposed roots below intact soil layer: Ancillary indicators ☐ Wracking/presence of organic litter: ☐ Presence of large wood: ☐ Leaf litter disturbed or washed away: ☐ Water staining: ☐ Weathered clasts or bedrock: </td> </tr> </table>			☒ Change in vegetation type and/or density: Check the appropriate boxes and select the general vegetation change (e.g., <i>graminoids to woody shrubs</i>). Describe the vegetation transition looking from the middle of the channel, up the banks, and into the floodplain. ☒ vegetation absent to: ☐ moss to:	☐ forbs to: ☐ graminoids to: ☐ woody shrubs to: ☐ deciduous trees to: ☐ coniferous trees to: ☐ Vegetation matted down and/or bent:	☐ Exposed roots below intact soil layer: Ancillary indicators ☐ Wracking/presence of organic litter: ☐ Presence of large wood: ☐ Leaf litter disturbed or washed away: ☐ Water staining: ☐ Weathered clasts or bedrock:
☒ Change in vegetation type and/or density: Check the appropriate boxes and select the general vegetation change (e.g., <i>graminoids to woody shrubs</i>). Describe the vegetation transition looking from the middle of the channel, up the banks, and into the floodplain. ☒ vegetation absent to: ☐ moss to:	☐ forbs to: ☐ graminoids to: ☐ woody shrubs to: ☐ deciduous trees to: ☐ coniferous trees to: ☐ Vegetation matted down and/or bent:	☐ Exposed roots below intact soil layer: Ancillary indicators ☐ Wracking/presence of organic litter: ☐ Presence of large wood: ☐ Leaf litter disturbed or washed away: ☐ Water staining: ☐ Weathered clasts or bedrock:			
Other observed indicators? Describe: None					

Project ID #: 21516

Step 4 Is additional information needed to support this determination? ☐ Yes ☒ No If yes, describe and attach information to datasheet:

Step 5 Describe rationale for location of OHWM

Inundation consistent with aerial imagery, including satellite imagery. Lack of vegetation within OHWM.

Additional observations or notes

The stream bed has been eroded deeper on either side of the bridge such that there is standing water 1-1.5 deep. Crayfish were observed within standing water downstream of the access road crossing.

Attach a photo log of the site. Use the table below, or attach separately.

Photo log attached? ☒ Yes ☐ No If no, explain why not: _____

List photographs and include descriptions in the table below.

Number photographs in the order that they are taken. Attach photographs and include annotations of features.

Photo Number	Photograph description
1	Overview of Coast Live Oak Woodland and location where the existing dirt access road crosses over a drainage. The access road becomes paved north of the drainage crossing; the transition to pavement is visible in the background of the photograph.
	Photo facing north on January 24, 2024.
2	View of drainage within the Survey area, just upstream of the road crossing. Water enters the Survey Area from a private residence to the east. Photo facing east on January 24, 2024.
3	View of access road crossing over the drainage. Water flows underneath the access road through a concrete box culvert.
	Concrete blocks and riprap line the stream bank. Photo facing northwest on January 24, 2024.
4	View of drainage downstream of the access road crossing. Standing water and metal pump visible in the stream bed.
	Photo facing northwest on January 24, 2024.
5	View of drainage crossing over the dirt access road and the concrete culvert downstream. The culvert is just west of the Survey Area.
	Photo facing south on January 24, 2024.

OHWM Field Identification Datasheet Instructions and Field Procedure

Step 1 Site overview from remote and online resources

Complete Step 1 prior to site visit.

Online Resources: Identify what information is available for the site. Check boxes on datasheet next to the resources used to assess this site.

- | | |
|----------------------|--|
| a. gage data | e. topographic maps |
| b. aerial photos | f. geologic maps |
| c. satellite imagery | g. land use maps |
| d. LiDAR | h. climatic data (precipitation and temperature) |

Landscape context: Use the online resources to put the site in the context of the surrounding landscape.

a. Note on the datasheet under Step 1:

- i. Overall land use and change if known
 - ii. Recent extreme events if known (e.g., flood, drought, landslides, debris flows, wildfires)
- b. Consider the following to inform weighting of evidence observed during field visit.
- i. What physical characteristics are likely to be observed in specific environments?
 - ii. Was there a recent flood or drought? Are you expecting to see recently formed or obscured indicators?
 - iii. How will land use affect specific stream characteristics? How natural is the hydrologic regime? How stable has the landscape been over the last year, decade, century?

Step 2 Site conditions during the field assessment (assemble evidence)

- | | |
|---|---|
| <ol style="list-style-type: none"> a. Identify the assessment area. b. Walk up and down the assessment area noting all the potential OHWM indicators. c. Note broad trends in channel shape, vegetation, and sediment characteristics. <ol style="list-style-type: none"> i. Is this a single thread or multi-thread system? Is this a stream-wetland complex? ii. Are there any secondary and/or floodplain channels? iii. Are there obvious man-made alterations to the system? iv. Are there man-made (e.g., bridges, dams, culverts) or natural structures (e.g., bedrock outcrops, Large Wood jams) that will influence or control flow? | <ol style="list-style-type: none"> d. Look for signs of recurring fluvial action. <ol style="list-style-type: none"> i. Where does the flow converge on the landscape? ii. Are there signs of fluvial action (sediment sorting, bedforms, etc.) at the convergence zone? e. Look for indicators on both banks. If the opposite bank is not accessible, then look across the channel at the bank. f. In Step 2 of the datasheet describe any adjacent land use or flow conditions that may influence interpretation of each line of evidence. <ol style="list-style-type: none"> i. What land use and flow conditions may be affecting your ability to observe indicators at the site? ii. What recent extreme events may have caused changes to the site and affected your ability to observe indicators? |
|---|---|

Step 3a List evidence

Assemble evidence by checking the boxes next to each line of evidence:

- a. If needed, use a separate scratch datasheet to check boxes next to possible indicators, or check boxes of possible indicators in pencil and use pen for final decision.
- b. If using fillable form, then follow the instructions for filling in the fillable form.

Context is important when assembling evidence. For instance, pool development may be an indicator of interest on the bed of a dry stream, but may not be a useful indicator to take note of in a flowing stream. On the other hand, if the pool is found in a secondary channel adjacent to the main channel, it could provide a line of evidence for a minimum elevation of high flows. Therefore, consider the site context when deciding which indicators provide evidence for identifying the OHWM. Explain reasoning in Step 5.

Questions to consider while making observations and listing evidence at a site:

Geomorphic indicators	Sediment and soil indicators	Vegetation Indicators	Ancillary indicators
Where are the breaks in slope? Are there identifiable banks? Is there an easily identifiable top of bank? Are the banks actively eroding? Are the banks undercut? Are the banks armored? Is the channel confined by the surrounding hillslopes? Are there natural or man-made berms and levees? Are there fluvial terraces? Are there channel bars?	Where does evidence of soil formation appear? Are there mudcracks present? Is there evidence of sediment sorting by grain size?	Where are the significant transitions in vegetation species, density, and age? Is there vegetation growing on the channel bed? If no, how long does it take for the non-tolerant vegetation to establish relative to how often flows occur in the channel? Where are the significant transitions in vegetation? Is the vegetation tolerant of flowing water? Has any vegetation been flattened by flowing water?	Is there organic litter present? Is there any leaf litter disturbed or washed away? Is there large wood deposition? Is there evidence of water staining?

Are the following features of fluvial transport present?

*Evidence of erosion: obstacle marks, scour, armoring
Bedforms: riffles, pools, steps, knickpoints/headcuts
Evidence of deposition: imbricated clasts, gravel sheets, etc.*

In some cases, it may be helpful to explain why an indicator was NOT at the OHWM elevation, but found above or below. It can also be useful to note if specific indicators (e.g., vegetation) are NOT present. For instance, note if the site has no clear vegetation zonation.

OHWM Field Identification Datasheet Instructions and Field Procedure

Step 3b Weight each line of evidence and weigh body of evidence

Weight each indicator by considering its importance based upon:

a. Relevance:

- i. Is this indicator left by low, high, or extreme flows?

Tips on how to assess the indicator relative to type of flow:

Consider the elevation of the indicator relative to the channel bed.

What is the current flow level based on season or nearby gages?

Consider the elevation of the indicator relative to the current flow.

If the stream is currently at baseflow and indicator is adjacent to that, then it is likely a low flow indicator. The difference between high and extreme flow indicators can sometimes be difficult to determine.

- ii. Did recent extreme events and/or land use affect this indicator?

1. Recent floods may have left many extreme flow indicators, or temporarily altered channel form.

Other resources will likely be needed to support any OHWM identification at this site. Field evidence of the OHWM may have to wait for the site to recover from the recent flood.

2. Droughts may cause field evidence of OHWM to be obscured, because there has been an extended time since the last high flow event. There can be overgrowth of vegetation or deposition of material from surrounding landscape that can obscure indicators.

3. Both man-made (e.g., dams, construction, mining activities, urbanization, agriculture, grazing) and natural (e.g., fires, floods, debris flows, beaver dams) disturbances can all alter how indicators are expected to appear at a site. Chapter 6 and Chapter 7 of the OHWM field manual provides specific case-studies that can help in interpreting evidence at these sites.

b. Strength:

- i. Is this indicator persistent across the landscape?

1. Look up and downstream and across the channel to see if you see the same indicator at multiple locations.
2. Does the indicator occur at the same elevation as other indicators?

c. Reliability:

- i. Is this indicator persistent on the landscape over time? Will this indicator still persist across seasons?

1. This can be difficult to determine for some indicators and may be specific to climatic region (in terms of persistence of vegetation) and history of land use or other natural disturbances.
2. Chapter 2, Chapter 6, and Chapter 7 of the OHWM field manual describes each indicator in detail and provides examples of areas where indicators are difficult to interpret.

d. Weigh body of evidence:

- i. Combine weights: integrate the weighted line of evidence (relevance, strength, reliability) of each indicator.
- ii. For each of the observed indicators, which are more heavily weighted? Where do high value indicators co-occur along the stream reach? Do they co-occur at a similar elevation along the banks relative to water surface (or channel bed if there is no water).
- iii. On datasheet, select the indicators used to identify the OHWM. Information in Chapter 2 of the OHWM field manual provides descriptions of specific indicators which can assist in putting these in context and determining relevance, strength, and reliability.

e. Take photographs of indicators and attach a log using either page 2 of datasheet or another method of logging photos.

- i. Annotate photos with descriptions of indicators.

***Landscape context from Step 1 can help determine the relevance, strength, and reliability of the indicators observed in the field.**

***Information in Chapter 2 of the OHWM field manual provides information on specific indicators which can assist in putting these in context and determining relevance, strength, and reliability.**

Step 4 Is additional information needed? Are other resources needed to support the lines of evidence observed in the field?

- a. If additional resources are needed, then repeat steps 3a and 3b for the resources selected in Step 1 of assembling, weighting, and weighing evidence collected from online resources. Chapter 5 of the OHWM field manual provides information on using online resources.
- b. Any data collected from online tools have strengths and weaknesses. Make sure these are clear when determining relevance, strength, and reliability of the remotely collected data. Clearly describe why other resources were needed to support the lines of evidence observed in the field, as well as the relevance, strength, and reliability of the supporting data and/or resources.
- c. Attach any remote data and data analysis to the datasheet.

Step 5 Describe rationale for location of OHWM:

- a. Why do the combination of indicators represent the OHWM?
- b. If there are multiple possibilities for the OHWM, explain why there are two (or more) possibilities. Include any relevant discussion on why specific indicators were not included in the final decision.
- c. If needed, add additional site notes on page 2 of the datasheet under Step 5.

APPENDIX E – PRELIMINARY JURISDICTIONAL DELINEATION FORM



PRELIMINARY JURISDICTIONAL DETERMINATION FORM

This preliminary JD finds that there “*may be*” waters of the United States on the subject project site, and identifies all aquatic features on the site that could be affected by the proposed activity, based on the following information:

District Office File/ORM # PJD Date:

State CA	City/County San Diego	Name/ Address of Person Requesting PJD	Boulder Ridge Capital, LLC
3220 Grey Hawk Court
Carlsbad, CA 92010
Nearest Waterbody: Lake O'Neill			
Location: TRS, LatLong or UTM: 33.386687, -117.236329			

Identify (Estimate) Amount of Waters in the Review Area:

Non-Wetland Waters:

linear ft width acres

Wetlands: acre(s) Cowardin Class:

Name of Any Water Bodies
on the Site Identified as

Tidal:

Section 10 Waters:

Non-Tidal:

☒ Office (Desk) Determination

☒ Field Determination:

Date of Field Trip:

SUPPORTING DATA: Data reviewed for preliminary JD (check all that apply - checked items should be included in case file and, where checked and requested, appropriately reference sources below):

- ☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant:
- ☒ Data sheets prepared/submitted by or on behalf of the applicant/consultant.
 - ☐ Office concurs with data sheets/delineation report.
 - ☐ Office does not concur with data sheets/delineation report.
- ☐ Data sheets prepared by the Corps
- ☐ Corps navigable waters' study:
- ☒ U.S. Geological Survey Hydrologic Atlas:
 - ☒ USGS NHD data.
 - ☐ USGS 8 and 12 digit HUC maps.
- ☐ U.S. Geological Survey map(s). Cite quad name:
- ☒ USDA Natural Resources Conservation Service Soil Survey. Citation:
- ☒ National wetlands inventory map(s). Cite name:
- ☐ State/Local wetland inventory map(s):
- ☐ FEMA/FIRM maps:
- ☐ 100-year Floodplain Elevation is:
- ☒ Photographs: ☐ Aerial (Name & Date):
 - ☒ Other (Name & Date):
- ☐ Previous determination(s). File no. and date of response letter:
- ☐ Other information (please specify):

IMPORTANT NOTE: The information recorded on this form has not necessarily been verified by the Corps and should not be relied upon for later jurisdictional determinations.

Signature and Date of Regulatory Project Manager
(REQUIRED)

BOULDER RIDGE CAPITAL, LLC

Signature and Date of Person Requesting Preliminary JD
(REQUIRED, unless obtaining the signature is impracticable)

EXPLANATION OF PRELIMINARY AND APPROVED JURISDICTIONAL DETERMINATIONS:

1. The Corps of Engineers believes that there may be jurisdictional waters of the United States on the subject site, and the permit applicant or other affected party who requested this preliminary JD is hereby advised of his or her option to request and obtain an approved jurisdictional determination (JD) for that site. Nevertheless, the permit applicant or other person who requested this preliminary JD has declined to exercise the option to obtain an approved JD in this instance and at this time.

2. In any circumstance where a permit applicant obtains an individual permit, or a Nationwide General Permit (NWP) or other general permit verification requiring “preconstruction notification” (PCN), or requests verification for a non-reporting NWP or other general permit, and the permit applicant has not requested an approved JD for the activity, the permit applicant is hereby made aware of the following: (1) the permit applicant has elected to seek a permit authorization based on a preliminary JD, which does not make an official determination of jurisdictional waters; (2) that the applicant has the option to request an approved JD before accepting the terms and conditions of the permit authorization, and that basing a permit authorization on an approved JD could possibly result in less compensatory mitigation being required or different special conditions; (3) that the applicant has the right to request an individual permit rather than accepting the terms and conditions of the NWP or other general permit authorization; (4) that the applicant can accept a permit authorization and thereby agree to comply with all the terms and conditions of that permit, including whatever mitigation requirements the Corps has determined to be necessary; (5) that undertaking any activity in reliance upon the subject permit authorization without requesting an approved JD constitutes the applicant’s acceptance of the use of the preliminary JD, but that either form of JD will be processed as soon as is practicable; (6) accepting a permit authorization (e.g., signing a proffered individual permit) or undertaking any activity in reliance on any form of Corps permit authorization based on a preliminary JD constitutes agreement that all wetlands and other water bodies on the site affected in any way by that activity are jurisdictional waters of the United States, and precludes any challenge to such jurisdiction in any administrative or judicial compliance or enforcement action, or in any administrative appeal or in any Federal court; and (7) whether the applicant elects to use either an approved JD or a preliminary JD, that JD will be processed as soon as is practicable. Further, an approved JD, a proffered individual permit (and all terms and conditions contained therein), or individual permit denial can be administratively appealed pursuant to 33 C.F.R. Part 331, and that in any administrative appeal, jurisdictional issues can be raised (see 33 C.F.R. 331.5(a)(2)). If, during that administrative appeal, it becomes necessary to make an official determination whether CWA jurisdiction exists over a site, or to provide an official delineation of jurisdictional waters on the site, the Corps will provide an approved JD to accomplish that result, as soon as is practicable.

PRELIMINARY JURISDICTIONAL DETERMINATION FORM

This preliminary JD finds that there *"may be"* waters of the United States on the subject project site, and identifies all aquatic features on the site that could be affected by the proposed activity, based on the following information:

Appendix A - Sites

District Office File/ORM # PJD Date:
State City/County Person Requesting PJD

Site Number	Latitude	Longitude	Cowardin Class	Est. Amount of Aquatic Resource in Review Area	Class of Aquatic Resource
1	33.386687	-117.236329	n/a	0.002 acre	Non-Section 10 non-wetland

Notes:

The historic path of this drainage was mapped in the NWI and NHD as receiving water from foothills to the northeast. Water flows through the Survey Area, then southwest towards Naval Weapons Station Fallbrook where it feeds into a larger perennial creek which connects with Lake O'Neill on Camp Pendelton. Lake O'Neill continues into the Santa Margarita River, which flows southwest until it reaches the Santa Margarita Marsh just north of Oceanside, San Diego, ultimately terminating in the Pacific Ocean. The historic path of this drainage appears to be highly manipulated by development downstream, immediately southwest of the Survey Area, resulting in a man-made underground connector system. No evidence was found of extreme events such as flood or drought.

APPENDIX F – CROTCH'S BUMBLE BEE FOCUSED SURVEY RESULTS



Fallbrook Self Storage Project Crotch's Bumble Bee Focused Survey Report

Boulder Ridge Capital, LLC



January 12, 2026

Andrew Bertha, Principal
Boulder Ridge Capital, LLC
3220 Grey Hawk Court
Carlsbad, CA 92010

Subject: Crotch's Bumble Bee Focused Survey Report for the Fallbrook Self Storage Project

Andrew Bertha,

The purpose of this report is to summarize the results of Crotch's bumble bee (*Bombus crotchii*; CBB) focused surveys for the approximately 6.08-acre Fallbrook Self Storage Project in the City of Fallbrook, San Diego County, California (Project). Based on the Biological Resources Report prepared for the Project (Chambers Group 2026), CBB were determined to have a moderate potential to occur at the Project site due to recent occurrences of CBB documented within 2 miles of the Project site and the presence of suitable foraging and nesting habitat (Chambers Group 2026). Focused surveys for CBB were subsequently conducted to determine presence or absence of CBB at the Project site. The focused surveys were negative; therefore, CBB can be considered absent from the Project site. The CBB focused survey results are detailed in the sections that follow.

Project Location and Description

The proposed Project encompasses approximately 6.08 acres in Fallbrook within northeastern San Diego County, approximately 500 feet southeast of the intersection of East Mission Road and Industrial Way (Attachment 1: Project Location and Vicinity Map). The Survey Area for the CBB focused surveys consisted of a 5.26-acre parcel, plus a 50-ft. wide road corridor from the parcel to East Mission Road, for a total of 6.08 acres. The elevation within the Survey Area ranges from 775 to 808 feet above mean sea level (amsl). The Project site is located in Township 9 South, Range 3 West, Section 14 within the Temecula United States Geological Survey (USGS) 7.5-minute quadrangle (USGS 1992). The proposed Project site is located within the San Diego County's draft NCMSCP, outside of a Priority Conservation Area (PCA) (SanGIS 2024).

The Project is bordered by commercial development to the west, a battery storage facility to the east, residential development to the north, and vacant lots totaling approximately 7 acres to the south. The Project is further surrounded by commercial and residential development; this development abuts large open space areas, including the Santa Margarita River Trail Reserve, Santa Margarita Canyon Preserve, and Santa Margarita Ecological Reserve approximately one mile to the north and Naval Weapons Station Fallbrook approximately 1.3 miles to the west. Moderately dense development continues for 3.5 miles east until Interstate 15 and 5.5 miles southeast until Highway 76, where land use transitions to rural development, farming, and agriculture. Land use south of the Project site becomes a mix of residential development and agriculture until Highway 76, followed by primarily residential development within the City of Vista south of Highway 76. Vegetation communities and other land types within the Survey Area include Coast Live Oak Woodland, Escaped Ornamental, Disturbed, Ornamental Landscaping, Bare Ground, and Developed, as described in the Biological Resources Report (Chambers Group 2026).

Crotch's Bumble Bee Natural History

CBB is a state candidate species for listing as endangered under the California Endangered Species Act (CESA). This species is classified as a short- or medium-tongued species that generally has a black and yellow pattern on its body. Queens and workers (females) have a black head and thorax, with yellow on the dorsal anterior thorax and sometimes yellow on the scutellum, whereas males have yellow hair on their faces (and very large eyes) with a broad black stripe mid-thorax. The female abdomen has an alternating pattern of yellow, black, and sometimes orange whereas the front of the male abdomen is yellow, and the rest of their abdomen is predominantly black and reddish yellow (iNaturalist 2024). CBB occurs primarily in California, along the central and coasts and deserts, throughout the Central Valley, and



Fallbrook Self Storage Project

Crotch's Bumble Bee Focused Survey Report

Boulder Ridge Capital, LLC



in foothill regions throughout Southern California but also occurs in Baja California and Baja California Sur, Mexico, and southwestern Nevada (Williams et al. 2014). However, CBB appears to be drastically declining throughout its range, particularly in the central portion of its range within the Central Valley (Xerces Society et al. 2018). Primary threats to CBB include agricultural infestation and rapid urbanization. Other threats include climate change (leading to increasing aridity), pesticide use, pathogens from managed pollinators, competition with non-native bee species, and reduced genetic diversity (Hatfield et al. 2015). In California, CBB inhabits open grasslands, shrublands, chaparral, desert margins including Joshua tree and creosote scrub, and semi-urban settings (CDFW 2022). As generalist foragers, CBB will visit a wide variety of plants that produce open flowers with short corollas (Xerces Society et al. 2018). According to research, CBB have shown a preference for floral resources of the families Fabaceae, Apocynaceae, Asteraceae, Lamiaceae, and Boraginaceae (Richardson 2017, as cited in Xerces Society et al. 2018), and of the genera *Acmispon*, *Antirrhinum*, *Asclepias*, *Chaenactis*, *Cirsium*, *Clarkia*, *Cordylanthus*, *Dendromecon*, *Ehrendorferia*, *Eriogonum*, *Eschscholzia*, *Euthamia*, *Hypericum*, *Keckiella*, *Lantana*, *Lupinus*, *Medicago*, *Monardella*, *Phacelia*, *Salvia*, *Vicia*, and *Trichostema* (Williams et al. 2014 and CDFW 2023b) (CBB preferred floral resources). CBB primarily nest underground, typically in abandoned rodent burrows, but may also nest in thatched grasses, old bird nests, brush or rock piles, and downed logs (CDFW 2023a). Little is known about overwintering sites for CBB, but presumably overwintering microhabitats are similar to other bumble bees, including areas with soft disturbed soil (Goulson 2010), leaf litter, and other debris (Williams et al. 2014). CBB queen flight season occurs from February through March. The colony active period occurs from April through August, during which CBB are most likely to be detected. The gyne (reproductive female) flight season occurs from September through October (CDFW 2023a).

Methods

Biologists familiar with the identification of CBB and other bumble bee species conducted focused surveys for CBB for the approximately 6.08-acre Project site. Survey methodology generally followed Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species (CDFW 2023a) and Photograph-Only Surveys of the Survey Protocols for the Rusty Patched bumble bee (*Bombus affinis*) (United States Fish and Wildlife Service [USFWS] 2019). Chambers Group conducted three on-site surveys during the Colony Active Period (April through August). Each survey was spaced 2 to 4 weeks apart. Surveys were conducted on foot and with binoculars and involved walking through areas of suitable habitat and inspecting floral resources (flowering plants) for foraging bees as well as potential nesting habitat. The biologists searched for CBB individuals and potential nest sites. If CBB was detected, the biologists would photograph the CBB from various angles to the greatest extent feasible in order to show key identifying characteristics. While onsite for the first survey, Chambers Group utilized the Field Maps application to digitally map areas of floral resources as potential food sources for CBB, as well as small mammal burrows that could provide CBB colony nesting opportunities. Habitat mapping was updated and refined as needed during the subsequent two surveys.

Results

Three focused CBB surveys were completed in July and August 2025 within the approximately 6.08-acre Survey Area. Patches of floral resources and burrows were mapped throughout the Survey Area (Attachment 2: CBB Habitat Features Map). Representative photographs of floral resources and burrows observed onsite are provided in Attachment 3: Site Photographs. Floral resources within the Survey Area were dominated by shortpod mustard (*Hirschfeldia incana*), with several ornamental species such as jacaranda (*Jacaranda mimosifolia*), bottlebrush (*Melaleuca viminalis*), plumbago (*Plumbago* spp.), and belladonna lily (*Amaryllis belladonna*) intermixed. Few native species were in flower during the surveys and included toyon (*Heteromeles arbutifolia*). Floral resources observed within the Survey Area included CBB preferred floral resource: bur clover (*Medicago polymorpha*) of the Fabaceae family. A list of plant species observed within the Survey Area, with notes on which species were in flower during the CBB focused surveys, is included in Attachment 4: Plants Species Observed. Numerous small mammal burrows and burrow complexes, likely created by California ground squirrels (*Otospermophilus beecheyi*) based on the size and distribution of the burrows, were observed and mapped throughout the Survey Area.



Fallbrook Self Storage Project

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No CBB or other bumble bees (*Bombus* spp.) were observed during the focused surveys. Burrows onsite were inspected for bee nesting colonies, and none were detected. Bee species observed included the western honeybee (*Apis mellifera*). Numerous butterfly species were observed foraging on floral resources throughout the Survey Area and included anise swallowtail (*Papilio zelicaon*), checkered white (*Pontia protodice*), cabbage white (*Pieris rapae*), dainty sulphur (*Nathalis iole*), marine blue (*Leptotes marina*), Edward's blue (*Hemiargus ceraunus gyas*), Acmon blue (*Icaricia acmon acmon*), gulf fritillary (*Agraulis vanillae incarnata*), mourning cloak (*Nymphalis antiopa*), common buckeye (*Junonia coenia grisea*), monarch (*Danaus plexippus*), Leussler's branded skipper (*Hesperia comma leussleri*), umber skipper (*Panes meane*), and cloudless sulphur (*Phoebus sennae marcellina*). A list of flying insect species observed during the focused surveys is provided as Attachment 5: Flying Insect Species Observed.

Weather conditions were appropriate for surveying with temperatures above 60 degrees Fahrenheit (°F), partly cloudy to clear skies, with winds below 15 miles per hour. Details for each survey effort and results are summarized in Table 2.

Table 2. Summary of Crotch's Bumble Bee Survey Results

Survey Date	Surveying Biologists	Time Start/End	Temp (°F) Start/End	Wind Speed (mph) Start/End	% Cloud Cover Start/End	Precipitation	CBB Observed? Y/N
Survey 1 and Habitat Mapping							
July 29, 2025	L. Gorman R. Meszaros	0900/1125	69/84	0-1/1-4	100/0	None	N
Survey 2							
August 12, 2025	L. Gorman L. Howard G. Huffman	1000/1210	73/84	0-2/2-6	0/0	None	N
Survey 3							
August 27, 2025	M. Speegle G. Huffman	1200/1445	87/89	9-13/11-15	0/0	None	N

Conclusions and Recommendations

No CBB was detected during the 2025 focused surveys. Therefore, CBB can be considered absent from the Project site.

Sincerely,

CHAMBERS GROUP, INC.



Laurie Gorman
Senior Project Manager / Biologist

Attachments

- Attachment 1** – Project Location and Vicinity Map
- Attachment 2** – CBB Habitat Features Map
- Attachment 3** – Site Photographs
- Attachment 4** – Plant Species Observed
- Attachment 5** – Flying Insect Species Observed



Fallbrook Self Storage Project

Crotch's Bumble Bee Focused Survey Report

Boulder Ridge Capital, LLC



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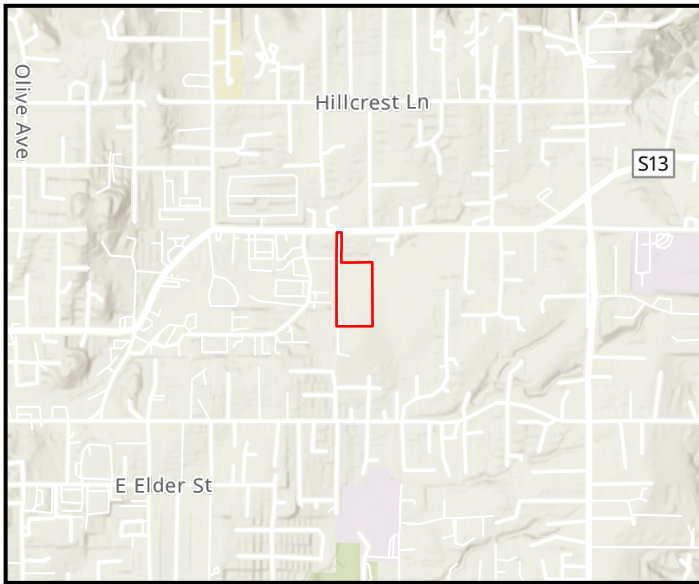
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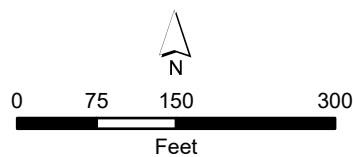


ATTACHMENT 1 – PROJECT LOCATION AND VICINITY MAP





 Project Location



Attachment 1

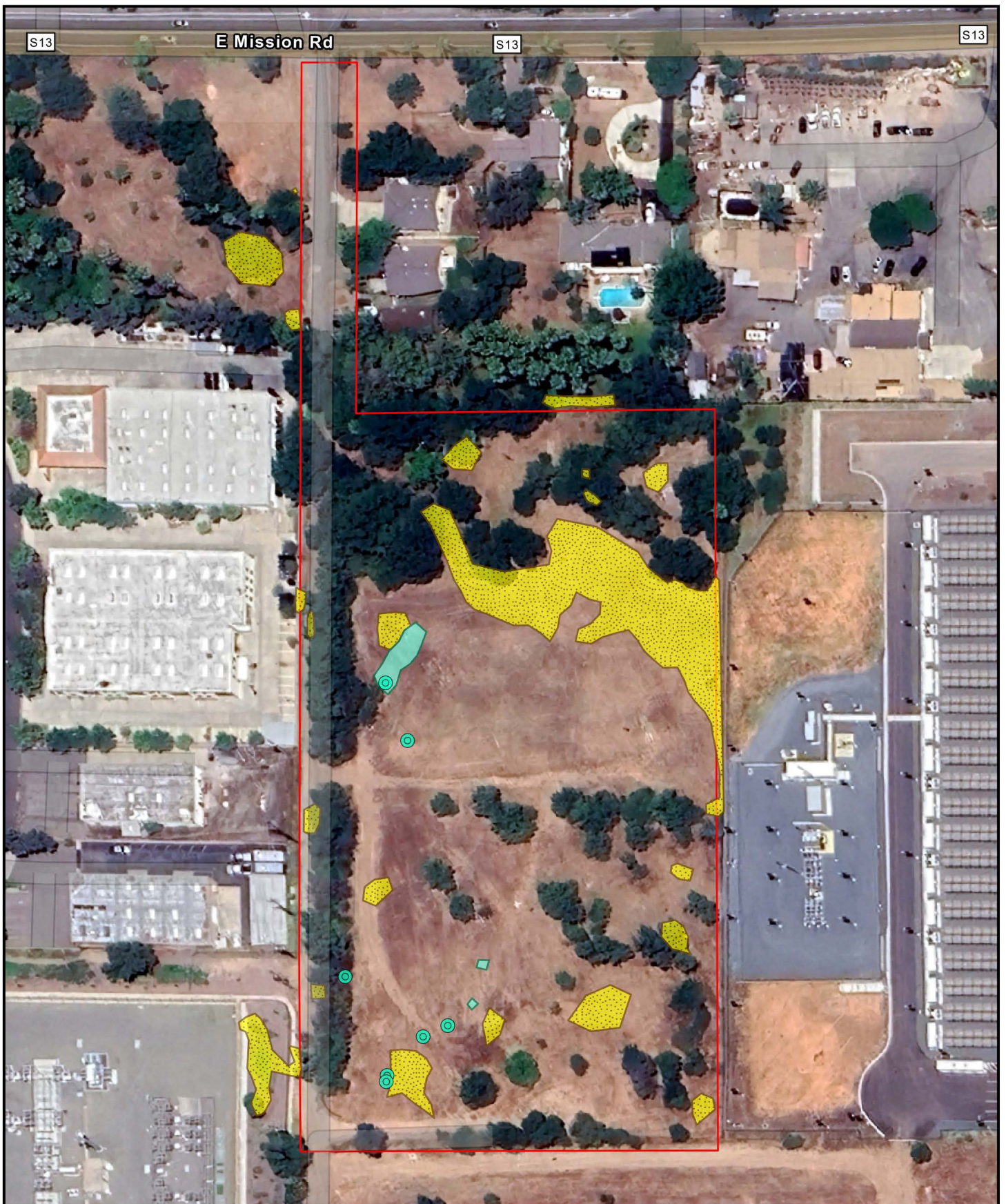
Fallbrook Self-Storage Project Location and Vicinity

Name: 21516 Fallbrook Self-Storage.Mxd
Print Date: 1/29/2025 12:57 PM Author: pcarlos



ATTACHMENT 2 – CBB HABITAT FEATURES MAP





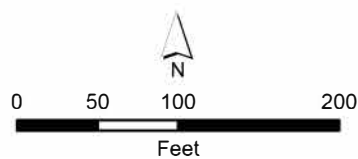
Project Location

Habitat Type

Foraging Habitat (Flowering Plants)

Burrowing Activity (Small Mammal-Sized Burrows and Burrow Complexes)

Burrowing Activity (Small Mammal-Sized Burrows and Burrow Complexes)



Attachment 2

Fallbrook Self-Storage Crotch's Bumble Bee Habitat Features

Name: 21516 Fallbrook Self Storage
Print Date: 9/19/2025 11:11 AM Author: pcaslos



ATTACHMENT 3 – SITE PHOTOGRAPHS



ATTACHMENT 3 – SITE PHOTOGRAPHS



Photo 1

Overview of Survey Area with a patch of flowering shortpod mustard (*Hirschfeldia incana*) visible in the center of the photograph. Shortpod mustard was the dominant floral resource (flowering plant species) observed during the 2025 focused Crotch's bumble bee (*Bombus crotchii*; CBB) surveys. Patches of floral resources were inspected for foraging bumble bees during the surveys. Photo facing northeast on July 29, 2025.



Photo 2

Patch of flowering shortpod mustard within western portion of the Survey Area. Photo facing east on July 29, 2025.

ATTACHMENT 3 – SITE PHOTOGRAPHS



Photo 3

Patch of jacaranda (*Jacaranda mimosifolia*) in flower near the northern end of the Survey Area. Jacaranda was one of several ornamental species in flower in the northern portion of the Survey Area and along the dirt access road from East Mission Road. Photo facing northwest on July 29, 2025.



Photo 4

Bottlebrush (*Melaleuca viminalis*) in flower in the northern portion of the Survey Area. Photo facing north on July 29, 2025.

ATTACHMENT 3 – SITE PHOTOGRAPHS



Photo 5

Dirt mounds in the eastern portion of the Survey Area containing small mammal burrow complexes. Small mammal burrows such as these have a potential to support nesting colonies of Crotch's bumble bee. No nesting colonies were detected during the 2025 focused surveys. Photo facing north on August 12, 2025.



Photo 6

Small mammal burrows within the southern portion of the Survey Area. Burrowing activity was observed within disturbed habitat areas. Photo facing south on August 12, 2025.

ATTACHMENT 4 – PLANT SPECIES OBSERVED

ATTACHMENT 4 – PLANT SPECIES OBSERVED

Scientific Name	Common Name
ANGIOSPERMS (EUDICOTS)	
VIBURNACEAE	MUSKROOT FAMILY
<i>Sambucus mexicana</i> ++	blue elderberry
AMARANTHACEAE	AMARANTH FAMILY
<i>Amaranthus retroflexus</i> *	rough pigweed
ANACARDIACEAE	SUMAC OR CASHEW FAMILY
<i>Malosma laurina</i>	laurel sumac
<i>Schinus molle</i> *, ++	Peruvian pepper tree
<i>Schinus terebinthifolia</i> *	Brazilian pepper tree
ARALIACEAE	GINSENG FAMILY
<i>Hedera helix</i> *	English ivy
ASTERACEAE	SUNFLOWER FAMILY
<i>Ambrosia psilostachya</i>	western ragweed
<i>Carduus pycnocephalus</i> subsp. <i>pycnocephalus</i> *	Italian thistle
<i>Centaurea melitensis</i> *	toalote
<i>Erigeron bonariensis</i> *	flax-leaved horseweed
<i>Heterotheca grandiflora</i>	telegraph weed
<i>Lactuca serriola</i> *, ++	prickly lettuce
<i>Pseudognaphalium californicum</i>	California everlasting
BIGNONIACEAE	BIGNONIA FAMILY
<i>Jacaranda mimosifolia</i> *, ++	jacaranda
BORAGINACEAE	BORAGE FAMILY
<i>Echium candicans</i> *, ++	pride of Madeira
BRASSICACEAE	MUSTARD FAMILY
<i>Hirschfeldia incana</i> *, ++	shortpod mustard
CACTACEAE	CACTUS FAMILY
<i>Opuntia ficus-indica</i> *	Indian fig
CRASSULACEAE	STONECROP FAMILY
<i>Crassula ovata</i> *	jade plant
CUCURBITACEAE	GOURD FAMILY
<i>Marah macrocarpa</i>	wild cucumber
EUPHORBIACEAE	SPURGE FAMILY
<i>Croton setiger</i>	turkey-mullein
<i>Euphorbia tirucalli</i>	fire stick tree
<i>Ricinus communis</i> *	castor-bean
FABACEAE	LEGUME FAMILY
<i>Medicago polymorpha</i> *	bur clover
<i>Tipuana tipu</i>	tipa

Scientific Name	Common Name
FAGACEAE	OAK FAMILY
<i>Quercus agrifolia</i>	coast live oak
JUGLANDACEAE	WALNUT FAMILY
<i>Juglans californica</i>	southern California black walnut
LAMIACEAE	MINT FAMILY
<i>Marrubium vulgare</i> *, ++	horehound
MORACEAE	MULBERRY FAMILY
<i>Ficus macrophylla</i> *	Moreton bay fig
MYRSINACEAE	MYRSINE FAMILY
<i>Anagallis (Lysimachia) arvensis</i> *, ++	scarlet pimpernel
MYRTACEAE	MYRTLE FAMILY
<i>Eucalyptus camaldulensis</i> *	red gum
<i>Melaleuca viminalis</i> *	bottlebrush
<i>Psidium cattleianum</i>	strawberry guava
NYCTAGINACEAE	FOUR O'CLOCK FAMILY
<i>Bougainvillea spectabilis</i> *, ++	bougainvillea
OLEACEAE	OLIVE FAMILY
<i>Fraxinus uhdei</i> *	shamel ash
<i>Olea europaea</i> *	olive
PHYTOLACCACEAE	POKEWEED
<i>Phytolacca americana</i> var. <i>americana</i> ++	pokeweed
PLANTAGINACEAE	PLANTAIN FAMILY
<i>Kickxia elatine</i> *, ++	fluellin
PLUMBAGINACEAE	LEADWORT FAMILY
<i>Plumbago auriculata</i> *, ++	cape plumbago
POLYGONACEAE	BUCKWHEAT FAMILY
<i>Rumex crispus</i> *	curly dock
PUNICACEAE	POMEGRANATE FAMILY
<i>Punica granatum</i>	pomegranate
ROSACEAE	ROSE FAMILY
<i>Eriobotrya japonica</i>	loquat
<i>Heteromeles arbutifolia</i> ++	toyon
RUTACEAE	RUE FAMILY
<i>Citrus</i> sp.*	Mandarin orange
SOLANACEAE	NIGHTSHADE FAMILY
<i>Nicotiana glauca</i> *	tree tobacco
<i>Solanum americanum</i> ++	small-flowered nightshade
VITACEAE	GRAPE FAMILY
<i>Vitis girdiana</i>	desert wild grape

Scientific Name	Common Name
ANGIOSPERMS (MONOCOTS)	
AGAVACEAE	AGAVE FAMILY
<i>Yucca elephantipes</i> *	giant yucca
ARECACEAE	PALM FAMILY
<i>Washingtonia filifera</i>	California fan palm
<i>Washingtonia robusta</i> *	Mexican fan palm
POACEAE	GRASS FAMILY
<i>Avena</i> sp.*	wild oat
<i>Bromus madritensis</i>	foxtail chess
<i>Ehrharta erecta</i> *	panic veldt grass
<i>Schismus barbatus</i> *	Mediterranean schismus
*Non-Native Species; ++Observed in Flower During Crotch's Bumble Bee (<i>Bombus crotchii</i>) Focused Surveys	

ATTACHMENT 5 – FLYING INSECT SPECIES OBSERVED



ATTACHMENT 5 – FLYING INSECT SPECIES OBSERVED

Scientific Name	Common Name
CLASS INSECTA	INSECTS
SCARABAEIDAE	SCARAB BEETLES
<i>Cotinis mutabilis</i>	figeater beetle
POMPIDIDAE	SPIDER WASPS
<i>Pepsis sp.</i>	tarantula hawk
APIDAE	HONEY BEES, BUMBLE BEES, AND ALLIES
<i>Apis mellifera</i>	western honey bee
NYMPHALIDAE	BRUSH FOOTED BUTTERFLIES
<i>Agraulis vanillae incarnata</i>	gulf fritillary
<i>Danaus plexippus</i>	monarch
<i>Nymphalis antiopa antiopa</i>	mourning cloak
<i>Junonia coenia grisea</i>	gray buckeye
HESPERIDAE	SKIPPERS
<i>Hesperia comma leussleri</i>	Leussler's branded skipper
<i>Panes meane</i>	umber skipper
LYCAENIDAE	HAIRSTREAKS, COPPERS, BLUES
<i>Plebejus acmon</i>	Acmon blue
<i>Leptotes marina</i>	marine blue
<i>Hemiargus ceraunus</i>	Edward's Blue
PAPILIONIDAE	SWALLOWTAILS
<i>Papilio zelicaon</i>	Anise Swallowtail
PIERIDAE	WHITES AND SULPHURS
<i>Pieris rapae</i>	cabbage white
<i>Pontia protodice</i>	checkered white
<i>Phoebis sennae marcellina</i>	southwestern cloudless sulphur
<i>Nathalis iole</i>	dainty sulphur