Final Environmental Impact Report

San Diego River Fire Hazard Mitigation Program: Fuels Treatment Plan Project

State Clearinghouse No. 2026020351

JULY 2026

Prepared for:

CITY OF SANTEE
FIRE DEPARTMENT
10601 Magnolia Avenue
Santee, California 92071

Prepared by:

DUDEK

687 South Coast Highway 101, Suite 110
Encinitas, California 92024

San Diego County Archaeological Society, Inc.

Environmental Review Committee

June 16, 2026

To: Mr. Harley Wallace, Fire Chief
Santee Fire Department Administration
10601 Magnolia Avenue
Santee, California 92071

Subject: Draft Environmental Impact Report
San Diego River Fire Hazard Mitigation Plan
Environmental Impact Report ENV-2026-0001

Dear Chief Wallace:

O1-1 I have reviewed the subject DEIR on behalf of this committee of the San Diego County Archaeological Society.

O1-2 Based on the DEIR and its supporting appendices posted on the City of Santee's website, we agree with the impact analysis and mitigation measures for cultural resources. Our only suggestion would be to include a new archaeological and Kumeyaay survey after moderate- or large-area fires of the fire-affected areas. Such surveys could detect resources which were obscured or inaccessible at the time of the current survey and help guide future actions in the riverway.

O1-3 One other comment, on Appendix D, is to note that the earlier 1928-29 Tax Factor aerial photographs were not inspected. While that ultimately does not affect the mitigation measures recommended, they should have been included in the research.

O1-4 SDCAS appreciates being included in the environmental review process for this project.

Sincerely,

James W. Royle, Jr., Chairperson
Environmental Review Committee

cc: Dudek
SDCAS President
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Response to Comment Letter O1

San Diego County Archaeological Society, Inc.
James W Royle
June 16, 2026

O1-1 The comment is an introduction to the comments that follow. The comment does not raise a significant environmental issue regarding the accuracy or adequacy of the information provided in the Draft EIR. Therefore, no further response is required.

O1-2 The comment agrees with the impact analysis and mitigation measures for cultural resources and provides a suggestion to include a new archaeological and Kumeyaay survey after moderate- or large-area fires of the fire-affected areas as such surveys could detect resources which were obscured or inaccessible at the time of the current survey and help guide future actions. The project is not proposing prescribed burning as part of the vegetative fuel reduction activities. Additionally, if a fire were to occur within the project site between the time of the survey and the implementation of fuel treatment activities MM-CUL-2 includes cultural resources monitoring with an archaeological monitor and Kumeyaay Native American monitor during on site initial ground disturbing activities which is intended to address inadvertent disturbance to cultural resources during project implementation, therefore, revisions to the mitigation measures are not warranted. Surveying of the project site after fires is not within the scope of the project. MM-CUL-2 would adequately address any exposed resources as a result of a fire prior to project implementation.

O1-3 The comment states that the earlier 1928-29 Tax Factor aerial photographs were not inspected. While it does not affect the mitigation measures recommended, they should have been included in the research. Dudek's 2026 Cultural Resources Inventory Report (Appendix D) contains a section on the review of historic maps and aerials, which included a review of historic aerial photographs from 1953 through 2022, and historic topographic maps from 1893 through 2021. It is unlikely that review of the 1928-29 "Tax Factor" aerial photographs referenced would have the potential to reveal new relevant information or previously unrecorded resources not already known through review of the aerial photographs, topographic maps, and records from the South Coastal Information Center, as the earliest topographic map available is from 1893, which is earlier than the 1928-29 "Tax Factor" aerial photo series. Through this research, the Cultural Resources Assessment Report and its review of historic aerial photographs/topographic maps are considered sufficiently adequate for the purposes of identifying the project's potential historic resources impacts. A review of the 1828-29 "Tax Factor" aerial photo series and revisions to the Cultural Resources Assessment Report (Appendix D) and the DEIR are not warranted.

O1-4 The comment is a conclusory remark. The comment does not raise a significant environmental issue regarding the accuracy or adequacy of the information provided in the Draft EIR. Therefore, no further response is required.

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VINCE NICOLETTI
DIRECTOR

PLANNING & DEVELOPMENT SERVICES
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TYLER FARMER
ASSISTANT DIRECTOR

June 22, 2026

Harley Wallace, Fire Chief
Santee Fire Department Administration
10601 Magnolia Ave
Santee, CA 92071

Sent via email to: HWallace@CityofSanteeCA.gov

REQUEST FOR COMMENTS ON THE NOTICE OF AVAILABILITY OF THE DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE SAN DIEGO RIVER FIRE HAZARD MITIGATION PROGRAM

Dear Mr. Wallace,

L1-1

The County of San Diego (County) staff reviewed the City of Santee (City) Notice of Availability of the Draft Environmental Impact Report (EIR) for the San Diego River Fire Hazard Mitigation Program (Project), dated May 8, 2026.

County staff appreciates the opportunity to review the Project and offers the following comments for your consideration. Please note that none of these comments should be construed as County support for this Project.

L1-2

GENERAL

1. The County's Land Use and Environment Group has developed Guidelines for Determining Significance that are used to determine the magnitude of environmental impacts and mitigation options for addressing potentially significant impacts in the unincorporated portions of the county. Project impacts that could have potentially significant adverse effects to the unincorporated county or County facilities should be evaluated using the County's Guidelines for Determining Significance. These guidelines are available online at: http://www.sandiegocounty.gov/pds/procguid.html.

L1-3

DEPARTMENT OF ENVIRONMENTAL HEALTH QULAITY (DEHQ)

The County's DEHQ Hazardous Materials Division (HMD) is responsible for the protection of public health and the environment by ensuring hazardous materials, hazardous waste, medical waste, aboveground tanks, and underground storage tanks are properly managed. HMD has completed its review and has the following comments regarding the Project:

L1-4

2. **HAZARDOUS MATERIALS BUSINESS PLAN (HMBP)**: This Project could result in facilities that store and/or handle 55gallons or more of hazardous materials and/or generate any amount of hazardous waste or medical waste. If chemicals/hazardous materials/hazardous wastes stored in project will hold a volume greater than or equal to 55 gallons, 500 pounds or 200 cubic feet each (e.g. gasoline, diesel fuel, lubricating oil, grease, cleaning products, landscaping chemicals and fertilizers, and solvents, etc.), the facility owner/operators(s) are required to submit a Hazardous Materials Questionnaire to the Hazardous Materials Division (HMD) and complete a Hazardous Materials Plan Check review prior to operation. Any proposed activities involving the storage and handling of hazardous materials will require the owner/operator and/or contractor(s) to comply with local and state laws and regulations. Additional information on HMBP requirements can be found on our website at: HMBP (sandiegocounty.gov)

L1-5

3. **HAZARDOUS WASTE:** All related hazardous wastes (e.g. waste gasoline, waste diesel fuel, waste lubricating oil/grease, waste cleaning products, waste landscaping chemicals and fertilizers, and waste solvents, etc.) generated and stored onsite must be properly labeled and handled in manner to prevent release to the environment. In addition, the owner/operator must ensure any hazardous wastes generated onsite during construction is properly disposed of by registered hazardous waste transporter and compliant with local and state laws and regulations. Additional information on Hazardous Waste requirements can be found on our website at: Hazardous Waste (sandiegocounty.gov)

L1-6

4. **ABOVEGROUND PETROLEUM STORAGE:** If one operation has greater than or equal to 1,320 gallons of petroleum (e.g. gasoline, diesel, oil, used oil, etc.) stored in aboveground tanks and containers 55-gallons or greater in size then they are subject to regulatory requirements under the California Aboveground Petroleum Storage Act (APSA), and a Spill Prevention, Control and Countermeasures (SPCC) Plan may be required. IMPORTANT: Facilities storing an aggregate of 10,000 or more gallons of petroleum must have their SPCC plan certified by a professional engineer. Additional information on APSA can be found on our website at: APSA (sandiegocounty.gov)

L1-7

5. **UNDERGROUND STORAGE TANKS:** If an underground storage tank (UST) that previously held a hazardous substance is unexpectedly discovered during the Project, the property owner/operator shall apply to the HMD for a removal permit in accordance with state law before removing the tank and connected piping. Additional information can be found on our website at: UST Plan Check

L1-8

6. **CONTAMINATED SOIL:** If it is discovered that any hazardous materials and/or waste has been released to the environment before or during the Project, the contaminated environmental media (e.g. soil) must be removed and property managed and disposed.

L1-9

Please note, the HMD has the authority pursuant to state law and County Code to regulate facilities that handle or store hazardous materials and/or generate hazardous/medical wastes. The HMD will apply that authority as necessary to protect public health and the environment. Additional information about HMD can be found on our website at: Hazardous Materials Division (sandiegocounty.gov)

DEPARTMENT OF GENERAL SERVICES (DGS)

L1-10 The County's Department of General Services (DGS) serves the public by providing a variety of goods and services that are essential to other County departments. This includes real estate services, facility planning & design, construction projects, fleet services, energy and sustainability and facilities operations. DGS completed their review and has the following comments regarding the Project:

L1-11 7. The Project area includes a portion of County-owned parcel APN: 381-050-77-00. The County requests the entire parcel be included in the Fire Hazard Mitigation Plan and analyzed as part of the project area within the EIR. Inclusion of the entire parcel will help support County and City of Santee joint efforts in implementing the San Diego Riverbed Encampment Resolution Fund grant program.

L1-12 8. The proposed vegetation areas include land owned and managed by the County. Potential Permits and Approvals Required should include the approval of easements, right-of entry permits, and/or other approvals and permits that the County would require to implement vegetation management on County-owned and managed lands. As the landowner, the County must authorize the implementation of the Project on County-owned and managed lands.

L1-13 The County appreciates the opportunity to comment on the Project. We look forward to receiving future documents related to the Project and providing additional assistance, at your request. For further coordination regarding the DEHQ comments please contact Rita Raphael, Office Support Specialist, at rita.raphael@sdcounty.ca.gov, or 619-756-5388. For further coordination regarding the DGS comments above, please contact Marcus Lubich, Project Manager, at marcus.lubich@sdcounty.ca.gov, or 858-414-4593.

If you have any general questions regarding these comments, please contact Timothy Vertino, Land Use / Environmental Planning Manager, at (858) 505-6677, or via e-mail at timothy.vertino@sdcounty.ca.gov

Sincerely,

Mike Madrid, AICP, Group Program Manager
Long Range Planning Division
Planning & Development Services

cc: Dallin Young, Director of Policy, Board of Supervisors, District 2
Madison O'Barr, CAO Group Analyst, Land Use and Environment Group
Timothy Vertino, Planning Manager, Planning & Development Services
Marcus Lubich, Project Manager, DGS
Rita Raphael, Office Support Specialist, DEHQ

SANDIEGOCOUNTY.GOV

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Response to Comment Letter L1

County of San Diego
Mike Madrid, AICP, Group Program Manager
June 22, 2026

L1-1 The comment provides an introduction to the comments that follow. The comment does not raise a significant environmental issue regarding the accuracy or adequacy of the information provided in the Draft EIR. Therefore, no further response is required.

L1-2 The comment states that project impacts that could have potentially significant adverse effects to the unincorporated County or County facilities should be evaluated using the County's Guidelines for Determining Significance. The City acknowledges this comment. While parcels included as part of the proposed project are owned by the County, the parcels are located within the City of Santee and are not considered unincorporated County of San Diego. Therefore, County standards of significance were not used to evaluate the project's potentially significant impacts. Further, as concluded in the Draft EIR, all impacts would be mitigated to less than significant.

LI-3 The comment introduces the Department of Environmental Health and Quality and is an introduction to the comments that follow. The comment does not raise a significant environmental issue regarding the accuracy or adequacy of the information provided in the Draft EIR. Therefore, no further response is required.

LI-4 The comment provides information regarding the Hazardous Materials Business Plan, and states that the project could result in facilities that store and/or handle 55 gallons or more of hazardous materials and/or generate any amount of hazardous waste or medical waste, and states that proposed activities involving the storage and handling of hazardous materials would require contractors to comply with local and state laws and regulations. The Project does not propose a facility that would store and/or handle hazardous materials, rather, the Project proposes the fuels treatment plan for the San Diego River Corridor in the City of Santee. The Draft EIR acknowledges the use and handling of hazardous materials in Draft EIR Section 4.3 and would comply with all local and state regulations that are applicable to the Project. The Project includes best management practices (BMPs) that are incorporated into the Project design to reduce the potential for hazardous materials to create hazards during routine handling during treatment and maintenance activities. The comment does not raise a significant environmental issue regarding the accuracy or adequacy of the information provided in the Draft EIR. Therefore, no further response is required.

L1-5 The comment provides information on hazardous waste requirements. The City acknowledges this comment. The project would comply with all local and state regulations that are applicable to the Project related to hazardous waste. The Project includes best management practices (BMPs) that are incorporated into the Project design to reduce the potential for hazardous materials to create hazards during routine handling during treatment and maintenance activities. The comment does not raise a significant environmental issue regarding the accuracy or adequacy of the information provided in the Draft EIR. Therefore, no further response is required.

L1-6 The comment provides information on regulations regarding aboveground petroleum storage. The City acknowledges this comment. The project would comply with all local and state regulations that are

applicable to the Project related to petroleum storage. The comment does not raise a significant environmental issue regarding the accuracy or adequacy of the information provided in the Draft EIR. Therefore, no further response is required.

L1-7 The comment provides information on regulations regarding unanticipated discovery of underground storage tanks. The City acknowledges this comment. The comment does not raise a significant environmental issue regarding the accuracy or adequacy of the information provided in the Draft EIR. Therefore, no further response is required.

L1-8 The comment provides information regarding handling contaminated soil. The Project includes best management practices (BMPs) that are incorporated into the Project design to reduce the potential for hazardous materials to create hazards during routine handling during treatment and maintenance activities. The comment does not raise a significant environmental issue regarding the accuracy or adequacy of the information provided in the Draft EIR. Therefore, no further response is required.

L1-9 The comment states that Hazardous Materials Division has the authority to regulate facilities that handle or store hazardous materials and/or generate hazardous/medical waste. The City acknowledges this comment. The comment does not raise a significant environmental issue regarding the accuracy or adequacy of the information provided in the Draft EIR. Therefore, no further response is required.

L1-10 The comment introduces the Department of General Services and is an introduction to comments that follow. The comment does not raise a significant environmental issue regarding the accuracy or adequacy of the information provided in the Draft EIR. Therefore, no further response is required.

L1-11 The comment requests that the entirety of APN: 381-050-77-00 is included in Project boundary, rather than the portion of the parcel that is currently part of the Project, stating that inclusion of the parcel would help to support County and City of Santee joint efforts implementing the San Diego Riverbed Encampment Resolution Fund grant program. The City acknowledges this comment, however, the parcel is not part of the Project. The comment does not raise a significant environmental issue regarding the accuracy or adequacy of information provided in the Draft EIR. Therefore, no further response is required.

L1-12 The comment states that the County must authorize implementation of the Project on County-owned and managed land. The City will acquire any approvals and permits from the County prior to any fuel treatment on County-owned lands that are required to implement the Project. Section 3.7 of the Final EIR has been updated to reflect this comment. A Right of Entry permit has been drafted bythe City of Santee Fire Department and will be finalized upon approval of Phase 2 of the Grant.

L1-13 The comment is a conclusory remark. The comment does not raise a significant environmental issue regarding the accuracy or adequacy of the information provided in the Draft EIR. Therefore, no further response is required.

From: JENNIFER WEBB <fwjwnw@cox.net>
Sent: Wednesday, June 3, 2026 10:51:23 AM
To: Harley Wallace <HWallace@CityofSanteeCa.gov>
Subject: San Diego Fire Mitigation EIR

Caution: The sender name (JENNIFER WEBB) is different from their email address (fwjwnw@cox.net), which may indicate an impersonation attempt. Verify the email's authenticity with the sender using your organization's trusted contact list before replying or taking further action.

Secured by Check Point

Dear Mr. Wallace and Esteemed City Council Members,

I1-1

I am writing as a concerned Santee resident, Jennifer Webb of 109 River Rock Court, to highlight an urgent fire safety issue.

Three city trees, situated 5-10 feet from my home, present a considerable fire hazard with branches encroaching upon my porch and roof. Previous appeals for their removal, and even attempts at trimming when the trees were smaller, have not resolved this ongoing risk. My recent inquiries have also gone unanswered.

I respectfully request the removal of these hazardous trees, particularly as other vegetation clearance, such as nearby bushes, is undertaken. This action is crucial for protecting my property and ensuring community safety.

Thank you for your prompt consideration of this critical safety concern.

Jennifer Webb
109 River Rock Court
Santee, CA. 92071
fwjwnw@cox.net

Sent from Yahoo Mail for iPhone

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Response to Comment Letter I1

Individual
Jennifer Webb
6/3/2026

I1-1 The comment expresses concern regarding three city trees that encroach the commenter's home. The City acknowledges this comment. The Draft EIR evaluates environmental impacts associated with the proposed project, which does not include the city trees discussed in this comment. However, maintenance of the trees referenced in the comment was conducted by the City of Santee's Public Services Division after the City received the comment. The comment does not raise a significant environmental issue regarding the accuracy or adequacy of the information provided in the Draft EIR. Therefore, no further response is required.

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Acronyms and Abbreviations

Acronym/Abbreviation	Definition
AB	Assembly Bill
AIA	airport influence area
ALUCP	Airport Land Use Compatibility Plan
ANSI	American National Standards Institute
APE	Area of Potential Effects
Basin Plan	Water Quality Control Plan for the San Diego Basin
BMP	best management practice
CAL FIRE	California Department of Forestry and Fire Protection
CalARP	California Accidental Release Prevention Program
CalEPA	California Environmental Protection Agency
CalGEM	California Geologic Energy Management
Caltrans	California Department of Transportation
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFC	California Fire Code
CFR	Code of Federal Regulations
CGP	Construction General Permit
CHRIS	California Historical Resources Information System
City	City of Santee
CNEL	Community Noise Equivalent Level
County	County of San Diego
CRHR	California Register of Historic Resources
CRPR	California Rare Plant Rank
CWA	Clean Water Act
dB	decibel
dBA	A-weighted decibel
DTSC	Department of Toxic Substance Control
DTSC-SL	Department of Toxic Substance Control–modified screening level
EIR	Environmental Impact Report
EOP	Emergency Operations Plan
EPA	U.S. Environmental Protection Agency
ESA	Environmentally Sensitive Area
FESA	federal Endangered Species Act
FHSZ	Fire Hazard Severity Zone

Acronym/Abbreviation	Definition
FTA	Federal Transit Administration
FTP	Fuels Treatment Plan
GHG	greenhouse gas
HCP	habitat conservation plan
HERO	Human and Ecological Risk Office
HMTA	Hazardous Materials Transportation Act
HSC	California Health and Safety Code
IFC	International Fire Code
ips	inch per second
ISA	International Society of Arboriculture
L_{dn}	day–night average noise level
L_{eq}	equivalent noise level over a given period
L_{max}	maximum sound level recorded during the measurement interval
MJHMP	Multi-Jurisdictional Hazard Mitigation Plan
MHPA	Multi-Habitat Planning Area
MLD	most likely descendant
MM	Mitigation Measure
mph	miles per hour
MS4	Municipal Separate Storm Sewer
MSCP	Multiple Species Conservation Program
NAHC	Native American Heritage Commission
NEPA	National Environmental Policy Act
NESHAP	National Emission Standards for Hazardous Air Pollutants
NOP	Notice of Preparation
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
OSHA	Occupational Safety and Health Administration
Porter–Cologne Act	Porter–Cologne Water Control Quality Act
PCA	pest control adviser
PCB	polychlorinated biphenyl
PPV	peak particle velocity
PRC	Public Resources Code
Project	San Diego River Fire Hazard Mitigation Program: Fuels Treatment Plan Project
RCRA	Resource Conservation and Recovery Act
RSL	regional screening level
RWQCB	Regional Water Quality Control Board
SDAPCD	San Diego County Air Pollution Control District
SFD	Santee Fire Department

Acronym/Abbreviation	Definition
SLF	Sacred Lands File
SR	State Route
SWRCB	State Water Resources Control Board
TCR	Tribal Cultural Resource
TMDL	total maximum daily load
USACE	U.S. Army Corps of Engineers
USDOT	U.S. Department of Transportation
USFWS	U.S. Fish and Wildlife Service
WDR	waste discharge requirement
WUI	wildland–urban interface

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1 Executive Summary

1.1 Introduction

This Environmental Impact Report (EIR) has been prepared by the City of Santee (City) as lead agency pursuant to the California Environmental Quality Act (CEQA). This EIR has been prepared to evaluate the environmental impacts associated with implementation of the San Diego River Fire Hazard Mitigation Program: Fuels Treatment Plan (Project).

This EIR is an informational document intended for use by the City, other public agencies, and members of the public in evaluating the potential environmental effects of the Project.

CEQA requires that local government agencies, before taking action on projects over which they have discretionary approval authority, consider the environmental consequences of such projects. An EIR is a document designed to provide to the public and to local and state governmental agency decision makers an analysis of potential environmental consequences of a project to support informed decision making.

The City prepared this EIR to provide the public and responsible agencies information about the potential adverse impacts on the local and regional environment associated with implementation of the Project. This EIR was prepared pursuant to CEQA, codified as California Public Resources Code Section 21000 et seq., and the CEQA Guidelines in the California Code of Regulations, Title 14, Section 15000 et seq.[1]

This summary provides a brief synopsis of the Project, the results of the environmental analysis contained within this environmental document, alternatives to the Project that were considered, and major areas of interest and issues to be resolved by decision makers. This summary does not contain the extensive background and analysis found throughout the individual chapters within the EIR. Therefore, the reader should review the entire document to fully understand the Project and its environmental effects.

1.2 Project Purpose

The City of Santee Fire Department has initiated the development of the San Diego River Fire Hazard Mitigation Program: Fuels Treatment Plan (FTP) to reduce wildfire risk in and around high-priority sites along the San Diego River corridor. This area lies within the wildland–urban interface and includes critical public infrastructure, adjacent residential neighborhoods, and biologically sensitive habitats. The need for a targeted, ecologically conscious approach to vegetation management is underscored by increasing fire risk, invasive plant encroachment, and complex access and ownership constraints unique to the corridor.

The FTP provides a framework for vegetation management across the approximately 300-acre Project Site and includes treatment strategies tailored to the Project Site's wildfire exposure, access conditions, existing vegetation, and proximity to sensitive resources. The plan is designed to protect communities, critical infrastructure, and sensitive resources by reducing wildfire risk through coordinated vegetation management across the Project Site. The FTP is designed to balance fire risk reduction with environmental stewardship. It

[1] Federal environmental compliance has been initiated utilizing the following Programmatic Environmental Assessment: https://www.fema.gov/sites/default/files/2020-09/fema_final-programmatic-environmental-assessment-recurring-activities-in-arizona-california-nevada_12012014.pdf.

emphasizes selective vegetation modification techniques that support defensible space and risk reduction while preserving ecological function, minimizing soil disturbance, and protecting sensitive resources.

1.3 Project Location

The approximately 300-acre Project Site is a total of 33 parcels composed of 29 distinct parcels and four (4) portions of rights-of-way along the San Diego River corridor that cuts through the center of the City of Santee as shown in Figure 3-1, Regional Location, and Figure 3-2, Project Location. The Project Site is located within Township 15 South, Range 1W, Sections 21, 22, 23, 27, 28, and 29 of the El Cajon and La Mesa, California 7.5-minute U.S. Geological Survey Quadrangle maps. The Project Site extends from Forester Creek at the western Project boundary to the City border with the unincorporated Lakeside community in the east, including the open space areas of Mast Park West, Mast Park Wetland Restoration Area, Mast Park East, Mission Creek, Walker Trails Open Space, and Walker Preserve. Vehicular access to the Project Site is via North Magnolia Avenue, the Lakeside Sports Park and Mast Park. Multiple pedestrian access paths, residential and commercial developments border the Project.

1.4 Project Description

The Project is the implementation of the San Diego River Fire Hazard Mitigation Program: Fuels Treatment Plan, which proposes fuel treatment and vegetation management in the Project Site. The Fuels Treatment Plan provides a framework for vegetation management across the approximately 300-acre Project Site and includes treatment strategies tailored to the Project Site's wildfire exposure, access conditions, existing vegetation, and proximity to sensitive resources. The plan is designed to protect communities, critical infrastructure, and sensitive resources by reducing wildfire risk through coordinated vegetation management across the Project area. The Fuels Treatment Plan is designed to balance fire risk reduction with environmental stewardship. It emphasizes selective vegetation modification techniques that support defensible space and risk reduction while preserving ecological function, minimizing soil disturbance, and protecting sensitive resources.

Vegetation management recommendations for the Project Site are organized into three zones. Each zone provides a framework to reduce fuel continuity while protecting the hydrologic, ecological, and recreational functions of the river corridor. In each zone, vegetation management consists overall of the removal of all fine fuels, leaf litter, woody debris, treating or removing all non-native and dead vegetation including invasive species and shrubs or trees with extensive dead or desiccated material, and treatment or removal of accumulations deposited during storm events.

Zone 1

Zone 1 encompasses the 0- to 50-foot area immediately adjacent to structures and represents the highest priority for reducing direct flame contact, radiant heat exposure, and ember ignition. Vegetation management in this zone focuses on eliminating combustible materials, disrupting fuel continuity, and minimizing ignition pathways to buildings.

Throughout Zone 1, all fine fuels, dead vegetation, leaf litter, and woody debris would be treated or removed. Grasses would be trimmed/mowed to a height not to exceed 4 inches. Shrubs would be thinned to reduce horizontal continuity to a residual surface coverage of approximately 30%. Shrubs or other surface vegetation (e.g., ground cover) would be treated to reduce vertical continuity beneath tree canopies to achieve a separation of three times the height of the surface vegetation. Non-native, invasive, or flammable plant species would be removed wherever present. Ladder fuels would also be addressed by pruning low tree branches (in addition to treating shrubs or surface vegetation

beneath tree canopies). All trimming activities would be done to industry standards (International Society of Arboriculture, American National Standards Institute) to minimize likelihood of plant death. In addition, clearance would be maintained around fences, propane tanks, accessory structures, and other features susceptible to ignition, as applicable. Live and healthy native species may be treated as allowed through additional permitting only.

Zone 2

Zone 2 encompasses the 50- to 100-foot area, which lies beyond the immediate structure buffer and provides an intermediate level of fuel reduction intended to moderate fire behavior as it approaches developed parcels. This zone generally includes landscaped edges and transitional areas between riparian vegetation and upland shrublands or grasslands.

Vegetation management in Zone 2 consists of treating or removing all non-native and dead vegetation, including invasive species and shrubs or trees with extensive dead or desiccated material, pruning dead and dying branches from native vegetation to reduce ladder fuels and minimizing the potential for tree canopy torching. Shrubs would be thinned to reduce horizontal continuity to a residual surface coverage of approximately 50%. Shrubs or other surface vegetation (e.g., ground cover) would be treated to reduce vertical continuity beneath tree canopies to achieve a separation of three times the height of the surface vegetation. Grasses would be trimmed/mowed to a height not to exceed 4 inches. All trimming activities would be done to industry standards (International Society of Arboriculture, American National Standards Institute) to minimize likelihood of plant death. Vegetation removal and treatment in this zone is intended to reduce fire intensity and rate of spread while maintaining ecological structure where feasible. Live and healthy native species may be treated as allowed through additional permitting only.

Zone 3

Zone 3 encompasses the broader vegetated areas of the river corridor (outside Zones 1 and 2), including most riparian zones, floodplain terraces, and open space areas such as portions of Mast Park and Walker Preserve. Treatments in this zone focus on reducing hazardous, non-native vegetation while preserving riparian canopy, hydrologic function, and recreational access. Vegetation management in Zone 3 is focused on treatment or removal of non-native species, dead or dying vegetation, and debris, including accumulations deposited during storm events. Removal and other treatment of live and healthy native species would not occur within Zone 3.

Biomass Removal

Biomass removal would depend on the type of treatment proposed. Methods available for biomass removal include off-site transportation to a green waste facility, on-site broadcast of chips, lop- and scatter (crews cut material into shorter lengths and scatter it evenly, so it lies as close to the ground as possible), cranes and helicopters and species-specific disposal (for invasive or weed species). Disposal approach would depend on access, vegetation type, and the volume of material generated. Off-site removal shall be prioritized where feasible due to its long-term hazard reduction benefits. Chipping may be used where equipment access is available, and vegetation consists of suitable woody material. Lop-and-scatter shall be limited to small, constrained areas.

Access and Staging

Access to the Project Site would vary during Project implementation. During Project implementation, routes would be confirmed by the vegetation management contractor prior to use. Some access routes would require rights of entry based on land ownership.

To the extent feasible, staging areas for Project equipment would be located away from residential areas and popular trailheads to reduce noise, dust, and congestion. When mechanical equipment is required, operators shall use designated entry points and avoid sensitive resource areas or high-use recreation corridors.

Maintenance

The Project includes the maintenance of the Project Site for 4 years to ensure that initial vegetation treatments continue to reduce wildfire hazard over time. The City will be responsible for conducting biannual inspections, determining maintenance needs for each zone, coordinating or engaging maintenance crews, and ensuring compliance with the FTP. Maintenance intervals will vary depending on vegetation type, treatment zone, and treatment technique.

1.5 Best Management Practices

Project-specific Best Management Practices (BMPs) were developed in conjunction with the FTP and will be implemented as part of the proposed Project. BMPs are identified by treatment type (hand labor, mechanical equipment, chemical use) and environmental issue area (slope stability/erosion, water quality, pests and pathogens, fire protection, air quality, recreation resources, noise, and biological resources). These BMPs are listed in Section 3.6, Best Management Practices, of this EIR.

1.6 Project Objectives

Consistent with the Project's purpose and need, the primary objectives sought by the Project are as follows:

Objective 1 – Define strategy for specific fuel treatment zones for reducing hazardous fuel loads within the San Diego River corridor.

Objective 2 – Enhance community safety within the City of Santee through the reduction of wildfire risk.

Objective 3 – Reduce horizontal and vertical continuity of fuels and hazardous fuel loads through the removal of non-native and invasive species.

Objective 4 – Reduce ignition potential and fire intensity within the San Diego River corridor.

1.7 Required Project Approvals

This EIR covers all state and local government and quasi-government approvals that may be needed to implement the Project, whether or not they are explicitly listed in this section or elsewhere in this EIR (14 CCR 15124[d]). Regulatory and environmental compliance for the Project will include coordination and consultation with several state and federal agencies to issue all required permissions for the Project, as well as review and approval by the City Council in accordance with the City's General Plan and Municipal Code.

City Council

- **Consideration of the San Diego River Hazard Mitigation Program: Fuels Treatment Plan.** The City Council will consider whether to adopt, revise, or reject the San Diego River Fire Hazard Mitigation Program: Fuels Treatment Plan.

- **Consideration of EIR.** The City Council will consider whether to certify or reject this EIR, along with appropriate CEQA findings and the mitigation monitoring and reporting program.

Local Agencies

- County of San Diego Right-of-Entry Permit

State Agencies

- California Department of Fish and Wildlife Lake and Streambed Alteration Agreement
- Regional Water Quality Control Board Clean Water Act Section 401 Water Quality Certification
- Caltrans Right-of-Way Encroachment Permit

Federal Agencies

- U.S. Army Corps of Engineers Regional General Permit 41
- National Historic Preservation Act Section 106 Consultation
- Federal Emergency Management Agency Record of Environmental Consideration approving National Environmental Policy Act Programmatic Environmental Assessment Consistency Memorandum
- U.S. Fish and Wildlife Service Biological Opinion or Concurrence

1.8 Summary of Impacts

Table 1-1 presents a summary of the Project's significant environmental impacts and mitigation measures that would reduce or avoid those effects, and the level of significance of the impact after implementation of the mitigation measures. With the exception of those specific impacts identified in Table 1-1, the Project would result in less-than-significant or no impacts with regard to all other resource areas evaluated. Cumulative impacts of the Project were evaluated in Section 6.1, Cumulative Impacts, of the Draft EIR. For cumulative impacts that would not be significant, the cumulative impacts and their conclusions are not included in Table 1-1. For areas where the cumulative impacts would be potentially significant and would require mitigation, these impacts, mitigation measures, and conclusions are included in Table 1-1.

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measures	Level of Significance After Mitigation
Biological Resources			
Would the Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	Potentially significant impact	**MM BIO-1 Pre-Construction Survey and Special-Status Plant Species Avoidance.** No vegetation management activities occurring in Zone 3 or other native and non-native brush thinning occurring in Zones 1 and 2 shall occur within known populations of San Diego marsh-elder and white rabbit-tobacco or any other special-status plant species. Prior to initiation of Project activities, a qualified biologist (i.e., a person having at minimum a BS or BA in wildlife management, ecology, zoology, botany, biology, or other closely related field, and at least 2 years' experience conducting field investigations in San Diego County) approved by the City of Santee shall conduct a pre-construction presence/absence survey for special-status plants within the impact footprint and flag any special-status plants, including the known locations of San Diego marsh-elder and white rabbit-tobacco. . If surveys are conducted pursuant to the FEMA Programmatic Biological Opinion for federally listed plant species, the qualified biologist shall be approved by the Carlsbad Fish and Wildlife Office (CFWO) in accordance with Gen AMM 16. If a special-status plant is observed, the biological monitor shall delineate an appropriate buffer zone (a minimum of 10 feet) depending on the sensitivity of the resource and the nature of the activity being conducted. Project activities shall completely avoid impacts to any special-status plant species. **MM BIO-2 Standard Best Management Practices (BMPs).** The following BMPs, when applicable, shall be included as part of the Project in accordance with Section 5.5.1.1 of the Draft Santee Multiple Species Conservation Program Subarea Plan (City of Santee 2025). The City of Santee shall have the right to access and inspect any treatment sites for compliance with Project approval conditions including these BMPs. **Delineation of Environmentally Sensitive Areas** ▪ Prior to Project implementation, highly visible barriers (such as orange construction fencing, stakes, or flagging depending on the size of the treatment area and the sensitivity and proximity of the biological resources) shall be installed to designate environmentally sensitive areas (e.g., special-status plant locations, nesting birds, etc.) to be protected from vegetation management related activities. Environmentally sensitive areas to be	Less-than-significant impact with mitigation incorporated

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measures	Level of Significance After Mitigation
		avoided shall be identified during the pre-construction surveys described in MM BIO-1 and MM BIO-3 and implemented by a qualified biologist approved by the City of Santee. No Project activity of any type shall be permitted within these environmentally sensitive areas (with exceptions for removal of dead/decaying and non-native species within jurisdictional aquatic resource areas in Zone 3). In addition, heavy equipment, including motor vehicles, shall not be allowed to operate within the environmentally sensitive areas. All vegetation management equipment shall be operated in a manner so as to prevent accidental damage to environmentally sensitive areas and associated barriers. No structure of any kind, equipment staging, incidental storage of equipment or supplies, or access roads shall be allowed within these protected zones. Silt fence barriers shall be installed, as appropriate, at the environmentally sensitive area boundary to prevent accidental deposition of fill material or sediment runoff into areas where sensitive biological features are adjacent to treatment areas. Flagging and/or fencing shall be removed upon completion of the activities. Invasive Species Control ▪ Invasive exotic plant species shall be removed from the Project work area and controlled during vegetation management periods. Project measures shall be included to ensure invasive plant material is not spread from the Project Site to other areas by disposal off site or by tracking seed on equipment, clothing, and shoes. Equipment/material imported from an area of invasive plants must be identified and measures implemented to prevent importation and spreading of non-native plant material within the Project Site. Disposal of the plant debris shall follow the regulations set by the County of San Diego agriculture commissioner. All vegetation management equipment shall be cleaned to remove dirt, seeds, vegetative material, or other debris that could contain or hold seeds of noxious weeds before arriving to and leaving from the Project Site. Eradication strategies (i.e., exotic plant abatement programs) shall be employed should an invasion occur during vegetation management activities. Trash Control	

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measures	Level of Significance After Mitigation
		▪ To avoid attracting predators of Covered Species and other special-status species, the Project Site shall be kept clean of debris. All food-related trash items shall be enclosed in sealed containers and regularly removed from the site(s) daily. On-Site Training and Monitoring ▪ All personnel involved in the on-site Project activities shall be required to participate in a pre-activity training and education program administered by the City, or their designee, to understand the avoidance and minimization obligations of the Project. ▪ The City shall require that a qualified biologist monitor Project activities for the duration of the Project to ensure that measures are being employed to avoid incidental disturbance of habitat, species of concern, and other sensitive biological resources. The biological monitor shall notify the City immediately of any non-compliance, and the City shall make an assessment that generates appropriate measures for the contractor to implement for remediation. Water Quality Best Management Practices ▪ The vegetation treatment contractors shall implement BMPs to protect water quality. To minimize soil disturbance, the vegetation treatment contractors shall leave stumps from removed trees and shrubs intact, with stump heights not exceeding 6 inches, as measured from the uphill side as described in the Fuels Treatment Plan (City of Santee 2026). ▪ Actions to prevent sediment or debris from entering watercourses, aquatic areas, wetlands, and riparian areas during and after Project activities may include, but are not limited to, the following BMPs: silt fencing, fiber rolls and other erosion control blankets, gravel bag berms, sand bag barriers, tracking controls, stockpile management, dry season scheduling, preservation of existing vegetation, temporary soil stabilization, dust and erosion control. ▪ No site personnel shall discharge solid or liquid materials into jurisdictional water features, wetland or riparian areas, or other sensitive habitats. Service and refueling of equipment shall only occur in areas that will not allow grease, oil, fuel, or other hazardous materials to pass into streams or	

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measures	Level of Significance After Mitigation
		retained vegetation. If discharged materials are observed during work activities, the biological monitor shall notify the City and appropriate entities immediately, including but not limited to applicable jurisdictional City or County, U.S. Fish and Wildlife Service, U.S. Army Corps of Engineers, California Department of Fish and Wildlife, and/or Regional Water Quality Control Board, and the City shall make an assessment that generates appropriate measures for the contractor to implement for remediation. Spills shall be cleaned up immediately and contaminated soils removed to approved disposal areas. MM BIO-3 Biological Monitor. A qualified biological monitor (i.e., a person having at minimum a BS or BA in wildlife management, ecology, zoology, botany, biology, or other closely related field, and at least 2 years' experience conducting field investigations in San Diego County) approved by the City of Santee shall be present to conduct a pre-activity sweep (i.e., pre-construction survey) of the work area prior to the commencement of work activities. Where monitoring is required pursuant to the FEMA Programmatic Biological Opinion for federally listed species, monitoring shall be conducted by or under the supervision of a CFWO-approved biologist in accordance with Gen AMM 16. The qualified monitor shall remain present during any Project activities in Zones 1 to 3 that occur in sensitive vegetation communities, as defined herein), to ensure no sensitive biological resources (i.e., sensitive vegetation communities, special-status species, and jurisdictional aquatic resources) are being adversely impacted from Project implementation in Zone 3 and that no special-status species or nesting birds are being adversely impacted from Project implementation in Zones 1 and 2. If a sensitive biological resource is observed during Project activities or during pre-construction surveys, the biological monitor shall delineate an appropriate buffer zone (a minimum of 10 feet) depending on the sensitivity of the resource and the nature of the activity being conducted. If fencing for temporary noise abatement (i.e., 8-foot-tall [minimum height] plywood sheet barriers or acoustical blankets suspended on chain-link fencing or other support means) is required along or parallel with an extent of the Project boundary that adjoins the receiving noise-sensitive property then prior to the use of temporary noise abatement, a qualified biologist shall confirm and verify with	

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measures	Level of Significance After Mitigation
		the City that the placement of the barriers are not located within any environmentally sensitive areas (e.g., special-status plant locations, sensitive vegetation communities, or jurisdictional aquatic resources) and would not impact any wildlife species or their movement. **MM BIO-4 Sensitive Vegetation Communities.** Unintended impacts (i.e. sensitive vegetation removal) to sensitive natural communities occurring from thinning or trimming activities in Zones 1 and 2 would be remedied through restoration of the affected area. This would entail restoring the disturbed area to pre-project or ecologically improved conditions typically within one year of completing activities. A restoration plan will be prepared for and approved by the City, and depending on the area affected any other appropriate regulatory agency (i.e. USFWS, CDFW, USACE, and/or RWQCB), that includes: details for the restoration activities, a description of how the proposal provides offsets for the temporal loss, success criteria and the timeline for restoration. If habitat is unable to be restored, or the restoration does not meet the success criteria, the impacts would be considered permanent and would require mitigation consistent with the ratios identified in Table 1 below. This mitigation would entail a mitigation plan outlining the enhancement or restoration of habitat within City Owned Preserve Lands or through acquisition of a conservation easement within the Upland Standards Areas or San Diego River Subunit depending on the type of habitat being impacted so that impacts will be mitigated in-kind. The mitigation plan shall include at a minimum: details for the mitigation activities including the target function and services for the native plant communities established, mitigation work plan, performance standards, funding mechanism, and the timeline for completion of the mitigation program. The mitigation site would be included in the Managed Preserve and managed and monitored in perpetuity with funding for long-term management and monitoring provided through a non-wasting endowment.	

Mitigation Ratios for Permanent Unintended Impacts

Vegetation Type [a]	Habitat Criteria	Mitigation Ratio
Riparian Forest/ Woodland	All riparian forest, including oak riparian	3:1
Riparian Scrub	Drainages with riparian scrub	3:1
Freshwater Marsh, Freshwater Seep, Disturbed Wetlands, Natural Channel, Open Water [e]	Absence of native species or small (<0.25 acre) amount of habitat	2:1 [f]
	Presence of native species or large (>0.25 acre) amount of habitat	3:1
Vernal Pools [b]	Natural Vernal Pool	4:1
	Man-made vernal pools with indicator plant species	3:1
	Man-made pools with covered wildlife species	3:1
Oak Woodland	Oak woodland containing any Engelmann oaks	3:1
Individual Oaks	Trees with at least on trunk of 6” or more Dbh [c] or multi-trunked native oaks with aggregate diameter of 10” of more.	10:1 by tree
Coastal Sage Scrub Coastal Sage/Chaparral Scrub	Habitat small, isolated patches <1 acres	2:1
	Habitat patches >1 acre	3:1
Chaparral	All	2:1
Native Grassland	All	3:1
Non-native grassland	All	1:1

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measures			Level of Significance After Mitigation
		Disturbed lands, Eucalyptus, agricultural lands [d]	No known habitat value for Covered Species	None	
			Habitat value for or presence of burrowing owls	1:1 as appropriate to ensure like value	

Notes:

[a] Vegetation types based on the Holland Vegetation classification system. See Appendix E, *Vegetation Communities Descriptions*. All other natural habitat types not listed in this table have a 1:1 mitigation ratio requirement.

[b] Vernal pool mitigation must meet a 'no net loss' criteria through creation of new vernal pool habitat and/or restoration or enhancement of existing vernal pool habitat. Preservation of existing vernal pool alone does not provide mitigation credits. If an existing vernal pool is significantly disturbed, enhancement of the existing pool can be implemented to provide up to a 1:1 mitigation credits towards the total requirement.

[c] Dbh = Diameter at Breast Height. Tree diameter is measured at 4 ½ feet above ground level. This measure is known as diameter at breast height or DBH. Diameter can be measured with diameter tape

[d] Disturbed land may include agricultural lands, ruderal, eucalyptus, and previously authorized graded areas.

[e] Any impacts to open water areas within abandoned sand mining pits along the San Diego River should be mitigated with creation of riparian scrub or riparian woodland, as these open water areas are unnatural, are relatively common, and these same areas likely supported riparian areas before mining occurred.

[f] Different ratios may be required under separate regulatory programs under the Clean Water Act, the Porter-Cologne Water Quality Control Act, and Section 1600 et seq. of the Fish and Game Code.

MM BIO-5 Avoidance of Listed Species Take: Least Bell's Vireo. All riparian habitat tree trimming or thinning within Zones 1 and 2 and invasive species removal in Zone 3 shall occur outside the least Bell's vireo breeding season (April 1 through August 15[2]). If that is not possible then no vegetation management activities shall occur during the least Bell's vireo breeding season until the following requirements have been met:

[2] Unitt and Klovstad (2004) states that the nesting season generally lasts from April to July and dates for fledglings ranged between 27 April to 21 August.

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measures	Level of Significance After Mitigation
		1. A qualified biologist shall conduct a focused pre-construction-level survey for least Bell's vireo using the most recent protocol within all fuel reduction areas containing suitable riparian habitat, including a 500-foot buffer. A minimum of three surveys shall be performed or 3 days prior to Project activities. If presence of least Bell's vireo is determined or assumed to occur on the Project Site, the following measures shall be required to be implemented: ▪ No vegetation removal shall occur within occupied habitat during the least Bell's vireo breeding season (April 1 to August 15) or until the nest has shown to be vacated. A 500-foot buffer shall be required around the nest site. If 100% avoidance of occupied habitat is not feasible, consultation with USFWS and California Department of Fish and Wildlife (CDFW shall be initiated prior to implementation of any activities that may impact occupied habitat, directly or indirectly. MM BIO-6 Avoidance of Listed Species Take: Coastal California Gnatcatcher. To the maximum extent feasible, staging areas, equipment storage areas, and access routes shall be located outside coastal sage scrub, alluvial fan scrub, and other suitable coastal California gnatcatcher habitat and shall utilize existing disturbed areas and roads whenever practicable. All coastal sage scrub thinning shall occur outside the coastal California gnatcatcher breeding season (February 15through August 15). If that is not possible then no vegetation management activities shall occur during the coastal California gnatcatcher breeding season (February 15 through August 15) until the following requirements have been met: 1. A permitted biologist (i.e., possessing a valid Endangered Species Act Section 10(a)(1)(a) Recovery Permit) shall conduct a focused protocol-level survey (i.e., three visit survey) for coastal California gnatcatcher (*Polioptila californica californica*) using the most recent protocol (USFWS 1997 Coastal California Gnatcatcher Presence/Absence Survey Guidelines) 3 days prior to Project activities within all fuel reduction areas containing coastal sage scrub including a 500-foot buffer. If presence of coastal California gnatcatcher is determined or assumed to occur on the Project	

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measures	Level of Significance After Mitigation
		Site, the following measures shall be required to be implemented by the applicant: a. No vegetation trimming or thinning shall occur within occupied habitat during the coastal California gnatcatcher breeding season (February 15 to August 15). A minimum 500-foot buffer shall be established around occupied nests unless a larger buffer is determined necessary by the permitted biologist based on species behavior, topography, existing disturbance conditions, or other site-specific factors. b. The buffer shall be required around the nest site until it is shown to be vacated. If 100% avoidance of occupied habitat is not feasible, consultation with USFWS and California Department of Fish and Wildlife (CDFW) shall be initiated prior to implementation of any activities that may impact occupied habitat, directly or indirectly. c. Other measures from FWS-CFWO-16B0293-18F1358; Section 7 Consultation on FEMA Disaster, Mitigation and Preparedness Programs in Imperial, Inyo, Kern, Los Angeles, Orange, Riverside, San Bernardino, and San Diego Counties, California Coastal California Gnatcatcher CAGN-1 through CAGN-4 will apply. CAGN-5 through CAGN-7 do not apply as this project is intended to enhance native habitat and species. **MM BIO-7 Nesting Bird Survey.** All nesting bird habitat trimming or thinning shall occur outside the nesting bird breeding season (February 15 through September 30). If the Project requires that work be initiated during the breeding season for nesting birds, in order to avoid direct impacts on active nests, a pre-construction survey shall be conducted in the Project Site and within 500 feet of the Project Site containing suitable nesting resources, by qualified biologists for nesting birds and/or raptors within 3 days prior to Project activities. If the biologist does not find any active nests within or immediately adjacent to the impact areas (i.e., 500 feet), the vegetation clearing work shall be allowed to proceed. If the biologist finds an active nest within or immediately adjacent to the work area and determines that the nest may be impacted or breeding activities substantially disrupted, the biologist shall delineate an appropriate buffer zone. A minimum buffer ranging from 50	

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measures	Level of Significance After Mitigation
		feet for common or disturbance-tolerant species to 500 feet for raptors and special-status species. Larger buffers may be established by the qualified biologist based on species sensitivity, nesting stage, line-of-sight conditions, topography, ambient noise levels, observed behavioral responses, or the nature of the proposed activity. The nest area and buffer zone shall be avoided until the nest is vacated and the juveniles have fledged or the nest fails. Status of the nest shall be monitored by a qualified biologist. A report shall be submitted to the City of Santee and Wildlife Agencies (i.e., U.S. Fish and Wildlife Service and California Department of Fish and Wildlife) for review prior to discontinuing the noise limits and nest buffers. The nest buffer area shall be demarcated in the field with flagging and stakes or construction fencing. Personnel, including all contractors working on site, are required to be instructed on the sensitivity of the area. No Project activities shall encroach into established buffers without the consent of a monitoring biologist. The buffer shall remain in place until it is determined that the nestlings have fledged and the nest is no longer active. Work can proceed into the buffer when the qualified biologist has determined that the nest is no longer active or if appropriate noise mitigation is in place. **MM BIO-8 Avoidance of Listed Species Take: Crotch's Bumblebee.** A pre-construction survey shall be conducted by a qualified biologist with expertise in surveying for bumble bees no more than 5 days prior to any project activities occurring within Zones 1, 2, or 3. If a Crotch's bumble bee nest is detected during the pre-construction survey, the Project's biological monitor shall establish, monitor, and maintain a no-work buffer around the nest. The size and configuration of the no-work buffer shall be based on best professional judgment of the Project biologist in consultation with the Wildlife Agencies. The buffer shall provide at least 50 feet of clearance around nest entrances. Project activities shall not occur within the no-work buffer until the colony is no longer active. To determine that a nest is no longer active, the nest shall be observed for a minimum of 60 minutes each day across a minimum of 3 days during suitable flight weather (i.e., ambient air temperature between 60° and 90° degrees F, winds under 10 mph, and no precipitation higher than a drizzling rain). If no bees are seen flying in or out of the nest by the end of the	

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measures	Level of Significance After Mitigation
		observation period, it shall be determined that the nest is no longer active. If Project activities occur outside of the colony active period (April 1–August 31), then pre-construction surveys for active bee nest colonies are not required. If Crotch's bumble bee is observed during the pre-construction survey, the Project's biological monitor shall ensure the individual(s) are not impacted by Project activities through establishment of a no-work area. The biological monitor shall also review the immediate vicinity to ensure no nests are present.	
Would the Project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	Potentially significant impact	MM BIO-3 MM BIO-4 **MM BIO-9 Tree Survey**. Prior to the commencement of vegetation management activities within Zones 1 to 3, a Certified Arborist shall be present to conduct a comprehensive tree inventory to determine the exact locations for dead, dying, and invasive species slated for removal. The comprehensive tree inventory may also occur concurrently with vegetation management activities so as not to interfere with Project timing. Trees shall be marked or flagged by the Certified Arborist for the contractor and the tree inventory and removal tracking shall be provided to the City of Santee.	Less-than-significant impact with mitigation incorporated
Would the Project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	Potentially significant impact	MM BIO-2 MM BIO-3 **MM BIO-10 Jurisdictional Aquatic Resources Permitting.** The City of Santee shall obtain the applicable permits, for treatment activities (i.e., trimming or thinning of native or non-native vegetation within Zones 1 and 2) occurring within jurisdictional aquatic resources, such as a Section 404 permit from USACE, a Streambed Alteration Agreement from CDFW, and a 401 Water Quality Certification/Waste Discharge Requirement from the RWQCB. No native or non-native vegetation trimming or thinning in Zones 1 and 2 shall occur within any jurisdictional riparian/wetland vegetation communities on the Project Site prior to issuance of aquatic resources permits. **MM BIO-11 Jurisdictional Aquatic Resources Avoidance.** Vegetation management activities occurring within Zone 3 shall only involve treatment or removal of dead, dying, or invasive species. The Project shall commit to avoid impacting streams within Zones 1, 2, and 3 by crossing them using temporary rubber mats or pads	Less-than-significant impact with mitigation incorporated

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measures	Level of Significance After Mitigation
		to distribute weight and minimize vegetation trampling and soil disturbance, and helicopter and/or crane removal where equipment access is constrained and hand carry is infeasible.	
Would the Project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	Less-than-significant impact	N/A	Less-than-significant impact
Would the Project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	Less-than-significant impact	N/A	Less-than-significant impact
Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	Less-than-significant impact	N/A	Less-than-significant impact
Would the Project have a cumulative effect on Biological Resources?	Potentially significant impact	**MM BIO-1** through **MM BIO-10**	Less-than-significant impact with mitigation incorporated
Cultural, Tribal Cultural			
Would the Project cause a substantial adverse change in the significance of a historical	Less-than-significant impact	N/A	Less-than-significant impact

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measures	Level of Significance After Mitigation
resource as defined in CEQA Guidelines Section 15064.5?			
Would the Project cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5?	Potentially significant impact	**MM CUL-1 Resource Avoidance**. Measures shall be taken to prevent inadvertent disturbance of archaeological resource sites CA-SDI-005050, CA-SDI-010148, SDRFM-DF-S-002, and SDFRM-DF-S-003. Prior to the commencement of any ground-disturbing activities within 100 feet of the resource boundaries of CA-SDI-005050, CA-SDI-010148, SDRFM-DF-S-002, and SDRFM-DF-S-003, temporary work buffers shall be placed to protect the sites from inadvertent disturbances associated with Project implementation. Following Project implementation within the vicinity of CA-SDI-005050, CA-SDI-010148, SDRFM-DF-S-002, and SDRFM-DF-S-003, the temporary work buffers shall be removed. Temporary work buffers may include exclusionary fencing, flagging, and/or Environmentally Sensitive Area (ESA) signage. An archaeological monitor shall guide the placement and erection of the temporary work buffers to ensure archaeological sites CA-SDI-005050, CA-SDI-010148, SDRFM-DF-S-002, and SDRFM-DF-S-003 are properly protected. Temporary work buffers shall remain in place for the duration of Project activities occurring in the vicinity of the resource. Following completion of work within each protected area, buffers shall be removed. The archaeological monitor shall confirm that removal occurs only after all potential disturbance risks have ended. Under no circumstances shall Project personnel, equipment, or materials enter the established buffer zones. If construction staff, monitors, or City representatives observe potential encroachment or damage, ground-disturbing activities shall be immediately redirected or halted until appropriate corrective action is taken. **MM CUL-2 Cultural Resources Monitoring.** To mitigate for potential impacts to previously unknown, buried cultural resources within the Project APE and to prevent impacts to known archaeological resources, an archaeological monitoring program shall be implemented pursuant to the City of Santee (City) regulations, the California Environmental Quality Act (CEQA), and Section 106 of	Less-than-significant impact with mitigation incorporated

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measures	Level of Significance After Mitigation
		the National Historic Preservation Act and shall include the following requirements: **Pre-Construction** a. The applicant shall contract a Secretary of Interior qualified Lead Archaeologist to oversee the cultural monitoring program. The Lead Archaeologist shall contract with a Kumeyaay monitor to conduct Native American monitoring for the Project. The Lead Archaeologist and Kumeyaay Native American monitor(s) shall attend the pre-construction meeting to explain the monitoring requirements. **Construction** a. Monitoring. Both the archaeological and Kumeyaay Native American monitor(s) are to be on site during initial ground-disturbing activities. b. The frequency and location of monitoring of native soils will be determined by the Lead Archaeologist in consultation with the Kumeyaay Native American monitor(s). c. If cultural resources are identified: a. Both the archaeological and Kumeyaay Native American monitor(s) have the authority to divert or temporarily halt ground disturbance operations in the area of the discovery. b. The archaeological monitor shall contact the Lead Archaeologist. c. The Lead Archaeologist shall contact the City. d. The Lead Archaeologist in consultation with the City and Kumeyaay Native American monitor(s) shall determine the significance of discovered resources. Construction activities will be allowed to resume after the City has concurred with the significance evaluation. a. Isolates and non-significant deposits shall be minimally documented in the field. Should the isolates and non-significant deposits not be collected by the archaeological monitor, the Kumeyaay Native American monitor(s) may collect the cultural material for transfer to a Tribal curation facility or repatriation program.	

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measures	Level of Significance After Mitigation
		b. If cultural resources are determined to be potentially significant, avoidance measures shall be developed by the Lead Archaeologist in consultation with the Kumeyaay Native American monitor(s) and approved by the City. If avoidance is not feasible, a research design and data recovery plan shall be prepared by the Lead Archaeologist in consultation with the Kumeyaay Native American monitor(s) and approved by the City. The preferred option is avoidance. c. If human remains are identified d. Upon the identification of possible human remains, no further disturbance shall occur in the area of the find until procedures stipulated in Public Resources Code Section 5097.98, CEQA Section 15064.5 and Health and Safety Code Section 7050.5 are completed. e. Upon completion of Project ground disturbance, a final report shall be prepared substantiating that earth-disturbing activities are completed and whether cultural resources were encountered. A copy of the final report shall be submitted to the South Coastal Information Center and any culturally affiliated tribe who requests a copy.	
Would the Project disturb any human remains, including those interred outside of dedicated cemeteries?	Potentially significant impact	**MM CUL-3 Inadvertent Discovery**. In order to mitigate impacts to human remains to a level that is less than significant, procedures for proper treatment of unanticipated discoveries must comply with the California Environmental Quality Act (CEQA) Guidelines. In the event of discovery of unanticipated human remains, personnel shall comply with Public Resources Code Section 5097.98, CEQA Section 15064.5, and Health and Safety Code Section 7050.5 during earth-disturbing activities: If any human remains are discovered, the construction personnel or the appropriate representative shall contact the County Coroner and the City. Upon identification of human remains, no further disturbance shall occur in the area of the find until the County Coroner has made the necessary findings as to origin. If the remains are determined to be of Native American origin, the Most Likely Descendant, as identified by the Native American Heritage Commission, shall be	Less-than-significant impact with mitigation incorporated

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measures	Level of Significance After Mitigation
		contacted by the property owner or their representative in order to determine proper treatment and disposition of the remains. The immediate vicinity where the Native American human remains are located is not to be damaged or disturbed by further development activity until consultation with the Most Likely Descendant regarding their recommendations as required by California Public Resources Code Section 5097.98 has been conducted. California Public Resources Code Section 5097.98, CEQA Section 15064.5 and Health and Safety Code Section 7050.5 shall be followed.	
Would the Project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?	Potentially significant impact	**MM CUL-1** **MM CUL-2**	Less-than-significant impact with mitigation incorporated
Would the Project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature,	Potentially significant impact	**MM CUL-1** **MM CUL-2**	Less-than-significant impact with mitigation incorporated

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measures	Level of Significance After Mitigation
place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.			
Would the Project have a cumulative effect on Cultural, Tribal Cultural, and Paleontological Resources?	Potentially significant impact	**MM CUL-1 through MM CUL-3**	Less-than-significant impact with mitigation incorporated
Hazards and Hazardous Materials			
Would the Project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	Less-than-significant impact	N/A	Less-than-significant impact

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measures	Level of Significance After Mitigation
Would the Project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	Less-than-significant impact	N/A	Less-than-significant impact
Would the Project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	Less-than-significant impact	N/A	Less-than-significant impact
Would the Project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment?	Less-than-significant impact	N/A	Less-than-significant impact
Would the Project be located within an airport land use plan, be within two miles of a public airport, and result in a safety hazard or excessive noise for people residing or working in the Project area?	Less-than-significant impact	N/A	Less-than-significant impact
Would the Project impair implementation of or physically interfere with an adopted	Less-than-significant impact	N/A	Less-than-significant impact

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measures	Level of Significance After Mitigation
emergency response plan or emergency evacuation plan?			
Would the Project expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	Less-than-significant impact	N/A	Less-than-significant impact
Would the Project have a cumulative effect on Hazards and Hazardous Materials?	Less-than-significant impact	N/A	Less-than-significant impact
Hydrology and Water Quality			
Would the Project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	Less-than-significant impact	N/A	Less-than-significant impact
Would the Project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin?	Less-than-significant impact	N/A	Less-than-significant impact
Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	Less-than-significant impact	N/A	Less-than-significant impact

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measures	Level of Significance After Mitigation
i) result in substantial erosion or siltation on or off-site; ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site; iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or iv) impede or redirect flood flows?			
Would the Project in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	Less-than-significant impact	N/A	Less-than-significant impact
Would the Project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	Less-than-significant impact	N/A	Less-than-significant impact
Would the Project have a cumulative effect on Hydrology and Water Quality?	Less-than-significant impact	N/A	Less-than-significant impact

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measures	Level of Significance After Mitigation
Noise			
Would the Project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	Potentially significant impact	**MM NOI-1 Noise Reduction Techniques:** Should mobile or stationary heavy construction equipment (i.e., self-propelled or electrically, mechanically, or hydraulically powered) associated with Project implementation operate at horizontal distances closer than 45 feet horizontal to an off-site noise-sensitive receiver position (e.g., exterior of an existing residence), the Project contractor(s) shall apply either of the following options as noise reduction techniques to keep noise exposures at or below the FTA guidance-based threshold (80 dBA 8-hour Leq during daytime hours): a. Administrative noise control – reduce heavy equipment operation time to just 1 hour per 8-hour period; or b. Temporary noise abatement – install 8-foot-tall (minimum height) plywood sheet barriers (or acoustical blankets suspended on chain-link fencing or other support means) along or parallel with an extent of the Project boundary that adjoins the receiving noise-sensitive property. The barrier extent shall have, end to end, a length of no less than the sum of the width of the property to be protected plus four times the perpendicular distance between it and the receiver position, where this perpendicular is extended from (or through) the midpoint of the receiving property line. Prior to the installation and use of temporary noise abatement, a qualified biologist shall confirm and verify with the City that the placement of the barriers are not located within any environmentally sensitive areas (e.g., special-status plant locations, sensitive vegetation communities, or jurisdictional aquatic resources) and would not impact any wildlife species or their movement.	Less-than-significant impact with mitigation incorporated
Would the Project result in generation of excessive groundborne vibration or groundborne noise levels?	Less-than-significant impact	N/A	Less-than-significant impact
For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been	Less-than-significant impact	N/A	Less-than-significant impact

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measures	Level of Significance After Mitigation
adopted, within two miles of a public airport or public use airport, would the Project expose people residing or working in the Project area to excessive noise levels.			
Would the Project have a cumulative effect on Noise?	Potentially significant impact	MM NOI-1	Less-than-significant impact with mitigation incorporated
Wildfire			
Would the Project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	Less-than-significant impact	N/A	Less-than-significant impact
Due to slope, prevailing winds, and other factors, would the Project exacerbate wildfire risks, and thereby expose Project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	Less-than-significant impact	N/A	Less-than-significant impact
Would the Project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or	Less-than-significant impact	N/A	Less-than-significant impact

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measures	Level of Significance After Mitigation
ongoing impacts to the environment?			
Would the Project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	Less-than-significant impact	N/A	Less-than-significant impact
Would the Project have a cumulative effect on Wildfire?	Less-than-significant impact	N/A	Less-than-significant impact

Notes: MSCP = Multiple Species Conservation Plan; USACE = U.S. Army Corps of Engineers; RWQCB = Regional Water Quality Control Board; APE = area of potential effects; FTA = Federal Transit Administration; dBA = A-weighted decibel.

Significant and Unavoidable Impacts

As identified in Table 1-1, the Project would not result in significant and unavoidable impacts.

1.9 Alternatives to the Project

Section 15126.6(a) of the CEQA Guidelines states that an EIR shall describe "a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project," as well as provide an evaluation of "the comparative merits of the alternatives." Under CEQA Guidelines Section 15126.6(a), an EIR does not need to consider alternatives that are not feasible, nor does it need to address every conceivable alternative to the Project. The range of alternatives "is governed by the 'rule of reason' that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice" (14 CCR 15126.6[f]).

No Project Alternative (Alternative 1)

Under Alternative 1, vegetation management within the Project Site would not occur, and the existing environment would remain in its current state. The Project Site would remain unchanged, and non-native vegetation would remain in the San Diego River corridor and thinning closer to existing structures would not occur. In the short term, consistent with the existing conditions, the Project Site would continue to experience frequent ignitions. Under Alternative 1, it is assumed any existing maintenance and recreational activity at the Project Site would remain unchanged from existing conditions.

Zone 3 Standards Alternative (Alternative 2)

Under Alternative 2, the Project Site would include treatment or removal of non-native species, dead or dying vegetation, and debris, consistent with the standard of Zone 3 across the entire Project Site. The Project Site would not include any thinning, mowing, or pruning activities described in Zone 1 or Zone 2 standards. This alternative would have the same boundary and treatment area as the Project.

Manual and Mechanical Treatment (Alternative 3)

Under Alternative 3, the Project would only use manual and mechanical treatment methods to implement the standards for Zones 1-3. This Alternative would not include any chemical or prescribed herbivory treatments. This alternative would have the same boundary and treatment area as the Project.

1.10 Areas of Controversy/Issues to Be Resolved

The scope of this EIR includes the potential environmental impacts identified in the Notice of Preparation that was available for public review from February 6, 2026, through March 6, 2026, and was extended at the state level through March 11, 2026, to accommodate a CEQAnet delay. Comments received during a public scoping held on February 18, 2026, at City Hall in Santee; and agency and public written comments received in response to the Notice of Preparation.

A summary of these written comment letters is provided in Table 1-2. The written comments and the Notice of Preparation are included as Appendix A of this EIR.

Table 1-2. Summary of Notice of Preparation Comments

Commenter	Date	Summary of Environmental Issues Raised	EIR Chapter/Section Where Comment is Addressed
State Agency			
Native American Heritage Commission (NAHC)	2/13/26	▪ Cultural Resources ▪ Tribal Cultural Resources and Tribal Consultation ▪ Inadvertent discovery of archaeological resources and Native American human remains	▪ Section 4.2, ▪ Cultural and Tribal Cultural Resources
San Diego County Archaeological Society	2/17/26	▪ Cultural Resources ▪ Tribal Cultural Resources ▪ Access to cultural sites that were previously inaccessible	▪ Section 4.2, Cultural and Tribal Cultural Resources
County of San Diego Public Works	3/3/26	▪ Vegetation removal to overlap with County-maintained right-of-way (ROW)	▪ Chapter 3, Project Description
Caltrans	3/9/26	▪ Transportation right-of-way (ROW)	▪ Chapter 3, Project Description
California Department of Fish and Wildlife (CDFW)	3/11/26	▪ Biological Resources, Impacts to Special-Status plant and wildlife species; riparian, aquatic, and streambed resources; sensitive natural communities	▪ Section 4.1, Biological Resources
Private Organizations and Members of the Public			
Sara Kniffen	2/10/26	No specific environmental issues raised	Not Applicable
Randy Northcote	2/12/26	▪ Vegetation removal of dead brush and non-native vegetation	▪ Chapter 3, Project Description ▪ Section 4.6, Wildfire
Amy Newton	2/23/26	▪ Brush Management and wildfire risk adjacent to homes	▪ Section 4.3, Hazards and Hazardous Materials ▪ Section 4.6, Wildfire
Kelly Debenham	3/24/26	▪ Impacts to wildlife and vegetation (hawks, migratory birds, rabbits, skunks, possum, coyotes, mule deer) ▪ Changes to vegetation landscape that would result in changes to the hydrology of the area	▪ Section 4.1, Biological Resources ▪ Section 4.4, Hydrology and Water Quality

Issues to be Resolved by Lead Agency

Section 15123(b)(3) of the CEQA Guidelines requires that an EIR contain a discussion of issues to be resolved. With respect to the proposed Project, the key issues to be resolved include decisions by the City, as lead agency, as to the following:

- Whether this environmental document adequately describes the environmental impacts of the Project.
- Whether the recommended mitigation measures should be modified and/or adopted.
- Whether there are other mitigation measures or alternatives that should be considered for the Project besides those identified in the Draft EIR.

2 Introduction

2.1 Purpose of the California Environmental Quality Act Process

This Environmental Impact Report (EIR) has been prepared in accordance with the California Environmental Quality Act (CEQA) to evaluate the potential environmental effects associated with implementation of the San Diego River Fire Hazard Mitigation Program: Fuels Treatment Plan Project (Project). Consistent with CEQA Guidelines Section 15161, this document is a project-level EIR. As the lead agency for the Project, the City of Santee (City) must complete an environmental review to determine if the Project could potentially result in significant adverse environmental effects. A detailed description of the Project is provided in Chapter 3, Project Description.

CEQA Guidelines Section 15002 states that the basic purposes of CEQA are the following:

- Inform governmental decision makers and the public about the potential significant environmental effects of proposed activities
- Identify the ways that environmental damage can be avoided or significantly reduced.
- Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible.

If a project will be approved involving significant environmental effects, the lead agency must also disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose.

This EIR provides project-level analysis of the potential environmental effects related to implementation of the Project. The level of impact analysis in this EIR corresponds to the degree of specificity deemed appropriate in accordance with CEQA Guidelines Section 15146. This EIR addresses the potentially significant environmental impacts that could occur as a result of implementation of the Project. This document also identifies appropriate and feasible mitigation measures, where necessary, and includes Project alternatives that could be adopted to reduce or avoid potential significant environmental effects.

2.2 Legal Authority and Lead Agency

This EIR has been prepared in accordance with all criteria, standards, and procedures of CEQA (PRC Section 21000 et seq.), the CEQA Guidelines (14 CCR 15000 et seq.), and the rules, regulations, and procedures for implementing CEQA as adopted by the City.

Pursuant to CEQA Section 21067 and CEQA Guidelines Article 4 and Section 15367, the City is the lead agency under whose authority this EIR has been prepared. “Lead agency” refers to the public agency that has the principal responsibility for carrying out or approving a project. Serving as the lead agency and before taking action to approve the Project, the City has the obligation to (1) ensure that this EIR was completed in accordance with CEQA; (2) review and consider the information contained in this EIR as part of its decision-making process; (3) make a statement that this EIR reflects the City’s independent judgment; (4) ensure that all significant impacts on the environment are eliminated or substantially lessened, where feasible; and, if necessary (5) make written findings for each unavoidable significant environmental effect stating the reasons why mitigation measures or Project alternatives

identified in this EIR are infeasible and citing the specific benefits of the Project that outweigh its unavoidable adverse effects (14 CCR 15090–15093).

Pursuant to CEQA Guidelines Sections 15040 through 15043, and upon completion of the CEQA review process, the City will have the legal authority to do any of the following:

- Approve the Project
- Require feasible changes in any or all activities involved in the Project to substantially lessen or avoid significant effects on the environment
- Disapprove the Project, if necessary, to avoid one or more significant effects on the environment that would occur if the Project was approved as proposed
- Approve the Project, even though the Project would cause a significant effect on the environment if the City makes a fully informed and publicly disclosed decision that (1) there is no feasible way to lessen the effect or avoid the significant effect, and (2) expected benefits from the Project will outweigh significant environmental impacts of the Project

This EIR is an informational document intended for use by City decision makers, trustee, and responsible agencies, and members of the general public in evaluating the physical environmental impacts of the Project. This EIR is the primary reference document for the formulation and implementation of a mitigation monitoring and reporting program for the Project, in compliance with Public Resources Code (PRC) Section 21081.6. Environmental impacts cannot always be mitigated to a level considered less than significant. In accordance with Section 15093(b) of the CEQA Guidelines, if a lead agency approves a project that has significant impacts that are not substantially mitigated (i.e., significant unavoidable impacts), the agency shall state in writing the specific reasons for approving the Project, based on the final CEQA documents and any other information in the public record. This is defined in Section 15093 of the CEQA Guidelines as "a statement of overriding considerations."

2.3 Responsible and Trustee Agencies

PRC Section 21104 requires that all EIRs be reviewed by state responsible and trustee agencies (see also 14 CCR 15082 and 15086[a]). As defined by CEQA Guidelines Section 15381, "the term 'Responsible Agency' includes all public agencies other than the Lead Agency which have discretionary approval power over the project." A trustee agency is defined in CEQA Guidelines Section 15386 as "a state agency having jurisdiction by law over natural resources affected by a project which are held in trust for the people of the State of California."

For this Project, the following agencies have discretionary approval power over the Project and are considered responsible agencies:

- U.S. Army Corps of Engineers
- Federal Emergency Management Agency
- U.S. Fish and Wildlife Service
- California Department of Fish and Wildlife
- Regional Water Quality Control Board
- State Historic Preservation Office

For this Project, the following agency is considered a trustee agency:

- California Department of Fish and Wildlife

2.4 Summary of Project Analyzed in this Environmental Impact Report

The Project includes the implementation of the San Diego River Fire Hazard Mitigation Program: Fuels Treatment Plan, which proposes fuel treatment and vegetation management within the segment of the San Diego River within the City of Santee. The Fuels Treatment Plan provides a framework for vegetation management across the approximately 300-acre Project Site and includes treatment strategies tailored to the site's wildfire exposure, access conditions, existing vegetation, and proximity to sensitive resources. The plan is designed to protect communities, critical infrastructure, and sensitive resources by reducing wildfire risk through coordinated vegetation management across the Project Site. It emphasizes selective vegetation modification techniques that support defensible space and risk reduction while preserving ecological function, minimizing soil disturbance, and protecting sensitive resources. A complete Project Description and permits and approvals required for Project implementation are provided in Chapter 3, Project Description, and described in Chapter 4, Environmental Analysis, of this Draft EIR.

2.5 Scope of Environmental Analysis

2.5.1 Notice of Preparation Scoping Process

The purpose of this EIR is to evaluate the potential environmental impacts associated with implementation of the Project. The City concluded that the Project could potentially have direct or indirect adverse effects on the environment. Accordingly, the City determined the need for preparation of an EIR for the Project. Potentially significant impacts were identified based on review of comments received in response to the Notice of Preparation (NOP) that was available for public review from February 6, 2026, through Wednesday, March 6, 2026[1] (see Appendix A) and additional research and analysis of relevant Project data during preparation of this Draft EIR. A scoping meeting for this Project was held on February 18, 2026, at the Santee City Hall Council Chambers (10602 Magnolia Avenue, Santee, California 92701).

A summary of written comment letters received is provided in Table 2-1. Nine written comments were received during the NOP period.

[1] Due to a delay in the uploading of the NOP to CEQA Net, the NOP Scoping period was extended for State agencies through March 11, 2026.

Table 2-1. Summary of Notice of Preparation Comments

Commenter	Date	Summary of Environmental Issues Raised	EIR Chapter/Section Where Comment is Addressed
Private Organizations and Members of the Public			
Sara Kniffen	February 10, 2026	No specific environmental issues raised	Not Applicable
Randy Northcote	February 12, 2026	▪ Vegetation removal of dead brush and non-native vegetation	▪ Chapter 3, Project Description ▪ Section 4.6, Wildfire
Native American Heritage Commission	February 13, 2026	▪ Cultural Resources ▪ Tribal Cultural Resources and Tribal Consultation ▪ Inadvertent discovery of archaeological resources and Native American human remains	▪ Section 4.2, Cultural and Tribal Cultural Resources
San Diego County Archaeological Society	February 17, 2026	▪ Cultural Resources ▪ Tribal Cultural Resources ▪ Access to cultural sites that were previously inaccessible	▪ Section 4.2, Cultural and Tribal Cultural Resources
Amy Newton	February 23, 2026	▪ Brush Management and wildfire risk adjacent to homes	▪ Section 4.3, Hazards and Hazardous Materials ▪ Section 4.6, Wildfire
County of San Diego Public Works	March 3, 2026	▪ Vegetation removal to overlap with County maintained right-of-way (ROW)	▪ Chapter 3, Project Description
Kelly Debenham	March 4, 2026	▪ Impacts to wildlife and vegetation (hawks, migratory birds, rabbits, skunks, possum, coyotes, mule deer) ▪ Changes to vegetation landscape that would result in changes to the hydrology of the area	▪ Section 4.1, Biological Resources ▪ Section 4.4, Hydrology and Water Quality
Caltrans	March 9,2026	▪ Transportation right-of-way (ROW)	▪ Chapter 3, Project Description
California Department of Fish and Wildlife	March 11, 2026	▪ Lake and Streambed Alteration ▪ Impacts to listed species ▪ Compliance with current land protections ▪ Alternatives ▪ Biological baseline ▪ Direct and indirect impacts ▪ Cumulative impacts ▪ Nesting Birds	▪ Section 4.1, Biological Resources ▪ Chapter 7, Alternatives

Note: EIR = Environmental Impact Report.

2.5.2 Environmental Effects Found Not to Be Significant

Pursuant to CEQA, the discussion of potential environmental impacts is focused on those impacts that could be significant or potentially significant. CEQA allows the lead agency to limit the detail of discussion of the environmental impacts that are not considered potentially significant (PRC Section 21100; 14 CCR 15126.2[a] and 15128). CEQA requires that the discussion of any significant environmental effect be limited to substantial, or potentially substantial, adverse changes in physical conditions that exist within the affected area, as defined in PRC Section 21060.5. In accordance with CEQA Guidelines Section 15143, environmental impacts dismissed in an analysis as clearly insignificant and unlikely to occur need not be discussed further in the EIR unless the lead agency subsequently receives information inconsistent with the finding.

Based on a review of comments received in response to the NOP (Appendix A) as well as additional research and analysis of relevant Project data during preparation of this Draft EIR, it was determined, for reasons described in Chapter 5, Effects Found Not to Be Significant, of this EIR, that the Project would not result in significant environmental impacts in the following resource areas. Thus, with the exception of the impact discussion in Chapter 5 of this EIR, these environmental resource areas are not discussed at further length in this EIR:

- Aesthetics
- Agricultural and Forestry Resources
- Air Quality
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Land Use and Planning
- Mineral Resources
- Population and Housing
- Public Services
- Recreation
- Transportation
- Utilities and Service Systems

2.5.3 Environmental Issues Determined to be Potentially Significant

Pursuant to CEQA and CEQA Guidelines Section 15064, the discussion of potentially significant environmental impacts is focused in this EIR on those impacts that the lead agency has determined could be potentially significant. A determination of the environmental impacts that would be potentially significant was made for the Project based on a review of comments received as part of the NOP scoping process and additional research and analysis of relevant information during preparation of this EIR. The following environmental issue areas were determined to potentially result in significant impacts and are addressed at further length in this EIR:

- Biological Resources
- Cultural and Tribal Cultural Resources
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Noise
- Wildfire

2.6 Organization of this Environmental Impact Report

This EIR contains all of the information required to be included in an EIR, as specified by the CEQA Statutes and Guidelines (PRC Section 21000 et seq.; 14 CCR 15000 et seq.). CEQA requires that an EIR contain, at a

minimum, specified content. The following provides a quick reference to locate the CEQA-required sections within this document:

- **Chapter 1: Executive Summary.** The Executive Summary provides a summary of the Project, Project alternatives, Project impacts, cumulative impacts, recommended mitigation measures, and the level of significance after mitigation for each environmental issue.
- **Chapter 2: Introduction.** The Introduction provides an overview of the Project and the CEQA process, and describes the purpose, scope, and components of this EIR.
- **Chapter 3: Project Description.** The Project Description provides a detailed description of the Project, including the location and Project characteristics. The intended uses of this EIR, Project background, Project objectives, and required Project approvals are also addressed.
- **Chapter 4: Environmental Analysis.** The Environmental Analysis chapter analyzes the environmental impacts of the Project. Impacts are organized into major environmental topic areas. Each topic area includes a description of the environmental setting, regulatory setting, significance criteria, mitigation measures, and level of significance after mitigation. The following specific environmental areas are addressed in Chapter 4:
  - Section 4.1 – Biological Resources
  - Section 4.2 – Cultural and Tribal Cultural Resources
  - Section 4.3 – Hazards and Hazardous Materials
  - Section 4.4 – Hydrology and Water Quality
  - Section 4.5 – Noise
  - Section 4.6 – Wildfire
- **Chapter 5: Effects Found Not to Be Significant.** The Effects Found Not to Be Significant chapter provides a summary of environmental topics that have been determined, based on review of comments received in response to the NOP and additional research and analysis of relevant Project data during preparation of this Draft EIR, to result in less-than-significant or no impact, and therefore, further discussion is not warranted. A brief discussion of these environmental topics are provided in this chapter.
- **Chapter 6: Other CEQA Considerations.** The Other CEQA Considerations chapter provides a discussion of cumulative impacts and other environmental impacts, including unavoidable, irreversible, and growth-inducing impacts.
- **Chapter 7: Alternatives.** The Alternatives chapter provides a comparison between the Project impacts and three Project alternatives: (1) the No Project, (2) Non-native Removal Only Alternative, and (3) the Manual and Mechanical Treatment only Alternative.
- **Chapter 8: List of Preparers.** The List of Preparers chapter provides a list of the organizations, persons consulted, and various individuals who contributed to the preparation of this EIR. This section also includes a list of the lead agency personnel and technical consultants used to prepare this EIR.
- **Appendices.** The technical appendices contain the NOP and written comments received in response to the NOP and technical studies prepared to support the analyses and conclusions in this EIR.
  - Appendix A, Notice of Preparation and Scoping Comments
  - Appendix B, Biological Resources Letter Report
  - Appendix C, Recommended Cultural Area of Potential Effects for the San Diego River Fire Hazard Mitigation Plan Phase I
  - Appendix D, Cultural Resources Assessment Report

The Final EIR will be prepared after the public review period for this EIR has been completed. The Final EIR will include comments and recommendations received on the EIR during the public review period; a list of persons, organizations, and public agencies commenting on the EIR; written responses to significant environmental issues identified in the comments received; and any other relevant information added by the City.

2.7 Documents Incorporated by Reference

Pursuant to CEQA Guidelines Section 15150, this EIR has referenced several technical studies, analyses, and previously certified environmental documents. Information from these documents, incorporated by reference, is briefly summarized in the appropriate chapters and sections. The documents that were used to prepare this EIR include the following:

- City of Santee General Plan Update (2007; 2022; 2025)
- Santee Municipal Code (Code of Ordinances) (2025 [Updated])
- County of San Diego Countywide Plan (General Plan) (2011)
- San Diego River Fire Hazard Mitigation Program: Fuels Treatment Plan (2026)

These reference documents, in accordance with CEQA Guidelines Section 15150(b), are available for review at the following locations:

City of Santee General Plan

https://www.cityofsanteeca.gov/departments/planning-building/planning

City of Santee Code of Ordinances

https://ecode360.com/43745546#43745546

County of San Diego Countywide Plan (General Plan)

https://www.sandiegocounty.gov/content/sdc/pds/generalplan.html

San Diego River Fire Hazard Mitigation Program: Fuels Treatment Plan

https://www.cityofsanteeca.gov/departments/fire-life-safety-services/san-diego-river-hazard-mitigation-grant-program

2.8 Review of the Draft Environmental Impact Report

Upon completion of this Draft EIR, the City prepared and filed a Notice of Completion with the Governor's Office of Land Use and Climate Innovation (LCI), State Clearinghouse to start the public review period (PRC Section 21161). Concurrent with the Notice of Completion, the City distributed a Notice of Availability in accordance with CEQA Guidelines Section 15087. The Notice of Availability was mailed to the agencies, organizations, and individuals who previously requested in writing to receive a copy. The Notice of Availability was published in the Union Tribune newspaper and posted on the City's website. During the public review period, this Draft EIR, including the appendices, is available for review at the following locations:

In Person:

Santee City Hall, Fire Administration (Building 5)
10601 Magnolia Avenue
Santee, California 92071

Santee City Hall, City Clerk's Office (Building 3)
10601 Magnolia Avenue
Santee, California 92071

Santee Library
9225 Carlton Hills Boulevard #17
Santee, California 92071

Online:

https://www.cityofsanteeca.gov/services/project-environmental-review

Agencies, organizations, individuals, and all other interested parties have the opportunity to comment on this Draft EIR during the public review period. Written or email comments on this Draft EIR should be addressed to the following:

Harley Wallace, Fire Chief
Santee City Hall, Fire Administration
10601 Magnolia Avenue
Santee, California 92071
Phone: 619.258.4100 ext. 207
Email: HWallace@CityofSanteeCa.gov

Upon completion of the public review period, written responses to all substantive environmental comments are prepared and made available prior to the public hearing on the Project before the City of Santee City Council, at which the Project, the Final EIR, and requested entitlements are considered. The comments received and the responses to those comments will be included as part of the record for consideration for the Project.

3 Project Description

This chapter describes the objectives of the San Diego River Fire Hazard Mitigation Program: Fuels Treatment Plan (Project) and the Environmental Impact Report (EIR) and provides a detailed description of the Project characteristics. The City of Santee Fire Department has initiated the implementation of the Project, which has received grant funding from the Federal Emergency Management Agency and San Diego River Conservancy. The Project includes two phases, a planning and environmental review phase (Phase 1) and the implementation phase (Phase 2). This EIR evaluates the impacts associated with implementation of Phase 2.

3.1 Introduction

The City of Santee Fire Department has initiated the development of the Project to reduce wildfire risk in and around high-priority sites along the San Diego River corridor. This area lies within the wildland–urban interface (WUI) and includes critical public infrastructure, adjacent residential neighborhoods, and biologically sensitive habitats. The need for a targeted, ecologically conscious approach to vegetation management is underscored by increasing fire risk, invasive plant encroachment, and complex access and ownership constraints unique to the corridor.

The Fuels Treatment Plan (FTP) provides a framework for vegetation management across the approximately 300-acre Project Site and includes treatment strategies tailored to the site's wildfire exposure, access conditions, existing vegetation, and proximity to sensitive resources. The plan is designed to protect communities, critical infrastructure, and sensitive resources by reducing wildfire risk through coordinated vegetation management across the Project Site. The FTP is designed to balance fire risk reduction with environmental stewardship. It emphasizes selective vegetation modification techniques that support defensible space and risk reduction while preserving ecological function, minimizing soil disturbance, and protecting sensitive resources.

3.2 Project Location

The approximately 300-acre Project Site composed of 29 distinct parcels and four (4) portions of rights-of-way parcels along the San Diego River corridor that cuts through the center of the City of Santee as shown in Figure 3-1, Regional Location, and Figure 3-2, Project Location. The Project Site is located within Township 15 South, Range 1W, Sections 21, 22, 23, 27, 28, and 29 of the El Cajon and La Mesa, California 7.5-minute U.S. Geological Survey Quadrangle maps. The Project Site extends from Forester Creek at the western Project boundary to the City border with the unincorporated Lakeside community in the east, including the open space areas of Mast Park West, Mast Park Wetland Restoration Area, Mast Park East, Mission Creek, Walker Trails Open Space, and Walker Preserve. Vehicular access to the Project is via North Magnolia Avenue, the Lakeside Sports Park, and Mast Park. Multiple pedestrian access paths as well as residential and commercial developments border the Project.

3.3 Environmental Setting

3.3.1 City of Santee

The City is located in the East County region of San Diego County, between the Pacific Ocean and the Cleveland National Forest. Encompassing about 17 square miles (approximately 10,615 acres) in eastern San Diego County, the City is located approximately 18 miles east of downtown San Diego. The City is bordered on the east

by primarily residential development in the unincorporated San Diego County communities of Lakeside and Eucalyptus Hills and to the northeast by vacant land and active mining operations in Slaughterhouse Canyon. To the south, Santee is bordered by the City of El Cajon, unincorporated areas of County of San Diego, and the Gillespie Field Airport, and further to the southwest by Mission Trails Regional Park property located in the City of San Diego (City of Santee 2003).

3.3.2 Existing Project Site

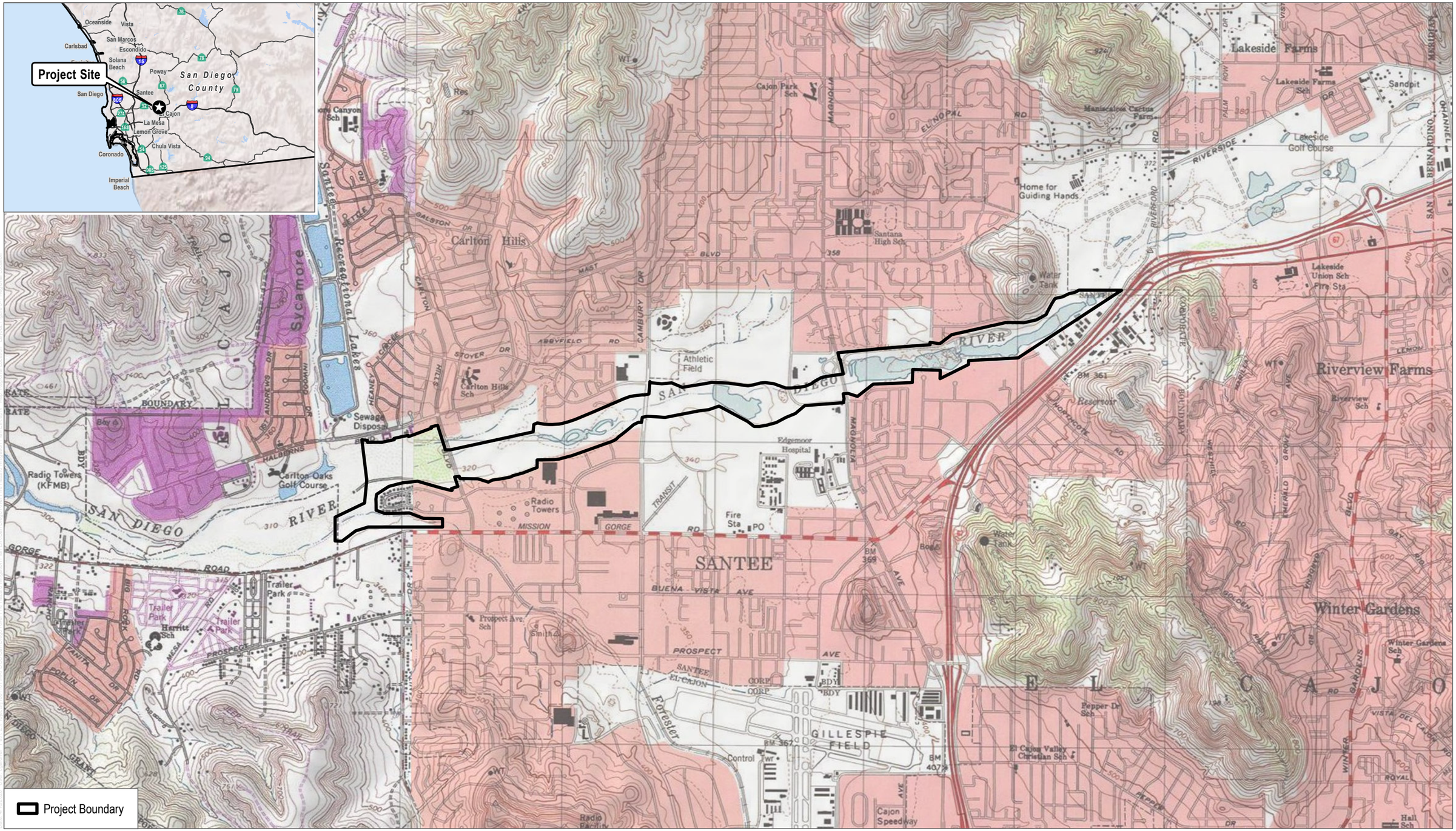
The Project Site consists of 299.9 acres of the San Diego River corridor, where riparian and upland vegetation border residential neighborhoods, commercial development, public recreation areas, and transportation-related rights-of-way. This corridor includes sensitive areas such as wetlands, the San Diego River, and adjacent parcels within city boundaries. The Project Site is characterized by a mix of natural vegetation and non-native species, as well as proximity to residential and commercial structures. Land use within the Project Site includes Park/Open Space and Public land uses (City of Santee 2017). Land uses that immediately surround the Project Site include Planned Development, Residential land uses including Low-Medium Density Residential, Medium-Density Residential, Medium-High Residential, Neighborhood Commercial, Light Industrial, and General Industrial (City of Santee 2017).

Land Ownership

Land within the Project Site is primarily publicly owned by the City of Santee (approximately 207 acres), the County of San Diego (approximately 49 acres), and the Metropolitan Transit Development Board (approximately 5 acres). City-owned parcels include both open space and actively managed recreational areas such as Mast Park and the Walker Preserve. The County of San Diego owns the central 49-acre portion of the Project Site. The remaining land in the Project Site consists of privately owned parcels (14 acres) and rights-of-way (25 acres). The parcel ownership is shown in Figure 3-3, Parcel Ownership, and detailed in Table 1, Parcel Ownership, below.

Table 1. Parcel Ownership

Ownership	Acreage
City of Santee	207
County of San Diego	49
Metropolitan Transit Development Board	5
Privately Owned	14
Publicly Owned Rights-of-way	25



SOURCE: USGS 7.5-Minute Series La Mesa and El Cajon Quadrangles
Township 15S Range 1W Sections 21, 22, 23, 27, 28, 29
1:24,000

0 260 520 Meters
0 1,000 2,000 Feet

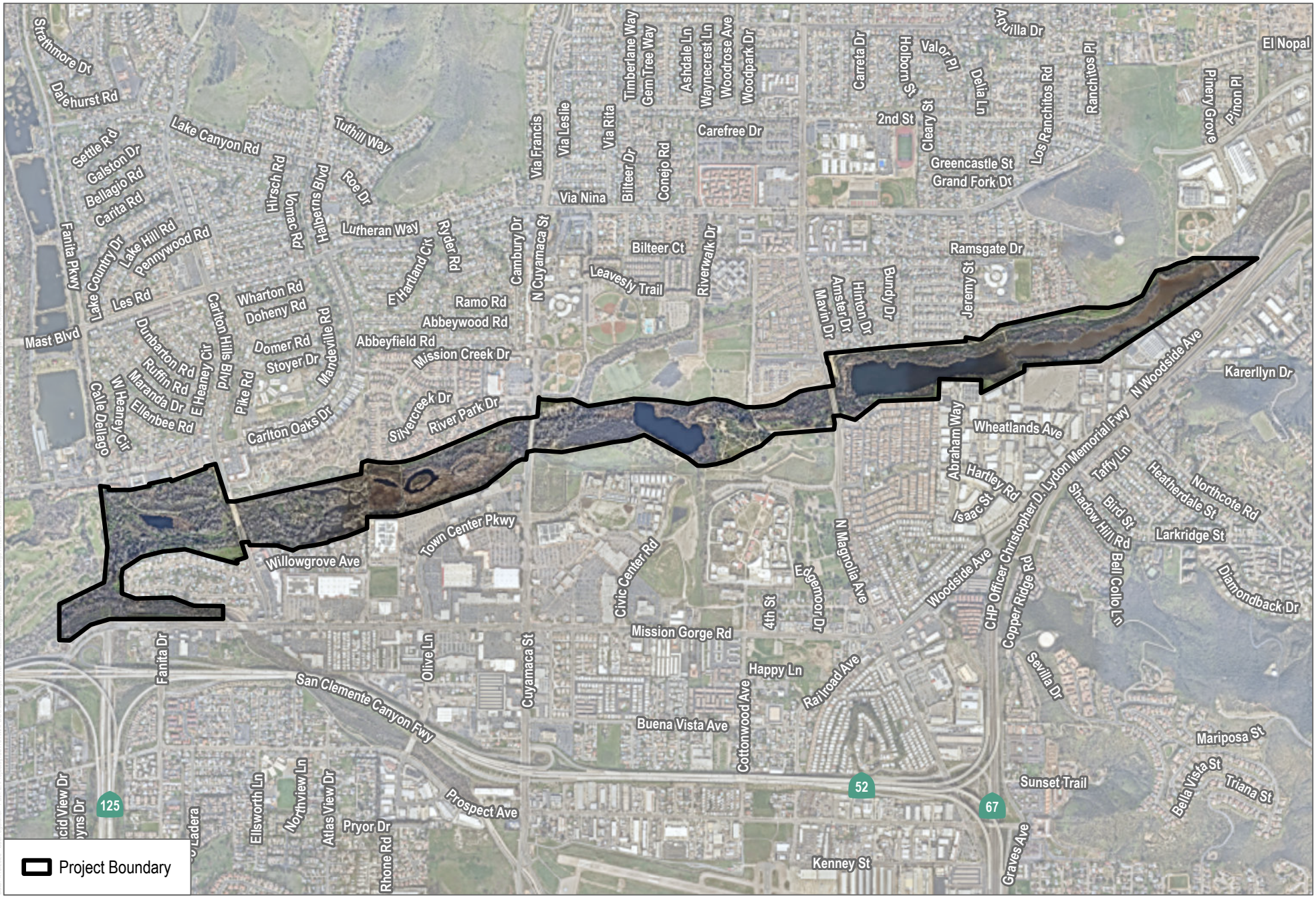
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FIGURE 3-1

Regional Location

San Diego River Fire Hazard Mitigation Program EIR

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SOURCE: SanGIS 2023; Open Street Maps 2019

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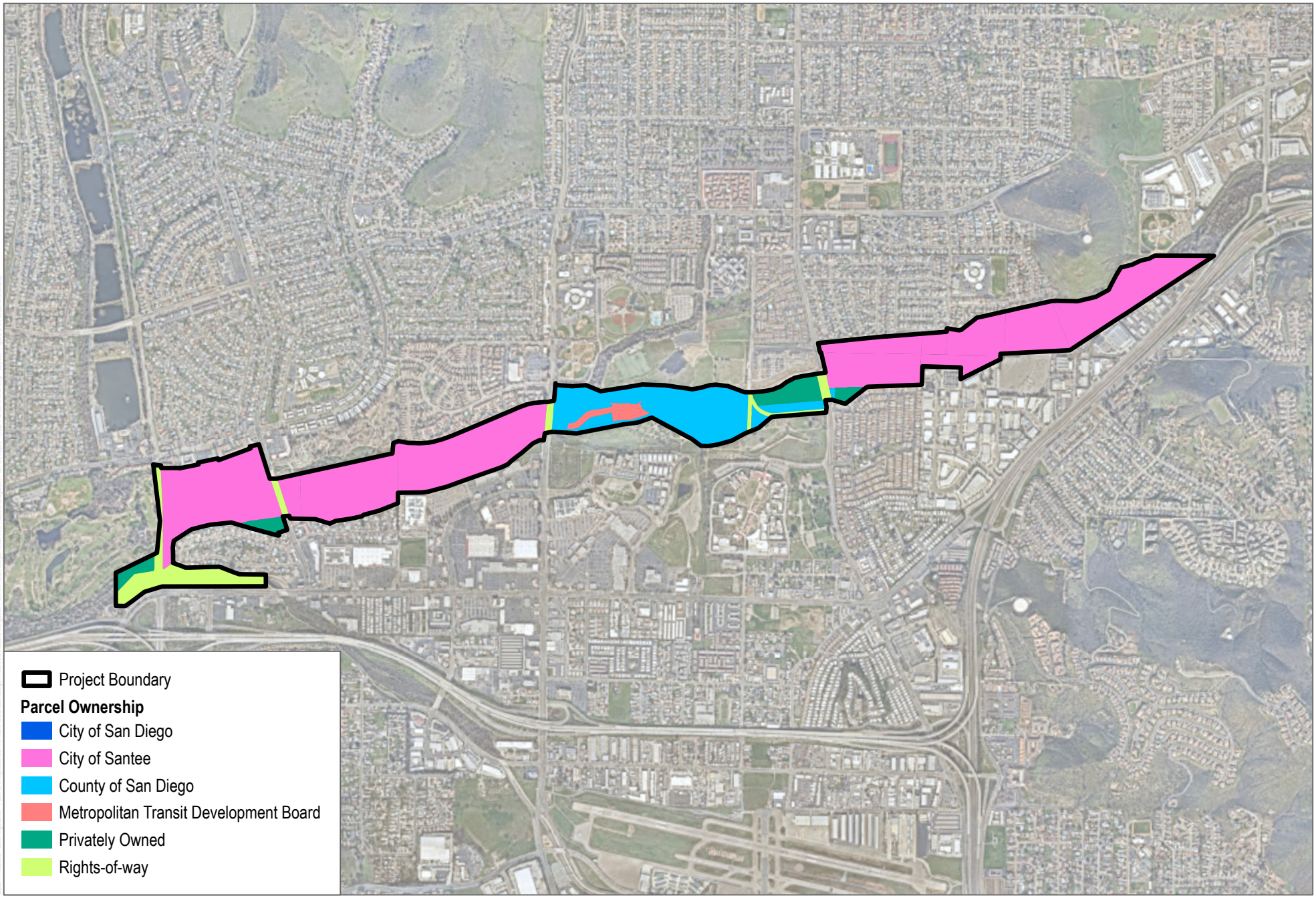
0 900 1,800 Feet

FIGURE 3-2

Project Location

San Diego River Fire Hazard Mitigation Program EIR

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SOURCE: SanGIS 2023, City of San Diego

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0 1,000 2,000 Feet

FIGURE 3-3

Parcel Ownership

San Diego River Fire Hazard Mitigation Program EIR

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3.3.3 Wildfire Environment

The landscape of the Project Site is defined by a mosaic of riparian woodlands, wetlands, shrublands, non-native grasslands, and disturbed areas contained within a broad floodplain. The river bisects the community of Santee in an east–west orientation and forms one of the major hydrological and ecological features of eastern San Diego County. Surrounding the corridor are urban neighborhoods, commercial districts, transportation infrastructure, parks, and open space preserves, creating a landscape typical of a wildland–urban interface environment. As shown in Figure 3-4, Fire Hazard Severity Zones, portions of the Project Site are in areas designated as Moderate and High FHSZs, and bordered by areas designated as Moderate, High and Very High FHSZs to the north and south (CAL FIRE 2025a).

The Project Site is a typical riverine environment with native and non-native vegetation, dead biomass, storm-deposited debris, invasive vegetation, secondary channels and some open water. Non-native and dead vegetation within the Project Site is highly flammable. Although the Project Site is dominated by riparian vegetation, the broader fire environment in the region is shaped by the presence of flammable shrublands in surrounding foothills and by the region's characteristic fire weather patterns. In San Diego County, inland valleys typically experience prolonged summer drying and periodic episodes of extreme offshore winds that can rapidly reduce fuel moisture and promote fast-moving wildfires (RCD of Greater San Diego County and San Diego County Fire Safe Council 2019; CAL FIRE 2025b). Human-caused ignitions are the most common type of ignition in the region (CAL FIRE 2025b); within the Project Site, public access and adjacency to development both contribute to elevated ignition potential. The San Diego River corridor therefore represents a complex fire environment defined by urban adjacency, variable fuel conditions, and exposure to regional fire weather events.

Climate and Fire Weather

The Santee area experiences a semi-arid Mediterranean climate characterized by hot, dry summers and mild winters with highly variable precipitation. Average annual rainfall at lower elevations in the county ranges from roughly 10 to 15 inches, with the majority occurring between December and March (RCD of Greater San Diego County and San Diego County Fire Safe Council 2019; CAL FIRE 2025b). Summer months are typically rainless, and prolonged dry periods contribute to the curing of fine fuels and the reduction of live fuel moisture across shrublands and grasslands. Peak temperatures in late summer and early fall frequently exceed 90°F in inland communities such as Santee, and fuel moisture typically reaches seasonal lows during this period.

A defining feature of the region's fire weather is the occurrence of Santa Ana winds, which develop when warm, dry air flows from inland deserts toward the coast. These winds, which most commonly occur in late summer and fall, can reach sustained speeds of 25 to 35 mph on ridge tops and produce gusts exceeding 60 mph, traveling efficiently through east–west oriented drainages such as the San Diego River valley. Relative humidity during Santa Ana events often drops into the single digits, rapidly drying fine fuels and enabling fast, wind-driven fire spread (RCD of Greater San Diego County and San Diego County Fire Safe Council 2019; CAL FIRE 2025b). Seasonal winds in the inland foothills generally blow west to southwest during the summer but shift to northerly and easterly directions during fall and winter storm cycles, reinforcing the potential for wind alignment within the corridor (Eucalyptus Hills Fire Safe Council 2009). During such events, ignitions have the potential to develop into fast-moving, high-intensity fires capable of significant spotting and embers carried long distances through the WUI.

Topography and Hydrology

The San Diego River corridor in Santee occupies a broad alluvial valley bounded by foothill terrain to the north and east. Elevations in the vicinity of the corridor range from roughly 300 feet along the river bottom to over 1,000 feet on adjacent ridgelines in neighboring communities (Lakeside Fire Safe Council 2024; Eucalyptus Hills Fire Safe Council 2009). Slopes in these upland areas can exceed 50°, creating steep gradients that can accelerate upslope fire runs under certain weather conditions.

The east–west orientation of the river reflects a broader regional drainage pattern that can channel Santa Ana winds toward the coast, increasing wind speeds within valley bottoms and contributing to rapid fire spread (CAL FIRE 2025b). Within the Project Site, the corridor includes active and secondary channels, wetlands, and riparian stands. Hydrologic conditions influence vegetation structure and fuel continuity in the corridor. Riparian species generally exhibit higher moisture content, though accumulated dead biomass, storm-deposited debris, and invasive vegetation can create locally high fuel loading. Periods of drought and high temperatures can exacerbate drying and flammability of vegetation.

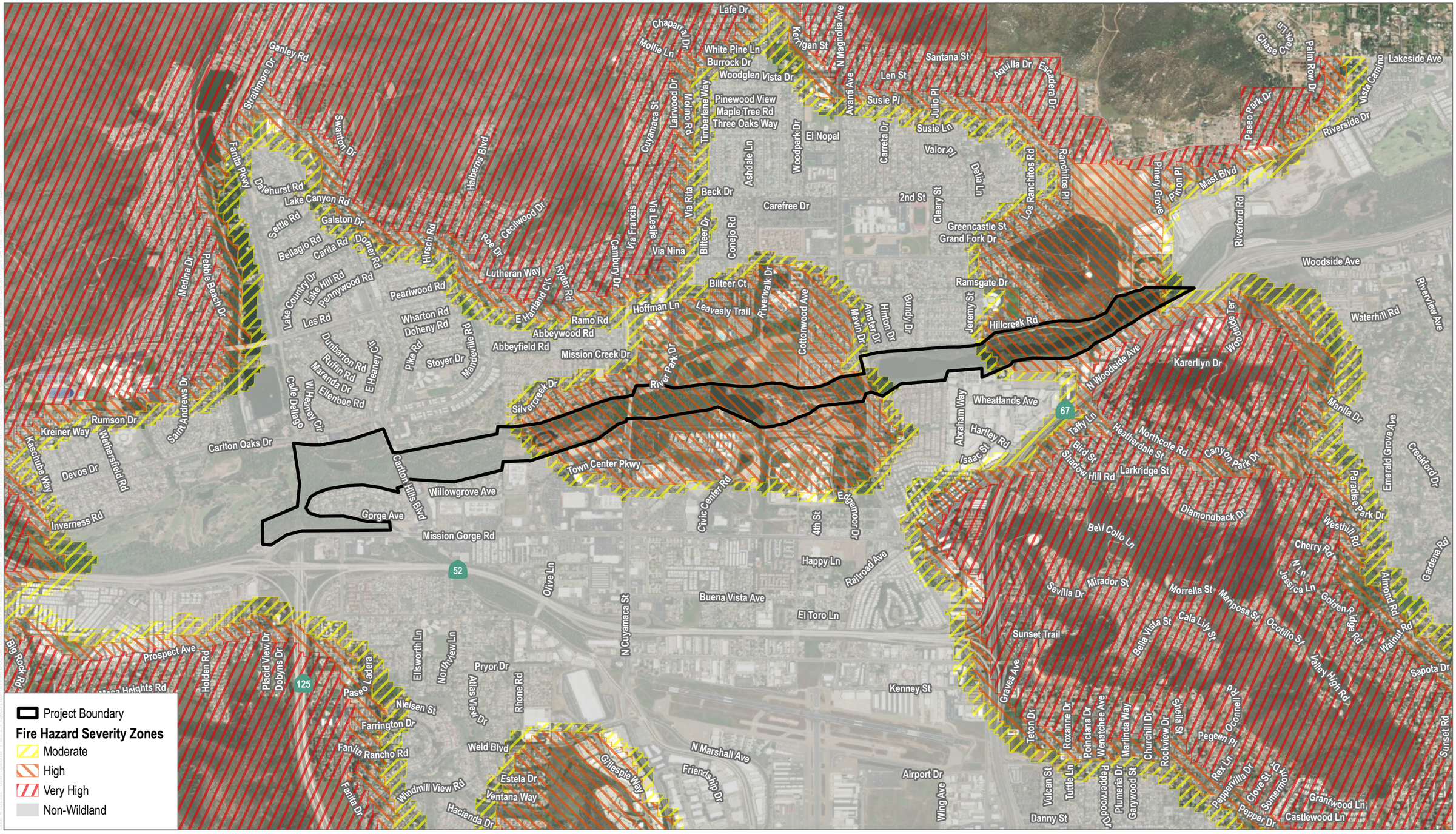
Vegetation and Fuels

Vegetation in the Project Site reflects the composition typical of inland valleys and river corridors in western San Diego County. Riparian vegetation, including willows, cottonwoods, mulefat, and associated understory species, dominates the immediate river margins. Although riparian vegetation often retains higher moisture levels, it can contain dense stands of shrubs, branches, and debris, along with invasive species such as *Arundo donax*, which can contribute to elevated fire intensity (Eucalyptus Hills Fire Safe Council 2009). Non-native trees (palms, eucalyptus, tamarisk, pines) also present a hazard, especially when dry branches form a fuel ladder and/or when they completely or partially detach from the canopy.

Upland terraces and disturbed areas support coastal sage scrub dominated by California sagebrush (*Artemisia californica*), black sage (*Salvia mellifera*), and California buckwheat (*Eriogonum fasciculatum*), along with patches of non-native grasses that cure early in the fire season and readily carry surface fire. Mixed chaparral is present in the surrounding foothills but is less extensive within the corridor itself. However, chaparral in adjacent uplands can influence ember production, wind-driven spread, and fire intensity during extreme weather events.

Fire History and Ignitions

The California Department of Forestry and Fire Protection (CAL FIRE) fire perimeter database includes fires that meet a minimum threshold of over 10 acres in timber, 50 acres in brush, or 300 acres in grass. The lack of mapped fires in this database since 1950 is not for lack of historical ignitions just below the database listing threshold. The Santee Fire Department responded to 174 fires near the Project Site in 2024 and 2025 alone, 81 of which were on the Project boundary. On March 29, 2026, an approximately 10-acre fire occurred within the Project Site. The surrounding foothills also have a well-established fire history. The most notable regional event was the 2003 Cedar Fire, which burned more than 273,000 acres and demonstrated the potential for large, wind-driven fires to spread rapidly from the east (RCD of Greater San Diego County and San Diego County Fire Safe Council 2019).



SOURCE: Maxar 2024; CalFire 2025

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0 1,000 2,000 Feet

FIGURE 3-4

Fire Hazard Severity Zones

San Diego River Fire Hazard Mitigation Program EIR

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Across the San Diego Unit, CAL FIRE responds to approximately 510 wildland fires per year, with an average of 15,000 acres burned annually when the extreme fire-siege years of 2003 and 2007 are excluded (CAL FIRE 2025b). Large fire years (i.e., those in which more than 20,000 acres burn) occur every 7 years on average, with recurrence intervals ranging from 1 to 22 years. The 2003 and 2007 fire sieges together burned over 500,000 acres countywide, underscoring the region's potential for extreme fire growth under severe wind and weather conditions (CAL FIRE 2025b).

Human-caused ignitions, including vehicle fires, debris burning, equipment use, and campfires, are the predominant ignition sources in the region (CAL FIRE 2025b). Ignitions affecting the Project area stem from the corridor's urban adjacency, recreational access, and use by unhoused populations in certain segments and are expected to increase.

3.4 Project Objectives

California Environmental Quality Act Guidelines Section 15124(b) requires project descriptions to contain a statement of objectives that includes the underlying purpose of the proposed project. The objectives of the Project are identified below:

Objective 1 – Define strategy for specific fuel treatment zones for reducing hazardous fuel loads within the San Diego River corridor.

Objective 2 – Enhance community safety within the City of Santee through the reduction of wildfire risk.

Objective 3 – Reduce horizontal and vertical continuity of fuels and hazardous fuel loads through the removal of non-native and invasive species.

Objective 4 – Reduce ignition potential and fire intensity within the San Diego River corridor.

3.5 Fuels Treatment Plan

The FTP proposes the implementation of fuel treatment and vegetation management in the Project Site, through identifying treatment zones and vegetation management techniques within the Project Site, as described below.

For purposes of this EIR and the Project, vegetation management refers broadly to the actions taken to modify, reduce, or maintain vegetation in order to lower wildfire risk within the Project Site. Vegetation treatment describes the specific prescribed methods used to accomplish that management such as hand labor, mechanical equipment, and chemical applications. Treatment activities are the on-the-ground implementation steps associated with those methods, including cutting, trimming, mowing, thinning, biomass removal, and other field actions necessary to meet the vegetation management objectives. These terms are used throughout the EIR to describe how vegetation would be modified to reduce hazardous fuel loads while protecting ecological and recreational functions of the corridor.

Treatment Zones

As shown in Figure 3-5, Treatment Zones, vegetation management recommendations for the Project Site are organized into three zones. Each zone provides a framework to reduce fuel continuity while protecting the hydrologic, ecological, and recreational functions of the river corridor. Treatments vary in intensity across zones but are designed to be ecologically conscious and appropriate for a highly used, hydrologically sensitive environment. In each zone, vegetation management consists overall of the removal of all fine fuels, leaf litter, woody debris, treating or removing all non-native and dead vegetation including invasive species and shrubs or trees with

extensive dead or desiccated material, and treatment or removal of accumulations deposited during storm events. Table 2 below shows the total acreages of each zone.

Zone 1

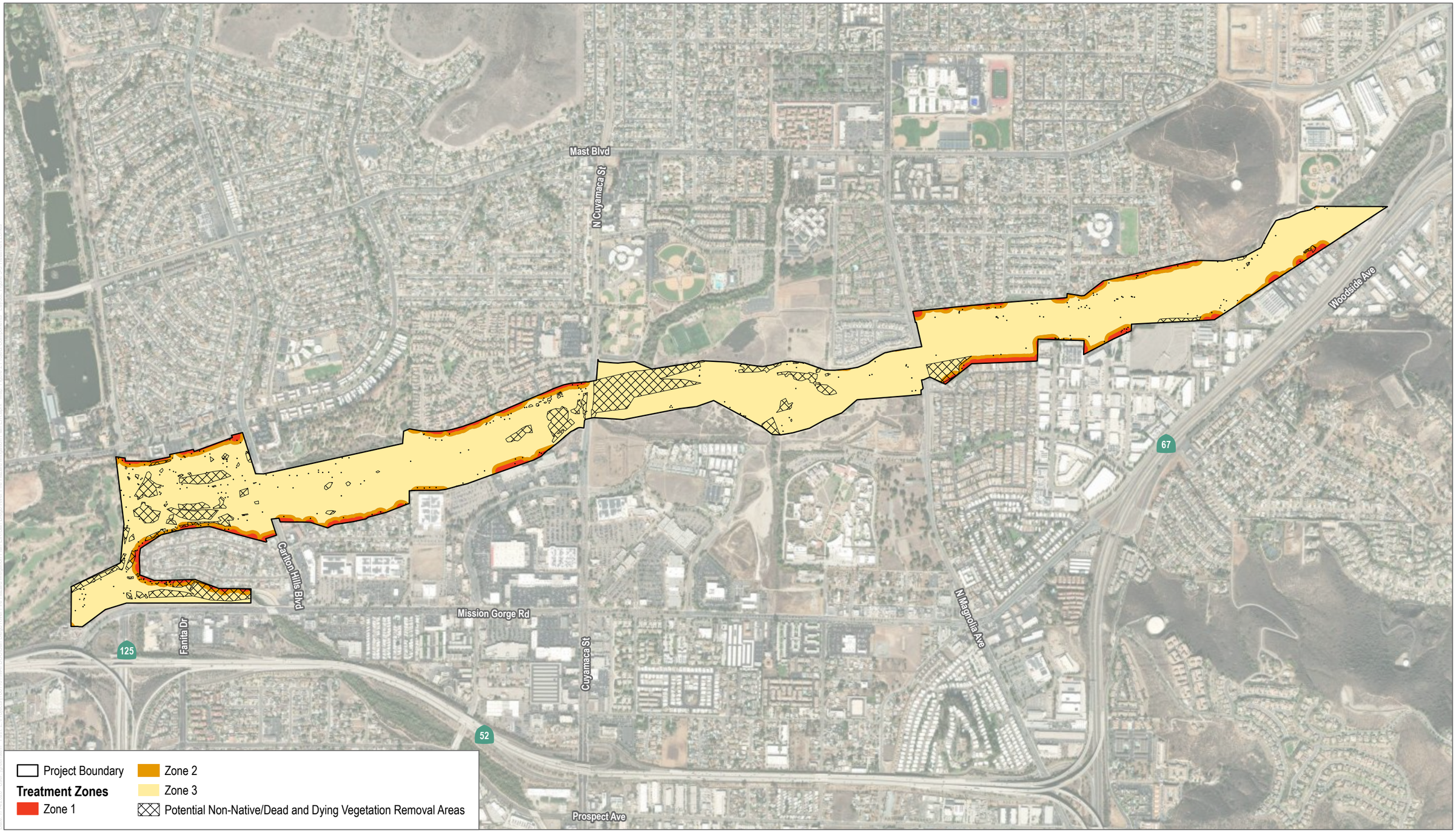
Zone 1 encompasses the 0- to 50-foot area immediately adjacent to structures and represents the highest priority for reducing direct flame contact, radiant heat exposure, and ember ignition. Vegetation management in this zone focuses on eliminating combustible materials, disrupting fuel continuity, and minimizing ignition pathways to buildings.

Throughout Zone 1, all fine fuels, dead vegetation, leaf litter, and woody debris would be treated or removed. Grasses would be trimmed/mowed to a height not to exceed 4 inches. Shrubs would be thinned to reduce horizontal continuity to a residual surface coverage of approximately 30%. Shrubs or other surface vegetation (e.g., ground cover) would be treated to reduce vertical continuity beneath tree canopies to achieve a separation of three times the height of the surface vegetation. Non-native, invasive, or flammable plant species would be removed wherever present. Ladder fuels would also be addressed by trimming low tree branches (in addition to treating shrubs or surface vegetation beneath tree canopies). All trimming activities would be done to industry standards (ISA, American National Standards Institute [ANSI]) to minimize likelihood of plant death. In addition, clearance would be maintained around fences, propane tanks, accessory structures, and other features susceptible to ignition, as applicable. Live and healthy native species may be treated as allowed (e.g., trimmed or removed) through additional permitting only.

Zone 2

Zone 2 encompasses the 50- to 100-foot area, which lies beyond the immediate structure buffer and provides an intermediate level of fuel reduction intended to moderate fire behavior as it approaches developed parcels. This zone generally includes landscaped edges and transitional areas between riparian vegetation and upland shrublands or grasslands.

Vegetation management in Zone 2 consists of treating or removing all non-native and dead vegetation, including invasive species and shrubs or trees with extensive dead or desiccated material. trimming dead and dying branches from native vegetation to reduce ladder fuels and minimize the potential for tree canopy torching. Shrubs would be thinned to reduce horizontal continuity to a residual surface coverage of approximately 50%. Shrubs or other surface vegetation (e.g., ground cover) would be treated to reduce vertical continuity beneath tree canopies to achieve a separation of three times the height of the surface vegetation. Grasses would be trimmed/mowed to a height not to exceed 4 inches. All trimming activities would be done to industry standards (ISA, ANSI) to minimize likelihood of plant death. Vegetation removal and treatment in this zone is intended to reduce fire intensity and rate of spread while maintaining ecological structure where feasible. Live and healthy native species may be treated (e.g., trimmed or removed) as allowed or through additional permitting only.



SOURCE: Vantor 2025; Open Street Map 2025

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0 500 1,000 Feet

FIGURE 3-5

Treatment Zones

San Diego River Fire Hazard Mitigation Program EIR

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Zone 3

Zone 3 encompasses the broader vegetated areas of the river corridor (outside Zones 1 and 2), including most riparian zones, floodplain terraces, and open space areas such as portions of Mast Park and Walker Preserve. Treatments in this zone focus on reducing hazardous, non-native vegetation while preserving riparian canopy, hydrologic function, and recreational access. Vegetation management in Zone 3 is focused on treatment or removal of non-native species, dead or dying vegetation, and debris, including accumulations deposited during storm events. Removal and other treatment of live and healthy native species would not occur within Zone 3.

Table 2. Acreage of Treatment Zones

Zone	Total Acres
1	9.2
2	22.5
3	268.2
Total	299.9

Any removal or trimming of native vegetation within Zones 1 and 2 shall occur only following acquisition of required permits. Until such permits are secured, vegetation management in these zones will focus solely on non-native species and dead or dying vegetation. Following completion of permitting, native vegetation treatments in Zone 1 and 2 may proceed as needed to meet the fire protection objectives.

Vegetation management activities in Zone 3 would be limited to removal of dead, dying, or non-native species. Removal or treatment of live, healthy native vegetation would not occur within Zone 3. Accordingly, permits associated with native vegetation treatment are not anticipated to be required for this zone.

Vegetation Management Techniques

Vegetation management within the Project Site would rely on a combination of techniques aimed at altering existing vegetation to reduce the potential for ignitions and modify fire behavior. While the FTP allows for use of any vegetation management techniques in each zone, method selection would depend on site conditions, access availability/condition, target vegetation types, zone designation, proximity to sensitive resources, and the potential for soil or habitat disturbance in sensitive areas. The following section discusses each vegetation management technique that may be implemented in the Project Site:

- **Hand Labor (e.g., hand cutting, trimming).** Hand labor treatments involve trimming, cutting, or removing trees, shrubs, and grasses by hand or using handheld equipment.
- **Mechanical (e.g., mowing, masticating).** Mechanical techniques include all fuel reduction methods that employ motorized heavy equipment to remove or alter vegetation, typically across larger areas.
- **Chemical (e.g., EPA approved herbicide).** Chemical techniques involve the use of herbicides to kill vegetation or prevent growth and are typically used in combination with other types of fuel reduction treatments. Herbicides do not remove any vegetation from a treatment area; therefore, dead plant material remains unless otherwise treated. Application of herbicides and other chemicals is typically performed by hand, and can include sponging, spraying, or dusting chemicals onto undesirable vegetation. Hand application provides flexibility in application and is ideally suited for small treatment areas.

Each vegetation management technique would implement the applicable best management practices (BMPs) as outlined in Section 3.6 of this EIR.

Biomass Removal

Biomass removal would depend on the type of treatment proposed. Mechanical treatments, such as mastication or mowing, may generate biomass that is inherently disposed of as part of the treatment itself (i.e., biomass is chipped or thatched). Chemical treatments generally produce little to no biomass at the time of application, but any subsequent cutting of dead material resulting from herbicide treatments would require disposal. Methods available for biomass removal include off-site transportation to a green waste facility, on-site broadcast of chips, lop-and-scatter (crews cut material into shorter lengths and scatter it evenly, so it lies as close to the ground as possible), cranes and helicopters and species specific disposal (for invasive or weed species). Disposal approach would depend on access, vegetation type, and the volume of material generated. Off-site removal shall be prioritized where feasible due to its long-term hazard reduction benefits. Chipping may be used where equipment access is available, and vegetation consists of suitable woody material. Lop-and-scatter shall be limited to small, constrained areas.

Access and Staging

Access to the Project Site would vary during Project implementation. Potential access routes for vegetation management activities are shown in Figure 3-6, Access Routes. The routes are broken into two categories depending on the capability of the road to support different equipment types:

- **Class 1:** Capable of supporting full-size vehicles and associated equipment (e.g., chippers) and equipment trailers.
- **Class 2:** Capable of supporting smaller vehicles (e.g., bobcats, side-by-sides).

During Project implementation, routes would be confirmed by the vegetation management contractor prior to use. Some access routes would require rights of entry based on land ownership. In addition to the routes identified in Figure 3-6, it is anticipated that overland travel by foot would be conducted by field crews along disturbed land to access vegetation management work locations. The proposed Project would prioritize existing roads and trails, minimizing the need for new disturbance.

To the extent feasible, staging areas for Project equipment would be located away from residential areas and popular trailheads to reduce noise, dust, and congestion. When mechanical equipment is required, operators shall use designated entry points and avoid sensitive resource areas or high-use recreation corridors. Access via public roadways may also be necessary. In such cases, the selected contractor will be responsible for traffic control to maintain safe working conditions.

Maintenance

The Project includes the ongoing maintenance of the Project Site to ensure that initial vegetation treatments continue to reduce wildfire hazard over time. Maintenance activities are intended to (1) prevent the re-accumulation of hazardous fuels, (2) sustain desired vegetation structure and species composition, (3) protect initial treatment investments, and (4) improve firefighter access and suppression effectiveness during wildfire events. The City will be responsible for conducting biannual inspections, determining maintenance needs for each zone, coordinating or engaging maintenance crews, and ensuring compliance with the FTP.

Maintenance intervals will vary depending on vegetation type, treatment zone, and treatment technique. The Project Site will be inspected biannually to determine maintenance needs. It is expected that maintenance within Zones 1

and 2 will occur at least once annually. Maintenance within Zone 3 will be determined during biannual inspections and will be based on the establishment (or re-establishment) of non-native plant species, vegetation mortality (dead plant material presence), and accumulation or deposition of combustible debris (including dead and dying non-native and native vegetation). The frequency of maintenance activities in Zone 3 will be dependent on observations made during biannual inspections. It is expected that approximately one-quarter of the total Project Site will be maintained annually to preserve reduced hazardous fuel conditions.

Maintenance of the plan area will use the techniques outlined in the FTP (hand labor, mechanical, and chemical). Biomass disposal associated with maintenance activities will follow the BMPs identified in Section 3.6.

3.6 Best Management Practices

The following BMPs would be applied to the Project where applicable and are considered part of the Project:

Hand Labor (referred to as "Hand Labor BMP-#" in this EIR)

1. Ensure equipment operators and Project personnel are properly trained in equipment use.
2. Ensure that vehicles and equipment arrive at the treatment area clean and weed-free.
3. An International Society of Arboriculture (ISA) Certified Arborist shall conduct all trimming according to International Society of ANSI A300 standards.
4. To minimize soil disturbance, leave stumps from removed trees and shrubs intact, with stump heights not exceeding 6 inches, as measured from the uphill side; treat stump-sprouting species using the cut and daub technique described in Section 3.3.3.2 of the FTP.
5. Protect retained trees and vegetation from tool and equipment damage.
6. Service and fuel tools only in areas that will not allow grease, oil, fuel, or other hazardous materials to pass into streams or retained vegetation.
7. Remove from the site and properly dispose of all refuse, litter, trash, and non-vegetative debris resulting from vegetation treatment operations, and other activity in connection with vegetation treatment operations.

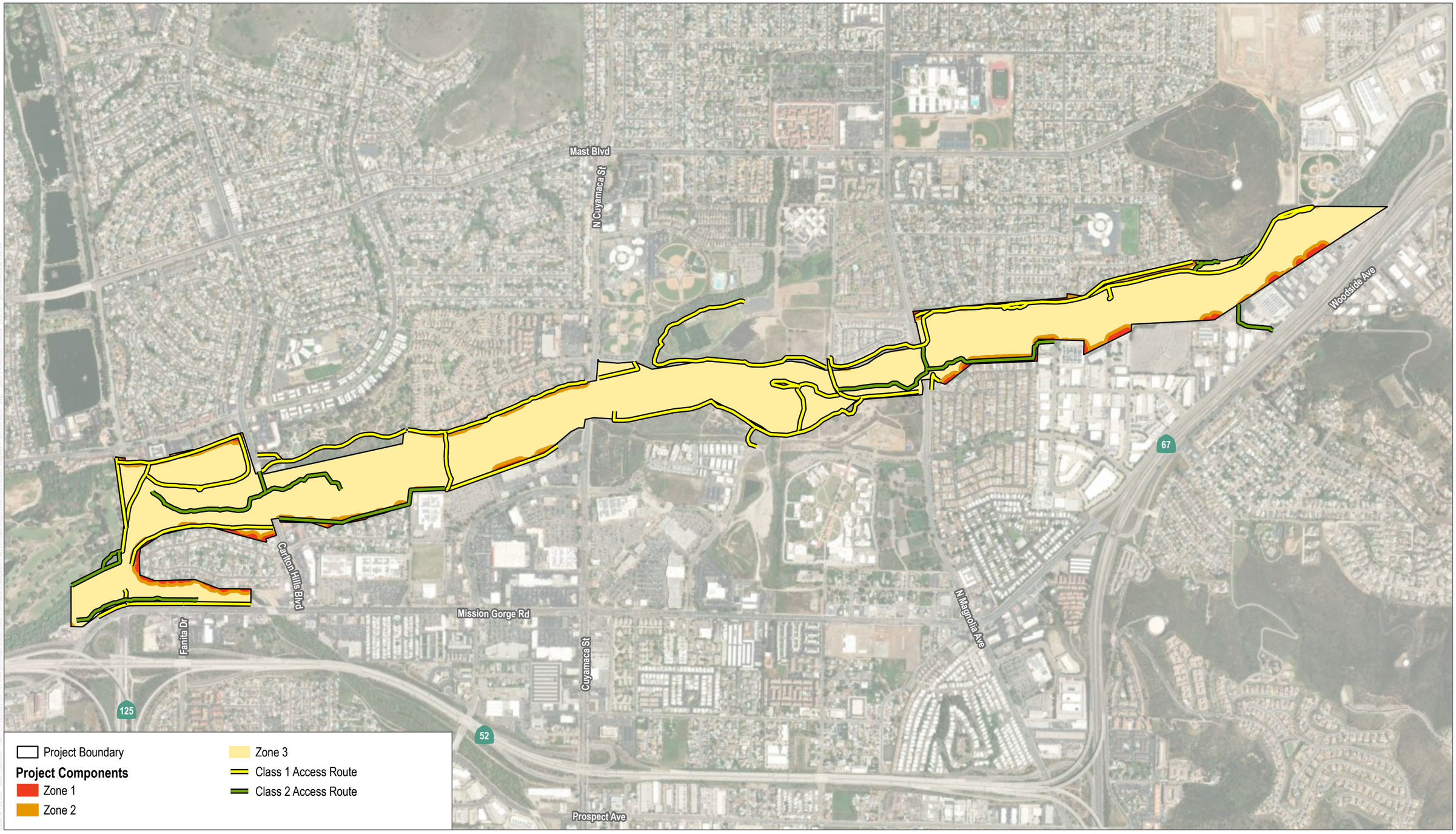
Mechanical (referred to as "Mechanical BMP-#" in this EIR)

1. Utilize low ground-pressure equipment, to the extent feasible.
2. Ensure equipment operators and Project personnel are properly trained in equipment use.
3. Ensure that vehicles and equipment arrive at the treatment area clean and weed-free.
4. Control fugitive dust resulting from equipment use by watering disturbed areas.
5. Protect retained trees and vegetation from potential damage resulting from heavy equipment use.
6. To minimize soil disturbance, leave stumps from removed trees and shrubs intact, with stump heights not exceeding 6 inches, as measured from the uphill side.
7. Limit the size and quantity of equipment to that which is necessary to meet the identified vegetation management standard.
8. Wherever possible, limit heavy equipment staging and placement to existing roads and access routes.
9. Regrade or recontour any areas subject to soil disturbance from heavy equipment, including dragging or skidding of trees or other material.

10. Where work is unavoidable in saturated soils or along creek banks, hand place temporary high-density flexible rubber mats to distribute equipment load and protect soils.
11. Use temporary rubber mats or plates to cross over jurisdictional creek areas.
12. Use temporary rubber mats or pads when driving across vegetated areas to distribute vehicle weight and minimize vegetation removal and soil disturbance.
13. Equipment used for mechanical treatment shall not operate on hillsides with slopes greater than 50% (27°).
14. Service and fuel heavy equipment only in areas that will not allow grease, oil, fuel, or other hazardous materials to pass into streams or retained vegetation.
15. Remove from the site and properly dispose of all refuse, litter, trash, and non-vegetative debris resulting from vegetation treatment operations, and other activity in connection with vegetation treatment operations.
16. Ensure that hazardous materials spill kits are available on all heavy equipment.
17. To the fullest extent possible and with due consideration given to topography, lean of trees, utility lines, local obstructions, and safety factors, trees shall be felled away from structures, landscape improvements (fences, signage), streams, sensitive biological resources areas, and retained trees. Cabling, sectional removal, or other felling techniques shall also be employed, where feasible, to minimize impacts to streams, sensitive biological resource areas, and retained trees.
18. Remove and fell trees according to ISA and ANSI A300 standards.

Chemical (referred to as "Chemical BMP-#" in this EIR)

1. Herbicide use shall be considered only when other treatment techniques are determined to be infeasible or ineffective in achieving desired management and maintenance standards.
2. Santee Fire Department shall consult with a state-licensed pest control adviser (PCA) and/or the San Diego County agricultural commissioner to identify the appropriate site-specific herbicide application approach to meet vegetation management standards.
3. The timing of herbicide applications shall be considered to minimize impacts to adjacent retained vegetation and nearby resources (typically between June 15 and November 15, with a potential extension through December 31 or until local rainfall greater than 0.5 inches is forecasted within a 24-hour period from planned application). Herbicide application shall not occur during winds that exceed 7 miles per hour.
4. Only herbicides that have been approved for aquatic use by the U.S. Environmental Protection Agency and are registered for use by the California Department of Pesticide Regulation would be used for aquatic vegetation control work.
5. Herbicide application shall be consistent with Federal Insecticide, Fungicide, and Rodenticide Act label instructions and use conditions issued by the U.S. Environmental Protection Agency, California Department of Pesticide Regulation, and the San Diego County agricultural commissioner.
6. The lowest recommended rate to achieve vegetation management objectives of both herbicides shall be utilized to achieve desired control.
7. An appropriate indicator dye shall be added to the tank mix to help the applicator identify areas that have been treated and better monitor the overall application.
8. No application to plants whose base is submerged in stream channels shall occur.
9. Safe procedures for transporting, mixing, and loading herbicides shall be followed.
10. The use of foliar (spray) applications shall be minimized, prioritizing localized or direct applications.
11. Herbicides shall not be applied within 25 feet of a perennial stream or water body.



SOURCE: Vantor 2025; Open Street Map 2025

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0 500 1,000 Feet

FIGURE 3-6

Access Routes

San Diego River Fire Hazard Mitigation Program EIR

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Slope Stability/Erosion (referred to as "Slope Stability/Erosion BMP-#" in this EIR)

1. Avoid work during and immediately following wet periods when soils are saturated.
2. Where work is unavoidable in saturated soils or along creek banks, hand place high-density flexible rubber mats to distribute equipment load and protect soils.
3. No vehicle or equipment is used on roads when roads are wet or muddy.
4. Equipment used for mechanical treatment shall not operate on hillsides with slopes greater than 50% (27°).
5. No removal of stumps or root balls of cut material. The root systems of cut vegetation shall be left intact as much as possible.
6. Mature, native tree canopy will be left intact.
7. Treated vegetation shall be masticated or chipped and spread back onto the treatment area where slopes do not exceed 45° (100% slope or 1:1 slope).
8. On slopes exceeding 45° (greater than 100% slope or greater than 1:1 slope), cut tree branches can be spread onto the surface to help prevent chips from sliding down the slope during precipitation.
9. Only hand labor shall be performed within 25 feet of a wetland or water body. Only hand labor or chemical spot treatment shall be performed between 25 and 100 feet of a perennial stream or water body.
10. Areas of bare soil created by fuel reduction treatments shall be covered entirely with chipped or masticated vegetation.

Water Quality (referred to as "Water Quality BMP-#" in this EIR)

1. Mechanical tools, equipment, and vehicles shall be routinely inspected to ensure that fuel, oil, and other fluids and lubricants are not leaking.
2. Tool and equipment refueling shall be conducted in identified re-fueling areas in staging or parking areas that provide secondary containment located away from watercourses.
3. Provide spill kits at refueling areas.
4. Store tools, lubricants, and fuels away from watercourses, ensuring secondary containment and clear labeling.
5. Stockpiling of vegetative material and equipment will be limited to designated upland areas outside of aquatic resources to the maximum extent practicable. Any temporarily staged materials will be placed to avoid contact with waters and minimize the potential for sediment discharge, and all stockpiled materials and equipment will be removed from the site at the end of each workday.

Pests and Pathogens (referred to as "Pests and Pathogens BMP-#" in this EIR)

1. Schedule all oak trimming or removal, where permitted, between October and March to avoid the goldspotted oak borer adult flight period and minimize wound-attraction.
2. Avoid trimming or ground disturbance during or immediately after wet periods (rainfall greater than 0.5 inches within a 24-hour period), when pest and pathogen transmission risk is highest.
3. Clean and sanitize vehicles, equipment, tools, footwear, and clothes before arriving at a project site or when leaving an area with infestations of invasive species. Sanitize all hand tools and chainsaws that come into contact with infected material, or material suspected to be infected, before leaving a work site using a 10% bleach solution or 70% isopropyl alcohol.
4. Remove all soil/mud and plant debris from boots, tracked equipment, tires, and undercarriages before entering and leaving a site, especially when working near the San Diego River or wetlands.

5. Treated woody vegetation shall be chipped or masticated and spread on site to a depth not exceeding 6 inches, unless material shows signs of active pest infestation.
6. Do not stage or transport cut wood from host species (e.g., oak, sycamore, willow) unless it is chipped, debarked, solarized, or disposed of at an approved facility.
7. Cover all infested wood in clear plastic tarps sealed at the edges for at least 6–12 months if immediate removal is not feasible.
8. Never move unprocessed wood or logs off site from the Project area unless securely covered and delivered to an approved biomass, composting, or landfill facility.
9. Report any suspected pest infestations (e.g., exit holes, staining, sap flow, crown dieback) to the Project manager immediately.

Fire Protection (referred to as "Fire Protection BMP-#" in this EIR)

1. During operations that involve the use of any vehicle, machine, tool or equipment powered by an internal combustion engine operated on hydrocarbon fuels, provide and maintain suitable and serviceable tools for firefighting purposes. Equipment shall be located at a point accessible in the event of a fire and shall include one backpack pump-type fire extinguisher filled with water, two axes, two McLeod fire tools, and a sufficient number of shovels so that each employee at the operation can be equipped to fight fire.
2. Ensure that all equipment with an internal combustion engine using hydrocarbon fuels is equipped with a spark arrestor, as defined in California Public Resources Code Section 4442.
3. Establish communication procedures with staff and contractors for reporting fires or call 911 in emergencies.
4. Restrict the use or timing of use of tools or equipment with the potential to generate heat or sparks during Red Flag Warnings and High to Extreme Fire Danger days.
5. Identify staging areas prior to initiating operations. Staging areas shall be contained within already disturbed areas or non-vegetated areas (e.g., roads, parking lots) and shall account for vehicle parking and tool/equipment storage.

Air Quality (referred to as "Air Quality BMP-#" in this EIR)

1. Control fugitive dust resulting from equipment use as needed by watering disturbed areas and ingress/ egress locations.
2. Maintain all trucks and equipment in good working order and compliant to current emission standards, including Tier 4 Final Air Pollution Control District – San Diego County required equipment and Best Available Control Technology, where possible.
3. Avoid work during unfavorable weather conditions, including excessive wind/Santa Ana events, to reduce unnecessary contributions to dust and particle suspension.
4. Securely cover all material (e.g., mulch, trees, tree debris) transported off site.
5. Limit the size and quantity of equipment to that which is necessary to meet the identified vegetation management standard.
6. Limit traffic speeds on dirt roads to 15 miles per hour.
7. Clean construction vehicles and equipment to prevent dust, silt, mud and dirt from being tracked onto paved roadways.
8. Limit vehicle idling time to a maximum of 2 minutes for diesel-powered equipment and 5 minutes for all other vehicles and equipment, except where idling is required for the equipment to perform its task.

9. Post a publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

Recreation Resources (referred to as "Recreation Resources BMP-#" in this EIR)

1. Restore disturbed recreation areas to pre-operation conditions (e.g., clear blocked trails, recontour damaged trails to minimize the potential for erosion or the creation of unauthorized trails).
2. Repair, replace, or reinstall damaged, removed, or relocated park infrastructure (e.g., signs, gates).
3. Minimize the extent or duration of closures by phasing work and/or conducting work outside of peak visitation periods, where feasible.
4. Where feasible, conduct operations on weekdays during daytime hours (7 a.m. to 7 p.m.).
5. Control public access by posting detours, installing and maintaining appropriate and adequate signage, using flaggers/monitors where necessary, closing work areas via exclusionary fencing, and providing necessary monitoring/patrolling staff to ensure access control measures are maintained and effective.
6. Disseminate information regarding planned Project activities on the City's website, social media, in-park signage, local newspaper, and via outreach to regular known user groups.

Noise (referred to as "Noise BMP-#" in this EIR)

1. All noise-producing Project equipment and vehicles using internal combustion engines shall be equipped with mufflers, air-inlet silencers where appropriate, and any other factory-installed shrouds, shields, or other noise-reducing features in good operating condition that meet or exceed original factory specification. Mobile or fixed "package" equipment shall be equipped with shrouds and noise control features that are readily available for that type of equipment.
2. Mobile equipment staging, parking, maintenance areas, and construction equipment shall be located as far as practicable from noise-sensitive receivers.
3. The on-site construction supervisor shall have the responsibility and authority to receive and resolve noise complaints. A clear appeal process to the Owner shall be established prior to construction commencement that shall allow for resolution of noise problems that cannot be immediately solved by the site supervisor.

Biological Resources (referred to as "Biological Resources BMP-#" in this EIR)

1. Retain at least 75% of the overstory and 50% of the understory canopy of native riparian vegetation within 100 feet of perennial streams and 50 feet of intermittent streams during thinning activities.

3.7 Required Project Approvals

This EIR covers all state and local government and quasi-government approvals that may be needed to implement the Project, whether or not they are explicitly listed in this section or elsewhere in this EIR (14 CCR 15124[d]). Regulatory and environmental compliance for the Project will include coordination and consultation with several state and federal agencies to issue all required permissions for the Project, as well as review and approval by the City Council in accordance with the City's General Plan and Municipal Code.

City Council

- **Consideration of the San Diego River Hazard Mitigation Program: Fuels Treatment Plan.** The City Council will consider whether to adopt, revise, or reject the San Diego River Hazard Mitigation Program: Fuels Treatment Plan.
- **Consideration of EIR.** The City Council will consider whether to certify or reject this EIR, along with appropriate California Environmental Quality Act findings and the mitigation monitoring and reporting program.

Local Agencies

- County of San Diego Right-of-Entry Permit

State Agencies

- California Department of Fish and Wildlife Lake and Streambed Alteration Agreement
- Regional Water Quality Control Board Clean Water Act Section 401 Water Quality Certification
- Caltrans Right-of-Way Encroachment Permit

Federal Agencies

- U.S. Army Corps of Engineers Regional General Permit 41
- National Historic Preservation Act Section 106 Consultation
- Federal Emergency Management Agency Record of Environmental Consideration approving National Environmental Policy Act Programmatic Environmental Assessment Consistency Memorandum
- U.S. Fish and Wildlife Service Biological Opinion or Concurrence

4 Environmental Analysis

Approach to the Environmental Analysis

This Draft Environmental Impact Report (EIR) evaluates and discloses the environmental impacts associated with the San Diego River Hazard Mitigation Program: Fuels Treatment Plan Project (Project), in accordance with the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000, et seq.) and the State CEQA Guidelines (14 CCR 15000 et seq.). Sections 4.1 through 4.6 of this Draft EIR present a discussion of environmental setting, regulatory setting, significance criteria, environmental impacts associated with the Project, mitigation measures to reduce the level of impact, and residual level of significance (i.e., no impacts would remain significant and unavoidable after application of all feasible mitigation measures). Issues evaluated in these sections consist of the environmental topics identified for review in the Notice of Preparation prepared for the Project (see Appendix A of this Draft EIR) and in Section 2.5.3, Environmental Issues Determined to be Potentially Significant, of this Draft EIR. Chapter 5, Effects Found Not to Be Significant, of this Draft EIR briefly describes potential environmental effects that were determined not to be significant and therefore are not discussed in further detail in the EIR, as required by CEQA Guidelines Section 15128. Chapter 6, Other CEQA Considerations, of this Draft EIR presents an analysis of the Project's impacts considered together with other past, present, and probable future projects producing related impacts (cumulative impacts), as required by State CEQA Guidelines Section 15130, and includes an analysis of the Project's growth-inducing impacts, as required by CEQA Section 21100(b)(5). Chapter 7, Alternatives, of this Draft EIR presents a reasonable range of alternatives and evaluates the environmental effects of those alternatives relative to the Project, as required by State CEQA Guidelines Section 15126.6.

Sections 4.1 through 4.6 of this Draft EIR include the following components:

- **Existing Conditions:** Provides information describing the existing environmental conditions on the Project Site and in the surrounding area as appropriate, in accordance with State CEQA Guidelines Section 15125. This setting discussion describes the conditions that existed when the Notice of Preparation was posted for public review and submitted to the State Clearinghouse.
- **Relevant Plans, Policies, and Ordinances:** Provides a discussion of existing federal, state, regional, and local regulations, plans, policies, and ordinances applicable to the Project.
- **Thresholds of Significance:** Provides criteria for determining the significance of Project impacts for each environmental issue.
- **Impact Analysis:** Provides a discussion of the characteristics of the Project that may have a physical impact on the environment, analyzes the nature and extent to which the Project is expected to change the existing environment, and indicates whether the Project's impacts would meet or exceed the level of significance thresholds.
- **Mitigation Measures and Level of Significance After Mitigation:** Mitigation measures are identified, as feasible, to avoid, minimize, rectify, reduce, or compensate for significant or potentially significant impacts, in accordance with the State CEQA Guidelines Section 15126.4. A "less-than-significant" impact is one that would not result in a substantial adverse change in the physical environment. A "potentially significant" impact or "significant" impact is one that would result in a substantial adverse change in the physical environment; both are treated the same under CEQA in terms of procedural requirements and the need to identify feasible mitigation. Significant and unavoidable impacts are identified as appropriate in accordance with State CEQA Guidelines Section 15126.2(c).

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4.1 Biological Resources

This section describes the existing biological resources conditions of the San Diego River Fire Hazard Mitigation Program: Fuels Treatment Plan (Project) Site and vicinity, identifies associated regulatory requirements, evaluates potential impacts, and identifies mitigation measures, if necessary to reduce or avoid significant impacts, related to implementation of the Project.

In addition to the documents incorporated by reference (see Section 2.7 of Chapter 2, Introduction, of this Environmental Impact Report), the following analysis is based, in part, on the following source:

- Biological Resources Letter Report, prepared by Dudek in April 2026 (Appendix B)

4.1.1 Existing Conditions

The approximately 300-acre Project Site is within the San Diego River Corridor and includes sensitive areas such as wetlands and the San Diego River. The Project Site is characterized by a mix of natural vegetation and non-native species, as well as proximity to residential and commercial structures. The following sections describe the existing biological resources within the Project Site and potentially occurring within adjacent areas associated with the San Diego River.

4.1.1.1 Vegetation Communities and Land Covers

Vegetation community classifications within the Project Site follow Holland (1986), as revised by Oberbauer et al. (2008). Some vegetation communities were added or given additional descriptions to identify unique characteristics or highly dominant species within certain communities. The Project Site is characterized by a mix of natural as well as non-native vegetation communities and land cover types. A total of 19 vegetation communities (including subforms) and/or land cover types were identified in the Project Site during the biological reconnaissance surveys, consisting of 11 native vegetation communities and 8 non-native vegetation communities or land cover types. Of the 19 vegetation communities, 12 are considered wetland/riparian habitats. Acreages for each vegetation community or land cover type are provided in Table 4.1-1 below, and their spatial distributions are shown in Figures 4.1-1A through 4.1-1E, Biological Resources. Descriptions of each vegetation community and land cover type are included in Section 4.1 of Appendix B of this Draft Environmental Impact Report (EIR).

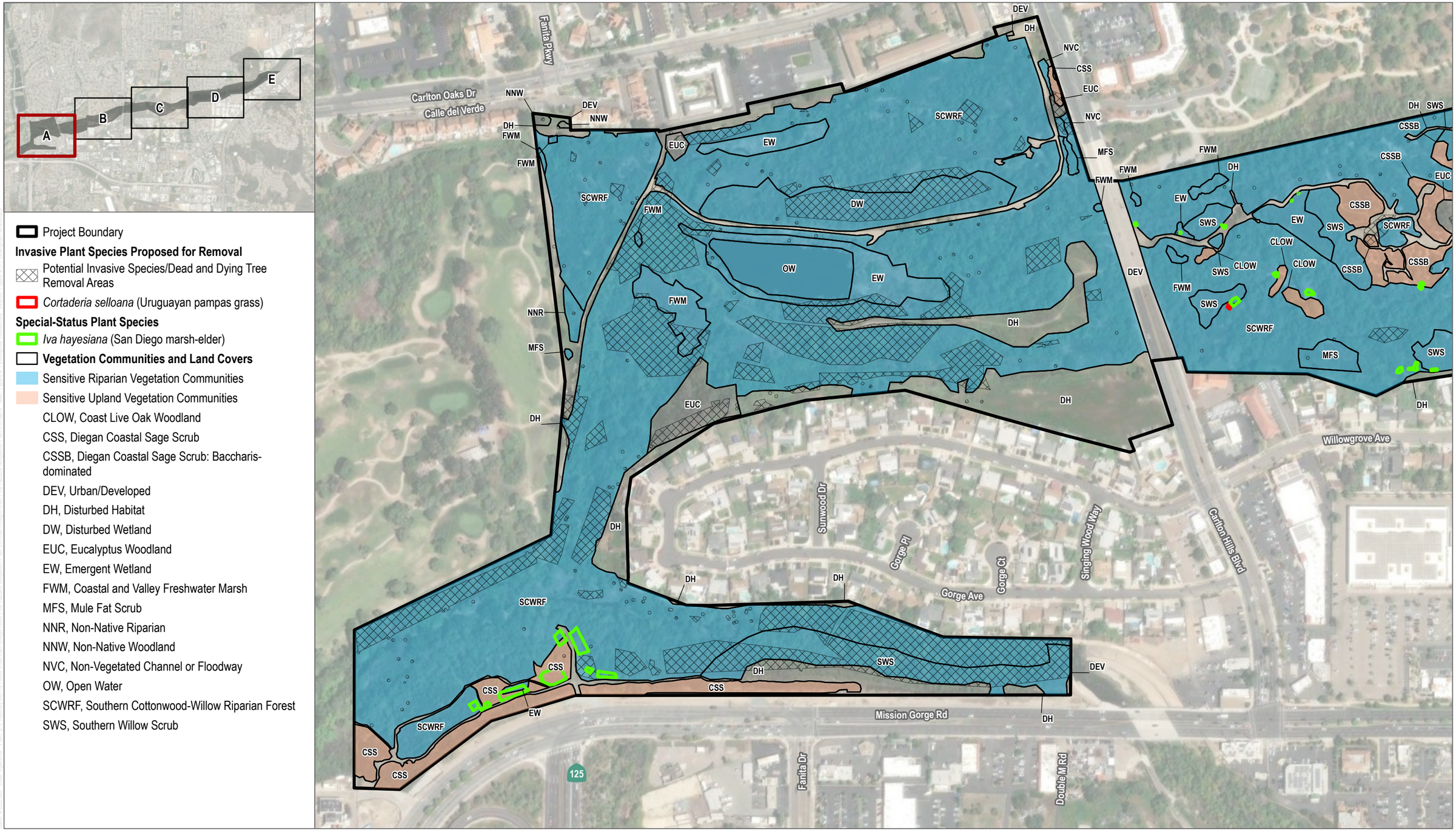
Table 4.1-1. Vegetation Communities and Land Covers Within the Project Site

Vegetation Community/Land Cover Type[1]	Project Site (Acres)	Sensitive (Y/N)[2]
Native Vegetation Communities		
Riparian and Bottomland Habitat		
Southern Arroyo Willow (*Salix lasiolepis*) Riparian Forest	9.00	Y
Southern Cottonwood–Willow (*Populus* spp.- *Salix* spp.) Riparian Forest	122.08	Y
Southern Riparian Scrub	1.22	Y
Southern Willow (*Salix* spp.) Scrub	17.26	Y
Mulefat (*Baccharis salicifolia*) Scrub	0.44	Y
Open Water	42.89	Y
Non-vegetated Channel or Floodway	0.08	Y
Subtotal	*192.97*	*N/A*
Bog and Marsh		
Coastal and Valley Freshwater Marsh	29.71	Y
Emergent Wetland	3.85	Y
Subtotal	*33.56*	N/A
Woodlands		
Coast Live Oak (*Quercus agrifolia*) Woodland (including Open subform)	1.84	Y
Scrub and Chaparral		
Diegan Coastal Sage Scrub (including *Baccharis*-dominated subform)	27.76	Y
Subtotal of Native Vegetation Communities	*256.13*	N/A
Non-native Vegetation Communities and Land Covers		
Riparian and Bottomland Habitat		
Non-native Riparian	0.76	Y
Disturbed Wetland	2.75	Y
Tamarisk Scrub	1.49	Y
Subtotal	*5.00*	*N/A*
Woodlands		
Non-native Woodland	0.48	N
Eucalyptus Woodland	2.29	N
Subtotal	*2.77*	*N/A*
Grasslands		
Non-native Grassland	1.85	Y
Disturbed or Developed Areas		
Disturbed Habitat	27.71	N
Urban/Developed	6.52	N
Subtotal	*34.23*	*N/A*
Subtotal of Non-native Vegetation Communities/Land Covers	*43.85*	*N/A*
Grand Total	**299.93**	**N/A**

Notes: N/A = Not Applicable. Totals may not sum due to rounding.

1 According to Oberbauer et al. (2008).

2 Considered sensitive under the Draft Santee MSCP Subarea Plan (City of Santee 2025).



SOURCE: Vantor 2025; Open Street Map 2025

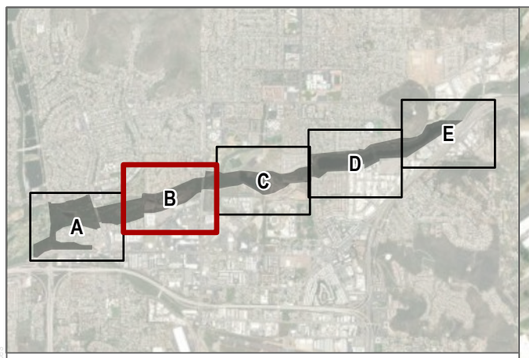
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FIGURE 4.1-1A

Biological Resources

San Diego River Fire Hazard Mitigation Program EIR

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Project Boundary

Invasive Plant Species Proposed for Removal

Potential Invasive Species/Dead and Dying Tree Removal Areas

Arundo donax (giant reed)

Special-Status Plant Species

Iva hayesiana (San Diego marsh-elder)

Vegetation Communities and Land Covers

Sensitive Riparian Vegetation Communities

Sensitive Upland Vegetation Communities

CLOW, Coast Live Oak Woodland

CSS, Diegan Coastal Sage Scrub

CSSB, Diegan Coastal Sage Scrub: Baccharis-dominated

DEV, Urban/Developed

DH, Disturbed Habitat

EUC, Eucalyptus Woodland

EW, Emergent Wetland

FWM, Coastal and Valley Freshwater Marsh

NNG, Non-Native Grassland

NNR, Non-Native Riparian

OW, Open Water

SCWRF, Southern Cottonwood-Willow Riparian Forest

SWS, Southern Willow Scrub

SOURCE: Vantor 2025; Open Street Map 2025

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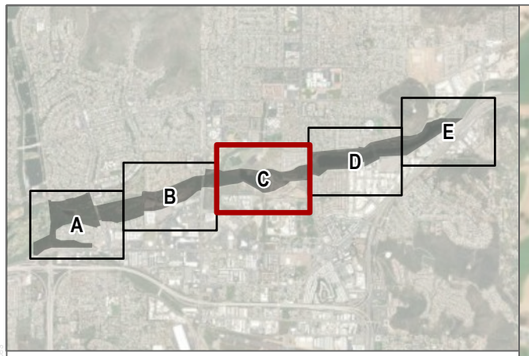
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FIGURE 4.1-1B

Biological Resources

San Diego River Fire Hazard Mitigation Program EIR

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Project Boundary

Invasive Plant Species Proposed for Removal

Potential Invasive Species/Dead and Dying Tree Removal Areas

Arundo donax (giant reed)

Vegetation Communities and Land Covers

Sensitive Riparian Vegetation Communities

Sensitive Upland Vegetation Communities

CLOW, Coast Live Oak Woodland

CSS, Diegan Coastal Sage Scrub

CSSB, Diegan Coastal Sage Scrub: Baccharis-dominated

DEV, Urban/Developed

DH, Disturbed Habitat

EUC, Eucalyptus Woodland

EW, Emergent Wetland

FWM, Coastal and Valley Freshwater Marsh

NNG, Non-Native Grassland

OW, Open Water

SCWRF, Southern Cottonwood-Willow Riparian Forest

SWRF, Southern Arroyo Willow Riparian Forest

TS, Tamarisk Scrub

SOURCE: Vantor 2025; Open Street Map 2025

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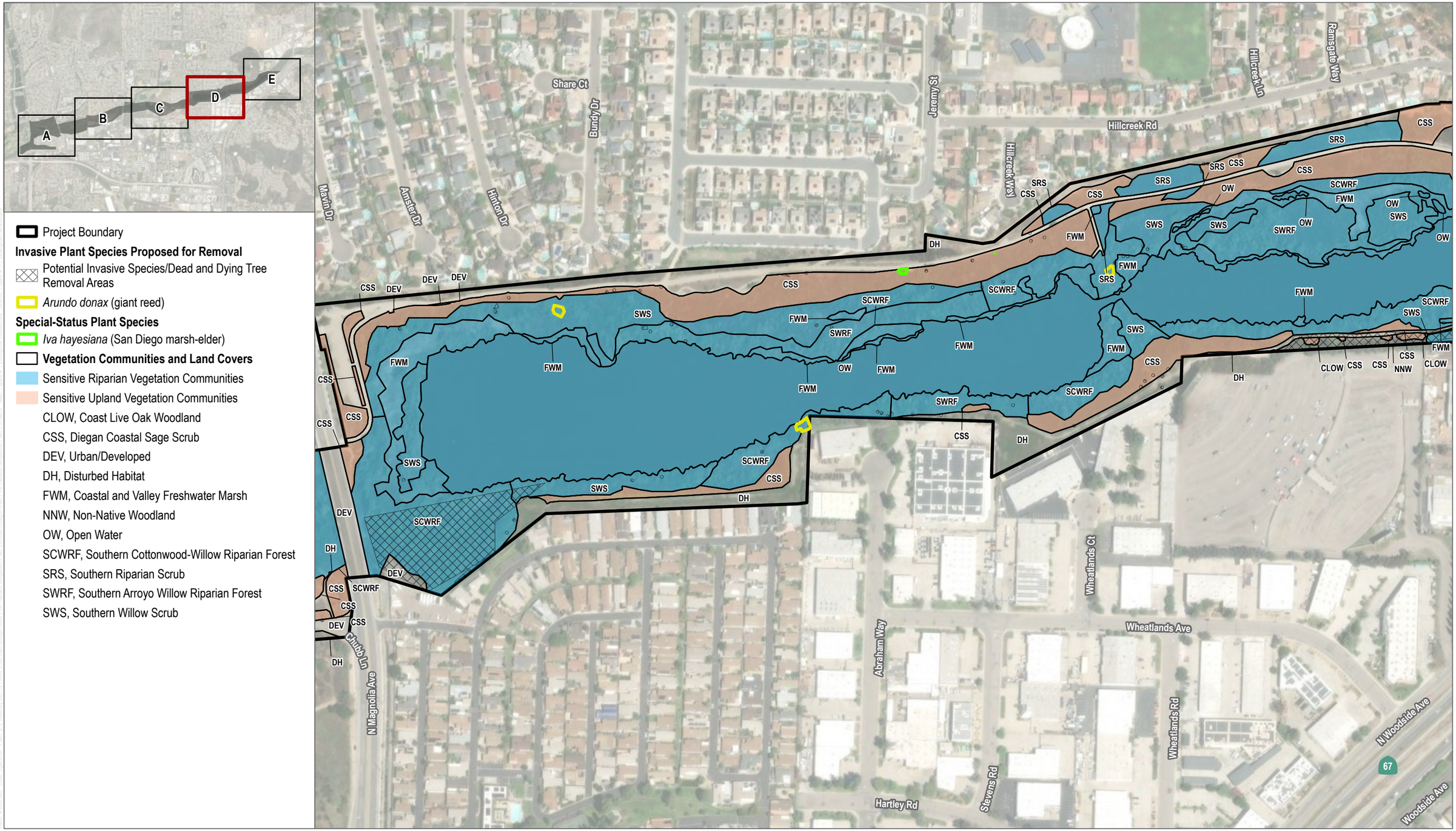
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FIGURE 4.1-1C

Biological Resources

San Diego River Fire Hazard Mitigation Program EIR

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- Project Boundary

Invasive Plant Species Proposed for Removal

- Potential Invasive Species/Dead and Dying Tree Removal Areas
- *Arundo donax* (giant reed)

Special-Status Plant Species

- *Iva hayesiana* (San Diego marsh-elder)

Vegetation Communities and Land Covers

- Sensitive Riparian Vegetation Communities
- Sensitive Upland Vegetation Communities
- CLOW, Coast Live Oak Woodland
- CSS, Diegan Coastal Sage Scrub
- DEV, Urban/Developed
- DH, Disturbed Habitat
- FWM, Coastal and Valley Freshwater Marsh
- NNW, Non-Native Woodland
- OW, Open Water
- SCWRF, Southern Cottonwood-Willow Riparian Forest
- SRS, Southern Riparian Scrub
- SWRF, Southern Arroyo Willow Riparian Forest
- SWS, Southern Willow Scrub

SOURCE: Vantor 2025; Open Street Map 2025

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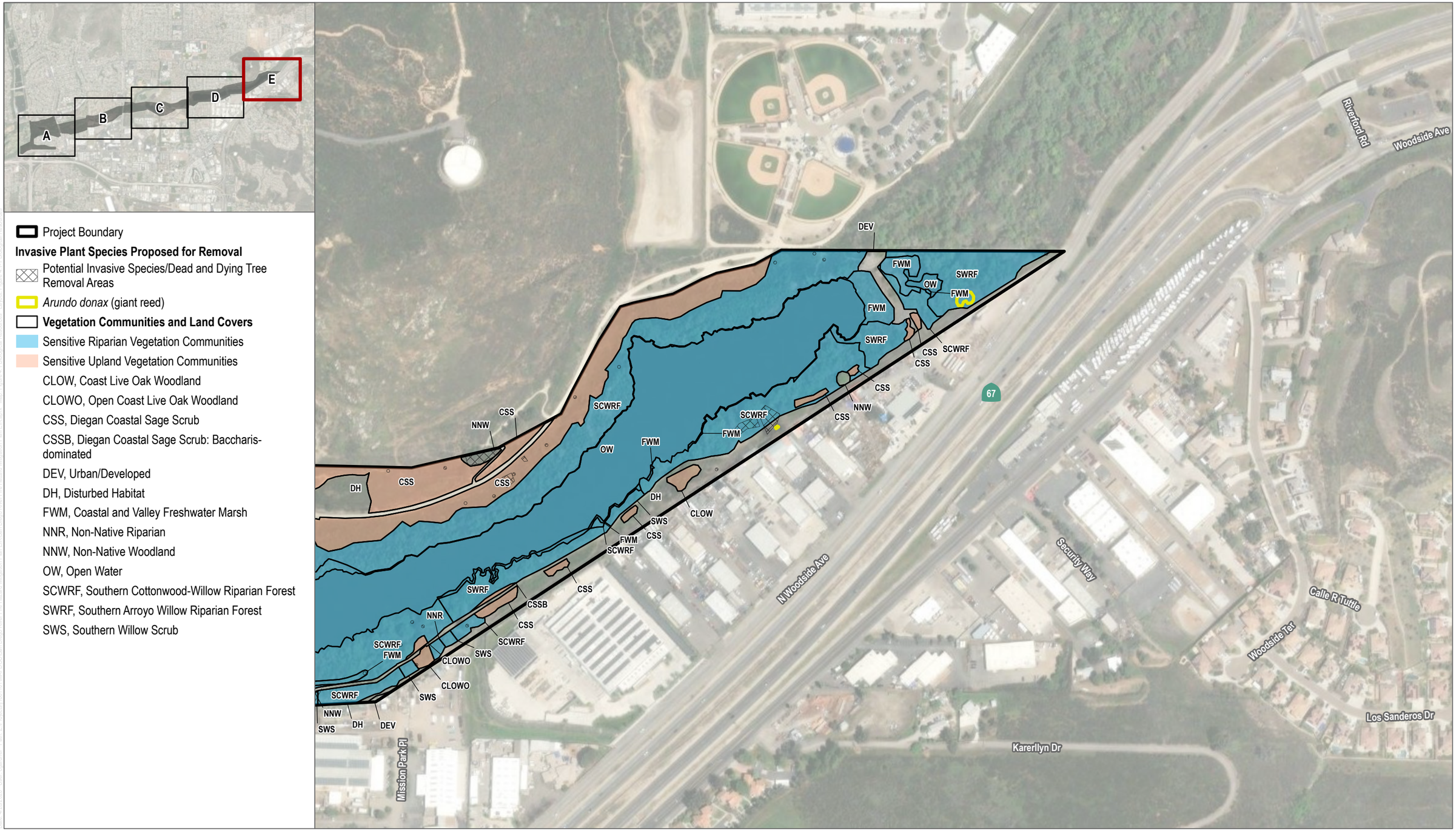
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FIGURE 4.1-1D

Biological Resources

San Diego River Fire Hazard Mitigation Program EIR

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SOURCE: Vantor 2025; Open Street Map 2025

FIGURE 4.1-1E

Biological Resources

San Diego River Fire Hazard Mitigation Program EIR

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4.1.1.2 Plants and Wildlife Observed

A total of 83 species of native or non-native plants, 52 (63%) native and 31 (37%) non-native, were detected within the Project Site during the biological reconnaissance surveys. Note that the biological reconnaissance was conducted during the fall, and many spring and summer-blooming plants may not have been detectible or identifiable yet. As such, plant diversity and abundance are likely underrepresented.

A total of 44 wildlife species consisting of 41 native and 3 non-native birds were detected within the Project Site during the biological reconnaissance surveys. Wildlife diversity was moderate during the biological reconnaissance surveys due to the presence of multiple native riparian and upland vegetation communities. However, nocturnal species, cryptic species, and fossorial species are likely underrepresented.

4.1.1.3 Special-Status Plants

Special-status plant species include those listed, or candidates for listing, as threatened or endangered by the U.S. Fish and Wildlife Service (USFWS) and California Department of Fish and Wildlife (CDFW), and species identified as rare by the California Native Plant Society (particularly California Rare Plant Rank [CRPR] 1A, presumed extinct in California; CRPR 1B, rare, threatened, or endangered throughout its range; and CRPR 2, rare or endangered in California, more common elsewhere). Plant species covered under the City of Santee Draft Multiple Species Conservation Program (MSCP) Subarea Plan (City of Santee 2025) are also considered special-status. Appendix C of the Biological Resources Letter Report provides a table of all special-status plant species whose geographic ranges fall within the general vicinity of the Project Site.

A total of 32 plant species meet the special-status definition and have recorded occurrences in the Project vicinity. The Project Site is not within any designated critical habitat for special-status plant species (USFWS 2025b). Of the 32 special-status plants known to occur in the region, one species was observed present within the Project Site during field surveys: San Diego marsh-elder (*Iva hayesiana*; CRPR 2B.2). San Diego marsh-elder populations were incidentally observed on the Project Site during the biological reconnaissance surveys within freshwater marsh habitat. Known locations of white rabbit-tobacco (*Pseudognaphalium leucocephalum;* CRPR 2B.2) that are present immediately outside of the Project Site boundary are shown on Figures 4.1-2A through 4.1-2E, Suitable Special-Status Plant Habitats, as well as the observed San Diego marsh-elder individuals. A total of 7 of the 32 special-status plant species were determined to have a moderate to high potential to occur in the native vegetation communities on the Project Site. Figures 4.1-2A through 4.1-2E depict the habitats that can support the seven special-status plants that were determined to have a moderate to high potential to occur. A total of 9 of the 32 special-status plants were determined to have a low potential to occur due to suitable elevation ranges but limited habitat suitability or lack of recent or nearby occurrence records; 15 of the 32 special-status plants are not expected to occur on the Project Site due to lack of suitable habitat, soils, and/or elevation range requirements. The remaining special-status plant species that are not expected to occur or were determined to have a low potential to occur on the Project Site due to lack of suitable habitat, elevation range, and/or soils. Table 4.1-2 summarizes the special-status plant species deemed present or with a moderate or high potential to occur on the Project Site.

Table 4.1-2. Special-Status Plant Species Present or with a Moderate to High Potential to Occur on the Project Site

Scientific Name	Common Name	Status* (Federal/State/CRPR /Santee MSCP)	Primary Habitat Associations/Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Ambrosia pumila	San Diego ambrosia	FE/None/1B.1/None	Chaparral, Coastal scrub, valley and foothill grassland, Vernal pools; alkaline (sometimes), clay (sometimes), disturbed areas (often), loam (sometimes), sandy (sometimes)/perennial rhizomatous herb/Apr–Oct/65–1,360	Moderate potential to occur. The Project Site is within the species known elevation range; coastal scrub, non-native grassland, and suitable substrates are present. CNDDB occurrence records from 2006 overlap the Project Site (CDFW 2025). However, this species prefers vernal pools and none were detected on the Project Site during the biological reconnaissance.
Centromadia pungens ssp. *laevis*	smooth tarplant	None/None/1B.1/ None	Chenopod scrub, meadows and seeps, playas, riparian woodland, valley and foothill grassland; alkaline/annual herb/Apr–Sep/0–2,100	Moderate potential to occur. The Project Site is within the species known elevation range; riparian woodland and non-native grassland are present, but the Project Site lacks alkaline soils. CNDDB occurrence records from 2008–2017 located 1 mile from the Project Site (CDFW 2025).
Isocoma menziesii var. *decumbens*	decumbent goldenbush	None/None/1B.2/ None	Chaparral, coastal scrub (often disturbed areas, sandy)/perennial shrub/ Apr–Nov/35–820	Moderate potential to occur. The Project Site is within the species known elevation range; coastal scrub with sandy soils and disturbed areas are present. Multiple CNDDB occurrence records from 2005 and 2019 located 2 miles from the Project Site (CDFW 2025).
Iva hayesiana	San Diego marsh-elder	None/None/2B.2/ None	Marshes and swamps, playas/perennial herb/ Apr–Oct/0–1,640	**Present.** Observed during the biological reconnaissance surveys within the freshwater marsh habitat on the Project Site.
Monardella viminea	willowy monardella	FE/SE/1B.1/Covered	Chaparral, Coastal scrub, Riparian forest, Riparian scrub, Riparian woodland;	Moderate to occur. The Project Site is within the species known elevation range and suitable modeled habitat occurs

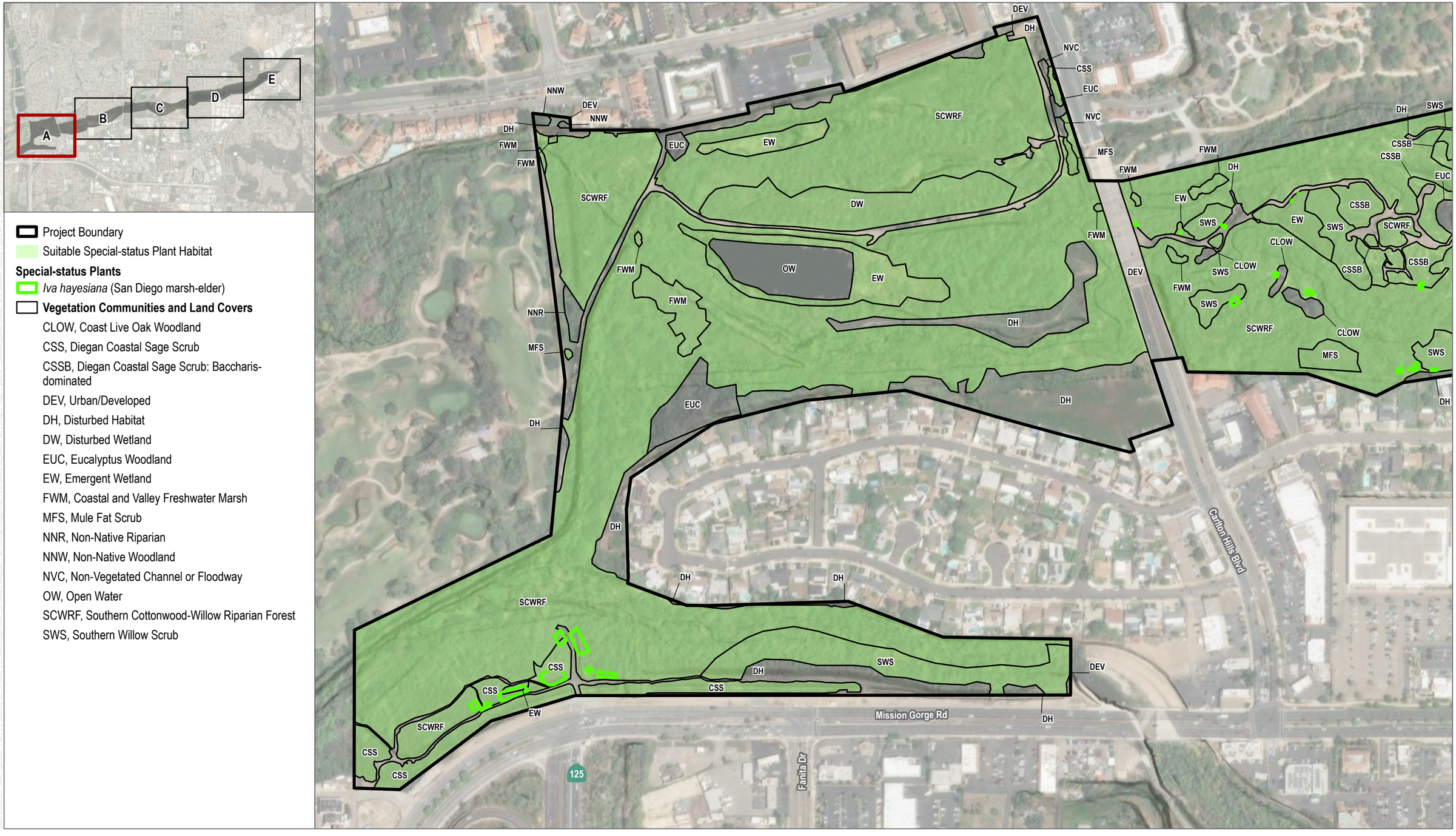
Table 4.1-2. Special-Status Plant Species Present or with a Moderate to High Potential to Occur on the Project Site

Scientific Name	Common Name	Status* (Federal/State/CRPR /Santee MSCP)	Primary Habitat Associations/Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
			Alluvial Terraces, Washes/perennial herb/June–Aug/165–740	within the Project Site (City of Santee 2025); however, this perennial species was not observed during field surveys and the site does not contain suitable alluvial terraces. Closest CNDDB occurrence record from 2007 is located 1 mile from the Project Site (CDFW 2025).
Pseudognaphalium leucocephalum	white rabbit-tobacco	None/None/2B.2/ None	Chaparral, cismontane woodland, coastal scrub, riparian woodland; gravelly, sandy/perennial herb/(July) Aug–Nov (Dec)/0–6,890	High potential to occur. Although not detected during the biological reconnaissance surveys, Dudek biologists have documented this species along sandy areas immediately adjacent to the San Diego River while working on other projects. The Project Site is within the species known elevation range; riparian woodland and sandy soils are present. Consortium of California Herbaria occurrence records from 2011 are located immediately outside of the southern Project Site boundary (CCH 2025).
Quercus dumosa	Nuttall's scrub oak	None/None/1B.1/ None	Chaparral, closed-cone coniferous forest, coastal scrub; clay, loam, sandy/perennial evergreen shrub/Feb–Apr (May–Aug)/ 50–1,310	High potential to occur. The Project Site is within the species known elevation range; coastal scrub and suitable soils present; may occur within coast live oak woodland on the Project Site. CNDDB occurrence records from 2009 overlap the Project Site (CDFW 2025).
Stylocline citroleum	oil neststraw	None/None/1B.1/ None	Chenopod scrub, coastal scrub, valley and foothill	Moderate potential to occur. The Project Site is within the species known elevation range; coastal scrub and non-native

Table 4.1-2. Special-Status Plant Species Present or with a Moderate to High Potential to Occur on the Project Site

Scientific Name	Common Name	Status* (Federal/State/CRPR /Santee MSCP)	Primary Habitat Associations/Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
			grassland; clay/annual herb/Mar–Apr/165–1,310	grassland are present along with clay soils. Historic CNDDB occurrence records from 1883 are 5 miles from the Project Site and presumed extant (CDFW 2025).

Note: CNDDB = California Natural Diversity Database; CCH = Consortium of California Herbaria.
*** Status Legend:**
Federal
FE: Federally listed as endangered
State
SE: State listed as endangered
CRPR: California Rare Plant Rank
1B: Plants rare, threatened, or endangered in California and elsewhere
2B: Plants rare, threatened, or endangered in California but more common elsewhere
Threat Rank
.1 Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)
.2 Moderately threatened in California (20% to 80% occurrences threatened/moderate degree and immediacy of threat)
Other Designations
MSCP: Multiple Species Conservation Program (City of Santee Draft MSCP Subarea Plan).



SOURCE: Vantor 2025; Open Street Map 2025

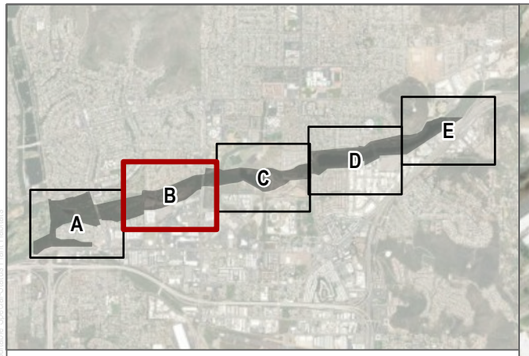
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FIGURE 4.1-2A

Suitable Special-Status Plant Habitats

San Diego River Fire Hazard Mitigation Program EIR

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Project Boundary

Suitable Special-status Plant Habitat

Special-status Plants

Iva hayesiana (San Diego marsh-elder)

Vegetation Communities and Land Covers

CLOW, Coast Live Oak Woodland

CSS, Diegan Coastal Sage Scrub

CSSB, Diegan Coastal Sage Scrub: Baccharis-dominated

DEV, Urban/Developed

DH, Disturbed Habitat

EUC, Eucalyptus Woodland

EW, Emergent Wetland

FWM, Coastal and Valley Freshwater Marsh

NNG, Non-Native Grassland

NNR, Non-Native Riparian

OW, Open Water

SCWRF, Southern Cottonwood-Willow Riparian Forest

SWS, Southern Willow Scrub



SOURCE: Vantor 2025; Open Street Map 2025

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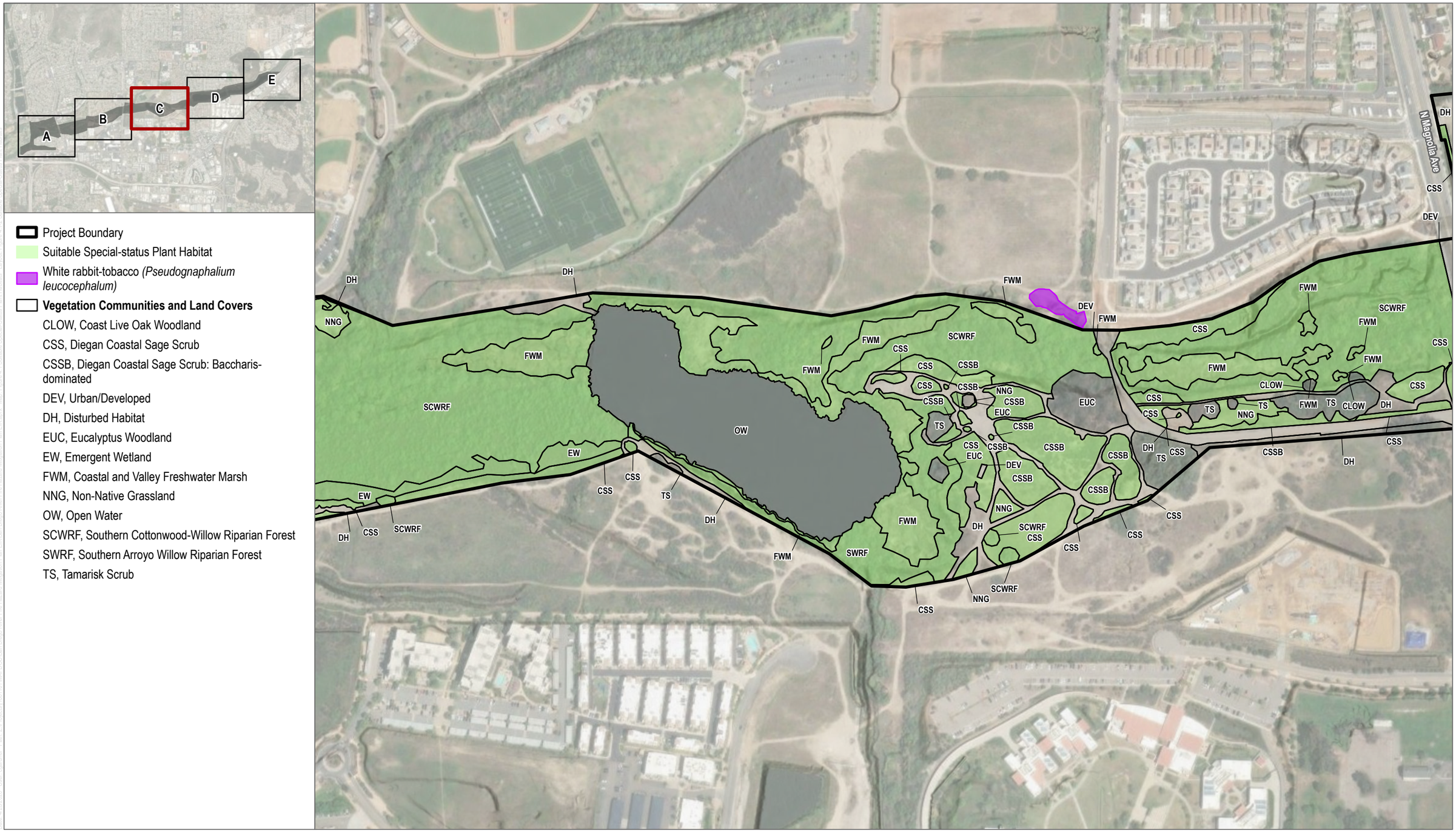
0 150 300 Feet

FIGURE 4.1-2B

Suitable Special-Status Plant Habitats

San Diego River Fire Hazard Mitigation Program EIR

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- Project Boundary
- Suitable Special-status Plant Habitat
- White rabbit-tobacco *(Pseudognaphalium leucocephalum)*
- **Vegetation Communities and Land Covers**
  - CLOW, Coast Live Oak Woodland
  - CSS, Diegan Coastal Sage Scrub
  - CSSB, Diegan Coastal Sage Scrub: Baccharis-dominated
  - DEV, Urban/Developed
  - DH, Disturbed Habitat
  - EUC, Eucalyptus Woodland
  - EW, Emergent Wetland
  - FWM, Coastal and Valley Freshwater Marsh
  - NNG, Non-Native Grassland
  - OW, Open Water
  - SCWRF, Southern Cottonwood-Willow Riparian Forest
  - SWRF, Southern Arroyo Willow Riparian Forest
  - TS, Tamarisk Scrub

SOURCE: Vantor 2025; Open Street Map 2025

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0 150 300 Feet

FIGURE 4.1-2C

Suitable Special-Status Plant Habitats

San Diego River Fire Hazard Mitigation Program EIR

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SOURCE: Vantor 2025; Open Street Map 2025

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0 150 300 Feet

FIGURE 4.1-2D

Suitable Special-Status Plant Habitats

San Diego River Fire Hazard Mitigation Program EIR

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SOURCE: Vantor 2025; Open Street Map 2025

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0 150 300 Feet

FIGURE 4.1-2E

Suitable Special-Status Plant Habitats

San Diego River Fire Hazard Mitigation Program EIR

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4.1.1.4 Special-Status Wildlife

Special-status wildlife species include those listed, or candidates for listing, as threatened or endangered by USFWS and CDFW, those designated as Species of Special Concern by CDFW, those designated as sensitive by USFWS, and Covered Species under the City of Santee Draft MSCP Subarea Plan. Appendix D of the Biological Resources Letter Report provides a table of all special-status wildlife species whose geographic ranges fall within the general vicinity of the Project Site. Special-status species' potential to occur within the Project Site were evaluated based on known species distribution, species-specific habitat preferences, and Dudek biologists' knowledge of regional biological resources. Each special-status species was assigned a rating of "not expected," "low," "moderate," or "high" potential to occur within the Project Site based on relative location to known occurrences, vegetation community, soil, and elevation.

Of the 41 special-status wildlife species known to occur in the region, a total of 24 species were determined to have a moderate to high potential to occur based on overlapping or nearby known occurrence records, as well as suitable habitats present. The remaining 17 special-status wildlife species that are not expected to occur or were determined to have a low potential to occur due to lack of suitable habitat. In addition, 2 of the 41 special-status wildlife are considered present on the Project Site: yellow warbler (*Setophaga petechia*) (CDFW Species of Special Concern when nesting) and least Bell's vireo (*Vireo bellii pusillus*) (federally and state endangered). The western portion of the Project Site is within designated critical habitat for least Bell's vireo as shown on Figure 4.1-3A, Suitable Special-Status Wildlife Habitats, and there are recent occurrence records that overlap the Project Site (USFWS 2025b; CDFW 2025). Multiple riparian woodlands, forests, scrubs, and emergent vegetation can support this species nesting and foraging on the Project Site. Yellow warbler is also considered present since the Project Site supports suitable nesting and foraging habitat and has been previously documented within the Project Site. Furthermore, coastal sage scrub habitats on the Project Site have a moderate potential to support the coastal California gnatcatcher (*Polioptila californica californica*) (federally threatened and CDFW Species of Special Concern) as there are recent occurrence records and designated critical habitat immediately adjacent to the Project Site (Figures 4.1-4, Wildlife Corridors and Habitat Linkages). Yellow warbler, least Bell's vireo, and coastal California gnatcatcher are all Covered Species under the City of Santee Draft MSCP Subarea Plan. Figures 4.1-3A through 4.1-3E also depicts the suitable habitats for special-status wildlife present, considered present, or determined to have a moderate or high potential to occur on the Project Site. Table 4.1-3 summarizes the special-status wildlife deemed present, considered present, or with a moderate to high potential to occur on the Project Site.

Table 4.1-3. Special-Status Wildlife Present, Considered Present, or with a Moderate to High Potential to Occur on the Project Site

Scientific Name	Common Name	Status* (Federal/State/Draft Santee MSCP)	Habitat	Potential to Occur
Reptiles				
Anniella stebbinsi	southern California legless lizard	None/SSC/None	Coastal dunes, stabilized dunes, beaches, dry washes, valley–foothill, chaparral, and scrubs; pine, oak, and riparian woodlands; associated with sparse vegetation and moist sandy or loose, loamy soils	High potential to occur. Suitable habitats present (coastal scrub, wash, oak woodland, riparian woodland; moist sandy soils). CNDDB occurrence record from 2012 overlap the western portion of the Project Site (CDFW 2025).
Arizona elegans occidentalis	California glossy snake	None/SSC/None	Arid scrub, rocky washes, grasslands, chaparral, open areas with loose soil	High potential to occur. Suitable substrate present. Historic CNDDB occurrence records from 1973 overlap the Project Site (CDFW 2025).
Aspidoscelis hyperythrabeldingi	Belding's orange-throated whiptail	None/WL/Covered	Low-elevation coastal scrub, chaparral, and valley–foothill hardwood	High potential to occur. Suitable coastal scrub habitat and hardwood present. CNDDB occurrence records from 1999 border the northern Project Site boundary (CDFW 2025).
Aspidoscelis tigris stejnegeri	San Diegan tiger whiptail	None/SSC/None	Hot and dry areas with sparse foliage, including chaparral, woodland, and riparian areas	High potential to occur. Riparian woodland is present. CNDDB occurrence records from 2008 are located 4 miles from the Project Site (CDFW 2025).
Crotalus ruber	red diamond-back rattlesnake	None/SSC/None	Coastal scrub, chaparral, oak and pine woodlands, rocky grasslands, cultivated areas, and desert flats	Moderate potential to occur. Coastal scrub and oak woodland present could provide suitable habitat for this species. CNDDB occurrence record from 1998 within 1 mile of the Project Site (CDFW 2025).
Phrynosoma blainvillii	Blainsville's horned lizard	None/SSC/Covered	Open areas of sandy soil in valleys, foothills, and semi-arid mountains including coastal	Moderate potential to occur. Coastal scrub, riparian woodland, and grassland with sandy soils present. Historic CNDDB

Table 4.1-3. Special-Status Wildlife Present, Considered Present, or with a Moderate to High Potential to Occur on the Project Site

Scientific Name	Common Name	Status* (Federal/State/Draft Santee MSCP)	Habitat	Potential to Occur
			scrub, chaparral, valley–foothill hardwood, conifer, riparian, pine–cypress, juniper, and annual grassland habitats	occurrence records from 1937 overlap the Project Site; however, the Project Site is currently fairly isolated (CDFW 2025).
Salvadora hexalepis virgultea	coast patch-nosed snake	FPT/SSC/None	Brushy or shrubby vegetation; requires small mammal burrows for refuge and overwintering sites	Moderate potential to occur. Suitable brushy or shrubby vegetation present. A CNDDB occurrence record from 2004 is located 4 miles from the Project Site (CDFW 2025).
Thamnophis hammondii	two-striped gartersnake	None/SSC/None	Streams, creeks, pools, streams with rocky beds, ponds, lakes, vernal pools	High potential to occur. San Diego River on site provides suitable habitat. A CNDDB occurrence record from 1998 is within 1 mile of the Project Site (CDFW 2025).
Birds				
Athene cunicularia (burrow sites and some wintering sites)	burrowing owl	BCC/SSC, SC/Covered	Nests and forages in grassland, open scrub, and agriculture, particularly with ground squirrel burrows	Moderate potential to occur. Coastal scrub and grassland present. The nearest CNDDB occurrence record within 1 mile of the Project Site is from 1921 and extirpated; however, there are occurrence records from 2024 located 2 miles from the Project Site (CDFW 2025).
Coturnicops noveboracensis	yellow rail	BCC/SSC/None	Nesting requires wet marsh/ sedge meadows or coastal marshes with wet soil and shallow, standing water	Moderate potential to occur. Suitable nesting habitat present (freshwater marsh, shallow standing water) along San Diego River in the Project Site. CNDDB occurrence records from 1998 overlap the Project Site (CDFW 2025).
Icteria virens (nesting)	yellow-breasted chat	None/SSC/None	Nests and forages in dense, relatively wide riparian woodlands	**Considered present.** Suitable nesting and foraging habitat present; San Diego River

Table 4.1-3. Special-Status Wildlife Present, Considered Present, or with a Moderate to High Potential to Occur on the Project Site

Scientific Name	Common Name	Status* (Federal/State/Draft Santee MSCP)	Habitat	Potential to Occur
			and thickets of willows, vine tangles, and dense brush	supports relatively wide riparian thickets of willows and dense brush throughout the Project Site. CNDDB occurrence record from 1994 are located 4 miles from the Project Site (CDFW 2025).
Polioptila californica californica	coastal California gnatcatcher	FT/SSC/Covered	Nests and forages in various sage scrub communities, often dominated by California sagebrush and buckwheat; generally avoids nesting in areas with a slope of greater than 40%; majority of nesting at less than 1,000 feet above mean sea level	**Considered present**. Coastal sage scrub is present within uplands along the north and south Project Site boundaries. There are CNDDB occurrence records from 1999 border the north Project Site boundary (CDFW 2025). There is designated critical habitat for this species approximately 1 mile north and south of the Project Site (USFWS 2025b).
Setophaga petechia (nesting)	yellow warbler	None/SSC/None	Nests and forages in riparian and oak woodlands, montane chaparral, open ponderosa pine, and mixed-conifer habitats	**Considered present**. Suitable nesting and foraging habitat present throughout the riparian areas along the San Diego River in the Project Site. CNDDB occurrence record from 1972 located 2 miles from the Project Site (CDFW 2025). Although not detected during the biological reconnaissance surveys, Dudek biologists have documented this species along the San Diego River within Santee while working on other projects.
Vireo bellii pusillus (nesting)	least Bell's vireo	FE/SE/Covered	Nests and forages in low, dense riparian thickets along water or along dry parts of intermittent streams; forages in riparian and adjacent shrubland late in nesting season	**Considered present**. Suitable nesting and foraging habitat present (riparian woodlands, mulefat scrub, willow scrub) along San Diego River. CNDDB occurrence records from 2012 overlap the Project Site (CDFW 2025). The

Table 4.1-3. Special-Status Wildlife Present, Considered Present, or with a Moderate to High Potential to Occur on the Project Site

Scientific Name	Common Name	Status* (Federal/State/Draft Santee MSCP)	Habitat	Potential to Occur
				western portion of the Project Site overlaps designated critical habitat for this species (USFWS 2025b). Although not detected during the biological reconnaissance surveys, Dudek biologists have documented this species along the San Diego River within Santee while working on other projects.
Botaurus exilis (nesting)	least bittern	None/SSC/None	Nests in freshwater and brackish marshes with dense, tall growth of aquatic and semi-aquatic vegetation	Moderate potential to occur. Suitable nesting habitat present. CNDDB occurrence record from 2007 located 2 miles from the Project Site (CDFW 2025).
Mammals				
Antrozous pallidus	pallid bat	None/SSC/ None	Grasslands, shrublands, woodlands, forests; most common in open, dry habitats with rocky outcrops for roosting, but also roosts in built structures and trees	Moderate potential to occur. Suitable habitat (grassland, woodlands, riparian forest) is present although the site lacks rocky outcrops for roosting; there are CNDDB occurrence records from 1951 that overlap the Project Site (CDFW 2025).
Corynorhinus townsendii	Townsend's big-eared bat	None/SSC/ None	Mesic habitats characterized by coniferous and deciduous forests and riparian habitat, but also xeric areas; roosts in limestone caves and lava tubes, built structures, and tunnels	Moderate potential to occur. No roosting habitat present but may forage over San Diego River's riparian habitats throughout the Project Site. CNDDB occurrence record from 1991 located 5 miles from the Project Site (CDFW 2025).
Dasypterus xanthinus	western yellow bat	None/SSC/None	Valley–foothill riparian, desert riparian, desert wash, and palm oasis habitats; below 2,000 feet above mean sea level; roosts in riparian and palms	High potential to occur. Suitable roosting habitat (riparian) present. CNDDB occurrence records from 1979 are immediately east of the Project Site (CDFW 2025).

Table 4.1-3. Special-Status Wildlife Present, Considered Present, or with a Moderate to High Potential to Occur on the Project Site

Scientific Name	Common Name	Status* (Federal/State/Draft Santee MSCP)	Habitat	Potential to Occur
Eumops perotis californicus	western mastiff bat	None/SSC/None	Chaparral, coastal and desert scrub, coniferous and deciduous forest and woodland; roosts in crevices in rocky canyons and cliffs where the canyon or cliff is vertical or nearly vertical, trees, and tunnels	Moderate potential to occur. Coastal scrub and woodlands present could provide roosting habitat. CNDDB occurrence records from 2003 located 4 miles from the Project Site (CDFW 2025).
Neotoma lepida intermedia	San Diego desert woodrat	None/SSC/None	Coastal scrub, desert scrub, chaparral, cacti, rocky areas	Moderate potential to occur in coastal scrub throughout the Project Site, although rocky areas are absent. CNDDB occurrence record from 1998 within 1 mile of the Project Site (CDFW 2025).
Nyctinomops femorosaccus	pocketed free-tailed bat	None/SSC/None	Pinyon–juniper woodlands, desert scrub, desert succulent shrub, desert riparian, desert wash, alkali desert scrub, Joshua tree, and palm oases; roosts in high cliffs or rock outcrops with drop-offs, caverns, and buildings	Moderate potential to occur. No roosting habitat present; however, CNDDB occurrence records from 1990 overlap the Project Site and there is riparian/wash habitat along the Project Site that can be seasonally arid. Multiple CNDDB occurrence records from 1983 to 2003 located 3 to 5 miles from the Project Site (CDFW 2025).
Nyctinomops macrotis	Big free-tailed bat	None/SSC/None	Rocky areas; roosts in caves, holes in trees, buildings, and crevices on cliffs and rocky outcrops; forages over water	High potential to occur. May forage over San Diego River in the Project Site. Not expected to roost as no suitable roosting habitat present. CNDDB occurrence records from 1989 overlap the Project Site (CDFW 2025).
Lasiurus frantzii	western red bat	None/SSC/None	Forest, woodland, riparian, mesquite bosque, and orchards, including fig, apricot, peach, pear, almond, walnut, and orange; roosts in tree canopy	Moderate potential to occur. Suitable roosting habitat present (riparian forest and woodland). A CNDDB occurrence record from 2003 is located 4 miles from the Project Site (CDFW 2025).

Table 4.1-3. Special-Status Wildlife Present, Considered Present, or with a Moderate to High Potential to Occur on the Project Site

Scientific Name	Common Name	Status* (Federal/State/Draft Santee MSCP)	Habitat	Potential to Occur
Invertebrates				
Bombus crotchii	Crotch's bumble bee	None/SCE/ Covered	Open grassland and scrub communities supporting suitable floral resources.	Moderate potential to occur. Suitable habitat present along with floral resources for foraging. Nearest CNDDB occurrence record is 2 miles from the Project Site, from 2020 (CDFW 2025).

Note: CNDDB = California Natural Diversity Database.
*** Status Abbreviations:**
Federal
FE: Federally listed as endangered
FT: Federally listed as threatened
FPT: Federally proposed for listing as threatened
BCC: U.S. Fish and Wildlife Service Bird of Conservation Concern
State
SSC: California Species of Special Concern
WL: California Watch List Species
SE: State listed as endangered
SC: State candidate for listing as threatened or endangered
SCE: State candidate for listing as endangered
Other Designations
MSCP: Multiple Species Conservation Program (City of Santee Draft MSCP Subarea Plan)

4.1.1.5 Jurisdictional Resources

Although a formal jurisdictional delineation was not conducted during the biological reconnaissance field surveys, the Project Site was evaluated for the potential to support jurisdictional waters regulated under the federal Clean Water Act (CWA), California Fish and Game Code, and Porter–Cologne Water Quality Act (Porter–Cologne Act). Baseline wetland mapping from the USFWS National Wetlands Inventory and U.S. Geological Survey National Hydrography Dataset were used as a basis to inform the outer limits of potentially jurisdictional waters, such as streams or wetlands, on the Project Site (USFWS 2025a; USGS 2025).

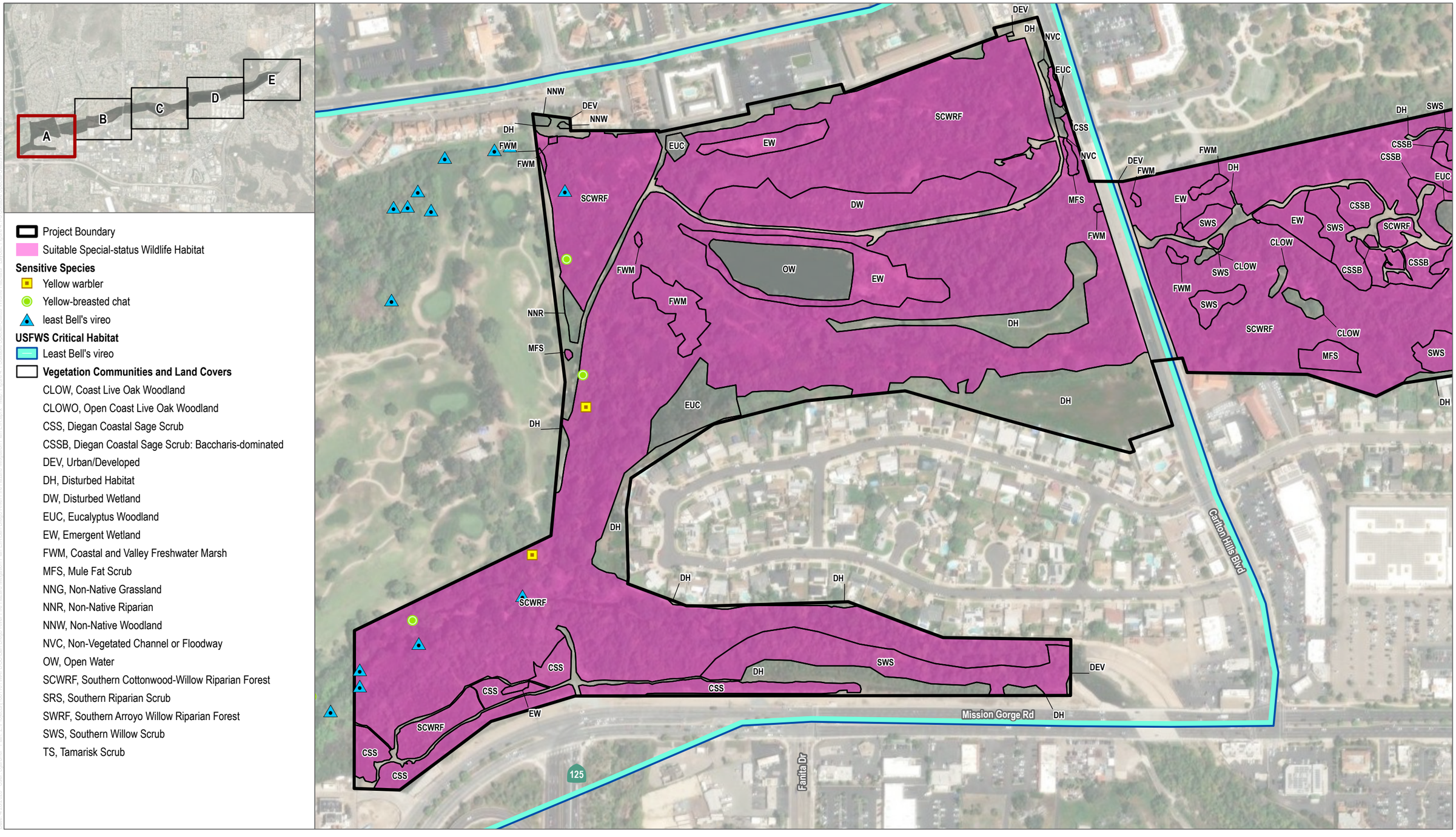
Potential non-wetland waters of the United States and state regulated by the U.S. Army Corps of Engineers (USACE) and/or Regional Water Quality Control Board (RWQCB) and CDFW streambed/associated riparian habitat were identified in the Project Site, consisting of the San Diego River, its tributary (Forester Creek), and multiple associated riparian/wetland vegetation communities/land covers. These features were informally mapped and examined based on the observable presence of an ordinary high water mark, hydrology indicators and/or hydrophytic (wetland) vegetation. No formal wetland determination points were taken in the Project Site.

Potential jurisdictional aquatic resources on the Project Site are depicted on Figure 4.1-5, Potentially Jurisdictional Aquatic Resources. Table 4.1-4 summarizes the acreages of the riparian/wetland vegetation communities (all considered sensitive by the City of Santee MSCP Draft Subarea Plan) and National Wetlands Inventory-mapped wetlands on the Project Site that would be considered potential jurisdictional aquatic resources. Note that the acreage of jurisdictional aquatic resources on the Project Site was calculated based off the riparian/wetland vegetation communities mapping conducted during the biological reconnaissance surveys; any National Wetlands Inventory-mapped resources that did not overlap the vegetation communities were added to the overall potential jurisdictional resources acreage to conservatively estimate the extent of potentially jurisdictional resources on the Project Site.

Table 4.1-4. Potential Jurisdictional Aquatic Resources Within the Project Site

Aquatic Resource Type	Acreage
USACE/RWQCB/CDFW	
Non-wetland Waters/Streambeds	40.18
Wetlands/Riparian Habitat	195.47
Potential Jurisdictional Aquatic Resource Total	**236.65**

Source: USFWS National Wetlands Inventory (USFWS 2025a).
Notes: USACE = U.S. Army Corps of Engineers; RWQCB = Regional Water Quality Control Board; CDFW = California Department of Fish and Wildlife.



SOURCE: Vantor 2025; Open Street Map 2025

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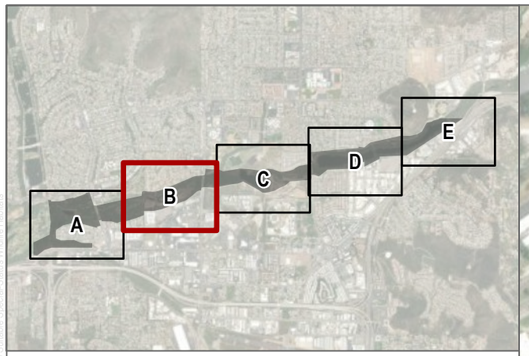
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FIGURE 4.1-3A

Suitable Special-Status Wildlife Habitats

San Diego River Fire Hazard Mitigation Program EIR

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Project Boundary

Suitable Special-status Wildlife Habitat

Vegetation Communities and Land Covers

CLOW, Coast Live Oak Woodland

CLOWO, Open Coast Live Oak Woodland

CSS, Diegan Coastal Sage Scrub

CSSB, Diegan Coastal Sage Scrub: Baccharis-dominated

DEV, Urban/Developed

DH, Disturbed Habitat

DW, Disturbed Wetland

EUC, Eucalyptus Woodland

EW, Emergent Wetland

FWM, Coastal and Valley Freshwater Marsh

MFS, Mule Fat Scrub

NNG, Non-Native Grassland

NNR, Non-Native Riparian

NNW, Non-Native Woodland

NVC, Non-Vegetated Channel or Floodway

OW, Open Water

SCWRF, Southern Cottonwood-Willow Riparian Forest

SRS, Southern Riparian Scrub

SWRF, Southern Arroyo Willow Riparian Forest

SWS, Southern Willow Scrub

TS, Tamarisk Scrub

SOURCE: Vantor 2025; Open Street Map 2025

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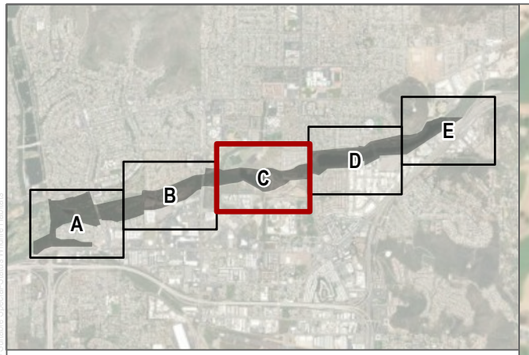
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FIGURE 4.1-3B

Suitable Special-Status Wildlife Habitats

San Diego River Fire Hazard Mitigation Program EIR

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Project Boundary

Suitable Special-status Wildlife Habitat

Sensitive Species

Yellow warbler

least Bell's vireo

Vegetation Communities and Land Covers

CLOW, Coast Live Oak Woodland

CLOWO, Open Coast Live Oak Woodland

CSS, Diegan Coastal Sage Scrub

CSSB, Diegan Coastal Sage Scrub: Baccharis-dominated

DEV, Urban/Developed

DH, Disturbed Habitat

DW, Disturbed Wetland

EUC, Eucalyptus Woodland

EW, Emergent Wetland

FWM, Coastal and Valley Freshwater Marsh

MFS, Mule Fat Scrub

NNG, Non-Native Grassland

NNR, Non-Native Riparian

NNW, Non-Native Woodland

NVC, Non-Vegetated Channel or Floodway

OW, Open Water

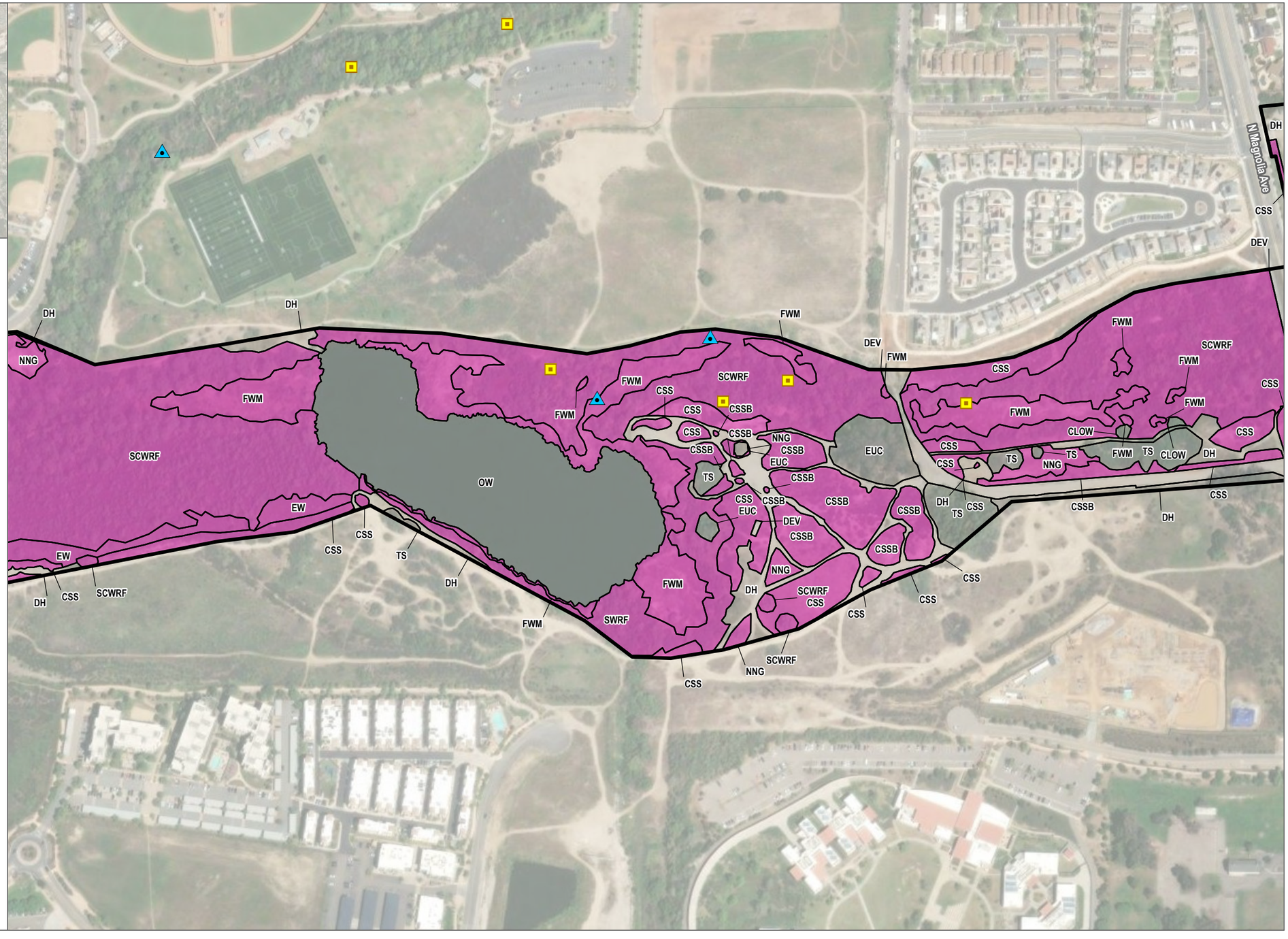
SCWRF, Southern Cottonwood-Willow Riparian Forest

SRS, Southern Riparian Scrub

SWRF, Southern Arroyo Willow Riparian Forest

SWS, Southern Willow Scrub

TS, Tamarisk Scrub



SOURCE: Vantor 2025; Open Street Map 2025

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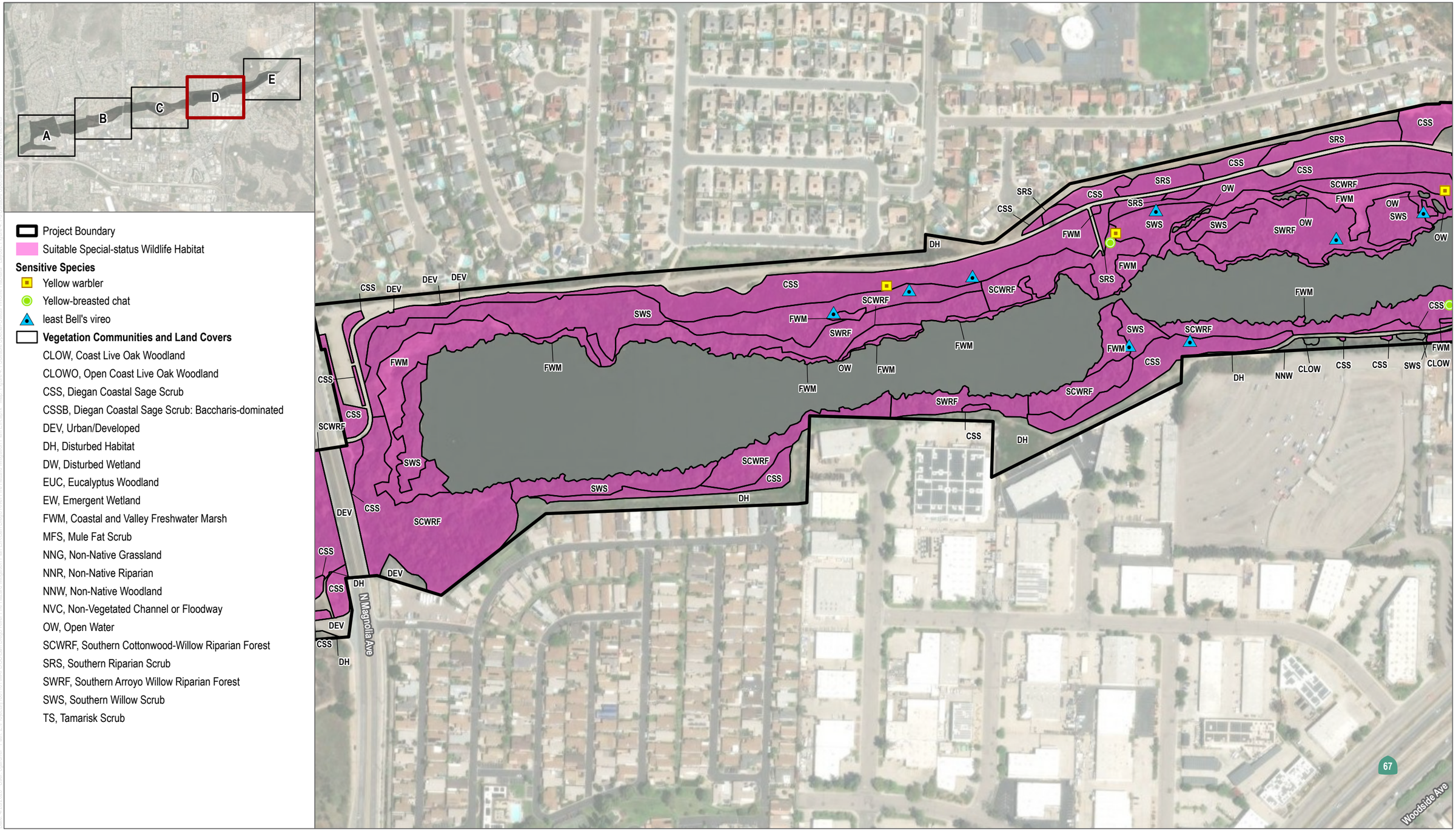
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FIGURE 4.1-3C

Suitable Special-Status Wildlife Habitats

San Diego River Fire Hazard Mitigation Program EIR

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SOURCE: Vantor 2025; Open Street Map 2025

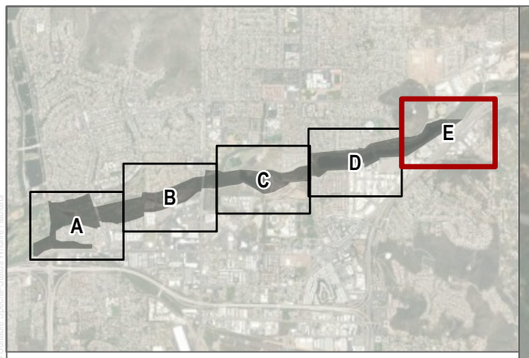
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FIGURE 4.1-3D

Suitable Special-Status Wildlife Habitats

San Diego River Fire Hazard Mitigation Program EIR

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Project Boundary

Suitable Special-status Wildlife Habitat

Sensitive Species

Yellow-breasted chat

coastal California gnatcatcher

Vegetation Communities and Land Covers

CLOW, Coast Live Oak Woodland

CLOWO, Open Coast Live Oak Woodland

CSS, Diegan Coastal Sage Scrub

CSSB, Diegan Coastal Sage Scrub: Baccharis-dominated

DEV, Urban/Developed

DH, Disturbed Habitat

DW, Disturbed Wetland

EUC, Eucalyptus Woodland

EW, Emergent Wetland

FWM, Coastal and Valley Freshwater Marsh

MFS, Mule Fat Scrub

NNG, Non-Native Grassland

NNR, Non-Native Riparian

NNW, Non-Native Woodland

NVC, Non-Vegetated Channel or Floodway

OW, Open Water

SCWRF, Southern Cottonwood-Willow Riparian Forest

SRS, Southern Riparian Scrub

SWRF, Southern Arroyo Willow Riparian Forest

SWS, Southern Willow Scrub

TS, Tamarisk Scrub

SOURCE: Vantor 2025; Open Street Map 2025

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0 150 300 Feet

FIGURE 4.1-3E

Suitable Special-Status Wildlife Habitats

San Diego River Fire Hazard Mitigation Program EIR

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Mast Blvd
N Cuyamaca St
Woodside Ave
67
Carlton Hills Blvd
Fanita Dr
125
Mission Gorge Rd
Cuyamaca St
N Magnolia Ave
52
Prospect Ave

Project Boundary
coastal California gnatcatcher Stepping Stone Linkage
coastal California gnatcatcher Habitat Blocks
Existing Protected Open Space
Hardline Conservation Lands
San Diego River Subunit *(Draft Santee MSCP Subarea Plan (City of Santee 2025))*
San Diego River Corridor Ordinance *(Draft Santee MSCP Subarea Plan (City of Santee 2025))*
Biological Core and Linkage Areas

SOURCE: Vantor 2025; Open Street Map 2025; SanGIS 2025; City of Santee 2025

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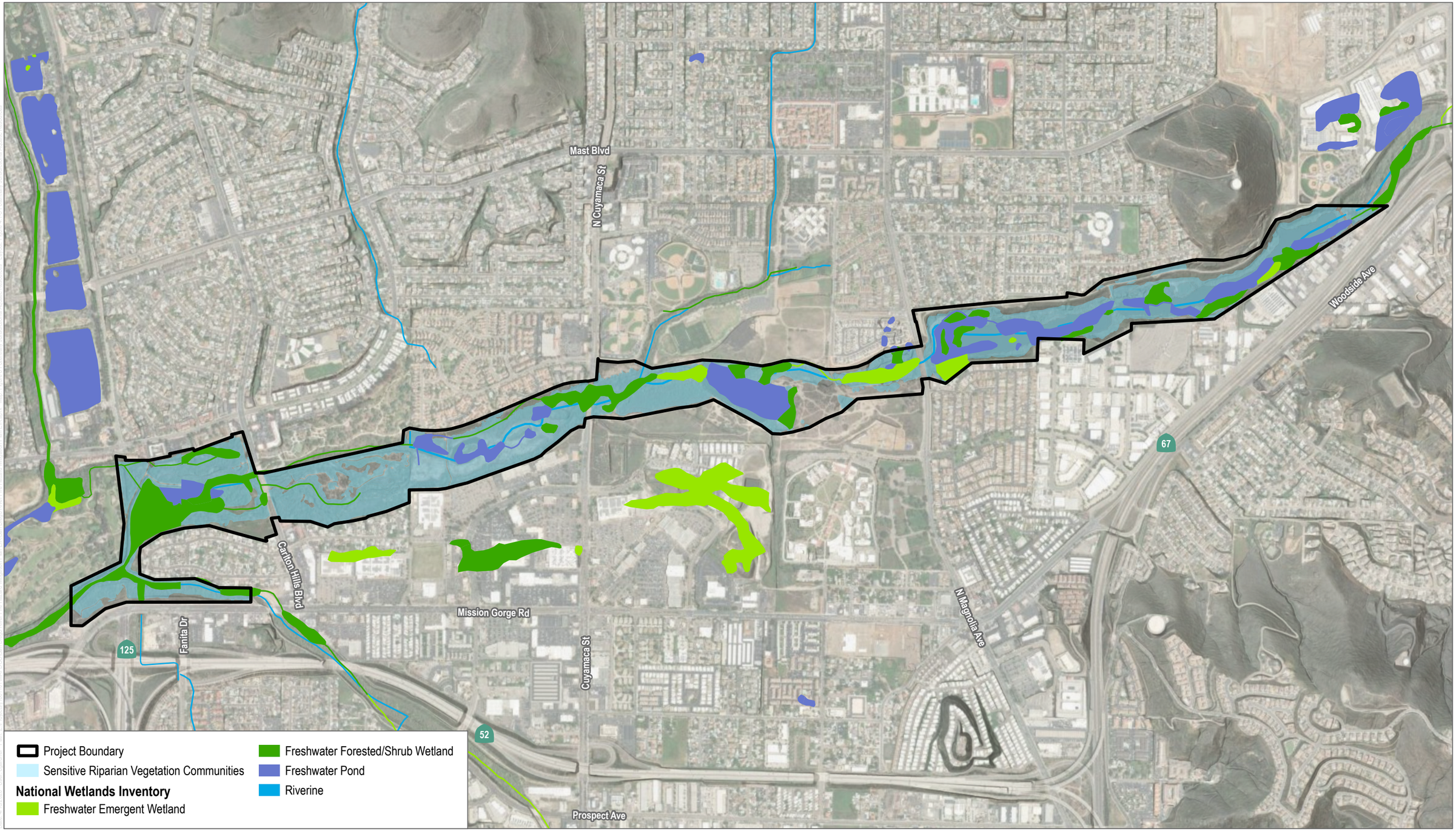
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FIGURE 4.1-4

Wildlife Corridors and Habitat Linkages

San Diego River Fire Hazard Mitigation Program EIR

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SOURCE: Vantor 2025; Open Street Map 2025; USGS NHD 2025; USFWS NWI 2025

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0 500 1,000 Feet

FIGURE 4.1-5

Potentially Jurisdictional Aquatic Resources

San Diego River Fire Hazard Mitigation Program EIR

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4.1.1.6 Wildlife Corridors, Habitat Linkages, and Wildlife Nursery Sites

The San Diego MSCP Plan (City of San Diego 1998) defines core and linkage areas as those maintaining ecosystem function and processes, including large animal movement. Each core area is connected to other core areas or to habitat areas outside of the MSCP study area either through common boundaries or through linkages. Core areas have multiple connections to help ensure that the balance in the ecosystem would be maintained.

Biological core and linkage areas are identified in the MSCP Plan (City of San Diego 1998) and used without revision on Figure 2-12 in the Draft Santee MSCP Subarea Plan (City of Santee 2025) and shown in context of the Project Site on Figure 4.1-6, MSCP Lands. According to the City of Santee Draft MSCP Subarea Plan, the San Diego River provides a corridor for wildlife movement and connectivity through the urbanized portion of the City of Santee (City of Santee 2025). The western portion of the Project Site from Forester Creek up to Mast Park is mapped as a San Diego County MSCP biological core and linkage area (Figure 2-12 in City of Santee 2025). The San Diego River segment within the Project Site is identified as a "Habitat Linkage/Wildlife Corridor," and there is a "Habitat Connectivity Connection with Surrounding Open Space" associated with the Forrester Creek portion of the site and adjacent golf course (Figure 5-3 in City of Santee 2025). The Draft City of Santee MSCP Subarea Plan also maps a "Coastal California Gnatcatcher Stepping Stone Linkage" across the easternmost portion of the Project Site to connect two mapped "Coastal Sage Scrub/Gnatcatcher Habitat Blocks" that are present in uplands that border the easternmost portion of the northern and southern Project Site boundaries. Figure 4.1-4 depicts the City of Santee MSCP Draft Subarea Plan San Diego River Corridor and coastal California gnatcatcher habitat blocks/linkages, mapped within and immediately adjacent to the Project Site.

The Project Site could potentially function as wildlife habitat for local populations of common mammal species. Species most likely to use the Project Site include coyote (*Canis latrans*), mule deer (*Odocoileus hemionus*), raccoon (*Procyon lotor*), striped skunk (*Mephitis mephitis*), and Virginia opossum (*Didelphis virginiana*). Larger species, such as bobcat (*Lynx rufus*) and mountain lion (*Puma concolor*) are not expected to use this highly urbanized vicinity of the San Diego River Corridor due to the amount of adjacent commercial and industrial uses, large presence of human encampments, and general lack of connectivity to larger core areas of suitable habitat.

Bat roosting opportunities for multiple special-status bat species are present throughout the riparian habitats surrounding San Diego River in the Project Site but surrounding commercial and residential development causes noise disturbance. In addition, no diagnostic signs of bird rookeries (e.g., numerous nests, whitewash) or large maternal or overwintering bat roosts (e.g., large concentrations of guano or guano odors) were identified in the Project Site during the biological reconnaissance field surveys. Therefore, it is unlikely for the Project Site to support wildlife nursery sites.

The Project Site contains multiple native vegetation communities that could provide nesting habitat for birds protected under the Migratory Bird Treaty Act and California Fish and Game Code Sections 3503, 3503.5, and 3513. These include raptors and special-status wildlife species as well as common species adapted to urban environments.

4.1.2 Relevant Plans, Policies, and Ordinances

Federal

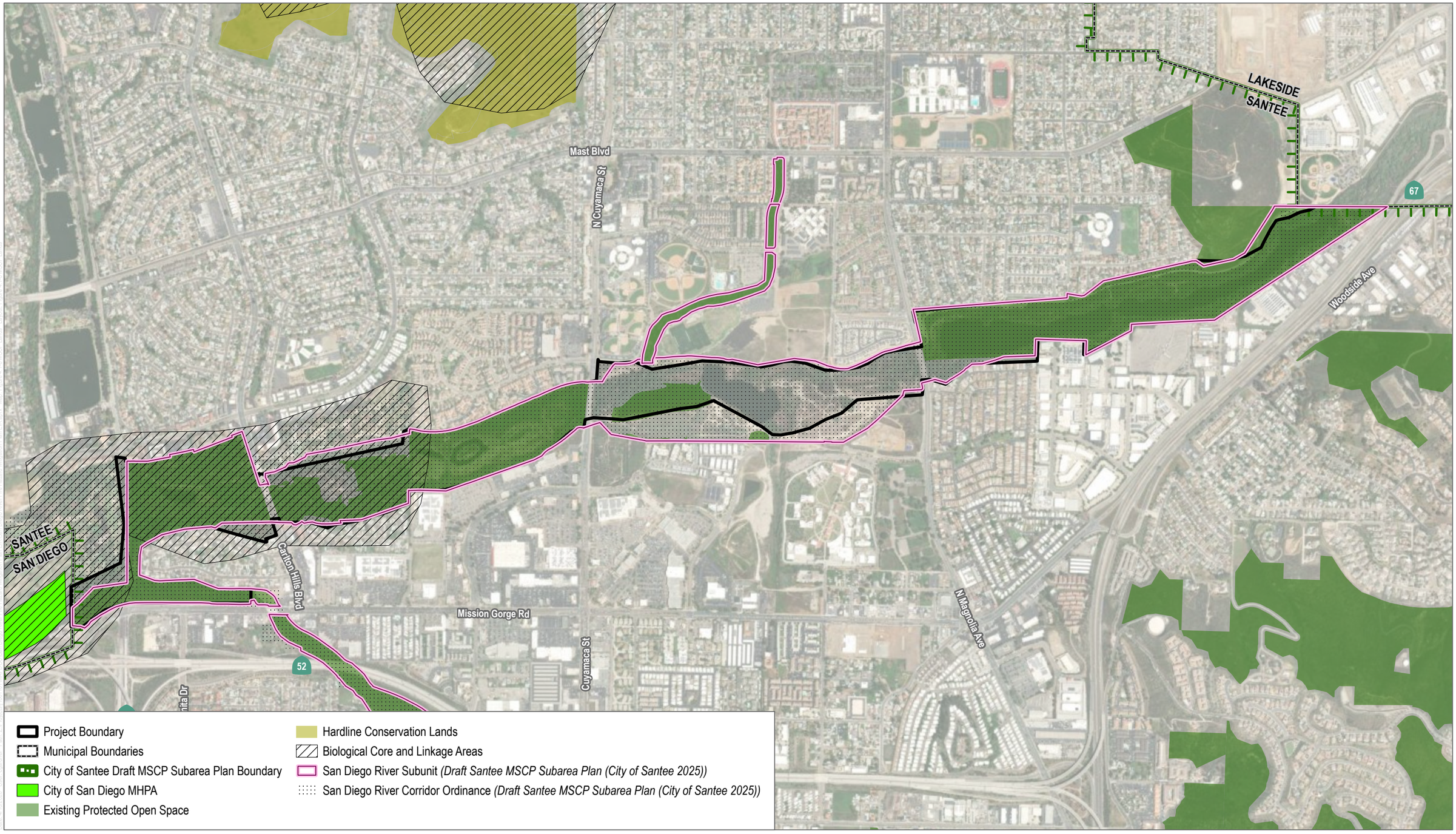
Federal Endangered Species Act

The federal Endangered Species Act (FESA) of 1973 (16 USC 1531 et seq.), as amended, is administered by USFWS for most plant and animal species, and by the National Oceanic and Atmospheric Administration National Marine Fisheries Service for certain marine species. This legislation is intended to provide a means to conserve the ecosystems upon which endangered and threatened species depend, and provide programs for the conservation of those species, thus preventing the extinction of plants and wildlife. FESA defines an endangered species as "any species that is in danger of extinction throughout all or a significant portion of its range." A threatened species is defined as "any species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range." Under FESA, it is unlawful to "take" any listed species; "take" is defined as, "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct."

FESA allows for the issuance of incidental take permits for listed species under Section 7, which is generally available for projects that also require other federal agency permits or other approvals, and under Section 10, which provides for the approval of habitat conservation plans (HCPs) on private property without any other federal agency involvement.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act prohibits the intentional and unintentional take of any migratory bird or any part, nest, or eggs of any such bird. Under the Migratory Bird Treaty Act, "take" is defined as pursuing, hunting, shooting, capturing, collecting, or killing, or attempting to do so (16 USC 703 et seq.). Currently, the Migratory Birds office considers nests that support eggs, nestlings, or juveniles to be active. Additionally, Executive Order 13186, Responsibilities of Federal Agencies to Protect Migratory Birds, requires that any project with federal involvement address impacts of federal actions on migratory birds with the purpose of promoting conservation of migratory bird populations (66 FR 3853–3856). Executive Order 13186 requires federal agencies to work with USFWS to develop a Memorandum of Understanding. USFWS reviews actions that might affect these species.



SOURCE: Vantor 2025; Open Street Map 2025; SanGIS 2025; City of Santee 2025

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FIGURE 4.1-6

MSCP Lands

San Diego River Fire Hazard Mitigation Program EIR

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Clean Water Act

The CWA provides guidance for the restoration and maintenance of the chemical, physical, and biological integrity of the nation's waters. Section 401 requires a project operator for a federal license or permit that allows activities resulting in a discharge to waters of the United States to obtain state certification, thereby ensuring that the discharge would comply with provisions of the CWA. The RWQCBs administer the certification program in California. Section 402 establishes a permitting system for the discharge of any pollutant (except dredged or fill material) into waters of the United States. Section 404 establishes a permit program administered by USACE that regulates the discharge of dredged or fill material into waters of the United States, including wetlands. USACE implementing regulations are found in the Code of Federal Regulations (CFR) at 33 CFR Parts 320 to 332. Guidelines for implementation are referred to as the Section 404(b)(1) Guidelines, which were developed by the U.S. Environmental Protection Agency in conjunction with USACE (40 CFR 230). The guidelines allow the discharge of dredged or fill material into the aquatic system only if there is no practicable alternative that would have less adverse impacts. Wetlands and Other Waters of the United States

Based on a recent court case ordering vacation of the Navigable Waters Protection Rule, USACE and the U.S. Environmental Protection Agency have halted implementation of the rule and are interpreting waters of the United States consistent with the pre-2015 regulatory regime until further notice. Per 33 CFR 328.3(a), waters of the United States are defined as follows:

1. All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
2. All interstate waters including interstate wetlands;
3. All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce including any such waters:
    a. Which are or could be used by interstate or foreign travelers for recreational or other purposes; or
    b. From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
    c. Which are used or could be used for industrial purposes by industries in interstate commerce;
4. All impoundments of waters otherwise defined as waters of the United States under this definition;
5. Tributaries of waters identified in paragraphs (a)(1) through (4) of this section;
6. The territorial seas;
7. Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a)(1) through (6) of this section; and
8. Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA (other than cooling ponds as defined in 40 CFR 423.11(m) which also meet the criteria of this definition) are not waters of the United States.

The USACE/U.S. Environmental Protection Agency Rapanos Guidance states that USACE will regulate traditional navigable waters and adjacent wetlands, and relatively permanent waters tributary to traditional navigable waters and adjacent wetlands. Non-relatively permanent waters (those exhibiting less than 3 months of continuous surface flows) and their adjacent wetlands would be regulated if there is a significant nexus from the site to traditional navigable waters.

The State Water Resources Control Board has authority over wetlands through Section 401 of the CWA, as well as the Porter–Cologne Act, California Code of Regulations Section 3831(k), and California Wetlands Conservation Policy. The CWA requires that an applicant for a Section 404 permit (to discharge dredge or fill material into waters of the United States) first obtain certification from the appropriate state agency stating that the fill is consistent with the state's water quality standards and criteria. In California, the authority to either grant certification or waive the requirement for permits is delegated by the State Water Resources Control Board to the nine RWQCBs. A request for certification is submitted to the RWQCB at the same time that an application is filed with USACE.

State

California Endangered Species Act

The California Endangered Species Act (CESA) (California Fish and Game Code Sections 2050–2068) provides protection for and prohibits the take of plant, fish, and wildlife species listed by the State of California. Unlike FESA, under CESA, state-listed plants have the same degree of protection as wildlife, but insects and other invertebrates may not be listed. Take is defined similarly to FESA and is prohibited for both listed and candidate species. Take authorization may be obtained by a project applicant from CDFW under CESA Section 2081, which allows take of a listed species for educational, scientific, or management purposes. In this case, developers consult with CDFW to develop a set of measures and standards for managing the listed species, including full mitigation for impacts, funding of implementation, and monitoring of mitigation measures.

California Fish and Game Code

Fully Protected Species

Sections 3511, 4700, 5050, and 5515 of the California Fish and Game Code outline protection for fully protected species of mammals, birds, reptiles, amphibians, and fish. Species that are fully protected by these sections may not be taken or possessed at any time. CDFW cannot issue permits or licenses that authorize the "take" of any fully protected species, except under certain circumstances, such as scientific research and live capture and relocation of such species pursuant to a permit for the protection of livestock. On July 10, 2023, Senate Bill 147 was signed into law and amends the California Fish and Game Code to allow a 10-year permitting mechanism for a defined set of projects within the renewable energy, transportation, and water infrastructure sectors. Furthermore, it is the responsibility of the CDFW to maintain viable populations of all native species. Toward that end, CDFW has designated certain vertebrate species as Species of Special Concern, because declining population levels, limited ranges, and/or continuing threats have made them vulnerable to extinction.

Sections 1600–1616

CDFW jurisdiction includes ephemeral, intermittent, and perennial watercourses (including dry washes) and lakes characterized by the presence of (1) definable bed and banks and (2) existing fish or wildlife resources. CDFW takes jurisdiction to the top of bank of the stream, or the limit of the adjacent riparian vegetation, which may include oak woodlands in canyon bottoms. Historical court cases have further extended CDFW jurisdiction to include watercourses that seemingly disappear but reemerge elsewhere. Under the CDFW definition, a watercourse need not exhibit evidence of an ordinary high water mark to be claimed as jurisdictional. CDFW does not have jurisdiction over ocean or shoreline resources.

Under California Fish and Game Code Sections 1600–1616, CDFW has the authority to regulate work that will substantially divert or obstruct the natural flow of, or substantially change or use any material from, the bed, channel, or bank of any river, stream, or lake. CDFW also has the authority to regulate work that will deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake. This regulation takes the form of a requirement for a Lake or Streambed Alteration Agreement and is applicable to all projects. Applications to CDFW must include a complete certified California Environmental Quality Act (CEQA) document.

California Native Plant Protection Act

The Native Plant Protection Act of 1977 (see Section 1900 et seq. of the California Fish and Game Code) directed CDFW to carry out the legislature's intent to "preserve, protect and enhance rare and endangered plants in this State." The Native Plant Protection Act gave the California Fish and Game Commission the power to designate native plants as "endangered" or "rare" and protect endangered and rare plants from take. CESA expanded on the original Native Plant Protection Act and enhanced legal protection for plants, but the Native Plant Protection Act remains part of the California Fish and Game Code. To align with federal regulations, CESA created the categories of "threatened" and "endangered" species. It converted all "rare" animals into the act as threatened species but did not do so for rare plants. Thus, there are three listing categories for plants in California: rare, threatened, and endangered. Because rare plants are not included in CESA, mitigation measures for impacts to rare plants are specified in a formal agreement between CDFW and the Project proponent.

Nesting Birds

Section 3503 of the California Fish and Game Code states that it is unlawful to take, possess, or needlessly destroy the nests or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto. Section 3503.5 protects all birds of prey (raptors) and their eggs and nests. Section 3511 states that fully protected birds or parts thereof may not be taken or possessed at any time. Section 3513 states that it is unlawful to take or possess any migratory non-game bird as designated in the Migratory Bird Treaty Act.

California Environmental Quality Act

CEQA requires identification of a project's potentially significant impacts on biological resources and ways that such impacts can be avoided, minimized, or mitigated. CEQA also provides guidelines and thresholds for use by lead agencies for evaluating the significance of proposed impacts.

The State of California CEQA Guidelines (CEQA Guidelines) Section 15380(b)(1) defines endangered animals or plants as species or subspecies whose "survival and reproduction in the wild are in immediate jeopardy from one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, disease, or other factors." A rare animal or plant is defined in Section 15380(b)(2) as a species that, although not presently threatened with extinction, exists "in such small numbers throughout all or a significant portion of its range that it may become endangered if its environment worsens; or … [t]he species is likely to become endangered within the foreseeable future throughout all or a significant portion of its range and may be considered 'threatened' as that term is used in the federal Endangered Species Act." Additionally, an animal or plant may be presumed to be endangered, rare, or threatened if it meets the criteria for listing, as defined further in CEQA Guidelines Section 15380(c).

CDFW has developed a list of "Special Species" as "a general term that refers to all of the taxa the California Natural Diversity Database is interested in tracking, regardless of their legal or protection status." This is a broader list than those species that are protected under FESA, CESA, and other California Fish and Game Code provisions, and includes lists developed by other organizations, including, for example, the Audubon Watch List Species. Guidance documents prepared by other agencies, including the U.S. Bureau of Land Management's Sensitive Species and USFWS Birds of Special Concern, are also included on this CDFW Special Species list. Additionally, CDFW has concluded that plant species listed as CRPR 1 and 2 by the California Native Plant Society, and potentially some CRPR 3 plants, are covered by CEQA Guidelines Section 15380.

Section IV, Appendix G (Environmental Checklist Form), of the CEQA Guidelines requires an evaluation of impacts to "any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by CDFW or USFWS."

Porter–Cologne Water Quality Control Act

Pursuant to provisions of the Porter–Cologne Act, the RWQCBs regulate discharging waste, or proposing to discharge waste, within any region that could affect a water of the state (California Water Code, Section 13260[a]). The State Water Resources Control Board defines a waters of the state as "any surface water or groundwater, including saline waters, within the boundaries of the state" (California Water Code, Section 13050[e]). All waters of the United States are waters of the state. Waters of the state include wetlands, and the State Water Resources Control Board definition of wetlands includes the following:

1. Natural wetlands.
2. Wetlands created by modification of a surface water of the state.
3. Artificial wetlands that meet any of the following criteria:
    a. Approved by an agency as compensatory mitigation for impacts to other waters of the state, except where the approving agency explicitly identifies the mitigation as being of limited duration.
    b. Specifically identified in a water quality control plan as a wetland or other water of the state.
    c. Resulted from historic human activity, is not subject to ongoing operation and maintenance, and has become a relatively permanent part of the natural landscape.
    d. Greater than or equal to 1 acre in size unless the artificial wetland was constructed and is currently used and maintained, primarily for one or more of the following purposes: industrial or municipal wastewater treatment or disposal; settling of sediment; detention, retention, infiltration, or treatment of stormwater runoff and other pollutants or runoff subject to regulation under a municipal, construction, or industrial permitting program; treatment of surface waters; agricultural crop irrigation or stock watering; fire suppression; industrial processing or cooling water; active surface mining – even if the site is managed for interim wetlands functions and values; log storage; treatment, storage, or distribution of recycled water; maximizing groundwater recharge (this does not include wetlands that have incidental groundwater recharge benefits); or fields flooded for rice growing.

Wetlands that may not meet all of USACE's wetland delineation criteria are considered wetland waters of the state if, "under normal circumstances, (1) the area has continuous or recurrent saturation of the upper substrate caused

by groundwater, or shallow surface water, or both; (2) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and (3) the area's vegetation is dominated by hydrophytes or the area lacks vegetation" (SWRCB 2021). Additionally, aquatic resources that USACE determines to not be waters of the United States because they lack a significant nexus to a traditional navigable water or are above the ordinary high water mark limit of federal jurisdiction may also be considered waters of the state. If a CWA Section 404 permit is not required for a project, RWQCB may still require a permit (waste discharge requirements) for impacts to waters of the state under the Porter–Cologne Act.

Local

Multiple Species Conservation Program Plan

The Project Site is within the boundaries of the San Diego MSCP Plan (City of San Diego 1998). The MSCP Plan is a multijurisdictional habitat conservation planning program that involves USFWS, CDFW, the County of San Diego, the Cities of San Diego and Chula Vista, and other local jurisdictions and special districts. Local jurisdictions and special districts implement the MSCP Plan for their respective portions through subarea plans. The combination of the MSCP Plan and subarea plans serve as an HCP pursuant to FESA Section 10(a)(1)(B), and as a natural community conservation plan pursuant to the California Natural Community Conservation Planning Act of 1991 (City of San Diego 1998).

The MSCP Plan study area encompasses 582,243 acres within the southwestern portion of San Diego County. As stated in the MSCP Plan, an objective of the MSCP is to conserve a connected system of biologically viable habitat lands in a manner that maximizes the protection of sensitive species and precludes the need for future listings of species as threatened or endangered. The MSCP Plan identifies a Multi-Habitat Planning Area (MHPA), which is the area within which the permanent MSCP Preserve is assembled and managed for its biological resources. The MHPA is defined in many areas by mapped boundaries in figures in the MSCP Plan and is also defined by quantitative targets for conservation of vegetation communities and goals and criteria for Preserve design. The MSCP Plan targets 171,917 acres within the MHPA for conservation (City of San Diego 1998).

A total of 85 plant and animal species are "covered" by the MSCP Plan. The MSCP Plan Final Environmental Impact Report/Environmental Impact Statement (City of San Diego 1998) identifies "Vegetation Community Conservation Target Areas" for conservation by subarea (Attachment B of the MSCP Plan [City of San Diego 1998]). A total of 2,067 acres is expected to be conserved within the Santee Subarea MHPA. With approval of each subarea plan and corresponding implementing agreement, each participating local jurisdiction receives permits and/or authorization to directly impact or take MSCP Covered Species. The Covered Species include species listed as endangered or threatened by FESA and/or CESA, as well as unlisted species. Table 3-5 in the MSCP Plan provides a list of the MSCP Covered Species, and includes specific conditions required for take authorizations (City of San Diego 1998).

Draft Santee Multiple Species Conservation Program Subarea Plan

The City of Santee has been preparing its subarea plan since the original approval of the San Diego MSCP Plan and is currently in the process of completing the Santee MSCP Subarea Plan. Although the Draft Santee MSCP Subarea Plan has not yet been approved or permitted, it is used as the guidance document for projects occurring within the City of Santee. The current Draft Santee MSCP Subarea Plan seeks coverage for up to 23 species, and relies on a combination of hardline conservation areas, criteria-based upland standards areas, San Diego River conservation opportunities areas, and City-owned preserve lands to protect species and habitat (City of Santee 2025). Coverage for

species is dependent on a number of factors, including multijurisdictional participation, adequate building of the Preserve system, adequate protection of certain populations, permanent management funding, and other factors.

The Draft Santee MSCP Subarea Plan Preserve boundaries are a result of the City of Santee's efforts to refine and expand the MHPA boundaries, to better define conservation priorities within the City of Santee, and to formulate an HCP under the MSCP Plan. Because the Draft Santee MSCP Subarea Plan is still in development, portions of the subarea plan may still change, including Hardline Preserve areas and Covered Species. As shown in Figure 4.1-6, the majority of the Project Site is located within Draft Santee MSCP Subarea Plan (City of Santee 2025).

4.1.3 Thresholds of Significance

The significance criteria used to evaluate Project impacts to biological resources are based on CEQA Guidelines Appendix G. Potential Project-related impacts analyzed in this section account for biological resources that occur or have the potential to occur on the Project Site. According to CEQA Guidelines Appendix G, a significant impact related to biological resources would occur if the Project would result in the following:

A. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.
B. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.
C. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
D. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.
E. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
F. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

4.1.4 Impact Analysis

A. Would the Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Special-Status Plant Species

Direct Impacts

One special-status plant species was observed within the Project Site: San Diego marsh-elder. White rabbit-tobacco has also been documented immediately outside of the Project Site boundary (Figure 4.1-2). Both San Diego marsh-elder and white rabbit-tobacco are not Covered Species under the City of Santee Draft MSCP Subarea Plan. Further, the native vegetation communities within the Project Site have potential to support an additional five special-status plant species with a moderate to high potential to occur on the Project Site. These species cannot be considered absent, as the focused botanical survey was conducted outside of the spring and summer blooming period.

The Project consists of removing hazardous (dead or dying/diseased) non-native trees from within Zone 3 of the Project Site, as well as native and non-native brush thinning in upland defensible space areas (Zones 1 and 2). Special-status plant species present or considered present (San Diego marsh-elder and white rabbit-tobacco) and the five additional special-status plant species determined to have a moderate to high potential to occur on the Project Site could be present in native habitats located in Zones 1 to 3. Direct impacts to special-status plants from vegetation management activities would be considered potentially significant. The Project shall completely avoid directly impacting special-status plants located in Zones 1 to 3 through implementation of **MM BIO-1: Pre-construction Survey and Special-Status Plant Species Avoidance**. As such, direct impacts to special-status plant species would be **less than significant**.

Indirect Impacts

Fuel Treatments identified as part of the vegetation management and maintenance activities (manual, mechanical, and chemical) could result in decreased water quality and altered hydrology, soil compaction, elevated dust levels, and the spread of invasive plant species. Potentially significant indirect impacts on special-status plant species would be avoided through implementation of **MM BIO-1**, **MM BIO-2: Standard Best Management Practices (BMPs)**, and **MM BIO-3: Biological Monitor**. With implementation of these measures, indirect impacts to special-status plant species would be **less than significant**.

Special-Status Wildlife Species

Direct Impacts

There are 24 special-status wildlife species that are known to occur within the Project Site or have a moderate to high potential to occur within the native portions of the Project Site, in both uplands (coastal sage scrub) and wetland/riparian habitats (southern arroyo willow riparian forest, southern cottonwood-willow riparian forest, mulefat scrub, southern willow scrub, emergent wetland, freshwater marsh, disturbed wetland) (Table 4.1-1). Impacts to individuals would be unlikely during Project implementation due to the

mobility of these species to move out of harm's way. However, the Project would implement **MM BIO-3** to ensure no special-status species would be injured or harmed during Project activities.

Suitable nesting riparian habitat for least Bell's vireo, yellow-breasted chat, and yellow warbler is present in Zones 1 and 2 of the Project Site (Figures 4.1-3A, 4.1-3C, 4.1-3D, and 4.1-3E). Treatment activities occurring within riparian habitat are not anticipated to result in removal of habitat for these special-status species. However, it is possible that unanticipated impacts (e.g., sensitive vegetation removal) to riparian habitat could occur, which would be considered significant and require mitigation. If unanticipated impacts to sensitive vegetation, the Project would implement **MM BIO-4: Sensitive Vegetation Communities**. **MM BIO-4** would require mitigation for any unanticipated significant impacts to riparian habitat within Zones 1 and 2 in accordance with the mitigation ratios in Table 5-13 of the Draft Santee MSCP Subarea Plan (City of Santee 2025). Additionally, the Project would implement **MM BIO-5: Avoidance of Listed Species Take: Least Bell's Vireo**, to ensure all Project activities occur outside the least Bell's vireo breeding season (March 15 through September 15). No impacts to native riparian habitat are anticipated within Zone 3, which would only result in the dead/dying and invasive species removal, and all Project activities would occur outside the least Bell's vireo breeding season. If any unintended impacts occur to riparian habitat within Zone 3, then **MM BIO-4** would be implemented.

Although a very limited amount is proposed, thinning of approximately 3 acres of non-contiguous areas (i.e., thinning would occur in unconnected slivers across many polygons throughout the Project Site) of coastal sage scrub has the potential to adversely impact coastal California gnatcatchers known to nest within that vegetation community. Treatment activities occurring within coastal sage scrub are not anticipated to result in the removal of suitable habitat for coastal California gnatcatcher. However, if Project activities result in unintended impacts to coastal sage scrub, then these impacts would be considered significant and require mitigation. Therefore, implementation of **MM BIO-4** would require mitigation for any unintended impacts to coastal sage scrub habitat within Zones 1 and 2 in accordance with the mitigation ratios in Table 5-13 of the Draft Santee MSCP Subarea Plan (City of Santee 2025). Implementation of **MM BIO-6: Avoidance of Listed Species Take: Coastal California Gnatcatcher**, would ensure all Project activities occur outside the coastal California gnatcatcher breeding season (March 1 to August 15). No impacts to coastal sage scrub habitat are anticipated within Zone 3, which would only result in the dead/dying, and invasive species removal, and all Project activities would occur outside the coastal California gnatcatcher breeding season. If any unintended impacts occur within Zone 3, then **MM BIO-4** would be implemented.

Although no evidence of roost or nursery sites was identified on the Project Site during the biological reconnaissance field surveys, impacts (e.g., tree removal in Zone 3, etc.) to maternity bat roosts would be significant. The Project would avoid the native bat breeding season (i.e., April 1 through August 31), as it overlaps the nesting bird season as required by **MM BIO-7**: Nesting Bird Survey. Additionally, implementation of **MM BIO-3**: Biological Monitor would ensure no special-status bat species or native bat colonies or maternity roosts would be injured or harmed during Project activities through establishment of a buffer if these resources are observed.

The Project Site supports multiple wetland and upland habitats that contain suitable vegetation for nesting and migratory birds and raptors protected by the Migratory Bird Treaty Act and Section 3500 of the California Fish and Game Code. The Project proposes to remove invasive and hazardous trees only, which have a low potential to support nesting birds compared to the high-quality surrounding native wetland and upland habitats along the San Diego River in the Project Site. All nesting bird habitat removal or thinning shall occur outside the nesting bird breeding season (February 15 through September 30) as directed by

MM BIO-7: Nesting Bird Survey. Implementation of **MM BIO-3** shall also reduce potentially adverse impacts to nesting birds to a less-than-significant level by requiring a biological monitor be present to establish nest buffers if Project activities cannot avoid the avian nesting season. With implementation of these measures, potentially significant impacts to nesting and migratory birds would be reduced to **less than significant.**

Crotch's bumble bee (*Bombus crotchii*) could occur within areas of the Project Site containing upland habitats and impacts to this species would be considered significant. Treatment activities occurring within upland habitats are not anticipated to result in the removal of suitable habitat for Crotch's bumble bee. However, if Project activities result in unintended impacts to upland habitats, then these impacts would be considered significant and require mitigation. Therefore, implementation of **MM BIO-4** would require mitigation for impacts to sensitive upland communities within Zones 1 and 2 in accordance with the mitigation ratios in Table 5-13 of the Draft Santee MSCP Subarea Plan (City of Santee 2025). Implementation of **MM BIO-8: Avoidance of Listed Species Take: Crotch's Bumble Bee**, would require a pre-construction survey within Zones 1, 2, and 3 to ensure avoidance of impacts to individuals. No impacts to sensitive upland habitats are anticipated within Zone 3, which would only result in the dead/dying, and invasive species removal, and ground disturbance activities that could impact Crotch's bumble bee nests are not anticipated in Zones 1, 2, or 3. If any unintended impacts occur within Zone 3, then **MM BIO-4** would be implemented.

Indirect Impacts

There is potential for Project activities to have indirect impacts to special-status wildlife, including nesting birds, from decreased water quality and altered hydrology, soil compaction, elevated dust levels, and the spread of invasive plant species. These indirect impacts would be avoided through implementation of **MM BIO-2** and **MM BIO-3**. As such, indirect impacts to special-status wildlife species would be **less than significant**.

B. Would the Project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Direct Treatment Footprint

A total of approximately 31.68 acres on the Project Site would be treated in Zones 1 and 2. Figures 4.1-7A through 4.1-7E, Impacts to Biological Resources, depict the spatial distribution of the three treatment zones with the biological resources observed on the Project Site. Table 4.1-5 details the vegetation communities within Zone 1 and Zone 2 that encompass the direct treatment footprint.

A total of 18.02 acres of sensitive vegetation communities would be treated within Zones 1 and 2, including 2.88 acres of sensitive vegetation communities within Zone 1 and 15.14 acres of sensitive vegetation communities within Zone 2. Although vegetation management within Zones 1 and 2 would include activities such as shrub trimming and grass mowing, all trimming activities would be done to industry standards (ISA, ANSI) to minimize likelihood of plant death. Vegetation management in Zones 1 and 2 is not expected to result in removal of any sensitive vegetation communities. However, if Project activities result in unintended impacts to sensitive vegetation communities, then these impacts would be considered significant and would require mitigation. Therefore, implementation of **MM BIO-4** would require mitigation for any unintended impacts to sensitive vegetation communities in accordance with the mitigation ratios in Table

5-13 of the Draft Santee MSCP Subarea Plan (City of Santee 2025). A biological monitor shall be present in accordance with **MM BIO-3** to ensure treatment and vegetation removal activities occur only within the designated areas.

Table 4.1-5. Vegetation Communities and Land Cover Types in Zones 1 and 2

Vegetation Community/Land Cover Type[1]	Project Site (Acres)	Sensitive (Y/N)[2]
Zone 1		
Native Vegetation Communities		
Coast Live Oak Woodland	0.07	Y
Mulefat Scrub	0.02	Y
Southern Arroyo Willow Riparian Forest	0.01	Y
Southern Cottonwood-Willow (*Populus* spp.- *Salix* spp.) Riparian Forest	2.13	Y
Southern Riparian Scrub	0.02	Y
Southern Willow (*Salix* spp.) Scrub	0.14	Y
Diegan Coastal Sage Scrub (Including Baccharis-dominated subform)	0.50	Y
Native Vegetation Communities Subtotal	*2.89*	*N/A*
Non-native Vegetation Communities and Land Cover Types		
Eucalyptus Woodland	0.01	N
Non-native Woodland	0.02	N
Disturbed Habitat	5.18	N
Urban/Developed[1]	1.06	N
Non-native Vegetation Communities Subtotal	*6.27*	*N/A*
Zone 1 Subtotal	*9.15*	*N/A*
Zone 2		
Native Vegetation Communities		
Coast and Valley Freshwater Marsh	0.14	Y
Open Water	0.24	Y
Mulefat Scrub	0.13	Y
Southern Arroyo Willow Riparian Forest	0.13	Y
Southern Cottonwood-Willow Riparian Forest	8.78	Y
Southern Riparian Scrub	0.76	Y
Southern Willow Scrub	1.75	Y
Diegan Coastal Sage Scrub (Including *Baccharis*-dominated subform)	2.60	Y
Coast Live Oak Woodland	0.61	Y
Native Vegetation Communities Subtotal	*15.14*	*N/A*
Non-native Vegetation Communities and Land Cover Types		
Eucalyptus Woodland	0.34	N
Non-native Woodland	0.04	N
Disturbed Habitat	6.11	N
Urban/Developed[1]	0.90	N
Non-native Vegetation Communities *Subtotal*	*7.39*	N/A
Zone 2 subtotal	*22.53*	*N/A*

Table 4.1-5. Vegetation Communities and Land Cover Types in Zones 1 and 2

Vegetation Community/Land Cover Type[1]	Project Site (Acres)	Sensitive (Y/N)[2]
Total	31.68	N/A

Notes: N/A = not applicable. Totals may not sum due to rounding.
1 Fuel treatment in Urban/Developed land consists of any ornamental plantings, maintained grass, or other landscaping.
2 Vegetation community considered sensitive under the Draft Santee MSCP Subarea Plan (City of Santee 2025).

Vegetation management activities occurring in Zone 3 would only involve removal of dead, dying, or invasive species and as such, no direct impacts to sensitive vegetation communities are anticipated in Zone 3 from Project implementation. However, if any unintended impacts occur to sensitive vegetation communities within Zone 3, then **MM BIO-4** would be implemented to reduce those impacts to less than significant. A biological monitor shall be present in accordance with **MM BIO-3** to ensure vegetation management activities occur only for dead, dying, and invasive species. A total of 1,509 trees (or approximately 29.0 acres) are estimated for removal within Zone 3 as shown on Figures 4.1-7A through 4.1-7E. It should be noted that the data collected during field assessments is only a preliminary mapping of the potential areas slated for treatment within Zone 3. The Project would implement **MM BIO-9: Tree Survey**, to provide comprehensive mapping, by a Certified Arborist, of the dead, dying, and invasive species that would be removed under the proposed Project. The plant species identified during field assessments for the Fuels Treatment Plan presented in Table 4.1-6 are located in Zone 3 and are proposed for treatment.

Table 4.1-6. Plant Species Identified for Treatment or Removal in Zone 3

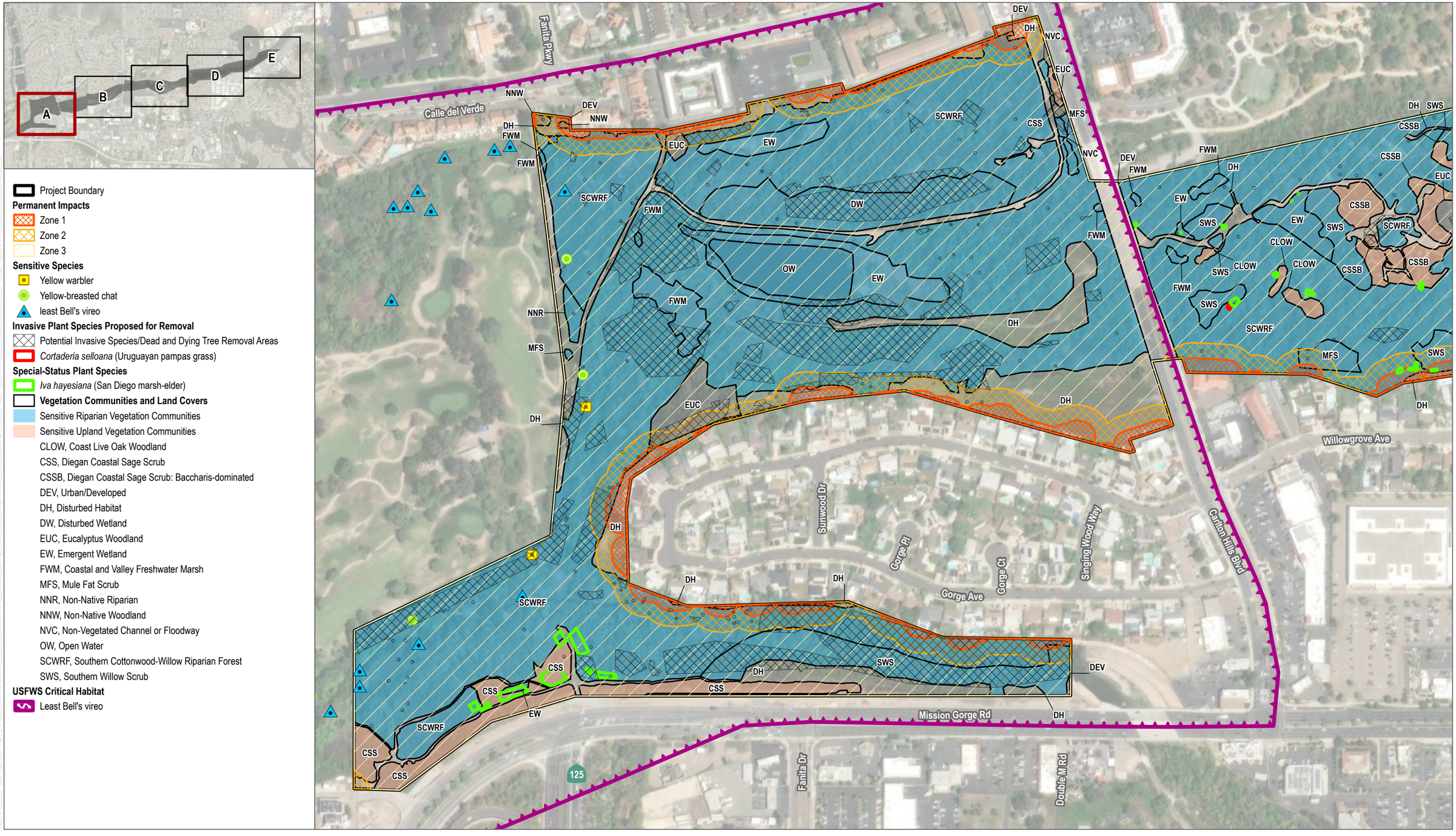
Non-tree Species	Tree Species	Tree Species Continued
Arrowweed	Aleppo pine	Fig (spp.)
Arundo donax	American sweetgum	Glossy privet
Bamboo	Arizona cypress	Golden raintree
Blackberry	Arroyo willow	Italian stone pine
Bougainvillea	Shamel ash	Laurel sumac
California sagebrush	Bottlebrush (spp.)	Mexican fan palm
Cape honeysuckle	Brazilian pepper	Monterey pine
Castor bean	California fan palm	Olive (spp.)
Desert broom	Canary island date palm	Paloverde (spp.)
Pampas grass	Canary island pine	Pepper tree (spp.)
Prickly Russian thistle	Carob	Pine (spp.)
Smilo grass	Carrotwood	Red willow
Tobacco tree	Chinese elm	Siberian elm
Toyon	Chinese flame tree	Silk oak
Yucca	Coast live oak	Tree of Heaven
	Date palm (spp.)	Weeping Bottlebrush
	Eucalyptus (spp.)	Yellowwood (spp.)
	Fan palm (spp.)	Willow (spp.)

Notes: All native tree or non-tree species listed in the table would only be removed if the individual were dead or dying.

Indirect Impacts

Indirect impacts could occur to sensitive vegetation communities in Zones 1 to 3 through decreased water quality and altered hydrology, soil compaction, elevated dust levels, and the spread of invasive plant

species. These indirect impacts would be avoided through implementation of **MM BIO-2** and **MM BIO-3**, as described in Section 4.1.5 below. As such, indirect impacts to sensitive vegetation communities would be **less than significant**.



SOURCE: Vantor 2025; Open Street Map 2025

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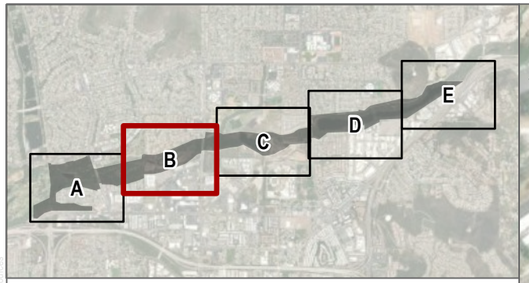
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FIGURE 4.1-7A

Impacts to Biological Resources

San Diego River Fire Hazard Mitigation Program EIR

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Project Boundary

Permanent Impacts

Zone 1

Zone 2

Zone 3

Invasive Plant Species Proposed for Removal

Potential Invasive Species/Dead and Dying Tree Removal Areas

Arundo donax (giant reed)

Special-Status Plant Species

Iva hayesiana (San Diego marsh-elder)

Vegetation Communities and Land Covers

Sensitive Riparian Vegetation Communities

Sensitive Upland Vegetation Communities

CLOW, Coast Live Oak Woodland

CSS, Diegan Coastal Sage Scrub

CSSB, Diegan Coastal Sage Scrub: Baccharis-dominated

DEV, Urban/Developed

DH, Disturbed Habitat

EUC, Eucalyptus Woodland

EW, Emergent Wetland

FWM, Coastal and Valley Freshwater Marsh

NNG, Non-Native Grassland

NNR, Non-Native Riparian

OW, Open Water

SCWRF, Southern Cottonwood-Willow Riparian Forest

SWS, Southern Willow Scrub

SOURCE: Vantor 2025; Open Street Map 2025

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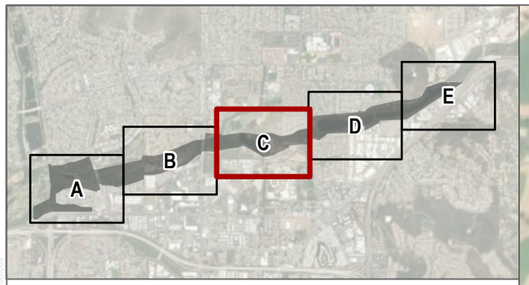
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FIGURE 4.1-7B

Impacts to Biological Resources

San Diego River Fire Hazard Mitigation Program EIR

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Project Boundary

Permanent Impacts

Zone 1

Zone 2

Zone 3

Sensitive Species

Yellow warbler

least Bell's vireo

Invasive Plant Species Proposed for Removal

Potential Invasive Species/Dead and Dying Tree Removal Areas

Arundo donax (giant reed)

Special-Status Plant Species

White rabbit-tobacco *(Pseudognaphalium leucocephalum)*

Vegetation Communities and Land Covers

Sensitive Riparian Vegetation Communities

Sensitive Upland Vegetation Communities

CLOW, Coast Live Oak Woodland

CSS, Diegan Coastal Sage Scrub

CSSB, Diegan Coastal Sage Scrub: Baccharis-dominated

DEV, Urban/Developed

DH, Disturbed Habitat

EUC, Eucalyptus Woodland

EW, Emergent Wetland

FWM, Coastal and Valley Freshwater Marsh

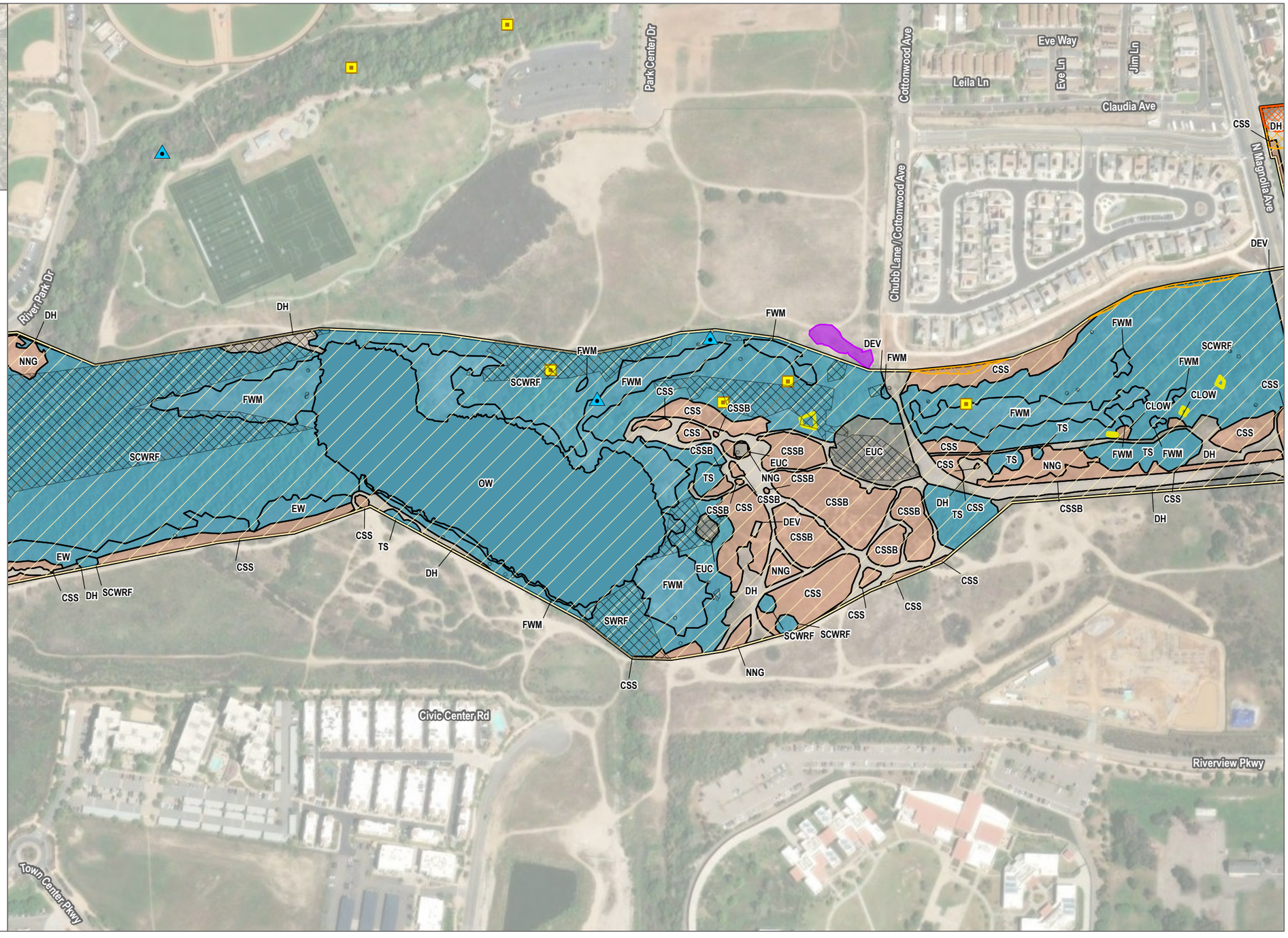
NNG, Non-Native Grassland

OW, Open Water

SCWRF, Southern Cottonwood-Willow Riparian Forest

SWRF, Southern Arroyo Willow Riparian Forest

TS, Tamarisk Scrub



SOURCE: Vantor 2025; Open Street Map 2025

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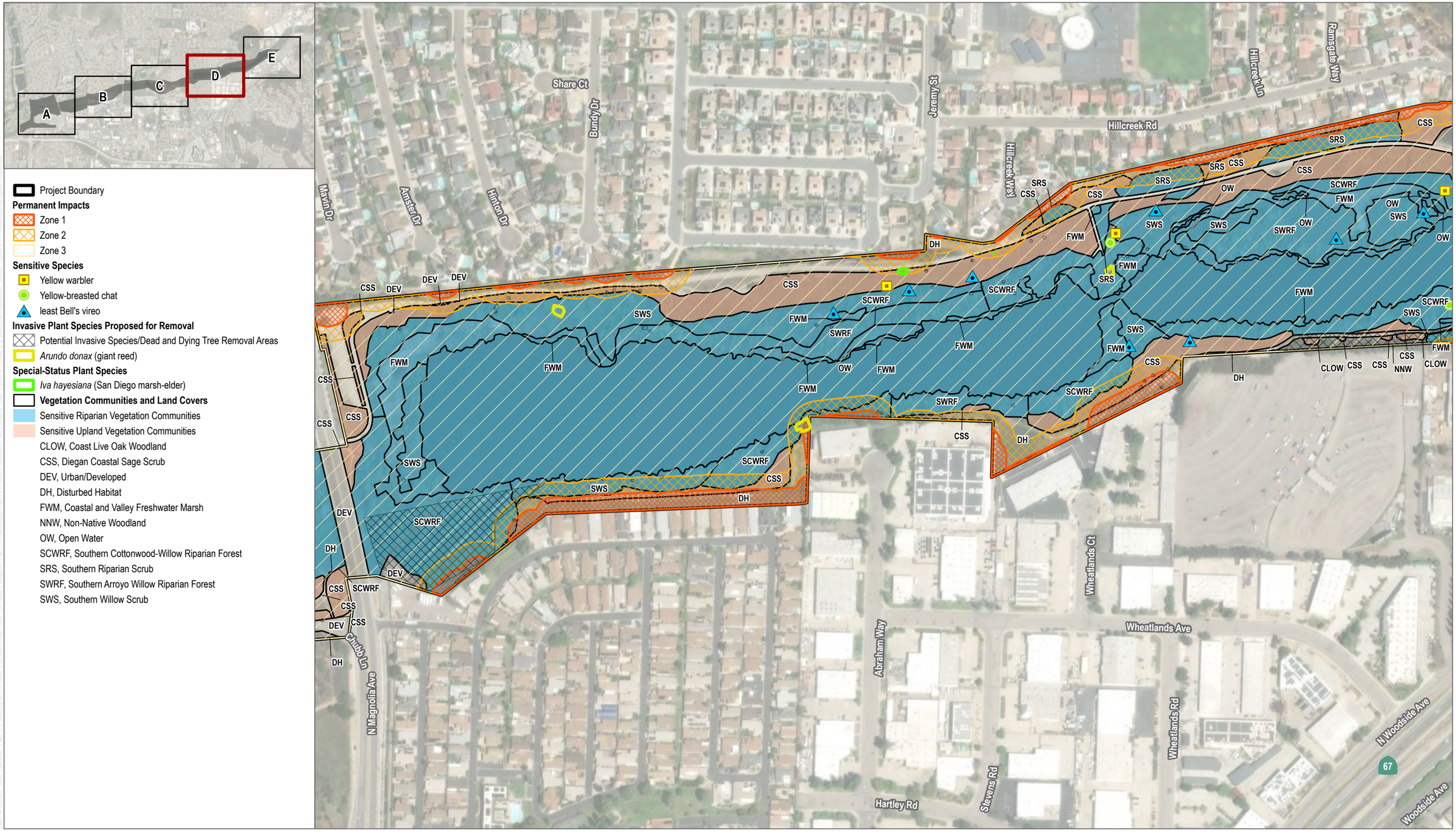
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FIGURE 4.1-7C

Impacts to Biological Resources

San Diego River Fire Hazard Mitigation Program EIR

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SOURCE: Vantor 2025; Open Street Map 2025

DUDEK

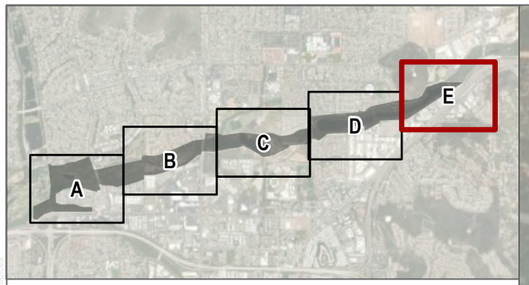
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FIGURE 4.1-7D

Impacts to Biological Resources

San Diego River Fire Hazard Mitigation Program EIR

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Project Boundary

Permanent Impacts

Zone 1

Zone 2

Zone 3

Sensitive Species

Yellow-breasted chat

coastal California gnatcatcher

Invasive Plant Species Proposed for Removal

Potential Invasive Species/Dead and Dying Tree Removal Areas

Arundo donax (giant reed)

Vegetation Communities and Land Covers

Sensitive Riparian Vegetation Communities

Sensitive Upland Vegetation Communities

CLOW, Coast Live Oak Woodland

CLOWO, Open Coast Live Oak Woodland

CSS, Diegan Coastal Sage Scrub

CSSB, Diegan Coastal Sage Scrub: Baccharis-dominated

DEV, Urban/Developed

DH, Disturbed Habitat

FWM, Coastal and Valley Freshwater Marsh

NNR, Non-Native Riparian

NNW, Non-Native Woodland

OW, Open Water

SCWRF, Southern Cottonwood-Willow Riparian Forest

SWRF, Southern Arroyo Willow Riparian Forest

SWS, Southern Willow Scrub

SOURCE: Vantor 2025; Open Street Map 2025

DUDEK

0 150 300 Feet

FIGURE 4.1-7E

Impacts to Biological Resources

San Diego River Fire Hazard Mitigation Program EIR

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C. Would the Project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Direct Treatment Footprint

Table 4.1-7 summarizes the treatment footprint containing potentially jurisdictional aquatic resource acreages within Zone 1 and Zone 2 on the Project Site. A total of approximately 14.98 acres of potentially jurisdictional aquatic resources would be treated within the Project Site as a result of the native and non-native brush thinning located up to 100 feet from the edge of the existing development areas. The ultimate decisions on the amount and location of jurisdictional aquatic resources would be made by the resource agencies (i.e., USACE, CDFW, and RWQCB).

Table 4.1-7. Potentially Jurisdictional Aquatic Resources Within Zones 1 and 2

Impact Zone	Non-wetland Water/ Streambed Acreage	Wetland/Riparian Habitat Acreage	Total Acreage
Zone 1	0.03	2.37	2.40
Zone 2	0.68	11.90	12.58
Total	**0.71**	**14.27**	**14.98**

Notes: Vegetation management activities occurring in Zone 3 would only involve removal of dead, dying, or invasive species and as such, no direct impacts to potentially jurisdictional resources in Zone 3 are anticipated from Project implementation.

Treatment activities to jurisdictional aquatic resources occurring within Zones 1 and 2 would require regulatory resources permitting from the appropriate resource agencies (USACE, RWQCB, and CDFW) (**MM BIO-10: Jurisdictional Aquatic Resources Permitting**). A biological monitor shall be present in accordance with **MM BIO-3** to ensure treatment and vegetation removal activities occur in accordance with the Project's aquatic resource permits and there are no direct impacts occurring outside the designated areas. Mitigation Measure **MM BIO-11: Jurisdictional Aquatic Resource Avoidance**, would be implemented to further avoid impacting streams by using temporary rubber mats or pads to distribute weight and minimize vegetation trampling and soil disturbance, and helicopter and/or crane removal where equipment access is constrained and hand carry is infeasible. Treatment activities occurring within Zones 1 and 2 are not anticipated to result in the removal or filling of any jurisdictional aquatic resources. However, if Project activities result in any unintended impacts to jurisdictional aquatic resources, then these impacts would be considered significant and require mitigation. Therefore, implementation of **MM BIO-4** would require mitigation for any unintended impacts to jurisdictional aquatic resources within Zones 1 and 2 in accordance with the mitigation ratios in Table 5-13 of the Draft Santee MSCP Subarea Plan (City of Santee 2025).

Vegetation management activities occurring in Zone 3 would only involve removal of dead, dying, or invasive species and as such, no direct impacts from removal or filling to potentially jurisdictional resources in Zone 3 are anticipated from Project implementation. If any unintended impacts occur to riparian habitat within Zone 3 then **MM BIO-4** would be implemented. Mitigation Measure **MM BIO-11: Jurisdictional Aquatic Resource Avoidance**, would be implemented to ensure activities occurring in Zone 3 would only involve treatment or removal of dead, dying, or invasive species. As directed by **MM BIO-11**, the Project is committed to avoiding impacts to streams by using temporary rubber mats or pads to distribute weight and minimize vegetation trampling and soil disturbance, and helicopter and/or crane removal where equipment access is constrained and hand carry is infeasible. A biological monitor shall be present in accordance with **MM BIO-3** to ensure treatment and vegetation removal activities do not impact any aquatic resource areas

located within Zone 3. As such, direct impacts to jurisdictional aquatic resources within Zone 3 would be avoided.

Indirect Impacts

Indirect impacts could occur to jurisdictional aquatic resources through decreased water quality and altered hydrology, soil compaction, elevated dust levels, and the spread of invasive plant species. These indirect impacts would be avoided through implementation of **MM BIO-2** and **MM BIO-3**, as described in Section 4.1.5 below. As such, indirect impacts to jurisdictional aquatic resources would be **less than significant**.

D. Would the Project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

The western portion of the San Diego River in the Project Site from Forester Creek up to Mast Park and the eastern portion of the Project Site are mapped as a wildlife corridors and linkage area, as shown on Figure 4.1-4. The western portion of the site is mapped as critical habitat for the least Bell's vireo (Figure 4.1-3). The purpose of the Project is fuel hazard management that shall not modify the width of the San Diego River, its tributary (Forester Creek), or modify its land use as Open Space. Additionally, tree removal and native brush thinning would improve fuel hazard risk within the San Diego River Corridor, reducing forest fires that adversely impact the San Diego River's function as a wildlife corridor due to habitat and species loss. Removal of non-native vegetation would improve the overall quality of the San Diego River as a wildlife corridor by reducing competition for resources from invasives that are usable for native wildlife species. Native brush thinning is not expected to adversely impact nursery sites or wildlife corridors through avoidance of the nesting bird season, and the loss of habitat is marginal compared to the net benefit of hazardous fuel reduction for fire management within the San Diego River Corridor. As a result, implementation of the Project would result in **less-than-significant** impacts to wildlife corridors and nursery sites.

E. Would the Project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

No conflicts with local policies and ordinances are anticipated from Project implementation. The Project would comply with the Section 8.06 of the Santee Municipal Code, and biological resources policies within the Conservation Element as no development is proposed, and the Project seeks to improve the San Diego River and Forester Creek through fuel reduction of mostly non-native trees and trees that are dead or decaying. Therefore, the Project is consistent with respect to the relevant City of Santee biological, floodway, and urban forestry municipal codes as well as the goals outlined in the City of Santee General Plan Conservation Element. The Project would comply with the City of Santee's municipal code as well as the biological resources policies outlined within the City of Santee General Plan Conservation Element. Furthermore, City of Santee staff shall review the Project to ensure there are no conflicts with the objectives and policies presented in the Conservation Element of the Santee General Plan and relevant urban forestry, floodway, and biological resources ordinances (City of Santee 2025; City of Santee 2003).

F. Would the Project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

Although the Draft Santee MSCP Subarea Plan has not yet been approved or permitted, it is used as the guidance document for projects occurring within the City of Santee. As such, BMPs included in Section 5.5 of the Subarea Plan have been incorporated into the Project-specific mitigation measures below.

The majority of Zones 1 and 2 overlap defensible space areas identified within the San Diego River Subunit as shown on Figure 4-5 of the City of Santee Draft MSCP Subarea Plan, and Zone 3 is identified as a fuel hazard reduction area (City of Santee 2025). Because this is a fuel hazard reduction project (as opposed to a development project) that is designed to target removal of non-native vegetation within the San Diego River Corridor wildland–urban interface, no permanent removal of habitat is anticipated. Any trimming or thinning of native vegetation shall occur only following acquisition of required permits. Project implementation **would not conflict** with the provisions of the San Diego County MSCP or Draft Santee MSCP Subarea Plan, nor would it prevent the Draft Santee MSCP Subarea Plan from being approved or compromise continued implementation of the MSCP in San Diego County.

4.1.5 Mitigation Measures and Level of Significance After Mitigation

The following mitigation measures shall be implemented to avoid and reduce potentially significant impacts to sensitive and riparian vegetation communities, special-status species, and potentially jurisdictional aquatic resources to a less-than-significant level. Any removal or pruning of native vegetation shall occur only following acquisition of required permits.

MM BIO-1 Pre-Construction Survey and Special-Status Plant Species Avoidance. No vegetation management activities occurring in Zone 3 or other native and non-native brush thinning occurring in Zones 1 and 2 shall occur within known populations of San Diego marsh-elder and white rabbit-tobacco or any other special-status plant species. Prior to initiation of Project activities, a qualified biologist (i.e., a person having at minimum a BS or BA in wildlife management, ecology, zoology, botany, biology, or other closely related field, and at least 2 years' experience conducting field investigations in San Diego County) approved by the City of Santee shall conduct a pre-construction presence/absence survey for special-status plants within the impact footprint and flag any special-status plants, including the known locations of San Diego marsh-elder and white rabbit-tobacco. If surveys are conducted pursuant to the FEMA Programmatic Biological Opinion for federally listed plant species, the qualified biologist shall be approved by the Carlsbad Fish and Wildlife Office (CFWO) in accordance with Gen AMM 16. If a special-status plant is observed, the biological monitor shall delineate an appropriate buffer zone (a minimum of 10 feet) depending on the sensitivity of the resource and the nature of the activity being conducted. Project activities shall completely avoid impacts to any special-status plant species.

MM BIO-2 Standard Best Management Practices (BMPs). The following BMPs, when applicable, shall be included as part of the Project in accordance with Section 5.5.1.1 of the Draft Santee Multiple Species Conservation Program Subarea Plan (City of Santee 2025). The City of Santee shall have the right to access and inspect any treatment sites for compliance with Project approval conditions including these BMPs.

Delineation of Environmentally Sensitive Areas

- Prior to Project implementation, highly visible barriers (such as orange construction fencing, stakes, or flagging depending on the size of the treatment area and the sensitivity and proximity of the biological resources) shall be installed to designate environmentally sensitive areas (e.g., special-status plant locations, nesting birds, etc.) to be protected from vegetation management related activities. Environmentally sensitive areas to be avoided shall be identified during the pre-construction surveys described in MM BIO-1 and MM BIO-3 and implemented by a qualified biologist approved by the City of Santee. No Project activity of any type shall be permitted within these environmentally sensitive areas (with exceptions for removal of dead/decaying and non-native species within jurisdictional aquatic resource areas in Zone 3). In addition, heavy equipment, including motor vehicles, shall not be allowed to operate within the environmentally sensitive areas. All vegetation management equipment shall be operated in a manner so as to prevent accidental damage to environmentally sensitive areas and associated barriers. No structure of any kind, equipment staging, incidental storage of equipment or supplies, or access roads shall be allowed within these protected zones. Silt fence barriers shall be installed, as appropriate, at the environmentally sensitive area boundary to prevent accidental deposition of fill material or sediment runoff into areas where sensitive biological features are adjacent to treatment areas. Flagging and/or fencing shall be removed upon completion of the activities.

Invasive Species Control

- Invasive exotic plant species shall be removed from the Project work area and controlled during vegetation management periods. Project measures shall be included to ensure invasive plant material is not spread from the Project Site to other areas by disposal off site or by tracking seed on equipment, clothing, and shoes. Equipment/material imported from an area of invasive plants must be identified and measures implemented to prevent importation and spreading of non-native plant material within the Project Site. Disposal of the plant debris shall follow the regulations set by the County of San Diego agriculture commissioner. All vegetation management equipment shall be cleaned to remove dirt, seeds, vegetative material, or other debris that could contain or hold seeds of noxious weeds before arriving to and leaving from the Project Site. Eradication strategies (i.e., exotic plant abatement programs) shall be employed should an invasion occur during vegetation management activities.

Trash Control

- To avoid attracting predators of Covered Species and other special-status species, the Project Site shall be kept clean of debris. All food-related trash items shall be enclosed in sealed containers and regularly removed from the site(s) daily.

On-Site Training and Monitoring

- All personnel involved in the on-site Project activities shall be required to participate in a pre-activity training and education program administered by the City, or their designee, to understand the avoidance and minimization obligations of the Project.
- The City shall require that a qualified biologist monitor Project activities for the duration of the Project to ensure that measures are being employed to avoid incidental disturbance of habitat,

species of concern, and other sensitive biological resources. The biological monitor shall notify the City immediately of any non-compliance, and the City shall make an assessment that generates appropriate measures for the contractor to implement for remediation.

Water Quality Best Management Practices

- The vegetation treatment contractors shall implement BMPs to protect water quality. To minimize soil disturbance, the vegetation treatment contractors shall leave stumps from removed trees and shrubs intact, with stump heights not exceeding 6 inches, as measured from the uphill side as described in the Fuels Treatment Plan (City of Santee 2026).
- Actions to prevent sediment or debris from entering watercourses, aquatic areas, wetlands, and riparian areas during and after Project activities may include, but are not limited to, the following BMPs: silt fencing, fiber rolls and other erosion control blankets, gravel bag berms, sand bag barriers, tracking controls, stockpile management, dry season scheduling, preservation of existing vegetation, temporary soil stabilization, and dust and erosion control.
- No site personnel shall discharge solid or liquid materials into jurisdictional water features, wetland or riparian areas, or other sensitive habitats. Service and refueling of equipment shall only occur in areas that will not allow grease, oil, fuel, or other hazardous materials to pass into streams or retained vegetation. If discharged materials are observed during work activities, the biological monitor shall notify the City and appropriate entities immediately, including but not limited to applicable jurisdictional City or County, U.S. Fish and Wildlife Service, U.S. Army Corps of Engineers, California Department of Fish and Wildlife, and/or Regional Water Quality Control Board, and the City shall make an assessment that generates appropriate measures for the contractor to implement for remediation. Spills shall be cleaned up immediately and contaminated soils removed to approved disposal areas.

MM BIO-3 Biological Monitor. A qualified biological monitor (i.e., a person having at minimum a BS or BA in wildlife management, ecology, zoology, botany, biology, or other closely related field, and at least 2 years' experience conducting field investigations in San Diego County) approved by the City of Santee shall be present to conduct a pre-activity sweep (i.e., pre-construction survey) of the work area prior to the commencement of work activities. Where monitoring is required pursuant to the FEMA Programmatic Biological Opinion for federally listed species, monitoring shall be conducted by or under the supervision of a CFWO-approved biologist in accordance with Gen AMM 16. The qualified monitor shall remain present during any Project activities in Zones 1 to 3 that occur in sensitive vegetation communities, as defined herein), to ensure no sensitive biological resources (i.e., sensitive vegetation communities, special-status species, and jurisdictional aquatic resources) are being adversely impacted from Project implementation in Zone 3 and that no special-status species or nesting birds are being adversely impacted from Project implementation in Zones 1 and 2. If a sensitive biological resource is observed during Project activities or during pre-construction surveys, the biological monitor shall delineate an appropriate buffer zone (a minimum of 10 feet) depending on the sensitivity of the resource and the nature of the activity being conducted.

If fencing for temporary noise abatement (i.e., 8-foot-tall [minimum height] plywood sheet barriers or acoustical blankets suspended on chain-link fencing or other support means) is required along or parallel with an extent of the Project boundary that adjoins the receiving noise-sensitive property

then prior to the use of temporary noise abatement, a qualified biologist shall confirm and verify with the City that the placement of the barriers are not located within any environmentally sensitive areas (e.g., special-status plant locations, sensitive vegetation communities, or jurisdictional aquatic resources) and would not impact any wildlife species or their movement.

MM BIO-4 Sensitive Vegetation Communities. Unintended impacts (i.e. sensitive vegetation removal) to sensitive natural communities occurring from thinning or trimming activities in Zones 1 and 2 would be remedied through restoration of the affected area. This would entail restoring the disturbed area to pre-project or ecologically improved conditions typically within one year of completing activities. A restoration plan will be prepared for and approved by the City, and depending on the area affected any other appropriate regulatory agency (i.e. USFWS, CDFW, USACE, and/or RWQCB), that includes: details for the restoration activities, a description of how the proposal provides offsets for the temporal loss, success criteria and the timeline for restoration. If habitat is unable to be restored, or the restoration does not meet the success criteria, the impacts would be considered permanent and would require mitigation consistent with the ratios identified in Table 1 below. This mitigation would entail a mitigation plan outlining the enhancement or restoration of habitat within City Owned Preserve Lands or through acquisition of a conservation easement within the Upland Standards Areas or San Diego River Subunit depending on the type of habitat being impacted so that impacts will be mitigated in-kind. The mitigation plan shall include at a minimum: details for the mitigation activities including the target function and services for the native plant communities established, mitigation work plan, performance standards, funding mechanism, and the timeline for completion of the mitigation program. The mitigation site would be included in the Managed Preserve and managed and monitored in perpetuity with funding for long-term management and monitoring provided through a non-wasting endowment.

Mitigation Ratios for Permanent Unintended Impacts

Vegetation Type [a]	Habitat Criteria	Mitigation Ratio
Riparian Forest/ Woodland	All riparian forest, including oak riparian	3:1
Riparian Scrub	Drainages with riparian scrub	3:1
Freshwater Marsh, Freshwater Seep, Disturbed Wetlands, Natural Channel, Open Water [e]	Absence of native species or small (<0.25 acre) amount of habitat	2:1 [f]
	Presence of native species or large (>0.25 acre) amount of habitat	3:1
Vernal Pools [b]	Natural Vernal Pool	4:1
	Man-made vernal pools with indicator plant species	3:1
	Man-made pools with covered wildlife species	3:1
Oak Woodland	Oak woodland containing any Engelmann oaks	3:1
Individual Oaks	Trees with at least on trunk of 6" or more Dbh [c] or multi-trunked native oaks with aggregate diameter of 10" of more.	10:1 by tree
Coastal Sage Scrub Coastal Sage/ Chaparral Scrub	Habitat small, isolated patches <1 acres	2:1
	Habitat patches >1 acre	3:1

Mitigation Ratios for Permanent Unintended Impacts

Vegetation Type [a]	Habitat Criteria	Mitigation Ratio
Chaparral	All	2:1
Native Grassland	All	3:1
Non-native grassland	All	1:1
Disturbed lands, Eucalyptus, agricultural lands [d]	No known habitat value for Covered Species	None
	Habitat value for or presence of burrowing owls	1:1 as appropriate to ensure like value

Notes:

[a] Vegetation types based on the Holland Vegetation classification system. See Appendix E, *Vegetation Communities Descriptions*. All other natural habitat types not listed in this table have a 1:1 mitigation ratio requirement.

[b] Vernal pool mitigation must meet a 'no net loss' criteria through creation of new vernal pool habitat and/or restoration or enhancement of existing vernal pool habitat. Preservation of existing vernal pool alone does not provide mitigation credits. If an existing vernal pool is significantly disturbed, enhancement of the existing pool can be implemented to provide up to a 1:1 mitigation credits towards the total requirement.

[c] Dbh = Diameter at Breast Height. Tree diameter is measured at 4 ½ feet above ground level. This measure is known as diameter at breast height or DBH. Diameter can be measured with diameter tape

[d] Disturbed land may include agricultural lands, ruderal, eucalyptus, and previously authorized graded areas.

[e] Any impacts to open water areas within abandoned sand mining pits along the San Diego River should be mitigated with creation of riparian scrub or riparian woodland, as these open water areas are unnatural, are relatively common, and these same areas likely supported riparian areas before mining occurred.

[f] Different ratios may be required under separate regulatory programs under the Clean Water Act, the Porter-Cologne Water Quality Control Act, and Section 1600 et seq. of the Fish and Game Code.

MM BIO-5 Avoidance of Listed Species Take: Least Bell's Vireo. All riparian habitat tree trimming or thinning within Zones 1 and 2 and invasive species removal in Zone 3 shall occur outside the least Bell's vireo breeding season (April 1 through August 15[1]). If that is not possible then no vegetation management activities shall occur during the least Bell's vireo breeding season until the following requirements have been met:

1. A qualified biologist shall conduct a focused pre-construction-level survey for least Bell's vireo using the most recent protocol within all fuel reduction areas containing suitable riparian habitat including a 500-foot buffer. A minimum of three surveys shall be performed 3 days prior to Project activities. If presence of least Bell's vireo is determined or assumed to occur on the Project Site, the following measures shall be required to be implemented:
    a. No vegetation removal shall occur within occupied habitat during the least Bell's vireo breeding season (April 1 to August 15) or until the nest has shown to be vacated. A 500-foot buffer shall be required around the nest site. If 100% avoidance of occupied habitat is not feasible, consultation with USFWS and California Department of Fish and Wildlife (CDFW) shall be initiated prior to implementation of any activities that may impact occupied habitat, directly or indirectly.

MM BIO-6 Avoidance of Listed Species Take: Coastal California Gnatcatcher. To the maximum extent feasible, staging areas, equipment storage areas, and access routes shall be located outside coastal sage scrub, alluvial fan scrub, and other suitable coastal California gnatcatcher habitat and shall utilize existing disturbed areas and roads whenever practicable.

[1] Unitt and Klovstad (2004) states that the nesting season generally lasts from April to July and dates for fledglings ranged between 27 April to 21 August.

All coastal sage scrub thinning shall occur outside the coastal California gnatcatcher breeding season (March 15 through August 15). If that is not possible then no vegetation management activities shall occur during the coastal California gnatcatcher breeding season (February 15 through August 15) until the following requirements have been met:

1. A permitted biologist (i.e., possessing a valid Endangered Species Act Section 10(a)(1)(a) Recovery Permit) shall conduct a focused protocol-level survey (i.e., three visit survey) for coastal California gnatcatcher (*Polioptila californica californica*) using the most recent protocol (U.S. Fish and Wildlife Service [USFWS] 1997 Coastal California Gnatcatcher Presence/Absence Survey Guidelines) 3 days prior to Project activities within all fuel reduction areas containing coastal sage scrub including a 500-foot buffer. If presence of coastal California gnatcatcher is determined or assumed to occur on the Project Site, the following measures shall be required to be implemented by the applicant:
    a. No vegetation trimming or thinning shall occur within occupied habitat during the coastal California gnatcatcher breeding season (February 15 to August 15). A minimum 500-foot buffer shall be established around occupied nests unless a larger buffer is determined necessary by the permitted biologist based on species behavior, topography, existing disturbance conditions, or other site-specific factors.
    b. The buffer shall be required around the nest site until it is shown to be vacated. If 100% avoidance of occupied habitat is not feasible, consultation with USFWS and California Department of Fish and Wildlife (CDFW) shall be initiated prior to implementation of any activities that may impact occupied habitat, directly or indirectly.
    c. Other measures from FWS-CFWO-16B0293-18F1358; Section 7 Consultation on FEMA Disaster, Mitigation and Preparedness Programs in Imperial, Inyo, Kern, Los Angeles, Orange, Riverside, San Bernardino, and San Diego Counties, California Coastal California Gnatcatcher CAGN-1 through CAGN-4 will apply. CAGN-5 through CAGN-7 do not apply as this project is intended to enhance native habitat and species.

MM BIO-7 Nesting Bird Survey. All nesting bird habitat trimming or thinning shall occur outside the nesting bird breeding season (February 15 through September 30). If the Project requires that work be initiated during the breeding season for nesting birds, in order to avoid direct impacts on active nests, a pre-construction survey shall be conducted in the Project Site and within 500 feet of the Project Site containing suitable nesting resources, by qualified biologists for nesting birds and/or raptors within 3 days prior to Project activities. If the biologist does not find any active nests within or immediately adjacent to the impact areas (i.e., 500 feet), the vegetation clearing work shall be allowed to proceed. If the biologist finds an active nest within or immediately adjacent to the work area and determines that the nest may be impacted or breeding activities substantially disrupted, the biologist shall delineate an appropriate buffer zone. A minimum buffer ranging from 50 feet for common or disturbance-tolerant species to 500 feet for raptors and special-status species. Larger buffers may be established by the qualified biologist based on species sensitivity, nesting stage, line-of-sight conditions, topography, ambient noise levels, observed behavioral responses, or the nature of the proposed activity. The nest area and buffer zone shall be avoided until the nest is vacated and the juveniles have fledged or the nest fails. Status of the nest shall be monitored by a qualified biologist. A report shall be submitted to the City of Santee and Wildlife Agencies (i.e., U.S. Fish and Wildlife Service and California Department of Fish and Wildlife) for review prior to discontinuing the noise limits and nest buffers. The nest buffer area shall be

demarcated in the field with flagging and stakes or construction fencing. Personnel, including all contractors working on site, are required to be instructed on the sensitivity of the area. No Project activities shall encroach into established buffers without the consent of a monitoring biologist. The buffer shall remain in place until it is determined that the nestlings have fledged and the nest is no longer active. Work can proceed into the buffer when the qualified biologist has determined that the nest is no longer active or if appropriate noise mitigation is in place.

MM BIO-8 Avoidance of Listed Species Take: Crotch's Bumblebee. A pre-construction survey shall be conducted by a qualified biologist with expertise in surveying for bumble bees no more than 5 days prior to any Project activities occurring within Zones 1, 2, or 3. If a Crotch's bumble bee nest is detected during the pre-construction survey, the Project's biological monitor shall establish, monitor, and maintain a no-work buffer around the nest. The size and configuration of the no-work buffer shall be based on best professional judgment of the Project biologist in consultation with the Wildlife Agencies. The buffer shall provide at least 50 feet of clearance around nest entrances. Project activities shall not occur within the no-work buffer until the colony is no longer active. To determine that a nest is no longer active, the nest shall be observed for a minimum of 60 minutes each day across a minimum of 3 days during suitable flight weather (i.e., ambient air temperature between 60° and 90° degrees F, winds under 10 mph, and no precipitation higher than a drizzling rain). If no bees are seen flying in or out of the nest by the end of the observation period, it shall be determined that the nest is no longer active. If Project activities occur outside of the colony active period (April 1–August 31), then pre-construction surveys for active bee nest colonies are not required.

If Crotch's bumble bee is observed during the pre-construction survey, the Project's biological monitor shall ensure the individual(s) are not impacted by Project activities through establishment of a no-work area. The biological monitor shall also review the immediate vicinity to ensure no nests are present.

MM BIO-9 Tree Survey. Prior to the commencement of vegetation management activities within Zones 1 to 3, a Certified Arborist shall be present to conduct a comprehensive tree inventory to determine the exact locations for dead, dying, and invasive species slated for removal. The comprehensive tree inventory may also occur concurrently with vegetation management activities so as not to interfere with Project timing. Trees shall be marked or flagged by the Certified Arborist for the contractor and the tree inventory and removal tracking shall be provided to the City of Santee.

MM BIO-10 Jurisdictional Aquatic Resources Permitting. The City of Santee shall obtain the applicable permits for treatment activities (i.e., trimming or thinning of native or non-native vegetation within Zones 1 and 2) occurring within jurisdictional aquatic resources, such as a Section 404 permit from USACE, a Streambed Alteration Agreement from CDFW, and a 401 Water Quality Certification/Waste Discharge Requirement from the RWQCB. No native or non-native vegetation trimming or thinning in Zones 1 and 2 shall occur within any jurisdictional riparian/wetland vegetation communities on the Project Site prior to issuance of aquatic resources permits.

MM BIO-11 Jurisdictional Aquatic Resources Avoidance. Vegetation management activities occurring within Zone 3 shall only involve treatment or removal of dead, dying, or invasive species. The Project shall commit to avoid impacting streams within Zones 1, 2, and 3 by crossing them using temporary rubber

mats or pads to distribute weight and minimize vegetation trampling and soil disturbance, and helicopter and/or crane removal where equipment access is constrained and hand carry is infeasible.

Level of Significance After Mitigation

A. Would the Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Direct impacts to special-status plants located in Zones 1 to 3 would be avoided through implementation of **MM BIO-1,** and impacts to special-status plant species would be **less than significant**.

Indirect impacts to special-status plants related to decreased water quality and altered hydrology, soil compaction, elevated dust levels, and the spread of invasive plant species would be reduced to below significance through implementation of **MM BIO-1**, **MM BIO-2**, and **MM BIO-3.**Indirect impacts to special-status plants would be **less than significant**.

Direct impacts to individual special-status wildlife species would be reduced to below significance through implementation of **MM BIO-3** that would ensure no special-status species would be injured or harmed during Project activities. Direct impacts to sensitive vegetation communities that support special-status species would be reduced to below significance through the implementation of **MM BIO-4** mitigation for unintended impacts to riparian habitat and coastal sage scrub habitat within Zones 1 and 2. Thus, direct impacts to sensitive vegetation would be **less than significant.**

Impacts to nesting habitat for special-status avian species and other nesting and migratory birds and raptors during the nesting bird breeding season would be reduced to below significance through implementation of **MM BIO-5**, **MM BIO-6**, and **MM BIO-7** that would ensure impacts to nesting habitat would only occur outside the nesting bird breeding season (February 15 through September 30). Implementation of **MM BIO-3** would also reduce potentially adverse impacts to nesting birds by requiring a biological monitor be present to establish nest buffers if Project activities cannot avoid the avian nesting season. Thus, direct impacts to nesting and migratory birds would be **less than significant**.

Indirect impacts to special-status wildlife, including nesting birds, due to decreased water quality and altered hydrology, soil compaction, elevated dust levels, and the spread of invasive plant species would be avoided through implementation of **MM BIO-2** and **MM BIO-3**. Indirect impacts to special-status wildlife species would be **less than significant**.

B. Would the Project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Direct Impacts to sensitive vegetation communities in Zones 1 and 2 would be reduced to below significance through implementation of **MM BIO-4** that would require compensatory mitigation. **MM BIO-3** that would require a biological monitor be present to ensure treatment and vegetation removal activities occur only within the designated areas and no unauthorized impacts to sensitive vegetation communities occur would further reduce impacts to sensitive vegetation. Direct impacts to trees within Zone 3 would be

reduced through implementation of **MM BIO-9** that would require comprehensive mapping of tree species to be removed. Direct impacts to sensitive vegetation communities would be **less than significant.**

Indirect impacts to sensitive vegetation communities in Zones 1 to 3 through decreased water quality and altered hydrology, soil compaction, elevated dust levels, and the spread of invasive plant species. would be avoided through implementation of **MM BIO-2** and **MM BIO-3**. Indirect impacts to sensitive vegetation communities would be **less than significant**.

C. Would the Project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Direct impacts within Zones 1 and 2 from native brush thinning would be reduced to below significance through implementation of **MM BIO-10** that would require permitting from the appropriate resource agencies (i.e., USACE, RWQCB, and CDFW). In addition, a biological monitor shall be present in accordance with **MM BIO-3** to ensure treatment and vegetation removal activities occur in accordance with the Project's aquatic resource permits, and there are no direct impacts occurring outside the designated areas. Direct impacts to jurisdictional aquatic resources within Zones 1 and 2 would be **less than significant**.

No direct impacts to potentially jurisdictional resources in Zone 3 are anticipated from Project implementation. However, implementation of **MM BIO-11** that would ensure activities occurring in Zone 3 would only involve removal of dead, dying, or invasive species utilizing methods that would not adversely impact aquatic resources. A biological monitor shall also be present in accordance with **MM BIO-3** to ensure treatment and vegetation removal activities do not impact any aquatic resource areas located within Zone 3. Direct impacts to protected jurisdictional aquatic resources would be **less than significant**.

Indirect impacts to jurisdictional aquatic resources through decreased water quality and altered hydrology, soil compaction, elevated dust levels, and the spread of invasive plant species would be avoided through implementation of **MM BIO-2** and **MM BIO-3.** Indirect impacts to jurisdictional aquatic resources would be **less than significant**.

D. Would the Project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Impacts to wildlife corridors and nursery sites are considered **less than significant**. No mitigation is required.

E. Would the Project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Impacts related to conflict with local policies and ordinances would be **less than significant**. No mitigation is required.

F. Would the Project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

Project implementation would not conflict with the provisions of the San Diego County MSCP or Draft Santee MSCP Subarea Plan, nor would it prevent the Draft Santee MSCP Subarea Plan from being approved or compromise continued implementation of the MSCP in San Diego County. Impacts are **less than significant**, and no mitigation is required.

4.2 Cultural and Tribal Cultural Resources

This section describes the existing cultural (archaeological and built environment), and tribal cultural resources conditions of the San Diego River Fire Hazard Mitigation Program: Fuels Treatment Plan (Project) Site, identifies associated regulatory requirements, evaluates potential impacts, and identifies mitigation measures, if needed to reduce or avoid significant impacts, related to implementation of the Project.

The following analysis is based, in part, on the following sources:

- Recommended Cultural Area of Potential Effects for the San Diego River Fire Hazard Mitigation Plan Phase I, prepared by Dudek in April 2026 (Appendix C)
- Cultural Resource Assessment Report, prepared by Dudek in July 2026 (Appendix D)

4.2.1 Existing Conditions

4.2.1.1 Study Area

The Project Site encompasses an approximately 300-acre segment of the San Diego River corridor within the City of Santee. The Project Site and surrounding suburbs are generally flat, with the San Diego River running east–west through the center between wetland, riparian, and disturbed vegetation. Elevations range from approximately 310 to 360 feet above mean sea level. Vegetation within the Project Area of Potential Effect (APE) and surrounding vicinity is characterized by a mix of native as well as non-native vegetation communities and land cover types.

Walking paths, open-space trails, and vegetation are distributed throughout the corridor, with the Walker Preserve Trail located toward the eastern extent of the Project Site. Portions of the river channel and adjacent terraces are seasonally inundated or densely vegetated, while other areas exhibit evidence of prior disturbance, grading, and recreational access.

Historical topographic maps (1893 to 1941) and early aerial imagery (1953 to 1964) indicate that the Project Site primarily consisted of open space within the San Diego River corridor, including undeveloped floodplain, riparian habitat, and lands historically used for agriculture. Over time, the surrounding landscape experienced substantial transformation, as residential subdivisions, commercial development, and municipal facilities expanded around the river. Continued remodeling of existing structures, infrastructure improvements, and the introduction of newer and larger developments further altered the character of the area. Commercial and industrial uses have also proliferated south of the river corridor as suburban growth progressed. Overall, development adjacent to the Project Site reflects predominantly modern, utilitarian building forms typical of suburban San Diego County, while the Project Site itself retains a largely natural riverine character defined by riparian and wetland vegetation communities (Appendix D).

4.2.1.2 Historic Setting

Historical Overview of the City of Santee

The City of Santee is located in eastern San Diego County. As described in Appendix D, the area was called several different names before it became known as “Santee” in 1893. Originally, the land was inhabited by the Kumeyaay

tribe of Native Americans who resided on the banks of the San Diego River in the village of "Sinyeweche" (the present-day area of "Santee"). The Kumeyaay dominated the land until the arrival of the Spanish in 1779. At the direction of Father Junipero Serra, the Kumeyaay constructed the Old Mission Dam for the nearby Mission de Alcala. During this period, the land was divided among the Spanish soldiers as payment for their services, and the Native Americans were gathered to live at the Mission. In 1822, the Mission system was disbanded by the Mexican government and during the 1840s, American settlers arrived in California.

In 1870, George A. Cowles migrated to California from Florida. In 1877, he purchased 4,000 acres of land in the Santee area, in which he planted vineyards, pomegranate and magnolia trees. At this time, the Cuyamaca Railroad ran through the area and the local station became known as "Cowles Station" due to its proximity to the vineyard and orchards owned by Cowles. The surrounding area soon became known as "Cowleston."

After the death of George Cowles death in 1887, his wife, Jennie, married realtor and surveyor, Milton Santee. Several years later, Jennie Cowles Santee named the early post office "Santee," and by 1893, the town name was changed to Santee. Similarly, the Cowles School, established in 1891, and the Cowles School District subsequently changed their names to Santee as well.

In 1885, Hosmer P. McKoon purchased 9,543 acres of land in the Santee area for his "Fanita Ranch" (named after his wife, Fannie). However, over the next few years McKoon sold segments of the ranch to new arrivals, including 7,000 acres to the Scripps family in 1898. The Scripps used the ranch to raise cattle and built a country resort for their family. Like much of the rest of San Diego County during this period, Santee's economy was based in agriculture and ranching. Farms, such as the Edgemoor Stock Farm (established in 1908), drove the local economy and contributed to the city's rural identity. In 1914, the opening of the Panama Canal resulted in an increase in shipping ports in San Diego County that led to more growth in the surrounding areas. However, little growth came to San Diego during the early twentieth century.

In 1941, the United States' entry into the Second World War increased military activity on the West Coast and brought new development to Santee during the 1940s. The federal government used 2,300 acres of the Fanita Ranch as military training grounds, and the Marine Corps Base, Camp Pendleton, was established north of Santee. The wartime demand for manufacturing transformed San Diego County's industry and it became home to various aircraft and ship manufacturing as well as military training.

During the mid-twentieth century, Santee's economy increased, and the city became home to a variety of industries. After the war, Santee's agricultural industry significantly decreased, and it began to suburbanize. Residential development in the area was built for military and worker housing during World War II, and the population rapidly increased. In 1967, the Las Colinas Detention Facility opened as a juvenile facility, and in 1979, it was converted to an adult women's institution to serve as the primary facility for women prisoners in San Diego County. The establishment of the detention center introduced employment opportunities in the local area and served as a catalyst for further population growth. Such rapid growth created concern about the character of the community, so Santee residents created the San Diego County Santee Citizen's Planning Committee. The committee was officially recognized by the San Diego County Board of Supervisors in December 1968, and it has continued to serve as a local land-use and planning advisory board to the county planning commission and the Board of Supervisors. In 1974, the Committee secured approval of the Santee Community Plan which acted as the area's General Plan until the Santee General Plan was adopted in 1984. In 1980, the citizens of Santee voted to incorporate in order to gain local control over the development of their city, and the creation of the General Plan was their first goal.

Santee's rapid population increase resulted in the need for more recreation and entertainment services. In 1974, two regional parks were established in the city: Mission Trails Regional Park and Santee Lakes Regional Park. Additionally, more commercial development and entertainment venues followed. During the late twenty-first century, much of Santee's economy has focused upon the hospitality and entertainment sectors, as well as health care assistance, retail trade, and educational services. Since the 1980s, the City has continued to grow, reaching a population of approximately 54,000 residents in 2020. Since this time, Santee has worked toward protecting and enhancing the San Diego River, expanded its park system, and boasts major commercial centers.

4.2.1.3 Cultural Resources

This section presents information gathered during the cultural resources inventory efforts in support of the Project (see Appendix D for additional details). Section 4.2.2, Relevant Plans, Policies, and Ordinances, provides background information on the federal, state, and local regulations and requirements related to these resources.

Previously Conducted Cultural Resources Studies

The South Coastal Information Center records indicate that between 1973 and 2021, 185 previous cultural resources technical investigations have been conducted within 1 mile of the Project Site (Appendix D). Of these 185 studies, 43 previous studies overlap portions of the Project Site. A total of 14 of the cultural studies are considered relevant to the Project because they contain information pertaining to the previously recorded cultural sites within the Project Site. The 14 studies conducted within the Project Site previously consist of six archaeological survey reports, one archaeological monitoring report, four extended Phase I and Phase II testing and evaluation studies, one supplemental historic property survey, one environmental report with a cultural resources component, and one data recovery program.

Previously Recorded Cultural Resources

The South Coastal Information Center records search identified 79 cultural resources within a 1-mile radius of the Project Site. Of the 79 resources identified within the 1-mile radius, 3 resources were identified within the Project Site. These three sites include a bedrock milling site with associated artifact scatter, a habitation site deposit including fire affected rock, lithic and ceramic artifacts, and midden soil, and a lithic scatter.

Archival Research

In addition to the South Coastal Information Center records search, Dudek conducted a review of topographic (topo) maps, and historical aerial photographs to understand the development of the Project Site and surrounding properties over time. The review identified changes to the San Diego River Corridor, surrounding development, and land alterations.

Historic topo maps of the Project Site are available from 1893 to 2021 (NETR 2025). The historic topo maps depict the San Diego River flowing through the Project Site during the earliest mapped years, with no discernible large structures present within the Project Site between 1893 and 1941. Surrounding lands remain largely undeveloped throughout this early period. By 1942, Fanita Ranch appears within the southwestern portion of the Project Site, and by 1947, structures associated with "Edgemoore County Farms" are shown adjacent to North Magnolia Avenue. Through 1955, the Project Site itself shows no major visible changes, although a sand pit and several small structures are mapped near Cuyamaca Street in 1956. The 1959 and 1964 maps also show no major modifications within the Project Site, but by 1969, several sand pits are mapped within or very near the Project Site. Subsequent

mapping from 1975 to 1986 continues to show no substantial change within the Project Site, while the 2001 topographic map depicts an athletic field just north of the Project Site. More recent maps from 2012 and 2015 reflect increased urban development through a greater number of named streets surrounding the Project Site, and by 2018 and 2021 the Walker Preserve Trail is mapped within the eastern portion of the Project Site.

Historical aerial photographs (historic aerials) of the Project Site are available from 1953 to 2022 and provide more detail on the historic development of the subject property and surrounding properties through time (NETR 2025). The earliest historical aerial from 1953 shows no major structures within the Project Site, though several north and south trending roads cross the corridor. By 1964, development is present in the northern portion of the Project Site near present-day Chubb Lane, and agricultural activity is visible in that vicinity. Residential development is evident to the north and south of the Project Site by 1966, and agricultural development appears to the east by 1968. A 1971 aerial shows the San Diego River dammed within part of the Project Site. Aerials from 1978 through the late 1980s show expanded residential and commercial development north and south of the river, with the Carlton Oaks Golf Course appearing west of the Project Site by 1989. From 1990 through 2003, no significant changes are visible within the Project Site. By 2005 and 2009, new development is apparent northeast of the Project Site near the present-day Lakeside Sports Park, along with several hiking trails in the northeast portion of the Project Site. Aerial photographs from 2010 through 2022 show no major changes within the Project Site.

Cultural Resources Pedestrian Survey

Dudek archaeologists and Red Tail Environmental Native American Monitor conducted an intensive- level pedestrian survey of the Project Site December 8 to December 10, 2025, and on January 9, 2026. Densely vegetated areas and large bodies of water were not subject to pedestrian survey, as these locations present safety concerns for survey personnel and offer low potential for observable cultural materials.

The cultural resources pedestrian survey resulted in the identification of nine cultural resources within the Project Site, including three previously recorded archaeological sites, three newly recorded archaeological sites and three newly recorded isolated finds. The three previously recorded archaeological sites include, CA-SDI-005050, a prehistoric habitation site containing midden soil, bedrock milling features, and associated artifacts; CA-SDI-010148, a large prehistoric archaeological site containing fire-affected rock, lithic and ceramic artifacts, and midden deposits; and CA-SDI-021860, a light lithic scatter. The three newly identified archaeologist sites include SDRFM-DF-S-001, a historic period linear rock feature with a small historic period refuse concentration; SDRFM-DF-S-002, a historic period site consisting of a foundation pad and concrete footing; and SDRFM-DF-S-003, a newly identified prehistoric milling feature consisting of a bedrock mortar. The three isolated finds (SDRFM-DF-I-001, SDRFM-DF-I-002, and SDRFM-DF-I-003) consist of individual flakes and isolated ground stone fragments that do not meet criteria for site designation.

Native American Coordination

Native American Heritage Commission Sacred Lands File Search

Dudek requested a Native American Heritage Commission (NAHC) search of the Sacred Lands File (SLF) for the Project Site on December 11, 2025. The SLF consists of a database of known Native American resources. A response letter was received via email from the NAHC on December 10, 2025, stating resources are listed in the SLF for this area, but did not provide details on what the resource(s) are or where they are located. Dudek sent outreach letters to 17 Native American groups and individuals on December 29, 2025. To date, two responses have been received. On January 30, 2026, Jason Santos, the Deputy Tribal Historic Preservation Officer from the

Manzanita Band of Kumeyaay Nation, responded by stating that the Project APE is not within the boundaries recognized by the Manzanita Indian Reservation. However, Mr. Santos stated that the Project APE is within the boundaries that Manzanita considers its Traditional Use Area. The Manzanita Band, therefore, has requested to kept informed as the Project progresses. Mr. Santos also recommended archaeological and Tribal cultural monitoring for all ground disturbing activities near known archaeological sites. Further, on February 20, 2026, Mr. Jason Lavigne, the Tribal Historic Preservation Officer from the San Pasqual Tribe of Mission Indians, responded by stating that the San Pasqual Tribe does not have any comments on the proposed Project. Mr. Lavigne also added that San Pasqual reserves the right to provide further comments if additional information on the Project becomes available, or if the circumstances change.

Assembly Bill 52 Consultation

The Project is subject to compliance with Assembly Bill (AB) 52 (California Public Resources Code [PRC] Section 21074), which requires consideration of impacts to tribal cultural resources (TCRs) as part of the California Environmental Quality Act (CEQA) process and requires the lead agency to notify any tribal groups (who have requested notification) of the proposed Project. The City sent AB 52 letters on March 20, 2026, and no responses were received.

4.2.2 Relevant Plans, Policies, and Ordinances

Federal

Section 106 National Historic Preservation Act

Federal protection of cultural resources is legislated by (a) the National Historic Preservation Act of 1966 as amended by 16 U.S. Code 470, (b) the Archaeological Resource Protection Act of 1979, and (c) the Advisory Council on Historical Preservation. These laws and organizations maintain processes for determination of the effects on historical properties eligible for listing in the National Register of Historic Places (NRHP).

Section 106 of the National Historic Preservation Act and accompanying regulations (36 CFR Part 800) constitute the main federal regulatory framework guiding cultural resources investigations and requires consideration of effects on properties that are listed in or may be eligible for listing in the NRHP. The NRHP is the nation's master inventory of known historic resources. It is administered by the National Park Service and includes listings of buildings, structures, sites, objects, and districts that possess historic, architectural, engineering, archaeological, and cultural districts that are considered significant at the national, state, or local level.

- The formal criteria (36 CFR 60.4) for determining NRHP eligibility are as follows:
- The property is at least 50 years old (however, properties under 50 years of age that are of exceptional importance or are contributors to a district can also be included in the NRHP);
- It retains integrity of location, design, setting, materials, workmanship, feeling, and associations; and
- It possesses at least one of the following criteria:
  A. Association with events that have made a significant contribution to the broad patterns of history (events).
  B. Association with the lives of persons significant in the past (persons).

C. Distinctive characteristics of a type, period, or method of construction, or represents the work of a master, or possesses high artistic values, or represents a significant, distinguishable entity whose components may lack individual distinction (architecture).
D. Has yielded, or may be likely to yield, information important to prehistory or history (information potential).

Listing in the NRHP does not entail specific protection or assistance for a property but it does guarantee recognition in planning for federal or federally assisted projects, eligibility for federal tax benefits, and qualification for federal historic preservation assistance. Additionally, project effects on properties listed in the NRHP must be evaluated under CEQA.

The National Register Bulletin also provides guidance in the evaluation of archaeological site significance. If a heritage property cannot be placed within a particular theme or time period, and thereby lacks "focus," it is considered not eligible for the NRHP. In further expanding upon the generalized National Register criteria, evaluation standards for linear features (such as roads, trails, fence lines, railroads, ditches, flumes, etc.) are considered in terms of four related criteria that account for specific elements that define engineering and construction methods of linear features: (1) size and length; (2) presence of distinctive engineering features and associated properties; (3) structural integrity; and (4) setting. The highest probability for NRHP eligibility exists within the intact, longer segments, where multiple criteria coincide.

State

California Register of Historical Resources (Public Resources Code Section 5020 et seq.)

In California, the term "historical resource" includes but is not limited to "any object, building, structure, site, area, place, record, or manuscript which is historically or archaeologically significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California" (PRC Section 5020.1[j]). In 1992, the California legislature established the California Register of Historic Resources (CRHR) "to be used by state and local agencies, private groups, and citizens to identify the state's historical resources and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse change" (PRC Section 5024.1[a]). The criteria for listing resources on the CRHR were expressly developed to be in accordance with previously established criteria developed for listing in the NRHP, enumerated below. According to PRC Section 5024.1(c)(1–4), a resource is considered historically significant if it (i) retains "substantial integrity," and (ii) meets at least one of the following criteria:

1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.
2. Is associated with the lives of persons important in our past.
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
4. Has yielded, or may be likely to yield, information important in prehistory or history.

In order to understand the historic importance of a resource, sufficient time must have passed to obtain a scholarly perspective on the events or individuals associated with the resource. A resource less than 50 years old may be considered for listing in the CRHR if it can be demonstrated that sufficient time has passed to understand its historical importance (see 14 CCR 4852[d][2]).

The CRHR protects cultural resources by requiring evaluations of the significance of prehistoric and historic resources. The criteria for the CRHR are nearly identical to those for the NRHP, and properties listed or formally designated as eligible for listing in the NRHP are automatically listed in the CRHR, as are the state's landmarks and points of interest. The CRHR also includes properties designated under local ordinances or identified through local historical resource surveys.

Native American Historic Cultural Act (California Public Resources Code Section 5097 et seq.)

The Native American Historic Resources Protection Act (PRC 5097 et seq.) addresses the disposition of Native American burials in archaeological sites and protects such remains from disturbance, vandalism, or inadvertent destruction; establishes procedures to be implemented if Native American human remains or associated burial items are discovered during construction of a Project; and establishes the NAHC to resolve disputes regarding the disposition of such remains. In addition, the Native American Historic Resource Protection Act makes it a misdemeanor punishable by up to 1 year in jail to deface or destroy a Native American historic or cultural site that is listed or may be eligible for listing in the CRHR.

California Native American Graves Protection and Repatriation Act

The California Native American Graves Protection and Repatriation Act, enacted in 2001, requires all state agencies and museums that receive state funding and that have possession or control over collections of human remains or cultural items, as defined, to complete an inventory and summary of these remains and items on or before January 1, 2003, with certain exceptions. The California Native American Graves Protection and Repatriation Act also provides a process for the identification and repatriation of these items to the appropriate tribes.

California Environmental Quality Act

As described further below, the following CEQA statutes and CEQA Guidelines are of relevance to the analysis of archaeological, historic, and cultural resources:

- California Public Resources Code Section 21083.2(g) defines “unique archaeological resource.”
- California Public Resources Code Section 21084.1 and CEQA Guidelines Section 15064.5(a) define “historical resources.” In addition, CEQA Guidelines Section 15064.5(b) defines the phrase “substantial adverse change in the significance of an historical resource.” It also defines the circumstances when a project would materially impair the significance of an historical resource.
- California Public Resources Code Section 5097.98 and CEQA Guidelines Section 15064.5(e) set forth standards and steps to be employed following the accidental discovery of human remains in any location other than a dedicated ceremony.
- California Public Resources Code Sections 21083.2(b)-(c) and CEQA Guidelines Section 15126.4 provide information regarding the mitigation framework for archaeological and historic resources, including examples of preservation-in-place mitigation measures; preservation-in-place is the preferred manner of mitigating impacts to significant archaeological sites because it maintains the relationship between artifacts and the archaeological context and may also help avoid conflict with religious or cultural values of groups associated with the archaeological site(s).

More specifically, under CEQA, a project may have a significant effect on the environment if it may cause “a substantial adverse change in the significance of an historical resource” (PRC Section 21084.1; CEQA Guidelines Section 15064.5[b]). If a site is either listed or eligible for listing in the CRHR, or if it is included in a local register

of historic resources or identified as significant in a historical resources survey (meeting the requirements of PRC Section 5024.1[q]), it is a "historical resource" and is presumed to be historically or culturally significant for purposes of CEQA (PRC Section 21084.1; CEQA Guidelines Section 15064.5[a]). The lead agency is not precluded from determining that a resource is a historical resource even if it does not fall within this presumption (PRC Section 21084.1; CEQA Guidelines Section 15064.5[a]).

A "substantial adverse change in the significance of an historical resource" reflecting a significant effect under CEQA means "physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired" (CEQA Guidelines Section 15064.5[b][1]; PRC Section 5020.1[q]). In turn, CEQA Guidelines Section 15064.5(b)(2) states the significance of an historical resource is materially impaired when a project incurs the following:

1. Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register of Historical Resources; or
2. Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to section 5020.1(k) of the Public Resources Code or its identification in an historical resources survey meeting the requirements of section 5024.1(g) of the Public Resources Code, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or
3. Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the California Register of Historical Resources as determined by a lead agency for purposes of CEQA.

Pursuant to these sections, the CEQA inquiry begins with evaluating whether a Project Site contains any "historical resources," then evaluates whether that project will cause a substantial adverse change in the significance of a historical resource such that the resource's historical significance is materially impaired.

If it can be demonstrated that a project will cause damage to a unique archaeological resource, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that they cannot be left undisturbed, mitigation measures are required (PRC Section 21083.2[a], [b], and [c]).

PRC Section 21083.2(g) defines a unique archaeological resource as an archaeological artifact, object, or site about which it can be clearly demonstrated that without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

1. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
2. Has a special and particular quality such as being the oldest of its type or the best available example of its type.
3. Is directly associated with a scientifically recognized important prehistoric or historic event or person.

Impacts to non-unique archaeological resources are generally not considered a significant environmental impact (PRC Section 21083.2[a]; CEQA Guidelines Section 15064.5[c][4]). However, if a non-unique archaeological resource qualifies as a TCR (PRC Section 21074[c], 21083.2[h]), further consideration of significant impacts is required.

CEQA Guidelines Section 15064.5 assigns special importance to human remains and specifies procedures to be used when Native American remains are discovered. These procedures are detailed in PRC Section 5097.98.

California Environmental Quality Act Guidelines Section Public Resources Code Section 21083.2(b)

Pursuant to these sections, CEQA first evaluates whether a Project Site contains any "historical resources," then assesses whether that Project would cause an adverse effect to the significance of a historical resource.

When a Project significantly affects a unique archaeological resource, CEQA imposes special mitigation requirements. Specifically, "if it can be demonstrated that a Project will cause damage to a unique archaeological resource, the lead agency may require reasonable efforts to be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. Examples of that treatment, in no order of preference, may include, but are not limited to, any of the following:

A. Planning construction to avoid archaeological sites.
B. Deeding archaeological sites into permanent conservation easements.
C. Capping or covering archaeological sites with a layer of soil before building on the sites.
D. Planning parks, greenspace, or other open space to incorporate archaeological sites."

California Public Resources Code, Section 21083.2(b)(1)–(4).

If these "preservation in place" options are not feasible, mitigation may be accomplished through data recovery (PRC Section 21083.2[d]; 14 CCR 15126.4[b][3][C]). PRC Section 21083.2(d) states that "excavation as mitigation shall be restricted to those parts of the unique archeological resource that would be damaged or destroyed by the Project. Excavation as mitigation shall not be required for a unique archeological resource if the lead agency determines that testing or studies already completed have adequately recovered the scientifically consequential information from and about the resource, if this determination is documented in the environmental impact report."

These same requirements are set forth in slightly greater detail in CEQA Guidelines Section 15126.4(b)(3), as follows:

A. Preservation in place is the preferred manner of mitigating impacts to archeological sites. Preservation in place maintains the relationship between artifacts and the archeological context. Preservation may also avoid conflict with religious or cultural values of groups associated with the site.
B. Preservation in place may be accomplished by, but is not limited to, the following:
    1. Planning construction to avoid archeological sites;
    2. Incorporation of sites within parks, greenspace, or other open space;
    3. Covering the archeological sites with a layer of chemically stable soil before building tennis courts, parking lots, or similar facilities on the site[; and]
    4. Deeding the site into a permanent conservation easement.

C. When data recovery through excavation is the only feasible mitigation, a data recovery plan, which makes provision for adequately recovering the scientifically consequential information from and about the historical resource, shall be prepared and adopted prior to any excavation being undertaken.

Note that, when conducting data recovery, "if an artifact must be removed during Project excavation or testing, curation may be an appropriate mitigation." (Ibid.) However, "data recovery shall not be required for an historical resource if the lead agency determines that testing or studies already completed have adequately recovered the scientifically consequential information from and about the archeological or historic resource, provided that determination is documented in the EIR and that the studies are deposited with the California Historical Resources Regional Information Center" (14 CCR 15126.4[b][3][D]).

California Health and Safety Code

California law protects Native American burials, skeletal remains, and associated grave goods, regardless of their antiquity, and provides for the sensitive treatment and disposition of those remains. California Health and Safety Code Section 7050.5 requires that if human remains are discovered in any place other than a dedicated cemetery, no further disturbance or excavation of the site or nearby area reasonably suspected to contain human remains shall occur until the county coroner has examined the remains (Section 7050.5b). PRC Section 5097.98 also outlines the process to be followed in the event that remains are discovered. If the coroner determines or has reason to believe the remains are those of a Native American, the coroner must contact the NAHC within 24 hours (Section 7050.5c). The NAHC would notify the most likely descendant (MLD). With the permission of the landowner, the MLD may inspect the site of discovery. The inspection must be completed within 48 hours of being granted access to the site. The MLD may recommend means of treating or disposing of, with appropriate dignity, the human remains and items associated with Native Americans.

California State Assembly Bill 52

AB 52 of 2014 amended PRC Section 5097.94 and added PRC Sections 21073, 21074, 21080.3.1, 21080.3.2, 21082.3, 21083.09, 21084.2, and 21084.3. AB 52 established that TCRs must be considered under CEQA and also provided for additional Native American consultation requirements for the lead agency. Section 21074 describes a TCR as a site, feature, place, cultural landscape, sacred place, or object that is considered of cultural value to a California Native American Tribe and that is either of the following:

- On or determined to be eligible for the California Register of Historical Resources or a local historic register; or
- A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1.

AB 52 formalizes the lead agency–tribal consultation process, requiring the lead agency to initiate consultation with California Native American groups that are traditionally and culturally affiliated with the Project Site, including tribes that may not be federally recognized. Lead agencies are required to begin consultation prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report.

Section 1 (a)(9) of AB 52 establishes that "a substantial adverse change to a tribal cultural resource has a significant effect on the environment." Effects on TCRs should be considered under CEQA. Section 6 of AB 52 adds Section 21080.3.2 to the PRC, which states that parties may propose mitigation measures "capable of avoiding or substantially lessening potential significant impacts to a tribal cultural resource or alternatives that would avoid

significant impacts to a tribal cultural resource." Further, if a California Native American tribe requests consultation regarding Project alternatives, mitigation measures, or significant effects to TCRs, the consultation shall include those topics (PRC Section 21080.3.2[a]). The environmental document and the mitigation monitoring and reporting program (where applicable) shall include any mitigation measures that are adopted (PRC Section 21082.3[a]).

Local

City of Santee General Plan Conservation Element

The City of Santee does not maintain a local register of historic resources. As a result, the Property was not evaluated under local significance criteria. Nevertheless, the City of Santee General Plan serves to guide the City's future development. This is accomplished through objectives and policies that serve as a long-term guide for physical, economic, and environmental growth. The Conservation Element of the Santee General Plan addresses water resources, land resources, archaeological and cultural sources, biological resources, and open space. Section 4.3 of the Conservation Element discusses archaeological, cultural, and historic resources known to be within the City. The goal of the Conservation Element is to conserve open space, natural, and cultural resources.

According to Conservation Element Objective 8.0 (Preserve significant cultural resources), Policy 8.1, the City shall require either the preservation of significant historic or prehistoric sites, or the professional retrieval of artifacts prior to the development of a site, consistent with the provisions of CEQA. Preservation may include various measures including avoidance, preservation in place, incorporation into open space, or covering or capping. The type of preservation would depend upon the nature and significance of the archaeological resource and the practical requirements of the proposed land use. Policy 8.2 states that the City should require curation of any recovered artifacts as a condition of any cultural resources mitigation program.

4.2.3 Thresholds of Significance

The significance criteria used to evaluate the Project impacts to cultural, tribal cultural, and paleontological resources are based on CEQA Guidelines Appendix G. According to CEQA Guidelines Appendix G, a significant impact related to cultural, tribal cultural, and paleontological resources would occur if the Project would incur the following:

A. Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5.
B. Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5.
C. Disturb any human remains, including those interred outside of dedicated cemeteries.
D. Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is (i) listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k).
E. Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is (ii) a resource determined by the lead agency, in its discretion

and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

F. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

4.2.4 Impact Analysis

A. Would the Project cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5?

According to CEQA Guidelines Section 15064.5(a)(3), a historical resource includes any resource listed in or determined eligible for listing in the CRHR, or any resource the lead agency determines meets the CRHR criteria. The evaluation of resources within the Project Site did not identify any built-environment resources or historic-era structures that meet the criteria for listing in the CRHR.

Dudek prepared a Built Environment Area of Potential Effects (APE) memorandum for this Project and is included as Appendix C. The memorandum includes background research of historic aerials, the California Historical Resources Information System (CHRIS), the Built Environment Resource Directory, and the San Diego County Historic Property List. The findings determined that no known built environment resources are located within the Project Site, and none of the adjacent historic-age properties are listed in, or determined eligible for listing in the NRHP, CRHR, or included in a local register. Additionally, the Project would not include construction disturbance, demolition, non-compatible building or structural modifications, construction-related groundborne vibration, or property acquisitions. Project activities consist solely of vegetation management activities (hand labor, mechanical and chemical application) that would not physically alter any building, structure, or object and therefore the Project would not result in a substantial adverse change under CEQA Section 15064.5(b) and impacts would be **less than significant.**

B. Would the Project cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5?

The Project Site is located within the San Diego River corridor, a riparian and wetland landscape that retains areas of relatively low ground disturbance compared to the surrounding urban development and is considered to have elevated potential for prehistoric archaeological resources. The Records Search and the Cultural Resources Pedestrian Survey identified a total of nine cultural resources within the Project Site, including six archaeological sites CA-SDI-005050 (bedrock milling; lithic and ceramic scatter), CA-SDI-010148 (artifact scatter), CA-SDI-021860 (lithic scatter), SDRFM-DF-S-001 (historic period linear rock feature and refuse), SDRFM-DF-S-002 (historic period poured concrete pad and footing), and SDRFM-DF-S-003 (prehistoric bedrock milling feature), and three isolated finds (SDRFM-DF-I-001, SDRFM-DF-I-002, and SDRFM-DF-I-003) that do not meet the criteria for site designation.

Vegetation management and maintenance activities across three treatment zones would use a combination of hand labor (e.g., cutting, trimming) mechanical methods (e.g., mowing and mastication), and limited chemical treatment (e.g., EPA-approved herbicide). Ground disturbance could occur where crews access treatment areas via existing roads and trails, conduct overland travel by foot (including off-trail travel in some locations), and where mechanical equipment operates in accessible areas to remove

or rearrange vegetation and biomass. Due to this and the Project's location within the San Diego River corridor, there is an increased potential that Project associated ground disturbance would have the potential to impact unanticipated archaeological resources. For this reason, the Project Site should be treated as potentially sensitive for archaeological resources. With Implementation of **MM CUL-1: Resource Avoidance**, and **MM CUL-2: Cultural Resources Monitoring**, the Project would avoid direct impacts to the three identified archaeological sites and would reduce potential impacts to unanticipated archaeological resources. Therefore, with incorporation of **MM CUL-1** and **MM CUL-2**, impacts to archaeological resources would be **less than significant**.

C. Would the Project disturb any human remains, including those interred outside of formal cemeteries?

No prehistoric or historic burials were identified within or immediately adjacent to the Project Site as a result of the CHRIS records search, NAHC SLF search, or pedestrian survey. Moreover, the Project Site is not part of a dedicated cemetery and as such, the likelihood of disturbing human remains is low. However, the possibility of encountering human remains within the Project Site exists. In the unexpected event that human remains are unearthed during construction activities, impacts would be potentially significant. However, because inadvertent discovery of human remains cannot be ruled out, to reduce potential impacts, **MM CUL-3** requires that if human remains are discovered, all work in the vicinity of the find shall stop and the County Coroner and the City shall be notified immediately. If the remains are determined to be Native American, the County Coroner would notify the NAHC, which would determine and notify an MLD. With incorporation of **MM CUL–3**, impacts associated with human remains would be **less than significant**.

D. Would the Project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?

As part of the Cultural Resources Assessment Report (Appendix D), records of the CHRIS and SLF were completed in October and December 2025. Based on the CHRIS records search, the anticipated site type within the Project Site consisted of prehistoric artifact scatters and features.

The NAHC was contacted through a formal SLF request, and the commission responded by email indicating that known Native American cultural resources are present in the vicinity of the Project Site. The City sent AB 52 letters on March 20, 2026, and no responses were received. Therefore, no TCRs have been identified by California Native American tribes as part of the City's AB 52 notification and consultation process. One newly recorded resource, SDRFM-DF-S-003, contains a bedrock milling feature and may retain native American cultural value; however, it is recommended not eligible for listing in the NRHP or CRHR because it appears to have been relocated, lacks associated archaeological deposits, and does not meet the criteria for significance.

Although the resource is not eligible for listing in the CRHR, avoidance and monitoring is recommended for potential Tribal significance. With implementation of **MM CUL-1** and **MM CUL-2**, the Project would avoid impacts to areas of potential Tribal cultural importance. Impacts are considered **less than significant with mitigation incorporated.**

E. Would the Project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

One cultural resource identified (SDRFM-DF-S-003) contains a bedrock milling feature that may have cultural value. However, it is not considered a TCR because it is not eligible for the CRHR, does not meet CEQA's TCR criteria, and lacks associated archaeological deposits. The Sacred Lands File returned a positive indication of cultural resources inventory in the vicinity of the Project Site; however, the City sent AB 52 letters on March 20, 2026, and no responses were received. Therefore, no TCRs have been identified within the Project Site to date through the consultation process.

The archaeological sensitivity of the Project Site is considered to be moderate. For this reason, the Project Site should be treated as potentially sensitive for archaeological resources; **MM CUL-1** is required to reduce potential impacts to unanticipated discovery of cultural resources and TCRs, and **MM CUL-2** would reduce the significance of impacts associated with any potential buried, currently unrecorded/unknown TCRs. Impacts are considered **less than significant with mitigation incorporated.**

4.2.5 Mitigation Measures and Level of Significance After Mitigation

A. Would the Project cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5?

The Project would not result in potentially significant impacts with regard to a substantial adverse change in significance of a historical resource pursuant to CEQA Guidelines Section 15064.5. Impacts associated with historical resources would be **less than significant.**

B. Would the Project cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5?

The Project would result in potentially significant impacts with regard to a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5. With incorporation of **MM CUL-1** and **MM CUL-2**, impacts associated with archaeological resources would be **less than significant.**

MM CUL-1 Resource Avoidance. Measures shall be taken to prevent inadvertent disturbance of archaeological resource sites CA-SDI-005050, CA-SDI-010148, SDRFM-DF-S-002, and SDFRM-DF-S-003. Prior to the commencement of any ground-disturbing activities within 100 feet of the resource boundaries of CA-SDI-005050, CA-SDI-010148, SDRFM-DF-S-002, and SDRFM-DF-S-003, temporary work buffers shall be placed to protect the sites from inadvertent disturbances associated with project implementation. Following Project implementation within the vicinity of CA-SDI-005050, CA-SDI-010148, SDRFM-DF-S-002,

and SDRFM-DF-S-003, the temporary work buffers shall be removed. Temporary work buffers may include exclusionary fencing, flagging, and/or Environmentally Sensitive Area (ESA) signage. An archaeological monitor shall guide the placement and erection of the temporary work buffers to ensure archaeological sites CA-SDI-005050, CA-SDI-010148, SDRFM-DF-S-002, and SDRFM-DF-S-003 are properly protected.

Temporary work buffers shall remain in place for the duration of Project activities occurring in the vicinity of the resource. Following completion of work within each protected area, buffers shall be removed. The archaeological monitor shall confirm that removal occurs only after all potential disturbance risks have ended.

Under no circumstances shall Project personnel, equipment, or materials enter the established buffer zones. If construction staff, monitors, or City representatives observe potential encroachment or damage, ground-disturbing activities shall be immediately redirected or halted until appropriate corrective action is taken.

MM CUL-2 Cultural Resources Monitoring. To mitigate for potential impacts to previously unknown, buried cultural resources within the Project APE and to prevent impacts to known archaeological resources, an archaeological monitoring program shall be implemented pursuant to the City of Santee (City) regulations, the California Environmental Quality Act (CEQA), and Section 106 of the National Historic Preservation Act and shall include the following requirements:

- Pre-Construction
  - The applicant shall contract a Secretary of Interior qualified Lead Archaeologist to oversee the cultural monitoring program. The Lead Archaeologist shall contract with a Kumeyaay monitor to conduct Native American monitoring for the Project.

    The Lead Archaeologist and Kumeyaay Native American monitor(s) shall attend the pre-construction meeting to explain the monitoring requirements.
- Construction
  - Monitoring. Both the archaeological and Kumeyaay Native American monitor(s) are to be on site during initial ground-disturbing activities. The frequency and location of monitoring of native soils will be determined by the Lead Archaeologist in consultation with the Kumeyaay Native American monitor(s).
  - If cultural resources are identified:
    - Both the archaeological and Kumeyaay Native American monitor(s) have the authority to divert or temporarily halt ground disturbance operations in the area of the discovery.
    - The archaeological monitor shall contact the Lead Archaeologist.
    - The Lead Archaeologist shall contact the City.
    - The Lead Archaeologist in consultation with the City and Kumeyaay Native American monitor(s) shall determine the significance of discovered resources. Construction activities will be allowed to resume after the City has concurred with the significance evaluation.

- Isolates and non-significant deposits shall be minimally documented in the field. Should the isolates and non-significant deposits not be collected by the archaeological monitor, the Kumeyaay Native American monitor(s) may collect the cultural material for transfer to a Tribal curation facility or repatriation program.
- If cultural resources are determined to be potentially significant, avoidance measures will be developed by the Lead Archaeologist in consultation with the Kumeyaay Native American monitor(s) and approved by the City. If avoidance is not feasible, a research design and data recovery plan shall be prepared by the Lead Archaeologist in consultation with the Kumeyaay Native American monitor(s) and approved by the City. The preferred option is avoidance.
- If human remains are identified
  - Upon the identification of possible human remains, no further disturbance shall occur in the area of the find until procedures stipulated in Public Resources Code Section 5097.98, CEQA Section 15064.5 and Health and Safety Code Section 7050.5 are completed.

▪ Upon completion of project ground disturbance, a final report shall be prepared substantiating that earth-disturbing activities are completed and whether cultural resources were encountered. A copy of the final report shall be submitted to the South Coastal Information Center and any culturally affiliated tribe who requests a copy.

C. Would the Project disturb any human remains, including those interred outside of formal cemeteries?

The Project would result in potentially significant impacts associated with the disturbance of human remains, including those interred outside of formal cemeteries. With incorporation of **MM CUL-3**, impacts associated with human remains would be **less than significant with mitigation incorporated**.

MM CUL-3 Unanticipated Discovery of Human Remains. In order to mitigate impacts to human remains to a level that is less than significant, procedures for proper treatment of unanticipated discoveries must comply with the California Environmental Quality Act (CEQA) Guidelines. In the event of discovery of unanticipated human remains, personnel shall comply with Public Resources Code Section 5097.98, CEQA Section 15064.5, and Health and Safety Code Section 7050.5 during earth-disturbing activities:

If any human remains are discovered, the construction personnel or the appropriate representative shall contact the County Coroner and the City. Upon identification of human remains, no further disturbance shall occur in the area of the find until the County Coroner has made the necessary findings as to origin. If the remains are determined to be of Native American origin, the Most Likely Descendant, as identified by the Native American Heritage Commission, shall be contacted by the property owner or their representative in order to determine proper treatment and disposition of the remains. The immediate vicinity where the Native American human remains are located is not to be damaged or disturbed by further development activity until consultation with the Most Likely Descendant regarding their recommendations as required by California Public Resources Code Section 5097.98 has been conducted. California Public Resources Code Section 5097.98, CEQA Section 15064.5 and Health and Safety Code Section 7050.5 shall be followed.

D. Would the Project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?

The Project would result in potentially significant impacts if TCRs were found during project activities. With implementation of **MM CUL-1** and **MM CUL-2**, the Project would avoid inadvertent disturbance to resources with potential tribal cultural significance and ensure that tribal monitors participate directly in ground-disturbing activities and in all vegetation management activities decisions for discoveries. Impacts to TCRs would be **less than significant with mitigation incorporated.**

E. Would the Project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

The Project would result in potentially significant impacts associated with the disturbance of TCRs because one resource (SDRFM-DF-S003) contains- a bedrock milling feature that may have Native American cultural value and the Project Site is considered moderately sensitive for cultural resources. With implementation of **MM CUL-1** and **MM CUL-2**, the potential for inadvertent disturbance to TCRs would be minimized, and any discovery of Native American human remains would be treated in compliance with state law. Therefore, impacts associated with TCRs would be **less than significant with mitigation incorporated**.

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4.3 Hazards and Hazardous Materials

This section evaluates the effects of proposed San Diego River Fire Hazard Mitigation Program: Fuels Management Plan (Project) implementation on hazards and hazardous materials conditions. The following analysis identifies associated regulatory requirements, evaluates potential impacts, and identifies mitigation measures, if necessary to reduce or avoid significant impacts, related to the implementation of the Project.

4.3.1 Existing Conditions

Project Site Conditions

The Project Site is situated within a wildland–urban interface setting and is characterized by a river corridor containing riparian habitats, wetlands, open space, and restored areas, with adjacent residential and commercial development on both sides of the corridor. Existing land uses within the Project Site are primarily open space and recreation-oriented, including multi-use public access trails, parkland, and natural areas.

The Project Site does not contain industrial operations, permanent structures associated with hazardous materials handling, or land uses involving the routine storage, use, or disposal of hazardous or acutely hazardous materials. Existing hazards within the corridor are instead primarily related to wildfire risk, including dense vegetation, invasive species, accumulated biomass, and ignition potential associated with human access and adjacent development. These existing conditions form the baseline context for the proposed fuels reduction and hazard mitigation activities evaluated in this Environmental Impact Report.

Contaminated Sites

A search of the Regulated Site Portal identified several listings of contaminated sites around the Project Site. These listings are for a variety of sites that handle hazardous materials and/or wastes, have environmental permits for operations, or have had release of hazardous materials. Government Code Section 65962.5 requires the California Environmental Protection Agency (CalEPA) to compile a list of hazardous waste and substances sites (Cortese List). While the Cortese List is no longer maintained as a single list, the following databases provide information that meet the Cortese List requirements:

1. List of Hazardous Waste and Substances sites from Department of Toxic Substances Control EnviroStor database (HSC 25220, 25242, 25356, and 116395)
2. List of LUST Sites by County and Fiscal Year from the State Water Resources Control Board GeoTracker database (HSC 25295)
3. List of solid waste disposal sites identified by the State Water Resources Control Board with waste constituents above hazardous waste levels outside the waste management unit (Water Code Section 13273[e] and 14 CCR Section 18051)
4. List of “active” Cease and Desist Orders and Cleanup and Abatement Orders from the State Water Resources Control Board (Water Code Sections 13301 and 13304)
5. List of hazardous waste facilities subject to corrective action pursuant to Section 25187.5 of the Health and Safety Code, identified by the Department of Toxic Substances Control

In addition to Cortese List sites and the CalEPA Regulated Site Portal (discussed in Current Hazardous Material Uses and Hazardous Waste Generation), the following databases provide additional information regarding potential environmental contamination within the State of California. Table 4.3-1 provides a summary of these databases.

Table 4.3-1. Online Database Listings

Database	Details
Department of Toxic Substance Control (DTSC) EnviroStor https://www.envirostor.dtsc.ca.gov/	The DTSC's data management system for tracking cleanup, permitting, enforcement, and investigation efforts at hazardous waste facilities and sites with known contamination or sites where there may be reasons for further investigation.
Regional Water Quality Control Board (RWQCB) GeoTracker http://geotracker.waterboards.ca.gov/	The California RWQCB's data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater. GeoTracker contains records for sites that require cleanup, various unregulated projects, and permitted facilities. Sites include Leaking Underground Storage Tanks, Department of Defense, Cleanup Program, Irrigated Lands, Oil and Gas Production, Permitted Underground Storage Tanks, and Land Disposal Sites.
National Pipeline Mapping System https://www.npms.phmsa.dot.gov/	The National Pipeline Mapping System Public Map Viewer is a web-based application designed to assist the general public with displaying and querying data related to gas transmission and hazardous liquid pipelines, liquefied natural gas plants, and breakout tanks under Department of Transportation Pipeline and Hazardous Material Safety Administration jurisdiction.
CalRecycle Solid Waste Information System (SWIS) https://www2.calrecycle.ca.gov/SolidWaste/Site/Search	The SWIS database contains information on solid waste facilities, operations, and disposal sites throughout the state. These include landfills, transfer stations, compositing sites, engineered conversion facilities, and closed disposal facilities.
California Geologic Energy Management Division (CalGEM) Well Finder https://www.conservation.ca.gov/calgem/Pages/Wellfinder.aspx	The CalGEM Well Finder database identifies oil and gas wells and related facilities throughout the state.

Source: DTSC 2026; CalGEM 2026.

A regulatory database search of existing sites was completed within the Project Site. The database search specifically identified sites that have had reported releases of hazardous materials or waste, including active contaminated sites that are currently under assessment and/or remediation. Some of the sites identified on these databases include closed cases, which received regulatory closure because the contamination levels at those facilities or sites were found to be below regulatory thresholds, contamination levels were determined to not be a threat to human health or the environment, or remediation was completed to the satisfaction of the regulatory agency overseeing the effort.

EnviroStor Database Sites

The EnviroStor database includes both state cleanup and Federal Superfund sites. No EnviroStor-listed sites are located on or directly adjacent to the Project Site. The closest EnviroStor-listed site is the Coneen Property, located at 8656 Cuyamaca Street, which is designated by the Department of Toxic Substance Control (DTSC) as a Site Evaluation and is located approximately 5,100 feet south of the Project Site, on the opposite side of State Route 52.

Given the distance, intervening roadway infrastructure, and site status, this site would not affect the Project Site or contribute to existing hazardous materials conditions within the Project area (DTSC 2026).

GeoTracker Database Sites

The GeoTracker database includes hazardous material release sites found in the Spills, Leaks, Investigations, and Cleanups program; the Leaking Underground Storage Tank program; military cleanup sites; and permitted land disposal sites (such as landfills). One GeoTracker-listed site is located within the Project Site, and 11 sites are located directly adjacent to the Project Site; all of these sites have received regulatory closure. No open GeoTracker sites are located within or directly adjacent to the Project Site (SWRCB 2026).

National Pipeline Mapping System

A review of the National Pipeline Mapping System identified a gas transmission pipeline located approximately 0.18 miles northwest of the Project Site (NPMS 2026). The National Pipeline Mapping System includes generalized locations of gas transmission pipelines regulated by the U.S. Department of Transportation (USDOT).

California Department of Resources Recycling and Recovery Solid Waste Information System Database Sites

A review of the CalRecycle Solid Waste Information System database identified two solid waste facilities within the City of Santee. The Santee Limited Volume Transfer Operation is an active solid waste operation located at 8502 Railroad Avenue, approximately 1.05 miles south of the Project Site. A second facility, also identified as Santee Limited Volume Transfer Operation, is listed as closed and is located near Mission Road at State Route 52/125, approximately 0.5 miles west of the Project Site (CalRecycle 2026). Neither facility is located on or directly adjacent to the Project Site.

California Geologic Energy Management Oil and Gas Wells

No oil and gas wells, nor well fields, were identified on or overlapping the Project Site (CalGEM 2026).

Hazardous Materials

Definitions

California Health and Safety Code (HSC) Section 25260(d) defines hazardous material as a substance or waste that, because of its physical, chemical, or other characteristics, may pose a risk endangering human health or safety or of degrading the environment. Hazardous material includes, but is not limited to:

1. A hazardous substance, as defined in Section 25281 or subdivision (a) or Section 78075.
2. A hazardous waste, as defined in Section 25117.
3. A waste, as defined in Section 470 or as defined in Section 13050 of the Water Code.

Under 29 CFR 1910.1200, the Occupational Safety and Health Administration (OSHA) defines a hazardous chemical as any chemical that is a physical hazard or health hazard.

Potential Existing Hazards and Contamination

Hazardous materials, if present in soils, can be distributed and dispersed by vegetation treatment activities, particularly those using heavy equipment. Soil contamination generally occurs in areas that are or have been previously developed, especially with industrial-type uses. Soil contamination can also occur in areas where pesticides have been historically applied, as well as in areas that have historically been mined or used for defense activities (e.g., an air force base). Contamination can also be associated with leaking utilities (e.g., leaking petroleum or gas pipelines, or leaking transformers on utility poles), or accidental spills. The proposed treatment landscape includes tree, shrub, and grass fuel types, sometimes near developed areas. Some of the treatable landscape may contain limited remnant contamination from previous defense, agricultural, or pesticide use; contamination from nearby urban areas; or may have been exposed to leaks from pipelines, transformers, or utility poles.

Schools

The closest schools to the Project Site include Carlton Oaks School, located approximately 0.52 miles northwest of the Project Site; Carlton Hills School, located approximately 0.25 miles north of the Project Site; Hill Creek School, located approximately 0.10 miles north of the Project Site; Santana High School, located approximately 0.55 miles north of the Project Site; Cajon Park School, located approximately 1.07 miles north of the Project Site; Sycamore Canyon School, located approximately 1.27 miles north of the Project Site; and Chet F. Harritt School, located approximately 0.90 miles southwest of the Project Site.

Airports

The closest airport to the Project Site is Gillespie Field Airport, located approximately 1.1 miles southwest of the Project Site. The Project Site is located within the Gillespie Field Airport Influence Area (AIA), Review Area 2, and the Federal Aviation Administration height notification boundary. Portions of the Project Site are also located within the 60-to-65-decibel (dB) Community Noise Equivalent Level (CNEL) noise exposure contour. The Project Site is located outside of designated airport safety zones (SDCRAA 2010).

Wildfire Risk

Portions of the Project Site are in areas designated as Moderate and High FHSZs, and the Project Site is bordered by areas designated as Moderate, High, and Very High FHSZs to the north and south (see Figure 3-4 Fire Hazard Severity Zones) (CAL FIRE 2026). Wildfire risks associated with the Project are discussed in Section 4.6, Wildfire, of this Environmental Impact Report.

4.3.2 Relevant Plans, Policies, and Ordinances

Federal

Code of Federal Regulations

The U.S. Environmental Protection Agency (EPA) is the primary federal agency responsible for enforcement and implementation of federal laws and regulations pertaining to hazardous materials. Applicable federal regulations pertaining to hazardous materials are contained mainly in the Code of Federal Regulations (CFR) Titles 29, 40, 42, and 49. Title 40 CFR Part 273 governs the collection and management of widely generated waste, including batteries, pesticides, mercury-containing equipment, and light bulbs. This regulation

streamlines the hazardous waste management standards and ensures that such waste is diverted to the appropriate treatment or recycling facility.

Title 40 CFR Part 112 requires the preparation of a Spill Prevention, Control, and Countermeasure Plan if oil is stored in excess of 1,320 gallons in aboveground storage (or have a buried capacity of 42,000 gallons). Spill Prevention, Control, and Countermeasure regulations place restrictions on the management of petroleum materials and, therefore, have some bearing on hazardous materials management.

Title 40 CFR Part 61 established National Emission Standards for Hazardous Air Pollutants (NESHAP) and names asbestos-containing material as one of these materials. Asbestos-containing material use, removal, and disposal are regulated by EPA under this law. In addition, notification of friable asbestos-containing material removal prior to a proposed demolition project is required by this law.

Hazardous materials, as defined in the CFR, are listed in 49 CFR 172.101. These laws and associated regulations include specific requirements for facilities that generate, use, store, treat, and/or dispose of hazardous materials. EPA also provides oversight and supervision of Federal Superfund investigation/remediation projects, evaluates remediation technologies, and develops hazardous materials disposal restrictions and treatment standards.

Comprehensive Environmental Response, Compensation, and Liability Act and the Superfund Amendments and Reauthorization Act of 1986

Congress enacted the Comprehensive Environmental Response, Compensation, and Liability Act, commonly known as Superfund, on December 11, 1980. The Comprehensive Environmental Response, Compensation, and Liability Act established prohibitions and requirements concerning closed and abandoned hazardous waste sites, provided for liability of persons responsible for releases of hazardous waste at these sites, and established a trust fund to provide for cleanup when no responsible party could be identified. The Superfund Amendments and Reauthorization Act amended the Comprehensive Environmental Response, Compensation, and Liability Act on October 17, 1986. The Superfund Amendments and Reauthorization Act stressed the importance of permanent remedies and innovative treatment technologies in cleaning up hazardous waste sites, required Superfund actions to consider the standards and requirements found in other state and federal environmental laws and regulations, provided new enforcement authorities and settlement tools, increased state involvement in every phase of the Superfund program, increased the focus on human health problems posed by hazardous waste sites, encouraged greater citizen participation in making decisions on how sites should be cleaned up, and increased the size of the trust fund to $8.5 billion.

Resource Conservation and Recovery Act of 1976, with Hazardous and Solid Waste Amendments of 1984

Federal hazardous waste laws are generally promulgated under the Resource Conservation and Recovery Act (RCRA). These laws provide for the “cradle to grave” regulation of hazardous wastes. Any business, institution, or other entity that generates hazardous waste is required to identify and track its hazardous waste from the point of generation until it is recycled, reused, or disposed. The DTSC is responsible for implementing the RCRA program and California’s own hazardous waste laws, which are collectively known as the Hazardous Waste Control Law. Under the Certified Unified Program Agency program, CalEPA has in turn delegated enforcement authority to counties for state law regulating hazardous waste producers or generators. The 1986 amendments to RCRA enabled the EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. Some of the other mandates of this law include increased

enforcement authority for EPA, more stringent hazardous waste management standards, and a comprehensive underground storage tank program.

Federal Insecticide, Fungicide, and Rodenticide Act

The Federal Insecticide, Fungicide, and Rodenticide Act (7 USC 136 et seq.) provides federal control of pesticide distribution, sale, and use. EPA was given authority under the Federal Insecticide, Fungicide, and Rodenticide Act to study the consequences of pesticide usage and require users (e.g., farmers, utility companies) to register when purchasing pesticides. Later amendments to the law required users to take exams for certification as applicators of pesticides. All pesticides used in the United States must be registered (licensed) by EPA. Registration assures that pesticides would be properly labeled and that if used in accordance with specifications, would not cause unreasonable harm to the environment.

Toxic Substances Control Act of 1976

The Toxic Substances Control Act of 1976 (15 USC 2605) banned the manufacturing, processing, distribution, and use of polychlorinated biphenyls (PCBs) in totally enclosed systems. PCBs are considered hazardous materials because of their toxicity; and they have been shown to cause cancer in animals, along with effects on the immune, reproductive, nervous, and endocrine systems, and studies have shown evidence of similar effects in humans (Appendix B, Section 6.4 of the Toxic Substances Control Act). The EPA Region 9 PCB Program regulates remediation of PCBs in several states, including California. 40 CFR Section 761.30(a)(1)(vi)(A) states that all owners of electrical transformers containing PCBs must register their transformers with EPA. Specified electrical equipment manufactured between July 1, 1978, and July 1, 1998, that does not contain PCBs, must be marked by the manufacturer with the statement “No PCBs” (Section 761.40[g]). Transformers and other items manufactured before July 1, 1978, containing PCBs must be marked as such.

Occupational Health and Safety Administration

OSHA is responsible for enforcement and implementation of federal laws and regulations pertaining to worker health and safety. Workers at hazardous waste sites must receive specialized training and medical supervision according to the Hazardous Waste Operations and Emergency Response regulations (29 CFR 1910.120).

Hazardous Materials Transportation Act

The transportation of hazardous materials is regulated by the Hazardous Materials Transportation Act (HMTA), which is administered by the Research and Special Programs Administration of the USDOT. HMTA provides USDOT with a broad mandate to regulate the transport of hazardous materials, with the purpose of adequately protecting the nation against risk to life and property, which is inherent in the commercial transportation of hazardous materials. The HMTA governs the safe transportation of hazardous materials by all modes, excluding bulk transportation by water. The Research and Special Programs Administration carries out these responsibilities by prescribing regulations and managing a user-funded grant program for planning and training grants for states and Indian tribes. USDOT regulations that govern the transportation of hazardous materials are applicable to any person who transports, ships, causes to be transported or shipped, or who is involved in any way with the manufacture or testing of hazardous materials packaging or containers. USDOT regulations pertaining to the actual movement govern every aspect of the movement, including packaging, handling, labeling, marking, placarding, operational standards, and highway routing. Additionally, the USDOT is responsible for developing curriculum to train for

emergency response and administers grants to states and Indian tribes for ensuring the proper training of emergency responders. HMTA was enacted in 1975 and was amended and reauthorized in 1990, 1994, and 2005.

Emergency Planning Community Right-to-Know Act

The Emergency Planning Community Right-to-Know Act, also known as Superfund Amendments and Reauthorization Act Title III, was enacted in October 1986. This law requires any infrastructure at the state and local levels to plan for chemical emergencies. Reported information is then made publicly available so that interested parties may become informed about potentially dangerous chemicals in their community. Sections 301 through 312 of the Act are administered by EPA's Office of Emergency Management. EPA's Office of Information Analysis and Access implements the Emergency Planning Community Right-to-Know Act Section 313 program. In California, Superfund Amendments and Reauthorization Act Title III is implemented through the California Accidental Release Prevention Program (CalARP).

Federal Response Plan

The Federal Response Plan of 1999, as amended in 2003 is a signed agreement among 27 federal departments and agencies, including the American Red Cross, that (1) provides the mechanism for coordinating delivery of federal assistance and resources to augment efforts of state and local governments overwhelmed by a major disaster or emergency; (2) supports implementation of the Robert T. Stafford Disaster Relief and Emergency Act, as well as individual agency statutory authorities; and (3) supplements other federal emergency operations plans developed to address specific hazards. The Federal Response Plan is implemented in anticipation of a significant event likely to result in a need for federal assistance or in response to an actual event requiring federal assistance under a presidential declaration of a major disaster or emergency.

International Fire Code

The International Fire Code (IFC), created by the International Code Council, is the primary means for authorizing and enforcing procedures and mechanisms to ensure the safe handling and storage of any substance that may pose a threat to public health and safety. The IFC regulates the use, handling, and storage requirements for hazardous materials at fixed facilities. The IFC and the International Building Code use a hazard classification system to determine what measures are required to protect against structural fires. These measures may include construction standards, separations from property lines, and specialized equipment. To ensure that these safety measures are met, IFC employs a permit system based on hazard classification. The IFC is updated every three years.

Regional Screening Levels

The federal EPA provides regional screening levels (RSLs) for chemical contaminants to provide comparison values for residential and commercial/industrial exposures to soil, air, and tap water (drinking water). RSLs are available on the EPA's website and provide a screening level calculation tool to assist risk assessors, remediation project managers, and others involved with risk assessment and decision-making. RSLs are also used when a site is initially investigated to determine if potentially significant levels of contamination are present to warrant further investigation. In California, the DTSC Human and Ecological Risk Office (HERO) incorporated the EPA RSLs into the HERO human health risk assessment. HERO created Human Health Risk Assessment Note 3, which incorporates HERO recommendations and DTSC-modified screening levels (DTSC-SLs) based on review of the EPA RSLs. The DTSC-SL should be used in conjunction with the EPA RSLs to evaluate chemical concentrations in environmental media at California sites and facilities.

Federal Aviation Administration

Title 14 Code of Federal Regulations, Chapter 1, Subchapter E, Part 77 – Aeronautics and Space – Safe, Efficient Use, and Preservation of the Navigable Airspace

This regulation establishes requirements for notifying the Federal Aviation Administration of certain construction activities and alterations to existing structures, in order to ensure there are no obstructions to navigable airspace. For example, projects that include construction or alteration exceeding 200 feet in height above ground level are required to notify the Federal Aviation Administration.

State

California Environmental Protection Agency

CalEPA was created in 1991 by the Governor's Executive Order W-5-91. Several state regulatory boards, departments, and offices were placed under the CalEPA umbrella to create a cabinet-level voice for the protection of human health and the environment and to assure the coordinated deployment of state resources. Among those responsible for hazardous materials and waste management are DTSC, Department of Pesticide Regulation, and Office of Environmental Health Hazard Assessment. CalEPA also oversees the unified hazardous waste and hazardous materials management regulatory program (Unified Program).

California Health and Safety Code and Code of Regulations

HSC Chapter 6.95 and 19 California Code of Regulations (CCR) 2729 set out the minimum requirements for business emergency plans and chemical inventory reporting. These regulations require businesses to provide emergency response plans and procedures, training program information, and a hazardous materials chemical inventory disclosing hazardous materials stored, used, or handled on site. A business that uses hazardous materials or a mixture containing hazardous materials must establish and implement a business plan if the hazardous material is handled in certain quantities.

HSC Section 25501 states that "hazardous materials" include, but are not limited to, hazardous substances, hazardous waste, and any material that a handler or the administering agency has a reasonable basis for believing that it would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or the environment. Hazardous materials refer generally to hazardous substances that exhibit corrosive, poisonous, flammable, and/or reactive properties and have the potential to harm human health and/or the environment.

The transport of hazardous waste materials is further governed by California HSC Section 25163 and CCR Title 22, Chapter 13. Specifically, HSC Section 25163 requires transporters of hazardous waste to hold a valid registration issued by the DTSC in his/her possession while transporting hazardous waste. Additionally, CCR Title 22, Chapter 13 includes a number of requirements, which include, but are not limited to, the requirement to receive an identification number and a registration certificate from DTSC; requirement to obtain a Uniform Hazardous Waste Manifest that has been properly completed and signed by generator and transporter prior to accepting hazardous wastes; and delivery of hazardous waste to authorized facilities only.

California Department of Toxic Substances Control

The California DTSC, which is a department of CalEPA, is authorized to carry out the federal RCRA hazardous waste program in California to protect people from exposure to hazardous wastes. The department regulates hazardous waste, cleans up existing contamination, and looks for ways to control and reduce the hazardous waste produced in California, primarily under the authority of RCRA and in accordance with the California Hazardous Waste Control Law (California HSC Division 20, Chapter 6.5) and the Hazardous Waste Control Regulations (22 CCR Divisions 4 and 4.5). Permitting, inspection, compliance, and corrective action programs ensure that people who manage hazardous waste follow state and federal requirements and other laws that affect hazardous waste specific to handling, storage, transportation, disposal, treatment, reduction, cleanup, and emergency planning.

California Building Code

The State of California provides a minimum standard for building design through the California Building Code, which is located in Part 2 of CCR Title 24. Part 2 of the California Building Code is a fully integrated code based on the International Building Code. It is generally adopted on a jurisdiction-by-jurisdiction basis, subject to further modification based on local conditions. Commercial and residential buildings are plan-checked by local city and county building officials for compliance with the California Building Code. Typical fire safety requirements of the California Building Code include the installation of sprinklers in all high-rise buildings; the establishment of fire resistance standards for fire doors, building materials, and particular types of construction; and the clearance of debris and vegetation within a prescribed distance from occupied structures in wildlife hazard areas.

California Accidental Release Prevention Program

CalARP (19 CCR 2735.1 et seq.) regulates facilities that use or store regulated substances, such as toxic or flammable chemicals, in quantities that exceed established thresholds. Under the regulations, industrial facilities that handle hazardous materials above threshold quantities are required to prepare and submit a Risk Management Plan to the local Certified Unified Program Agency. The overall purpose of CalARP is to prevent accidental releases of regulated substances and reduce the severity of releases that may occur. CalARP requires businesses to have planning activities that are intended to minimize the possibility of an accidental release by encouraging engineering and administrative controls. It is further intended to mitigate the consequences of an accidental release, by requiring owners or operators of facilities to develop and implement an accident prevention program. CalARP meets the requirements of the EPA Risk Management Program, which was established pursuant to the Clean Air Act amendments.

California Division of Occupational Safety and Health

The California Division of Occupational Safety and Health is responsible for developing and enforcing workplace safety standards and ensuring worker safety in the handling and use of hazardous materials (8 CCR 1529). Among other requirements, the California Division of Occupational Safety and Health requires entities handling specified amounts of certain hazardous chemicals to prepare injury and illness prevention plans and chemical hygiene plans and provides specific regulations to limit exposure of construction workers to lead.

California Fire Code

CCR Part 9 of Title 24 refers to the California Fire Code, which contains regulations consistent with nationally recognized and accepted practices for safeguarding life and property from the hazards of the following: fire and

explosion; dangerous conditions arising from the storage, handling, and use of hazardous materials and devices; and hazardous conditions in the use or occupancy of buildings or premises. The California Fire Code also contains provisions to assist emergency response personnel. The California Fire Code also establishes requirements intended to provide safety and assistance to firefighters and emergency responders during emergency operations. The provisions of the California Fire Code apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal, and demolition of every building or structure throughout California. The California Fire Code includes regulations regarding fire-resistance-rate construction, fire protection systems such as alarm and sprinkler systems, fire service features such as fire apparatus access roads, means of egress fire safety during construction and demolition. There are fire-safety-related building standards referenced in other parts of Title 24. The California Fire Code is a fully integrated code based on the IFC.

California Wildland–Urban Interface Code

CCR Part 7 of Title 24 refers to the California Wildland–Urban Interface (WUI) Code. It establishes construction and site-development requirements for buildings located in fire-prone WUI areas, focusing on reducing structure ignitions during wildfires. It covers ignition-resistant building materials, exterior fire-resistant features such as roofing, siding, and glazing, vegetation management and defensible-space requirements, and standards for decks, vents, and accessory structures. The code also addresses fire-hazard severity classifications, access and water-supply criteria for firefighting, and design measures intended to limit ember intrusion, radiant-heat exposure, and direct flame contact. Together, these provisions support resilient development in communities facing increasing wildfire risk. The 2025 California WUI Code is a fully integrated code based on the 2024 International WUI Code.

California Emergency Services Act

Under the Emergency Services Act (California Government Code Section 8550 et seq.), the State of California developed an emergency response plan to coordinate emergency services provided by federal, state, and local agencies. Rapid response to incidents involving hazardous materials or hazardous waste is an integral part of the plan, which is administered by the Governor's Office of Emergency Services. The Office of Emergency Services coordinates the responses of other agencies, including the EPA, California Highway Patrol, Regional Water Quality Control Boards (RWQCBs), air quality management districts, and county disaster response offices.

Toxic Substances Control Act

The EPA prohibited the use of PCBs in the majority of new electrical equipment starting in 1979 and initiated a phaseout for much of the existing PCB-containing equipment. The inclusion of PCBs in electrical equipment and the handling of those PCBs are regulated by the provisions of the Toxic Substances Control Act (15 USC 2601 et seq.). Relevant regulations include labeling and periodic inspection requirements for certain types of PCB-containing equipment and highly specific safety procedures for their disposal. The state likewise regulates PCB-laden electrical equipment and materials contaminated above a certain threshold as hazardous waste; these regulations require that such materials be treated, transported, and disposed accordingly. At lower concentrations for non-liquids, RWQCBs may exercise discretion over the classification of such wastes.

Environmental Screening Levels

Environmental Screening Levels provide conservative screening levels for over 100 chemicals found at sites with contaminated soil and groundwater. They are intended to help expedite the identification and evaluation of potential environmental concerns at contaminated sites. The Environmental Screening Levels were developed by San Francisco Bay RWQCB; however, they are used throughout the state. Although Environmental Screening Levels are not intended to establish policy or regulation, they can be used as a conservative screening level for sites with contamination.

Department of Toxic Substance Control Human and Ecological Risk Office Screening Levels

DTSC screening levels were derived from the EPA RSLs using DTSC-modified exposure and toxicity factors for constituents in soil, tap water, and ambient air. The DTSC screening levels should be used in conjunction with the EPA RSLs and RWQCB Environmental Screening Levels to evaluate chemical concentrations in environmental media at California sites and facilities.

Regional and Local

San Diego County Department of Environmental Health and Quality

The San Diego County Department of Environmental Health and Quality regulates and enforces state underground storage tank and aboveground petroleum storage tank installation and monitoring requirements, including permitting and inspecting, for businesses within San Diego County, including those in Santee. The County of San Diego (County) operates a Site Assessment and Mitigation Program to mitigate the release of contaminant materials. The San Diego County Department of Environmental Health and Quality is also responsible for administering the state's Leaking Underground Fuel Tank program. The purpose of the program is to oversee the proper assessment and remediation of contaminants released from underground storage tanks.

San Diego County Air Pollution Control District

Although the California Air Resources Board is responsible for the regulation of mobile emission sources within the state, local air quality management districts and air pollution control districts are responsible for the development and implementation of rules and regulations designed to attain the National Ambient Air Quality Standards and California Ambient Air Quality Standards, as well as the permitting of new or modified sources, development of air quality management plans, and adoption and enforcement of air pollution regulations. The San Diego County Air Pollution Control District is the local agency responsible for the administration and enforcement of air quality regulations in San Diego County, where the City is located. The San Diego County Air Pollution Control District is responsible for monitoring air quality, as well as planning, implementing, and enforcing programs designed to attain and maintain state and federal ambient air quality standards within the SDAB.

Regional Water Quality Control Board

RWQCB implements the California Water Code, which regulates waste discharges to land. If a discharge of waste threatens a water of the state, a report of waste discharge or an application for a waiver of a report of waste discharge must be filed with the RWQCB. The RWQCB accomplishes its permitting responsibility by issuing either a general or site-specific permit (Waste Discharge Permit) or a waiver of a permit.

County of San Diego Emergency Operations Plan

The San Diego County Emergency Operations Plan, approved in 2022, is a comprehensive emergency management system that provides for a planned response to disaster situations associated with natural disasters, technological incidents, and nuclear defense operations. The Emergency Plan includes operational concepts relating to various emergency situations, identifies components of the Emergency Management Organization and describes the overall responsibilities for protecting life and property and assuring the overall well-being of the population. The plan also identifies the sources of outside support that might be provided (through mutual aid and specific statutory authorities) by other jurisdictions, state and federal agencies, and the private sector.

San Diego County Multi-Jurisdictional Hazard Mitigation Plan

The San Diego County Multi-Jurisdiction Hazard Mitigation Plan was originally prepared in July 2010 and updated in October 2017 to meet federal and state requirements for disaster preparedness to make the County eligible for funding and technical assistance from state and federal hazard mitigation programs. The plan includes a risk assessment to enable local jurisdictions to identify and prioritize appropriate mitigation actions to reduce losses from potential hazards, including flooding, earthquakes, fires, and human-made hazards. To address potential hazards, the plan then incorporates mitigation goals and objectives, mitigation actions and priorities, an implementation plan, and documentation of the mitigation planning process for each of the 22 participating jurisdictions, including Santee.

California Disaster and Civil Defense Master Mutual Aid Agreement

As provided for in the California Emergency Services Act, the California Disaster and Civil Defense Master Mutual Aid Agreement was developed in 1950 and adopted by all 58 California counties. This statewide mutual aid system is designed to ensure that adequate resources, facilities, and other support are provided to jurisdictions whenever their own resources prove to be inadequate to cope with a given situation. San Diego County is located in Mutual Aid Region 6 of the state system, which also includes Imperial, Riverside, San Bernardino, Inyo, and Mono Counties.

Airport Land Use Compatibility Plan – Gillespie Field

The San Diego County Regional Airport Authority, designated as the Airport Land Use Commission for all public airports in the County of San Diego, adopted the Gillespie Field Airport Land Use Compatibility Plan (ALUCP) January 25, 2010 (last amended December 20, 2010). The ALUCP assists in achieving compatible land use development in the area surrounding Gillespie Field Airport. The ALUCP designates the AIA and contains projected noise contours, flight activity zones, a land use compatibility matrix, and plan recommendations for areas surrounding Gillespie Field. The AIA is delineated by using the projected 60 dB CNEL contour and is generally the area in which current and future airport-related noise, overflight, safety, and/or airspace protection factors may affect land uses or necessitate restrictions on uses. For the purposes of this analysis, the AIA is divided into Review Area 1 and Review Area 2 for Gillespie Field.

Gillespie Field Airport Influence Area Review Area 1 and Review Area 2 (SDCRAA 2010)

- Review Area 1 consists of locations where noise or safety concerns may necessitate limitations on the types of land use actions. Specifically, Review Area 1 encompasses locations exposed to aircraft noise levels of 60 dB CNEL or greater together with all of the safety zones identified in the ALUCP.

- Review Area 2 consists of locations beyond Review Area 1 but within the airspace and/or overflight notification areas. Limits on the heights of structures, particularly in areas of high terrain, are the only restrictions on land uses within Review Area 2.

City of Santee Hazard Mitigation Plan

The purpose of the Hazard Mitigation Plan is to identify risks and ways to mitigate damage from natural and human-caused disasters. Goal 7 of the Plan, Hazardous Materials Release, outlines objectives and actions to monitor and prevent the release of hazardous materials, along with educational awareness to the public about the dangers (City of Santee 2023).

Santee General Plan

The City's General Plan contains objectives and policies aimed at minimizing potential risks associated with hazards and hazardous materials. The Safety and Environmental Justice Element of the General Plan aims to reduce loss of life, injuries, and damage to property resulting from natural and human-caused public safety hazards including hazardous materials application, release and exposure, flooding, geologic and seismic hazards, fire, traffic hazards, and crime. Related objectives and policies of the Safety and Environmental Justice Element are listed below (City of Santee 2025).

City of Santee General Plan Safety and Environmental Justice Element

Goal 4: Improve the City of Santee's capacity to prevent and respond to emergencies and hazardous materials incidents.

Objective 8.0 Ensure the efficient control of emergency operations during natural or human-caused disasters

Policy 8.1 Continue to hold periodic disaster exercises in cooperation with the appropriate state and federal agencies.

Policy 8.2 Update the adopted Santee Emergency Operations Plan periodically to ensure the safety of residents, employees, and visitors in times of natural or human-caused disaster.

Policy 8.3 Maintain an Emergency Operations Center to coordinate resources, information, and communication, which would strengthen the City of Santee's ability to detect and respond to threats.

Objective 9.0 Minimize the risk of damage to persons, property and the environment caused by hazardous materials.

Policy 9.1 Continue to implement the County's Hazardous Waste Management Plan or develop and implement an equivalent plan.

Policy 9.2 Continue to participate in the San Diego County Joint Powers Authority Hazardous Materials Response Team in dealing with hazardous materials incidents.

Policy 9.3 Require that any potential hazardous materials issues be fully investigated at the environmental review stage prior to project approval.

Policy 9.4 Review any proposed uses involving the use, transport, storage or handling of hazardous waste to ensure that such uses will not represent a significant risk to surrounding uses or the environment.

Policy 9.6 Control the location, manufacture, storage or use of hazardous materials in Santee through Zoning Ordinance implementation and the Development Review process.

Policy 9.7 Encourage safe and proper disposal of household hazardous waste.

Policy 9.8 Promote safe, environmentally sound means of solid waste disposal for the community.

Policy 9.10 Continue to implement the Construction and Demolition Diversion Ordinance as required by Cal Recycle.

Santee Municipal Code

The Santee Municipal Code is a compilation of the Santee City Charter and all regulatory and penal ordinances and certain administrative ordinances adopted by the City Council. The Santee Municipal Code includes Chapter 11.04, California Building Code; Chapter 11.17, California Wildland-Urban Interface Code; Chapter 11.18, California Fire Code; and Chapter 11.24, Construction and Improvement Standards.

4.3.3 Thresholds of Significance

The significance criteria used to evaluate the Project impacts to hazards, hazardous materials, and wildfire are based on California Environmental Quality Act Guidelines Appendix G. According to California Environmental Quality Act Guidelines Appendix G, a significant impact related to the Project would occur if the Project would incur the following:

A. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.
B. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.
C. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.
D. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment.
E. For a project located within an airport land use plan, or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?
F. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.
G. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires.

4.3.4 Impact Analysis

A. Would the Project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Implementation of the Project would involve temporary and intermittent transport and use of hazardous materials during active vegetation management activities. After initial treatment, maintenance intervals will vary depending on vegetation type, treatment zone, and treatment technique determined by a biannual inspection of the Project Site, Typical hazardous materials used for treatment and maintenance activities would include fuel and lubricants for hand labor and mechanical equipment, and potentially herbicides where needed based on site conditions. The quantities and types of materials would be consistent with standard vegetation treatment operations, and their use would be limited to the duration and locations of treatment activities.

The Project includes best management practices (BMPs) that are incorporated into the Project design to reduce the potential for hazardous materials to create hazards during routine handling during treatment and maintenance activities. The Fuels Treatment Plan (FTP) specifies BMPs requiring that tools/equipment be serviced and fueled only in locations that would not allow grease, oil, fuel, or other hazardous materials to pass into streams or retained vegetation (**Hand Labor BMP-6** and **Water Quality BMP-1**); that spill kits be available (**Mechanical BMP-16** and **Water Quality BMP-3**); fueling occur in identified refueling areas with secondary containment; and tools, lubricants, and fuels be stored away from watercourses with secondary containment and labeling (**Water Quality BMP-1, 2,** and **4**). These measures would reduce the potential for accidental releases and limit exposure pathways to sensitive resources, including waterways.

If chemical (herbicidal) treatment is used, it would be a limited, secondary tool rather than a primary treatment method and would be restricted to the use of EPA-approved herbicides. The FTP specifies that herbicide use would be considered only when other treatment techniques are infeasible or ineffective for achieving vegetation management and maintenance standards (**Chemical BMP-1**). Herbicidal application would require appropriate training/licensing, and the FTP specifies that herbicide application would occur only under a prescription prepared by a state-licensed pest control adviser (**Chemical BMP-2**). In addition, the FTP includes runoff protective BMPs: herbicide use would be prioritized as localized/direct application rather than foliar spraying, would follow required transport/mixing/loading procedures, and would be timed to minimize impacts, specifically including avoidance of application when local rainfall greater than 0.5 inches is forecast within 24 hours of planned application (**Chemical BMP-3**, **Chemical BMP 6-10**). The FTP also specifies use of EPA-approved aquatic-use herbicides/surfactants registered for use by the California Department of Pesticide Regulation where aquatic vegetation control is needed, and compliance with applicable label instructions and regulatory requirements (**Chemical BMP-4-5**).

Biomass disposal would occur using the disposal methods identified in the FTP, which are designed to reduce hazards and avoid environmental impacts. The FTP identifies off-site transport to an approved green waste facility as the preferred disposal method because it provides the greatest long-term hazard reduction by preventing cut material from remaining on site and avoiding concentrated piles of drying fuels. Where off-site hauling is inefficient or unnecessary, the FTP allows on-site broadcast of chips (with limits to avoid deep accumulations and explicit avoidance of broadcasting within jurisdictional streambeds) and lop-and-scatter only sparingly where other methods are not feasible and with controls to avoid creating slash concentrations. For areas requiring specialized handling, the FTP includes species-specific containment and disposal requirements, such as Arundo, which must be contained immediately by bundling or bagging

and transported off site to prevent spread by fragments. The FTP further requires that disposal practices avoid unauthorized deposition of material in stream channels and comply with applicable permit conditions, including federal, state, and local permits from U.S. Army Corps of Engineers, the San Diego Regional Water Board, and California Department of Fish and Wildlife, thereby reducing the potential for environmental hazards during handling and disposal.

Because hazardous materials use would be temporary and because the Project incorporates the FTP's BMPs that address equipment inspection, fueling/servicing controls, secondary containment, spill preparedness, herbicide licensing and minimized use, herbicide application timing restriction, and controlled biomass disposal/containment, the Project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. Therefore, impacts would be **less than significant.**

B. Would the Project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Reasonably foreseeable accidental releases could include small spills during fueling/servicing of equipment, leaks from equipment, or herbicide spills during transport or mixing/loading. Project BMPs included directly address scenarios that would involve spills through routine inspection to prevent leaking fluids; refueling in designated areas with secondary containment; spill kits at refueling areas; and requirement that "hazardous materials spill kits are available on all heavy equipment" (**Hand Labor BMP-6, Water Quality BMP-1-4**, and **Mechanical BMP-16**).

In addition, vegetation treatment and maintenance activities, particularly those involving mechanical equipment, have the potential to disturb surface soils. In general, soil contamination, where present, is most commonly associated with previously developed or industrialized areas, historic agricultural uses involving pesticides, or accidental spills or leaking infrastructure. The Project Site consists primarily of tree, shrub, and grass fuel types within an open-space river corridor, with limited historic development, and no known hazardous materials cleanup sites are located on or directly adjacent to the Project Site.

The FTP further includes specific BMPs for chemical treatment that reduce both the likelihood and potential magnitude of accidental releases by limiting herbicide use to situations where other techniques are infeasible or ineffective, requiring consultation with a licensed pest control adviser and consistency with all label instructions, minimizing foliar spray applications in favor of localized/direct application methods, and implementing timing restrictions to reduce runoff potential (**Chemical BMP-1-11**).

In the event of an accidental release, the Project also includes BMPs for spill response and cleanup, including immediate containment of released materials using on-site spill kits, proper collection and disposal of contaminated materials at approved facilities, and removal of any contaminated soils, as necessary, in accordance with applicable regulations (Mechanical BMP-16 and Water Quality BMP-3). These measures are intended to limit the extent and duration of exposure and prevent migration of hazardous materials to sensitive resources, including waterways.

Given the Project's BMPs that are aimed toward preventing spills and are directly responsive to spill mechanisms, the potential for a significant accidental release affecting the public or environment would be low. The Project would not create a significant hazard under upset/accident conditions because accidental release pathways are addressed through BMPs requiring secondary containment, spill kits, equipment

inspection, controlled fueling practices, and constrained herbicide application practices. Therefore, impacts would be **less than significant**.

C. Would the Project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

As discussed under Section 4.3.1, Existing Conditions, above, the Project Site is located less than 0.25 miles from two existing schools, Carlton Hills School (0.25 miles south) and Hill Creek School (0.10 miles south), with six additional schools located within an approximately 2-mile radius of the Project Site. Project activities would be temporary and intermittent after initial treatment. Maintenance intervals will vary depending on vegetation type, treatment zone, and treatment technique determined by a biannual inspection of the Project Site. It is anticipated the maintenance activities will occur annually. Activity would occur only during active vegetation management implementation periods and would not involve ongoing industrial operations or long-term stationary emission sources. Activities would include short-term operation of hand and mechanical equipment and potentially limited, localized herbicide application conducted under the constraints described in the FTP (licensed personnel, pest control adviser prescription, label compliance, minimized foliar spraying, and timing constraints to reduce runoff risk).

As discussed above under Thresholds A and B, the Project's transport, use and handling of hazardous materials would result in less-than-significant impacts related to both routine operations and reasonably foreseeable upset or accident conditions. In addition, the FTP includes BMPs specifically intended to prevent off-site movement of herbicides, including limiting herbicide use to situations where other methods are infeasible or ineffective; prioritizing localized or direct application methods over broadcast spraying; avoiding application during unsuitable weather conditions (such as high winds) that could increase drift potential; implementing timing restrictions; and complying with all applicable label requirements (**Chemical BMP-1-11**). These measures are designed to contain herbicides within the Project Site and prevent exposure to nearby sensitive receptors, including schools. While schools are present in the surrounding area, the Project's handling of hazardous materials associated with the Project would be limited in scope, temporary in duration, and tightly controlled. Hazardous materials associated with the Project would be limited to common fuels for equipment and potentially herbicides, used only as needed and only during implementation activities.

Based on the temporary nature of Project activities, the limited and controlled use of hazardous materials, and the incorporation of BMPs that minimize drift, emissions, and off-site exposure, the Project would not emit hazardous emissions or handle hazardous materials in a manner that would pose a significant hazard to schools within 0.25 miles of the Project Site. Therefore, impacts to schools within 0.25 miles of the Project Site would be **less than significant**.

D. Would the Project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment?

Government Code Section 65962.5 establishes the statutory basis for compiling information on hazardous materials sites, commonly referred to as the Cortese List. Although the Cortese List is no longer maintained as a single consolidated list, information that satisfies Section 65962.5 requirements is available through databases maintained by the DTSC, the State Water Resources Control Board, and other regulatory agencies. A regulatory database search was conducted to identify sites listed pursuant to Government Code

Section 65962.5 that overlap the Project Site or are located within an appropriate buffer area. The search did not identify any listed hazardous materials sites within the Project Site. Therefore, implementation of the Project would not result in a significant hazard to the public or the environment under this threshold.

The proposed Project consists of vegetation management activities, including hand, mechanical, and limited chemical treatments. Project components do not include excavation, grading, trenching, or other subsurface disturbance. Accordingly, the Project would not involve activities that typically create pathways for encountering or mobilizing contaminated soil or groundwater.

Therefore, because the Project is not located on a site included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, impacts would be **less than significant.**

E. For a project located within an airport land use plan, or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

City planning documents indicate that land use compatibility with the Gillespie Field Airport is governed by the applicable ALUCP. The ALUCP establishes safety zones, noise contours, and AIAs where certain development activities are subject to review. The proposed Project consists of vegetation management activities within an existing river corridor and does not include construction of occupied structures, new land uses, or land use intensification. The Project would not introduce residential uses, high-occupancy facilities, tall structures, or other features that could interfere with airport operations or airspace safety. The Project Site is located approximately 1.1 miles southwest of Gillespie Field Airport and partially within the 60 to 65 dB CNEL noise exposure contour. The Project Site is located outside designated airport safety zones and does not include proposed uses that are sensitive to aircraft noise or overflight activity. The Project is located within Gillespie Field Review Area 2 and within the Federal Aviation Administration height notification boundary. Review Area 2 also includes requirements related to residential overflight notification; however, no residential or other noise-sensitive uses are proposed as part of the Project. Therefore, no conflicts with ALUCP compatibility policies would occur. Because the Project does not propose new land uses, occupied structures, or development within AIAs, it would not result in an airport-related safety hazard or excessive noise exposure for people residing or working in the Project Site. Therefore, impact would be **less than significant.**

F. Would the Project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

The Project would occur within a river corridor that includes public access trails and multiple access points. Project access routes and staging areas would be coordinated by the contractor in coordination with the City and emergency service providers. To the extent feasible, staging areas would be located away from residential areas and key access points, and access planning would be designed to maintain emergency response capability during Project implementation.

The FTP anticipates that temporary closures or access restrictions may be necessary for recreational trails or localized work areas during active treatment for public safety. These temporary restrictions would apply to non-emergency recreational access and would not affect designated emergency evacuation routes or emergency access corridors. The FTP includes BMPs to manage public access, including signage, detours, monitors or

flaggers, and temporary exclusionary fencing. Phasing and scheduling measures would be implemented to minimize the duration and extent of any temporary closures (**Recreation Resources BMP-1-6**).

Emergency response services within the Project area are provided by the Santee Fire Department, the San Diego County Sheriff's Department, and other responsible agencies. The City of Santee participates in the County's emergency planning framework, including the San Diego County Emergency Operations Plan, which establishes evacuation procedures and identifies major interstates and arterial roadways as primary evacuation routes.

The Project does not include permanent road closures, structural development, or land use changes that would restrict established evacuation routes or emergency access corridors. Temporary access controls associated with vegetation treatment and maintenance activities would be localized, short term, and coordinated to avoid interference with emergency response needs. Emergency access would be maintained to the extent feasible during Project implementation.

The primary purpose of the Project is hazard mitigation and fuels reduction, which would reduce wildfire ignition potential and fire intensity within the corridor and improve emergency response conditions in proximity to developed areas. Although temporary access restrictions could result in short-term inconvenience for recreational users, the Project includes access planning and public safety measures and does not propose permanent closures or block emergency routes. By maintaining reduced fuel loads and fire risk, the Project would support emergency response and evacuation objectives rather than impair them. Therefore, the Project would not physically interfere with the implementation of an adopted emergency response plan or emergency evacuation plan, and impacts would be **less than significant.**

G. Would the Project expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?

Portions of the Project Site are in areas designated as Moderate and High FHSZs and bordered by areas designated as Moderate, High, and Very High FHSZs to the north and south. These designations reflect existing wildfire risk conditions within and adjacent to the river corridor. The Project Site is located within a wildland–urban interface setting and is characterized by proximity to residential development and high levels of public access, which contribute to elevated ignition potential.

The proposed Project is designed to reduce hazardous fuel loads and fuel continuity through zone-based vegetation management prescriptions. The FTP documents recent ignition response activity by the Santee Fire Department within and near the river corridor and uses this information to support the need for vegetation treatment and hazard reduction. Project implementation would involve the use of mechanical equipment that could pose temporary ignition risks during active operations. However, the FTP includes fire prevention and protection BMPs, such as maintaining firefighting tools and water on site, use of spark arrestors, communication protocols for reporting ignitions, and restrictions on equipment operation during Red Flag Warning periods and other high fire danger conditions **(Fire Protection BMPs 1-5).** With implementation of these BMPs, operational ignition risks would be minimized. In the long term, the Project would reduce hazardous fuel loading and fuel continuity within the corridor and adjacent to developed areas, thereby lowering the potential for wildfire ignition and spread. By improving defensible space conditions and reducing fire intensity potential, the Project would enhance public and structural safety. Ongoing maintenance activities would occur as needed based on biannual inspections to maintain a reduction in wildfire hazard on the Project Site after the initial treatment of the Project Site.

In the long term, the proposed vegetation management activities would reduce hazardous vegetation and wildfire intensity within the San Diego River corridor, thereby reducing potential wildfire-related risks to existing infrastructure. By lowering fire intensity and improving defensible space conditions, the Project would decrease the likelihood that wildfire could damage or compromise existing infrastructure. Accordingly, the Project would not expose people or structures to an increased risk of loss, injury, or death related to wildland fires. Instead, the Project would result in a beneficial reduction in wildfire hazard. Impacts would be **less than significant.**

4.3.5 Mitigation Measures and Level of Significance After Mitigation

All impacts related to hazards and hazardous materials would be less than significant. No mitigation is required.

4.4 Hydrology and Water Quality

This section describes the existing hydrology and water quality conditions of the San Diego River Fire Hazard Mitigation Plan: Fuels Treatment Plan Project (Project) Site and vicinity, identifies associated regulatory requirements, evaluates potential impacts, and identifies mitigation measures, if necessary, to reduce or avoid significant impacts related to implementation of the Project.

4.4.1 Existing Conditions

Watershed

The Project Site lies within the San Diego River Corridor in Santee. The corridor is in a broad alluvial valley with active and secondary channels, wetlands, and floodplain terraces within the San Diego River Watershed Management Area, San Diego Hydrologic Unit (907), and Santee Subwatershed (907.12) (San Diego RWQCB 2026). The San Diego River watershed originates in the mountains of east San Diego County, near Julian, and drains to the Pacific Ocean in Ocean Beach. The watershed encompasses 434 square miles. About 44% of the San Diego Watershed is undeveloped, 23% consists of open space and park, 19% is residential, 6% is for transportation uses, and 8% is for other uses. The San Diego River watershed supplies approximately 760,000 individuals with potable water. The watershed contains five reservoirs, including Lake Murray, Lake Jennings, San Vicente, El Capitan, and Cuyamaca Reservoirs, which are located in the eastern half of the San Diego River watershed, upstream from the Lower San Diego Hydrologic Area (Project Clean Water 2025).

The largest receiving water in the City is the San Diego River, which enters the City in the east and flows westward toward the Pacific Ocean. The City has five primary waterways: the San Diego River, Forester Creek, Sycamore Creek, and creeks paralleling Big Rock Road and Fanita Drive. All of the creeks have their own watersheds in addition to lying within the larger San Diego River watershed. All of these watersheds empty into the San Diego River, which flows westward into the Pacific Ocean (City of Santee 2003).

Water Quality

The State Water Resources Control Board (SWRCB) establishes statewide water quality control policies and regulations. The SWRCB also oversees the nine Regional Water Quality Control Boards (RWQCBs) in California, which are responsible for designating beneficial uses, establishing water quality objectives to protect those uses, and identifying programs of implementation to meet objectives through the preparation of a basin plan.

Beneficial Uses

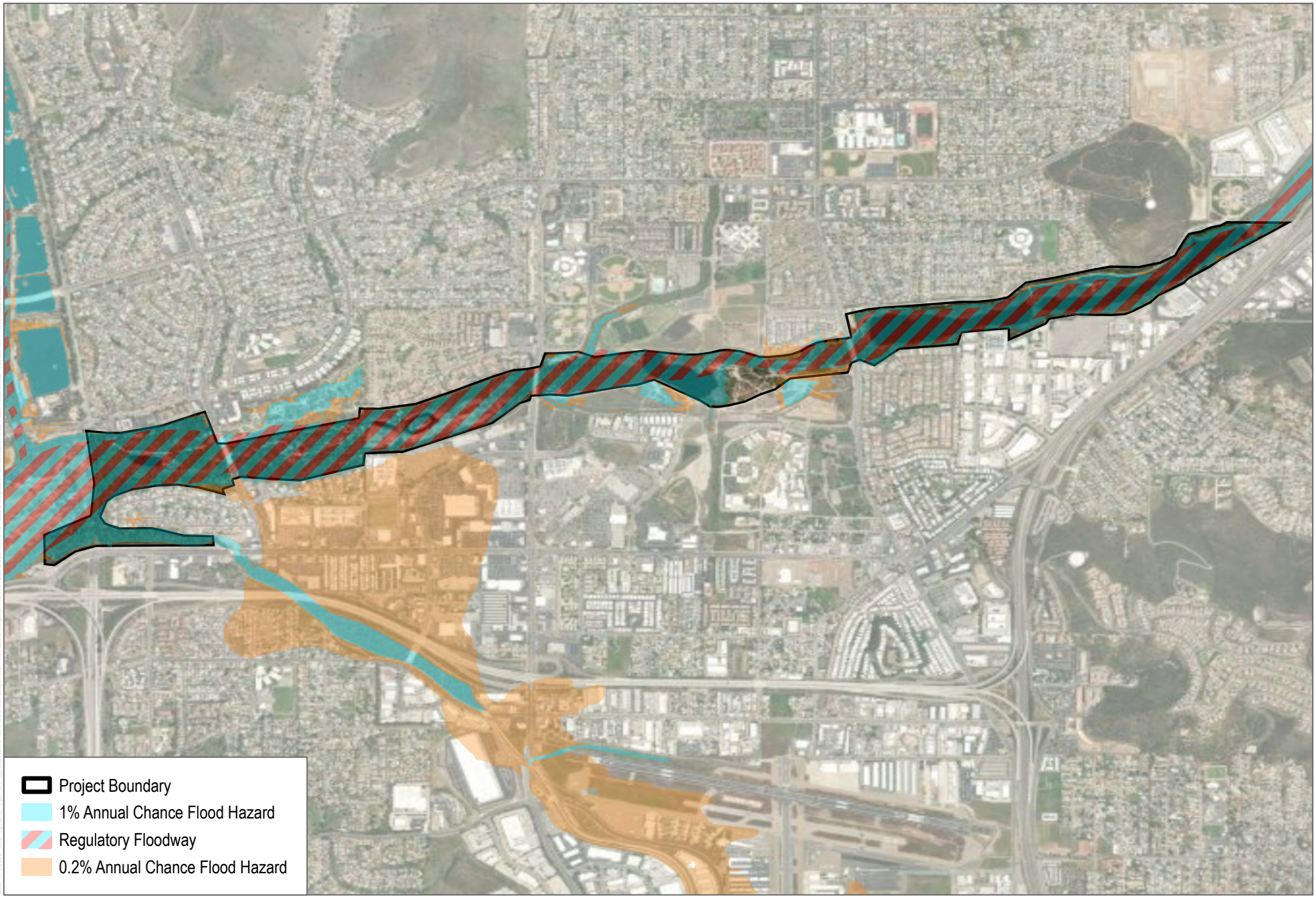
The Water Quality Control Plan for the San Diego Basin (Basin Plan) lists beneficial uses of major water bodies within the region, including the San Diego River segment that comprises the Project Site. Within the Project Site, San Diego River is an inland surface water body with designated beneficial uses in the Basin Plan. Existing beneficial uses include municipal and domestic water supply, agricultural supply, industrial service supply, contact water recreation, non-contact water recreation, warm freshwater habitat, cold freshwater habitat, and wildlife habitat. The Basin Plan designates existing or potential beneficial uses for groundwater for the San Diego River Basin within the Project Site (San Diego RWQCB 2021).

Groundwater

The San Diego River Watershed Management Area contains three groundwater basins: Mission Valley, San Diego River Valley, and El Cajon Valley. The Project Site overlies the San Diego River Valley Groundwater Basin, which consists of alluvium deposited by the San Diego River and its tributaries. The basin is surrounded by contacts with semi-permeable rocks of the Eocene Poway Group, impermeable Cretaceous crystalline rock, and impermeable Jurassic to Cretaceous Santiago Peak volcanic rocks. The Quaternary alluvium forms the principal water-bearing unit within the basin (DWR 2004).

Flood Hazards

The Project Site is located within portions of the San Diego River floodplain, which can experience periodic overbank flooding (FEMA 2026). As shown in Figure 4.4-1, Flood Hazard Map, the Project Site overlaps Federal Emergency Management Agency–designated flood hazard zones. Specifically, the Project Site includes zones designated as 1% annual chance of flood, regulatory floodway, and 0.2% chance of flood hazard.



SOURCE: Vantor 2026, FEMA 2026, USFWS 2026, USGS 2026

DUDEK

0 1,000 2,000 Feet

FIGURE 4.4-1

Flood Hazard Map

San Diego River Fire Hazard Mitigation Program EIR

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4.4.2 Relevant Plans, Policies, and Ordinances

Federal

Clean Water Act

The Clean Water Act (CWA), as amended by the Water Quality Act of 1987, is the major federal legislation governing water quality (33 USC 1251 et seq.). The objective of the CWA is "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." The CWA establishes basic guidelines for regulating discharges of both point and non-point sources of pollutants into the waters of the United States. The CWA requires that states adopt water quality standards to protect public health, enhance the quality of water resources, and ensure implementation of the CWA. Relevant sections of the CWA are as follows:

- Sections 303 and 304 provide for water quality standards, criteria, and guidelines. Under Section 303(d) of the CWA, the State of California is required to develop a list of impaired water bodies that do not meet water quality standards and objectives. California is required to establish total maximum daily loads (TMDLs) for each pollutant/stressor. A TMDL defines how much of a specific pollutant/stressor a given water body can tolerate and still meet relevant water quality standards. Once a water body is placed on the Section 303(d) List of Water Quality Limited Segments, it remains on the list until a TMDL is adopted and the water quality standards are attained or there is sufficient data to demonstrate that water quality standards have been met and delisting from the Section 303(d) list should occur.
- Section 401 (Water Quality Certification) requires an applicant for any federal permit that proposes an activity that may result in a discharge to waters of the United States to obtain certification from the state that the discharge will comply with other provisions of the CWA. This process is known as the Water Quality Certification/Waste Discharge Requirements process.
- Section 402 (National Pollutant Discharge Elimination System) establishes the National Pollutant Discharge Elimination System (NPDES), a permitting system for the discharge of any pollutant (except for dredged or fill material) into waters of the United States. This permit program is administered by the SWRCB and the nine RWQCBs, which have several programs that implement individual and general permits related to construction activities, stormwater runoff quality, and various kinds of non-stormwater discharges.
- Section 404 (Discharge of Dredged or Fill Material into Waters of the United States) establishes a permit program for the discharge of dredged or fill material into waters of the United States. This permit program is jointly administered by the U.S. Army Corps of Engineers (USACE) and the U.S. Environmental Protection Agency (EPA).

Numerous agencies have responsibilities for administration and enforcement of the CWA. At the federal level this includes EPA, USACE, the Bureau of Reclamation, and the major federal land management agencies, such as the U.S. Forest Service and the Bureau of Land Management. At the state level, with the exception of tribal lands, the California Environmental Protection Agency and its sub-agencies, including the SWRCB, have been delegated primary responsibility for administering and enforcing the certain provisions of the CWA in California. At the local level, the San Diego RWQCB, municipalities, and special districts have implementation and enforcement responsibilities under the CWA.

Federal Antidegradation Policy

The federal Antidegradation Policy (40 CFR 131.12) is designed to protect water quality and water resources. The policy requires states to develop statewide antidegradation policies and identify methods for implementing those policies. State antidegradation policies and implementation measures must include the following provisions: (1) existing instream uses and the water quality necessary to protect those uses shall be maintained and protected; (2) where existing water quality is better than necessary to support fishing and swimming conditions, that quality shall be maintained and protected unless the state finds that allowing lower water quality is necessary for important local economic or social development; and (3) where high-quality waters constitute an outstanding national resource, such as waters of national and state parks, wildlife refuges, and waters of exceptional recreational or ecological significance, that water quality shall be maintained and protected. State permitting actions must be consistent with the federal Antidegradation Policy.

California Toxics Rule

The California Toxics Rule is a federal regulation issued by EPA providing water quality criteria for potentially toxic constituents in receiving waters with human health or aquatic life designated uses in the State of California. EPA adopted the California Toxics Rule in 2000 to create legally applicable water quality criteria for priority toxic pollutants for inland surface waters, enclosed bays, and estuaries to protect human health and the environment for all purposes and programs under the CWA. The California Toxics Rule aquatic life criterion were derived using a CWA Section 304(a) method that produces an estimate of the highest concentration of substances in water that do not present a significant risk to the aquatic organisms in the water and their uses. The California Toxics Rule water quality criteria provide a reasonable and adequate amount of protection with only a small possibility of substantial overprotection or under protection.

State

Porter–Cologne Water Quality Control Act

The Porter–Cologne Water Quality Control Act (Porter–Cologne Act) (codified in the California Water Code, Section 13000 et seq.) is the primary water quality control law for California. Whereas the CWA applies to all waters of the United States, the Porter–Cologne Act applies to waters of the state,[1] which includes isolated wetlands and groundwater in addition to federal waters. The Porter–Cologne Act grants the SWRCB and the nine RWQCBs power to protect water quality and is the primary vehicle for implementation of California's responsibilities under the federal CWA. The Porter–Cologne Act also grants the SWRCB and the nine RWQCBs authority and responsibility to adopt plans and policies, to regulate discharges of waste to surface and groundwater, to regulate waste disposal sites, and to require cleanup of discharges of hazardous materials and other pollutants. Further, the Porter–Cologne Act establishes reporting requirements for unintended discharges of any hazardous substance, sewage, or oil or petroleum product.

The act requires a "Report of Waste Discharge" for any discharge of waste (liquid, solid, or otherwise) to land or surface waters that may impair a beneficial use of surface or groundwater of the state. California Water Code Section 13260(a) requires that any person discharging waste or proposing to discharge waste, other than to a community sewer system, that could affect the quality of the waters of the state, to file a Report of Waste Discharge with the applicable RWQCB. For discharges directly to surface water (waters of the United States), an NPDES permit

[1] "Waters of the state" are defined in the Porter–Cologne Act as "any surface water or groundwater, including saline waters, within the boundaries of the state" (California Water Code Section 13050[e]).

is required, which is issued under both state and federal law; for other types of discharges, such as waste discharges to land (e.g., spoils disposal and storage), erosion from soil disturbance, or discharges to waters of the state (such as groundwater and isolated wetlands), waste discharge requirements (WDRs) are required and are issued exclusively under state law. WDRs typically require many of the same best management practices (BMPs) and pollution control technologies as required by NPDES-derived permits.

California Antidegradation Policy

The California Antidegradation Policy, otherwise known as the Statement of Policy with Respect to Maintaining High Quality Water in California, was adopted by the SWRCB (State Board Resolution No. 68-16) in 1968. Unlike the federal Antidegradation Policy, the California Antidegradation Policy applies to all waters of the state, not just surface waters. The policy requires that, with limited exceptions, whenever the existing quality of a water body is better than the quality established in individual basin plans (see description below), such high quality must be maintained, and discharges to that water body must not unreasonably affect any present or anticipated beneficial use of the water resource.

Water Quality Control Plan for the San Diego Basin

The California legislature has assigned the primary responsibility to administer and enforce statutes for the protection and enhancement of water quality, including the Porter–Cologne Act and portions of the CWA, to the SWRCB and its nine RWQCBs. The San Diego RWQCB implements the Basin Plan (San Diego RWQCB 2021), which designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan (California Water Code Sections 13240–13247). The Porter–Cologne Act also provides the RWQCBs with authority to include within their basin plan water discharge prohibitions applicable to particular conditions, areas, or types of waste. The Basin Plan is continually updated to include amendments related to implementation of TMDLs, revisions of programs and policies within the San Diego RWQCB Region, and changes to beneficial use designations and associated water quality objectives. The Basin Plan is the guiding document that establishes water quality standards for the region.

The basin plan for each region provides quantitative and narrative criteria for a range of water quality constituents applicable to certain receiving water bodies and groundwater basins within the region. Specific criteria are provided for the larger, designated water bodies within the region, as well as general criteria or guidelines for ocean waters, bays, and estuaries; inland surface waters; and groundwaters. In general, the narrative criteria require that degradation of water quality not occur due to increases in pollutant loads that will adversely impact the designated beneficial uses of a water body.

Construction General Permit

For stormwater discharges associated with construction activity in the State of California, the SWRCB has adopted the General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit [CGP]) (Order No. 2022-0057-DWQ) to avoid and minimize water quality impacts attributable to such activities. The CGP applies to all projects in which construction activity disturbs one acre or more of soil. Construction activity subject to this permit includes clearing, grading, and disturbances to the ground, such as stockpiling and excavation. The CGP requires the development and implementation of a Stormwater Pollution Prevention Plan, which would specify water quality BMPs designed to reduce or eliminate pollutants in stormwater discharges and authorized non-stormwater discharges from the construction site. Routine inspection

of all BMPs is required under the provisions of the CGP and the Stormwater Pollution Prevention Plan must be prepared and implemented by qualified individuals as defined by the SWRCB.

To receive coverage under the CGP, a project applicant must submit a Notice of Intent and permit registration documents to the SWRCB. Permit registration documents include a construction site risk assessment to determine appropriate coverage level; detailed site maps showing disturbance area, drainage area, and BMP types/locations; the Stormwater Pollution Prevention Plan; and, where applicable, post-construction water balance calculations and active treatment systems design documentation.

Phase II Small Municipal Separate Storm Sewer System Permit

To enable efficient permitting under both the CWA and the Porter–Cologne Act, the SWRCB and the RWQCBs administer permit programs that group similar types of activities with similar threats to water quality. These "general permit" programs include the Phase II Small Municipal Separate Storm Sewer System (MS4) Permit, the CGP, and other general permits for low-threat discharges. Although the Phase II Small MS4 Permit applies to small municipal storm sewer systems, the City of Santee is subject to Phase I MS4 Permits (Order No. R9-2013-0001, as amended by Order Nos. R9-2015-0001 and R9-2015-0100, NPDES No. CAS019266).

The Small MS4 Permit consists of several program elements: Program Management, Public Involvement/ Participation, Illicit Discharge Detection and Elimination, Construction Site Storm Water Runoff Control, Pollution Prevention/Good Housekeeping for Permittee Operations, Post Construction Storm Water Management for New Development and Re-development, Water Quality Monitoring Requirements, Program Effectiveness Assessment, and Annual Reporting. Besides requiring implementation of construction site BMPs and performance criteria and design guidelines for development within the Small MS4's service area, the Small MS4 Permit also requires operators to map their outfalls, properly maintain the storm drain system, educate the public on pollution prevention, and monitor and report on the quality of MS4 discharges to receiving waters so that the effectiveness of the program can be evaluated. Collectively, the program elements are designed to ensure discharges from the storm drain system do not contain pollutant loads at levels that violate water quality standards and Basin Plan objectives and policies (such as a TMDL for a CWA Section 303[d] impaired water body). Implementation of the program elements are the responsibility of the Small MS4 operator, in this case, the City.

The Small MS4 Permit is administered by the SWRCB, while other general WDRs are administered by the San Diego RWQCB. Point source discharges or other activities that threaten water quality that are not covered under a general permit must seek individual NPDES permits and/or WDRs, depending on the type, location, and destination of the discharge. For these types of discharges, the initial step in the process is to submit a "Report of Waste Discharge" to the San Diego RWQCB, which then determines the appropriate permitting pathway.

Local

City of Santee General Plan

The Conservation, Safety and Community Enhancement Elements of the Santee General Plan contain objectives and policies related to the protection of water corridors within the City, as listed below:

Conservation Element

Objective 2.0 Protect floodways to reduce flood hazards, protect biological resources and preserve the aesthetic quality along water corridors.

Policy 2.1 The City shall encourage the protection of the San Diego River Corridor and all other City water corridors to reduce flood hazards, protect significant biological resources and scenic values, and to provide for appropriate recreational uses.

Policy 2.6 The City encourages the development of appropriate flood control measures to assure public safety, which also prioritize maintenance of natural habitats and vegetation, and provision of community recreational opportunities as feasible and appropriate.

Policy 2.7The City shall ensure that all development proposals are located outside of designated floodways and all development in the 100-year floodplain is consistent with the City's Flood Damage Protection Ordinance.

Safety Element

Objective 1.0 Minimize injuries, loss of life and property damage resulting from flood hazards.

Community Enhancement Element

Objective 16.0 Utilize the natural design elements presented by the river/creek system within the City.

Policy 16.1 The City should encourage the strengthening of links between the San Diego River, Forester Creek, Woodglen Vista Creek and the Sycamore Creek/Santee Lakes.

Policy 16.4 The City shall respect the natural stream processes of the San Diego River and its tributaries and ensure that flood control improvements along existing watercourses/channels avoid concrete channelization whenever possible and retain the natural character of the corridor through planting or preservation of native vegetation.

4.4.3 Thresholds of Significance

The significance criteria used to evaluate the Project's impacts to hydrology and water quality are based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines. According to CEQA Guidelines Appendix G, a significant impact related to hydrology and water quality would occur if the Project would incur the following:

A. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality.

B. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin.

C. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

   I. result in substantial erosion or siltation on or off-site;
   II. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off-site;
   III. create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or
   IV. impede or redirect flood flows.

D. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation.

E. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

4.4.4 Impact Analysis

A. Would the Project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

The Project Site contains surface water features, including the San Diego River and adjacent wetland and floodplain areas, which currently experience natural flows. The Project would include manual, mechanical, and chemical treatments (EPA-approved herbicides). Heavy equipment, and worker activity, could result in erosion and mobilize sediments adjacent to the San Diego River. Additionally, herbicides, and accidental release or fuels/lubricants from equipment have the potential to enter the San Diego River and surrounding wetlands. The Project would implement BMPs that would avoid herbicide application during wet conditions (**Chemical BMP-3**), implement erosion and sediment control measures (**Slope Stability/Erosion BMP-1-10**), and ensure proper maintenance of equipment (**Chemical BMP-1** and **Air Quality BMP-2**). The Project would not violate water quality standards or WDRs and would not substantially degrade surface water or groundwater quality. Therefore, impacts are **less than significant**.

B. Would the Project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin?

The Project would involve vegetation management activities that include selective hand labor, limited mechanical access, trimming, and removal of non-native or dead vegetation. Water use for vegetation management would be limited to temporary activities such as dust suppression associated with treatments and maintenance of the Project Site. Water would be hauled on site by the Project contractor and would not initiate new groundwater extractions or increase the Padre Dam Municipal Water District overall pumping capacity. The Project would not introduce any new impervious surfaces as part of Project implementation. Temporary crew access and equipment use would not meaningfully compact soils that would result in decreased groundwater recharge. The Project would not extract groundwater, change recharge conditions, and introduce any activity that would decrease groundwater supplies or interfere with groundwater recharge, or could interfere with the sustainable management of the basin. Therefore, groundwater- related impacts would be **less than significant**.

C. Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

i) result in substantial erosion or siltation on or off-site;

ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site;

iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or

iv) impede or redirect flood flows?

The Project Site contains the San Diego River and adjacent wetland and floodplain areas, which is largely pervious. The San Diego River and its adjacent floodplain comprise the Project Site. The San Diego River experiences periodic overbank flows during storm events (FEMA 2026). The Project would involve vegetation management activities that include removal of non-native, invasive dead/dying vegetation, as well as trimming, thinning, and debris removal within the San Diego River corridor. The amount of vegetation removed would vary based on the distance from the closest structure and the level of prior treatment. After the initial treatment, biannual inspections will occur to determine maintenance needs across the Project Site. Zone 1 would experience the most vegetation removal, while Zone 3, which is generally closest to the river, would experience the least. These activities have the potential to disturb soil through foot traffic, equipment movement, and removal of surface vegetation. The Project does not propose the introduction of impervious surfaces or the alteration of the river. Soil disturbance and removal of vegetation have the potential to increase the susceptibility to erosion and change the hydrology of an area. However, the Project would implement erosion prevention BMPs, including retaining root systems (no grubbing), maintaining non-invasive groundcover, avoiding activity during saturated soil conditions, and using erosion control BMPs where soft soils cannot be avoided (**Slope Stability/Erosion-BMP-1-10**). These measures would help prevent rutting and compaction, further reducing changes to infiltration or runoff rates. Impacts would be **less than significant** by including BMPs that would reduce erosion, siltation, and on- or off-site flooding, and impede or redirect flood flows.

Vegetation management activities would introduce crews and small equipment including fuels, lubricants, and other materials that could act as pollutants into an area that currently does not contain such equipment. As described in Section 4.3, Hazards and Hazardous Materials, BMPs have been identified to reduce potential for pollutants to enter waterways (**Hand Labor BMP-6**. **Water Quality BMP-1-5**, **Mechanical BMP-16**, **Chemical BMP-1-11**). As a result, the Project would not exceed drainage system capacity or create polluted runoff and impacts would be **less than significant**.

D. Would the Project in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

The proposed Project lies within an inland river corridor and is not in a tsunami or seiche zone (CGS 2026). Portions of the Project Site lie within the San Diego River floodplain and may experience periodic flooding during high flow events (FEMA 2026). Vegetation management activities would involve the use of equipment that contain pollutants. As described in Section 4.3, BMPs have been identified to reduce potential for pollutants to enter waterways (**Hand Labor BMP-6**, **Water Quality BMP-1-5**, **Mechanical BMP-16**, and **Chemical BMP-1-11).** More specifically, the Project would implement stabilization BMPs that

would include avoidance of hydroseed application when local rainfall greater than 0.5 inches is forecast within 24 hours of planned application (**Chemical BMP-3**) to prevent the release of pollutants if flooding were to occur within the Project Site. Work would be suspended during/after significant rainfall and would avoid saturated soils to prevent disturbance and pollutant transport. With these measures in place, vegetation management activities would not risk the release of pollutants during flood conditions, and the impact would be **less than significant.**

E. Would the Project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

The Project Site is subject to the Water Quality Control Plan for the San Diego Basin (Basin Plan), which establishes beneficial uses, water quality objectives, and implementation programs for inland surface waters and groundwater in Region 9, including the San Diego River (SWRCB 2021). The Project consists of vegetation management activities and would not include grading, excavation, channel modification, or in-channel work. The Project would implement BMPs to prevent pollutants from reaching the San Diego River, including sediment and perimeter controls, staging/refueling outside drainages with containment and spill kits, routine equipment inspections, removal of cut biomass from jurisdictional areas, avoiding saturated soils, and suspending work during/after significant rainfall (**Hand Labor BMP-6**, **Water Quality BMP-1-5**, **Mechanical BMP-15**, and **Chemical BMP-1-11**). These measures ensure the Project's activities avoid discharges into the river or altering water quality. The Project would not require extraction of groundwater, thereby preserving infiltration and avoiding changes to recharge. Based on these Project elements, the Project would not include actions that would interfere with groundwater conditions or management.

With implementation of the Project's BMPs, the Project would not conflict with the Water Quality Control Plan for the San Diego Basin (SWRCB 2021). The Project would not obstruct implementation of a groundwater sustainability plan. (SDCWA 2026; SWRCB 2026). Therefore, the Project would not conflict with or obstruct implementation related to water quality protection or groundwater sustainability. Impact would be **less than significant**.

4.4.5 Mitigation Measures and Level of Significance After Mitigation

All impacts related to hydrology and water quality would be less than significant. No mitigation is required.

4.5 Noise

This section describes the existing noise conditions of the Santee River Fire Hazard Mitigation Program: Fuels Treatment Plan (Project) Site and vicinity, identifies associated regulatory requirements, evaluates potential impacts, and identifies mitigation measures, if necessary to reduce or avoid significant impacts, related to implementation of the Project.

4.5.1 Existing Conditions

Noise and Vibration Characteristics

Noise

Sound may be described in terms of level or amplitude (measured in decibels [dB]), frequency or pitch (measured in hertz or cycles per second), and duration (measured in seconds or minutes). The standard unit of measurement of the amplitude of sound is the decibel. Because the human ear is not equally sensitive to sound at all frequencies, a special frequency-dependent rating scale is used to relate noise to human sensitivity. The A-weighted decibel scale (dBA) performs this compensation by discriminating against low and very high frequencies in a manner approximating the sensitivity of the human ear. Several descriptors of noise (noise metrics) exist to help predict average community reactions to the adverse effects of environmental noise, including traffic-generated noise, on a community. These descriptors include the equivalent noise level over a given period (L_{eq}), the statistical sound level, the day–night average noise level (L_{dn}), and the Community Noise Equivalent Level (CNEL). Each of these descriptors uses units of dBA. Table 4.5-1 provides examples of A-weighted noise levels from common sounds. In general, human sound perception is such that a change in sound level of 3 dB is barely noticeable; a change of 5 dB is clearly noticeable; and a change of 10 dB is perceived as doubling or halving of the sound level (Caltrans 2013).

The L_{eq} descriptor is a sound level energy-averaged over a specified period (typically no less than 15 minutes for environmental studies). It is a single and constant numerical value that represents the equivalent amount of variable sound energy received by a receptor during a time interval. For example, a 1-hour L_{eq} value of 55 dBA could represent the measured constant sound of 55 dBA from a continuous source of emission (e.g., steady-state operation of electro-mechanical equipment) or the logarithmic average of time-varying measured sound energy contained in that hour. The L_{eq} value is therefore a common and effective noise descriptor because of its ability to assess the total time-varying effects of noise on sensitive receptors. The L_{max} value is the maximum sound level measured during a designated time interval or event.

Unlike the L_{eq} metrics, L_{dn} and CNEL metrics always represent 24-hour periods, usually on an annualized basis. L_{dn} and CNEL also differ from L_{eq} because they apply a time-weighted factor designed to emphasize noise events that occur during the evening and nighttime hours (when speech and sleep disturbance is of more concern). “Time weighted” refers to the fact that L_{dn} and CNEL penalize noise that occurs during certain sensitive periods. In the case of CNEL, noise occurring during the daytime (7:00 a.m.–7:00 p.m.) receives no penalty. Noise during the evening (7:00 p.m.–10:00 p.m.) is penalized by adding 5 dB, while nighttime (10:00 p.m.–7:00 a.m.) noise is penalized by adding 10 dB. L_{dn} differs from CNEL in that the daytime period is defined as 7:00 a.m.–10:00 p.m., thus eliminating the evening period. L_{dn} and CNEL are the predominant criteria used to measure roadway noise affecting residential receptors. These two metrics generally differ from one another by no more than 0.5 dB to 1 dB, and as such are often treated as equivalent to one another.

Table 4.5-1. Typical Sound Levels in the Environment and Industry

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
—	110	Rock band
Jet flyover at 300 meters (1,000 feet)	100	N/A
Gas lawn mower at 1 meter (3 feet)	90	N/A
Diesel truck at 15 meters (50 feet), at 80 kph (50 mph)	80	Food blender at 1 meter (3 feet) Garbage disposal at 1 meter (3 feet)
Noisy urban area, daytime gas lawn mower at 30 meters (100 feet)	70	Vacuum cleaner at 3 meters (10 feet)
Commercial area Heavy traffic at 90 meters (300 feet)	60	Normal speech at 1 meter (3 feet)
Quiet urban daytime	50	Large business office Dishwasher, next room
Quiet urban nighttime	40	Theater, large conference room (background)
Quiet suburban nighttime	30	Library
Quiet rural night time	20	Bedroom at night, concert hall (background)
—	10	Broadcast/recording studio
Lowest threshold of human hearing	0	Lowest threshold of human hearing

Source: Caltrans 2013.
Notes: dBA = A-weighted decibels; N/A = not applicable; kph = kilometers per hour; mph = miles per hour.

Vibration

Vibration is an oscillatory motion through a solid medium in which the motion's amplitude can be described in terms of displacement, velocity, or acceleration. At sufficient magnitudes, vibration can be a serious concern, causing buildings to shake and rumbling sounds to be heard. In contrast to noise, vibration is not a common environmental problem. It is unusual for vibration from sources such as buses and trucks to be perceptible, even in locations close to major roads (FTA 2018). Some common sources of vibration are trains, buses on rough roads, and construction activities, such as blasting, pile driving, and heavy earthmoving equipment.

Several different methods are used to quantify vibration. Peak particle velocity (PPV) is defined as the maximum instantaneous peak of the vibration signal. PPV is most frequently used to describe vibration impacts to buildings and is usually measured in inches per second (ips); however, it can also be used to evaluate potential effects to building occupants (i.e., quantifying annoyance due to perceived vibration). A root mean square amplitude is frequently used to describe the effect of vibration on the human body and is defined as the average of the squared amplitude of the signal. Vibration velocity decibel notation is commonly used to describe root mean square vibration and relates to PPV by means of a crest factor (FTA 2018).

High levels of vibration may cause physical personal injury or damage to buildings. However, vibration levels rarely affect human health. Instead, most people consider vibration to be an annoyance that can affect concentration or disturb sleep. In addition, high levels of vibration can damage fragile buildings or interfere with equipment that is highly sensitive to vibration (e.g., electron microscopes). Most perceptible indoor vibration is caused by sources within buildings, such as operation of mechanical equipment, movement of people, or slamming of doors. Typical

outdoor sources of perceptible vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. If the roadway is smooth, the vibration from traffic is rarely perceptible.

Sensitive Receptors

Noise- and vibration-sensitive land uses are locations where people reside or where the presence of unwanted sound could adversely affect the use of the land. Residences, schools, hospitals, guest lodging, libraries, and some passive recreation areas would be considered noise and vibration sensitive and may warrant unique measures for protection from intruding noise.

The Project Site is surrounded mostly by residential and commercial uses. The closest sensitive receptors to the Project Site are the existing residences that are approximately 20 feet from the Project Site boundary.

Existing Noise Conditions

The San Diego River Corridor in the City consists of a mixture of natural riparian habitat, public parkland, transportation corridors, and adjacent commercial and residential development. Existing ambient noise levels in this part of the City are shaped primarily by transportation sources, with intermittent contributions from recreational activity, aircraft flyovers associated with Gillespie Field, commercial operations, and construction associated with ongoing development. As a means of coarsely estimating the existing outdoor ambient sound level at a location of interest, one may refer to Figure 7-2 of the Noise Element (i.e., Chapter 7) of the City of Santee General Plan (City of Santee 2003), which illustrates both Gillespie Field aviation noise contours and major roadway transportation noise contours emanating from these sound emission sources across the City and portions of the Project area.

4.5.2 Relevant Plans, Policies, and Ordinances

Federal

Federal Transit Administration

In its Transit Noise and Vibration Impact Assessment guidance manual, the Federal Transit Administration (FTA) recommends a daytime construction noise level threshold of 80 dBA L_{eq} over an 8-hour period (FTA 2018) when detailed construction noise assessments are performed to evaluate potential impacts to community residences surrounding a project. Although this FTA guidance is not a regulation, it can serve as a quantified standard in the absence of such noise limits at the state and local jurisdictional levels.

Federal Interagency Committee on Noise

Some guidance regarding the determination of a substantial permanent increase in ambient noise levels in the project vicinity above existing levels is provided by the 1992 findings of the Federal Interagency Committee on Noise (FICON 1992), which assessed the annoyance effects of changes in ambient noise levels resulting from aircraft operations. The Federal Interagency Committee on Noise recommendations are based upon studies that relate aircraft and traffic noise levels to the percentage of persons highly annoyed by the noise. Annoyance is a qualitative measure of the adverse reaction of people to noise that generates speech interference, sleep disturbance, or interference with the desire for a tranquil environment.

The rationale for the Federal Interagency Committee on Noise recommendations is that it is possible to consistently describe the annoyance of people exposed to transportation noise in terms of L_{dn}. The changes in noise exposure that are shown below are expected to result in equal changes in annoyance at sensitive land uses. Although the Federal Interagency Committee on Noise recommendations were specifically developed to address aircraft noise impacts, they are used in this analysis to define a substantial increase in community noise levels related to all transportation noise sources and permanent non-transportation noise sources.

- Outdoor ambient sound level without the project is less than 60 dBA L_{dn}, then a project-attributed increase of 5 dBA or more would be considered significant.
- Outdoor ambient sound level without the project is between 60 and 65 dBA L_{dn}, project-attributed increase of 3 dBA or more would be considered significant.
- Outdoor ambient sound level without the project is greater than 65 dBA L_{dn}, then project-attributed increase of 1.5 dBA or more would be considered significant.

State

California Code of Regulations, Title 24

Title 24 of the California Code of Regulations sets standards that new developments in California must meet. According to Title 24, interior noise levels are not to exceed 45 dBA CNEL in any habitable room (ICC 2019).

California Department of Health Services Guidelines

The California Department of Health Services has developed guidelines of community noise acceptability for use by local agencies (OPR 2017). Selected relevant levels are listed here:

- Below 60 dBA CNEL: normally acceptable for low-density residential use
- 50 to 70 dBA CNEL: conditionally acceptable for low-density residential use
- Below 65 dBA CNEL: normally acceptable for high-density residential use and transient lodging
- 60 to 70 dBA CNEL: conditionally acceptable for high-density residential, transient lodging, churches, educational, and medical facilities

The normally acceptable exterior noise level for high-density residential use is up to 65 dBA CNEL. Additionally, this exterior noise level limit is consistent with the City of Santee General Plan Noise Element, which considers multi-family unit noise-sensitive land uses.

California Department of Transportation

In its Transportation and Construction Vibration Guidance Manual (Caltrans 2020), the California Department of Transportation (Caltrans) recommends 0.5 ips PPV as a threshold for the avoidance of structural damage to typical newer residential buildings exposed to continuous or frequent intermittent sources of groundborne vibration. For transient vibration events, such as blasting, the damage risk threshold would be 1.0 ips PPV (Caltrans 2020) at the same type of newer residential structures. For older structures, these guidance thresholds would be more stringent: 0.3 ips PPV for continuous/intermittent vibration sources, and 0.5 ips PPV for transient vibration events. With respect to human annoyance, Caltrans guidance indicates that building occupants exposed to continuous groundborne vibration of 0.2 ips PPV would find it “annoying” and thus a likely significant impact. Although these

Caltrans guidance thresholds are not regulations, they can serve as quantified standards in the absence of such limits at the local jurisdictional level.

Local

City of Santee General Plan

City of Santee Noise Level Compatibility Standards

The Noise Element of the City's General Plan (City of Santee 2003) establishes target maximum noise levels in the City, categorized by land use. The Noise Element sets the following limitations on noise levels for receiving properties adjacent to the Project Site.

Transportation-Related Noise Standards

The City's Noise Element establishes a policy for exterior sensitive areas to be protected from high traffic noise levels. The Noise Element sets 65 dBA L_{dn} for exterior noise levels and 45 dBA L_{dn} for interior noise levels as the "normally acceptable" level.

For interior noise, the Noise Element also establishes 45 dBA L_{dn} as the maximum acceptable level for habitable rooms when exterior predicted noise levels due to traffic are 65 dBA L_{dn} or more. If windows and doors are required to be closed to meet this standard, then mechanical ventilation (i.e., air conditioning) shall be included in the Project design.

Noise Element

The Noise Element contains a section on the noise abatement and control objectives and policies for the City; relevant objectives and policies are presented below.

Objective 1.0 Control noise from sources adjacent to residential, institutional and other noise-sensitive receptors.

> Policy 1.6 The City shall continue to monitor noise throughout Santee and enforce the standards and regulations of the City's Noise Ordinance.
>
> Policy 1.16 The City shall ensure that appropriate regulations and standards are incorporated into the City's development policies and ordinances, including the use of noise evaluations in Environmental Impact Reports and statements, which take all aspects of noise into consideration.
>
> Policy 1.17 The City shall officially support the control of noise through legal regulations and cooperative government efforts.

City of Santee Noise Ordinance

Construction activities are subject to Section 5.04.090 of the City's Noise Ordinance, which specifically prohibits the operation of any single or combination of powered construction equipment at any construction site on Mondays through Thursdays except between the hours of 7:00 a.m. and 7:00 p.m. Further, construction equipment with a manufacturer's noise rating of 85 dBA L_{max} or greater may only operate at a specific location for 10 consecutive

workdays. A notice must be provided to all property owners within 300 feet if work is scheduled for more than 10 days and must be provided no later than 10 days prior to the start of the construction.

Municipal Code Section 5.04.160 applies to any noise source not specifically addressed in this chapter, except where exempted or excluded by Section 5.04.170. This section states that it is unlawful for any person to generate any noise on the public way that is louder than average conversational level at a distance of 50 feet or more, vertically or horizontally, from the source between 10:00 p.m. and 7:00 a.m. Also, between 10:00 p.m. and 7:00 a.m., no person is permitted to generate any noise on any private open space that is louder than average conversational level at a distance of 50 feet or more, measured from the property line of the property from which the noise is being generated.

4.5.3 Thresholds of Significance

The significance criteria used to evaluate the Project impacts related to noise are based on California Environmental Quality Act (CEQA) Appendix G. According to CEQA Guidelines Appendix G, a significant impact related to noise would occur if the Project would:

A. Generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.
B. Generate excessive groundborne vibration or groundborne noise levels.
C. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, expose people residing or working in the Project area to excessive noise levels.

4.5.4 Impact Analysis

A. Would the Project generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Noise associated with the initial treatment and maintenance of vegetation would primarily come from use of equipment. Noise from vegetation management activities are temporary and would vary hour to hour and day to day depending on the equipment in use, the operations performed, and the distances between these multiple sources of noise emission and a receptor of interest having a fixed location. The typical equipment used for each noise-generating treatment activity is summarized in Table 4.5-2 below. The typical maximum noise levels at a distance of 50 feet from various pieces of construction equipment and activities anticipated for use on the proposed Project Site are presented in Table 4.5-3. Note that the equipment noise levels presented in Table 4.5-3 are maximum noise levels. Usually, construction equipment operates in alternating cycles of full power and low power, producing average noise levels over time that are less than the maximum noise level. The average sound level of construction activity also depends on the amount of time that the equipment operates and the intensity of construction activities during that time. In fact, the Federal Highway Administration Roadway Construction Noise Model, from which the values in Table 4.5-3 are referenced, applies an “acoustical usage factor” to define the latter. This acoustical usage factor value, a percentage that may be as low as 16% for a crane that works briefly under load, and as high as 100% for continuously operating stationary equipment like ventilation fans,

refrigeration units, and pumps, is thus utilized to help derive a corresponding lower L_{eq} value from the L_{max} value appearing in Table 4.5-3 for each type of anticipated Project heavy equipment.

Table 4.5-2. Equipment by Vegetation Management Activity

Vegetation Management Activity	Equipment Types
Hand Labor	Chainsaws, masticators, chippers
Mechanical	Excavators, masticators, chippers, front-end loader, skid steer, air compressor

Typical construction equipment maximum noise levels are summarized in Table 4.5-3 below.

Table 4.5-3. Typical Construction Equipment Maximum Noise Levels

Equipment Type	Typical Equipment (L_{max}, dBA at 50 Feet)
Air Compressor	78
”All Other Equipment > 5 HP” (e.g., chipper)*	85
Excavator	81
Crane	81
Front-End Loader	79

Source: FHWA 2006. *meant to broadly cover unlisted equipment types.
Note: L_{max} = maximum sound level; dBA = A-weighted decibels.

As shown in Table 4.5-3, noise levels generated by individual equipment range from 78 to 85 dBA L_{max} at 50 feet from the noise source. Converted to an hourly L_{eq}, and due to having acoustical usage factor values of 40% (FHWA 2006), the excavator and front-end loaders would be expected to exhibit noise emission of 77 dBA and 75 dBA, respectively. Though multiple pieces of equipment would be operated simultaneously to implement a treatment, they would typically be spread out (i.e., usually more than 100 feet apart) rather than operating next to each other. This is particularly true of larger, heavy-duty off-road equipment such as masticators, chippers, bulldozers, skid steers, and excavators. This helps ensure worker safety and maximizes efficiency.

As discussed in Chapter 3, Project Description, vegetation management within the Project Site would rely on a combination of techniques to reduce the potential for ignitions and modify fire behavior, including hand labor, mechanical, and chemical treatment. While the Fuels Treatment Plan allows for use of any vegetation management techniques in each zone, method selection would depend on site conditions, access availability/condition, target vegetation types, zone designation, proximity to sensitive resources, and the potential for soil or habitat disturbance in sensitive areas. The most noise-intensive vegetation treatment activity is the mechanical technique, which would require the use of motorized heavy equipment. Chemical treatments would not require the use of heavy off-road equipment; noise generated by these treatment types would be minimal.

Although all pieces of heavy equipment could operate simultaneously for vegetation treatment activities under the Project, because of the size of the treatment zone sites and the spatial operational constraints of heavy equipment (only so many could operate in close proximity to one another because of function and size) it is unlikely that all pieces of equipment would operate in close proximity to each other near the boundaries of the Project Site. Therefore, it is unlikely that noise from multiple pieces of equipment would

combine to adversely affect any noise-sensitive receptor for an extended period, such as with respect to the aforementioned FTA guidance-based threshold of 80 dBA 8-hour L_{eq} at the exterior of an off-site residence.

An illustrative scenario that results in compliance with this FTA threshold, and thus a less-than-significant impact, would include the following parameters and be consistent with FTA "general assessment" technique for evaluating construction noise when site-specific details are unclear or undetermined:

- An excavator and front-end loader are working a full 8 hours at a site; and
- Over the course of this 8-hour workday or assessment period, horizontal distances between each of these two heavy equipment pieces and the off-site receiver are no closer than 45 feet.

Where the off-site noise-sensitive receiver may be closer to these pieces of operating equipment, such as only 17 feet, then compliance could still be expected so long as either of the following noise reduction techniques were applied:

- Administrative noise control – reduce equipment operation time to just 1 hour per 8-hour period; or
- Temporary noise abatement – install 8-foot-tall plywood sheet barriers (or acoustical blankets suspended on chain-link fencing or other support means) on or parallel with the Project boundary that adjoins the receiving noise-sensitive property.

The former "dilutes" the sound energy of the single hour across the 8-hour assessment period, and the latter blocks direct sound paths and thus attenuates the sound emission before it reaches the receiver position. Hence, should equipment-to-receiver horizontal distances be less than 45 feet, **MM NOI-1** would apply either administrative noise controls or temporary noise abatement to yield receiver exposure levels that are predicted to be less than 80 dBA 8-hour L_{eq} and thus a **less-than-significant impact with mitigation**.

Despite this finding, Project activity noise may cause outdoor ambient sound levels to be considerably higher than pre-existing or non-Project levels; for instance, if the outdoors of a residence near the Project area typically experiences 55 dBA L_{eq} during daytime hours, Project vegetative management activity noise of nearly but not exceeding a magnitude of 80 dBA L_{eq} would be a change of almost 25 dB and thus a clearly audible but temporary change to the outdoor sound environment.

In isolated or inaccessible areas where large trees cannot be safely removed using standard ground-based methods, helicopter or crane-assisted removal may be used. These techniques allow large trees to be lifted out without disturbing sensitive terrain or adjacent properties but require advance planning for safe lift paths, staging zones, and coordination with permitting agencies. Due to their cost and operational complexity, helicopter and crane removal would be considered only when no practical ground-based alternative exists. Due to the nature of these areas being inaccessible, it is assumed that noise-sensitive receptors would not be located in close proximity to the Project Site. However, noise-sensitive receptors could be exposed to helicopter noise during approach and takeoff procedures. The helicopter would only be used when no other practical alternatives exist; and thus, total helicopter usage for individual vegetation treatment sites would be limited to one helicopter trip over the span of 1 day and helicopter usage would be infrequent. Additionally, for safety and visibility reasons, helicopters would be used only during the day. Therefore, any exposure of sensitive receptors to noise generated by helicopter activity would be brief, infrequent, and would not occur during noise-sensitive evening and nighttime hours.

Furthermore, such a brief helicopter sortie (either passing by a receiver or involved in brief hover to perform a task) of partial hour duration and at safe elevation above grade would enable such noise exposure to be compliant with the aforementioned FTA-based guidance threshold of 80 dBA 8-hour L_{eq}. By way of illustration, and aside from other activities in the vicinity, a helicopter exhibiting 105 dBA L_{max} at a distance of 50 feet (per Federal Aviation Administration AC-36H data [FAA 2012]) and assuming 100% acoustical usage factor could operate as close as 225 feet (slant distance) to the receiver for up to 30 minutes. If more time was required, then the distance would need to be longer in order to attenuate the noise exposure at the receiver position.

In addition to the above, the Project would be required to comply with the ordinances for construction equipment outlined in Section 5.04.090 of the City's municipal code, which includes limiting construction equipment use to Mondays through Saturdays between 7:00 a.m. and 7:00 p.m., and any construction equipment with a manufacturer's noise rating of 85 dBA L_{max} or greater can only operate at a specific location for 10 consecutive workdays without a notice provided to property owners. Therefore, implementation of Project mechanically supported vegetation treatment activities would not result in the exposure of noise-sensitive receptors to a substantial temporary increase in ambient noise levels.

As described above, if equipment would be located at a horizontal distance of less than 45 feet, there is potential for exposure levels to be greater than 80 dBA 8-hour L_{eq} and mitigation would be required. **MM NOI-1** would apply either administrative noise controls or temporary noise abatement to yield receiver exposure levels that are predicted to be less than 80 dBA 8-hour L_{eq} and thus impacts would be **less than significant with mitigation**.

B. Would the Project generate excessive groundborne vibration or groundborne noise levels?

Mechanical treatment associated with the Project would include some use of heavy motorized equipment, however, techniques that would cause excessive groundborne vibration or groundborne noise levels, such as pile driving or compaction activities, would not occur. Caltrans has collected groundborne vibration information related to construction activities (Caltrans 2020). Information from Caltrans indicates that continuous vibrations with a PPV of approximately 0.2 ips are considered annoying, and, with respect to "older residential structures," a PPV of 0.3 ips would be considered a threshold for building damage risk. For context, heavier pieces of construction equipment, such as a bulldozer that may be expected on the Project Site, have PPVs of approximately 0.089 ips or less at a reference distance of 25 feet.

Groundborne vibrations attenuate rapidly, even over short distances. The attenuation of groundborne vibration as it propagates from source to receptor through intervening soils and rock strata can be estimated with expressions found in FTA and Caltrans guidance. The closest residents to the Project Site are approximately 17 feet from the Project boundary. By way of example, for a bulldozer operating on site and as close as the Project boundary (17 feet from the nearest residence), the estimated vibration velocity would be 0.1587 ips per the equation as follows (FTA 2018):

$$PPV_{rcvr} = PPV_{ref} * (25/D)^{1.5} = 0.1587 = 0.089 * (25/17)^{1.5}$$

In the above equation, PPV_{rcvr} is the predicted vibration velocity at the receiver position, PPV_{ref} is the reference value at 25 feet from the vibration source (the bulldozer), and D is the actual horizontal distance to the receiver. The estimated groundborne vibration velocity level would be 0.1587 ips PPV as received by the residential structure and would be compliant with the 0.2 ips PPV threshold per Caltrans guidance with

respect to annoyance. Additionally, at this predicted exposure of less than 0.3 ips PPV, the occupied residential structures would not experience a significant impact. Therefore, at this predicted PPV, the impact of vibration-induced building damage risk and annoyance to building occupants of nearby existing homes would be **less than significant**.

C. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project expose people residing or working in the Project area to excessive noise levels.

There are no private airstrips within the vicinity of the Project Site. The closest airport to the proposed Project Site is the Gillespie Field regional airport, approximately 1.1 miles south of the Project boundary. According to the Gillespie Field Airport Land Use Compatibility Plan, the Project Site falls outside the studied noise contours (County of San Diego 2010). Impacts would be **less than significant.**

4.5.5 Mitigation Measures and Level of Significance After Mitigation

MM NOI-1: Noise Reduction Techniques

Should mobile or stationary heavy construction equipment (i.e., self-propelled or electrically, mechanically, or hydraulically powered) associated with Project implementation operate at horizontal distances closer than 45 feet horizontal to an off-site noise-sensitive receiver position (e.g., exterior of an existing residence), the Project contractor(s) shall apply either of the following options as noise reduction techniques to keep noise exposures at or below the FTA guidance-based threshold (80 dBA 8-hour L_{eq} during daytime hours):

- Administrative noise control – reduce heavy equipment operation time to just 1 hour per 8-hour period; or
- Temporary noise abatement – install 8-foot-tall (minimum height) plywood sheet barriers (or acoustical blankets suspended on chain-link fencing or other support means) along or parallel with an extent of the Project boundary that adjoins the receiving noise-sensitive property. The barrier extent shall have, end to end, a length of no less than the sum of the width of the property to be protected plus four times the perpendicular distance between it and the receiver position, where this perpendicular is extended from (or through) the midpoint of the receiving property line. Prior to the installation and use of temporary noise abatement, a qualified biologist shall confirm and verify with the City that the placement of the barriers are not located within any environmentally sensitive areas (e.g., special-status plant locations, sensitive vegetation communities, or jurisdictional aquatic resources) and would not impact any wildlife species or their movement.

4.6 Wildfire

This section evaluates the effects of proposed San Diego River Fire Hazard Mitigation Program: Fuels Treatment Plan (Project) implementation on wildfire and wildfire-related risks. The following analysis considers drivers of wildfire risk, and how the proposed Project could add to such risk or expose people or structures to wildfire risk. This section also describes the existing wildfire conditions of the Project Site and vicinity, identifies associated regulatory requirements, evaluates potential impacts, and identifies mitigation measures if necessary to reduce or avoid significant impacts related to implementation of the proposed Project.

4.6.1 Existing Conditions

Wildfire is a continuous threat in Southern California and is particularly concerning in the wildland–urban interface, the geographic area where urban development either abuts or intermingles with wildland or vegetative fuels. During the summer through the winter season, dry vegetation, prolonged periods of drought, and Santa Ana wind conditions can combine to increase the risk of wildfires in the County.

Fire History

The Project Site, like all of San Diego County, is subject to seasonal weather conditions that can heighten the likelihood of fire ignition and spread. Fire history is an important component of a wildfire analysis. Wildfire history information can provide an understanding of fire frequency, fire type, most vulnerable project areas, and significant ignition sources, among others. According to the permitter data available from CAL FIRE, no fires have been recorded at the Project Site since 1950 (CAL FIRE 2025a). However, the threshold for inclusion in the CAL FIRE's perimeter database are fires measuring 10 acres in timber, 50 acres in brush, or 300 acres in grass. The Santee Fire Department (SFD) responded to 174 fires in or near the Project Site in 2024 and 2025. On March 29, 2026, an approximately 10-acre fire occurred within the Project Site. These fires are excluded from CAL FIRE's fire perimeter database as they did not reach the aforementioned size threshold; however, they do emphasize the prevalence of wildfire risk in and around the City. The surrounding foothills also have a well-established fire history. The most notable regional event was the 2003 Cedar Fire, which burned more than 273,000 acres and demonstrated the potential for large, wind-driven fires to spread rapidly from the east (RCD of Greater San Diego County and San Diego County Fire Safe Council 2019).

Across the San Diego Unit, CAL FIRE responds to approximately 510 wildland fires per year, with an average of 15,000 acres burned annually when the extreme fire-siege years of 2003 and 2007 are excluded (CAL FIRE 2025b). Large fire years (i.e., those in which more than 20,000 acres burn) occur every 7 years on average, with recurrence intervals ranging from 1 to 22 years. The 2003 and 2007 fire sieges together burned over 500,000 acres countywide, underscoring the region's potential for extreme fire growth under severe wind and weather conditions (CAL FIRE 2025b).

Human-caused ignitions, including vehicle fires, debris burning, equipment use, and campfires, are the predominant ignition sources in the region (CAL FIRE 2025a). Given the San Diego River Corridor's urban adjacency, recreational access, and history of use by unhoused populations in certain segments, ignitions within the Project Site are likely to arise from similar causes.

Fire Hazard Mapping

CAL FIRE's Fire and Resource Assessment Program database also includes map data documenting areas of significant fire hazards in the state. These maps categorize geographic areas of the state into different Fire Hazard Severity Zones (FHSZs), ranging from moderate to very high. CAL FIRE uses FHSZs to classify anticipated fire-related hazards for the entire state, and includes classifications for State Responsibility Areas, Local Responsibility Areas, and Federal Responsibility Areas. Fire hazard severity classifications take into account vegetation, topography, weather, crown fire production, and ember production and movement.

Vegetation Communities and Land Covers

Variations in vegetative cover type and species composition have a direct effect on fire behavior. Some plant communities and their associated plant species have increased flammability based on plant physiology (resin content), biological function (flowering, retention of dead plant material), physical structure (leaf size, branching patterns), and overall fuel loading.

A critical factor to consider is the dynamic nature of vegetation communities. Fire presence and absence at varying cycles or regimes affect plant community succession. Succession of plant communities, most notably the gradual conversion of shrublands to grasslands with high frequency fires and grasslands to shrublands with fire exclusion, is highly dependent on the fire regime. Further, biomass and associated fuel loading will increase over time if disturbance or fuel reduction effects are not diligently implemented.

The vegetation types and land covers in the Project Site were identified during field assessments conducted for the Project Site. As detailed in Section 4.1, Biological Resources, vegetation in the Project Site reflects the composition typical of inland valleys and river corridors in western San Diego County. Riparian vegetation, including willows, cottonwoods, mulefat, and associated understory species, dominates the immediate river margins. Although riparian vegetation often retains higher moisture levels, it can contain dense stands of shrubs, branches, and upstream debris from flooding, along with invasive species such as *Arundo donax,* which can contribute to elevated fire intensity (Eucalyptus Hills Fire Safe Council 2009). Non-native trees (palms, eucalyptus, tamarix, pines) also present a hazard, especially when dry branches form a fuel ladder and/or when they completely or partially detach from the canopy.

Upland terraces and disturbed areas support coastal sage scrub dominated by California sagebrush (*Artemisia californica*), black sage (*Artemisia nova*), and California buckwheat (*Eriogonum fasciculatum*), along with patches of non-native grasses that cure early in the fire season and readily carry surface fire. Mixed chaparral is present in the surrounding foothills but is less extensive within the 300-acre corridor itself. However, chaparral in adjacent uplands can influence ember production, wind-driven spread, and fire intensity during extreme weather events.

Topography/Terrain

Topography influences fire risk by affecting fire spread rates. Typically, steep terrain results in faster fire spread upslope and slower spread downslope. Terrain that forms a funneling effect, such as chimneys, chutes, or saddles on the landscape can result in especially intense fire behavior, including faster spread and higher intensity. Conversely, flat terrain tends to have little effect on fire spread, resulting in fires that are driven by vegetation and wind. The Project Site occupies a broad alluvial valley bounded by foothill terrain to the north and east. Elevations in the vicinity of the corridor range from roughly 300 feet along the river bottom to over 1,000 feet on adjacent ridgelines in neighboring communities (Lakeside Fire Safe Council 2024; Eucalyptus Hills Fire Safe Council 2009).

Slopes in these upland areas can exceed 50 degrees, creating steep gradients that can accelerate upslope fire runs under certain weather conditions.

Climate and Fire Weather

The Santee area experiences a semi-arid Mediterranean climate characterized by hot, dry summers and mild winters with highly variable precipitation. Average annual rainfall at lower elevations in the county ranges from roughly 10 to 15 inches, with the majority occurring between December and March (RCD of Greater San Diego County and San Diego County Fire Safe Council 2019; CAL FIRE 2025b). Summer months are typically rainless, and prolonged dry periods contribute to the curing of fine fuels and the reduction of live fuel moisture across shrublands and grasslands. Peak temperatures in late summer and early fall frequently exceed 90°F in inland communities such as Santee, and fuel moisture typically reaches seasonal lows during this period.

A defining feature of the region's fire weather is the occurrence of Santa Ana winds, which develop when warm, dry air flows from inland deserts toward the coast. These winds, which occur in late summer through the winter months can reach sustained speeds of 25 to 35 mph on ridge tops and produce gusts exceeding 60 mph that travel efficiently through east/west-oriented drainages such as the San Diego River valley. Relative humidity during Santa Ana events often drops into the single digits, rapidly drying fine fuels and enabling fast, wind-driven fire spread (RCD of Greater San Diego County and San Diego County Fire Safe Council 2019; CAL FIRE 2025b). Seasonal winds in the inland foothills generally blow west to southwest during the summer but shift to northerly and easterly directions during fall and winter storm cycles, reinforcing the potential for wind alignment within the corridor (Eucalyptus Hills Fire Safe Council 2009). During such events, ignitions have the potential to develop into fast-moving, high-intensity fires capable of significant spotting and embers carried long distances through the wildland–urban interface.

Emergency Response

The Project Site is located within the SFD's jurisdictional response area. SFD currently operates three fire stations, SFD Fire Station 4, which is located approximately 1 mile South of the Project Site at 8950 Cottonwood Avenue, and SFD Station 5, which is located approximately 0.06 miles north of the Project Site at 9130 Carlton Oaks Drive (City of Santee 2025a). In addition to the two permanent fire stations, the City opened an interim fire station, SFD Fire Station 20, in October 2025, which is located at the City Operation Yard at 9530 Via Zapador, approximately 1 mile south of the Project Site (City of Santee 2025a). Generally, each agency is responsible for structural fire protection and wildland fire protection within their area of responsibility. However, mutual aid agreements enable non-lead fire agencies to respond to fire emergencies outside their district boundaries. Mutual aid agreements in the City and City of San Diego include all emergency responses and rely on a closest unit concept. Fire agencies cooperate on a statewide master mutual aid agreement for wildland fires and there are mutual aid agreements in place with neighboring fire agencies and typically include interdependencies that exist among the region's fire protection agencies for structural and medical responses. These agreements are voluntary, as no local governmental agency can exert authority over another.

4.6.2 Relevant Plans, Policies, and Ordinances

Federal

National Fire Protection Association Codes, Standards, Practices, and Guides

National Fire Protection Association codes, standards, recommended practices, and guides are developed through a consensus standards development process approved by the American National Standards Institute. This process

brings together professionals representing varied viewpoints and interests to achieve consensus on fire and other safety issues. National Fire Protection Association standards are recommended guidelines and nationally accepted good practices in fire protection but are not laws or codes unless adopted as such or referenced as such by the California Fire Code (CFC) or the local fire agency.

Federal Wildland Fire Management Policy

The Federal Wildland Fire Management Policy was developed in 1995, updated in 2001, and again in 2009 by the National Wildfire Coordinating Group, a federal multi-agency group that establishes consistent and coordinated fire management policy across multiple federal jurisdictions. An important component of the Federal Wildland Fire Management Policy is the acknowledgment of the essential role of fire in maintaining natural ecosystems. The Federal Wildland Fire Management Policy and its implementation are founded on the following guiding principles, found in the Guidance for Implementation of Federal Wildland Fire Management Policy (National Wildfire Coordinating Group 2009):

- Firefighter and public safety is the first priority in every fire management activity.
- The role of wildland fire as an essential ecological process and natural change agent will be incorporated into the planning process.
- Fire management plans, programs, and activities support land and resource management plans and their implementation.
- Sound risk management is a foundation for all fire management activities.
- Fire management programs and activities are economically viable, based upon values to be protected, costs, and land and resource management objectives.
- Fire management plans and activities are based upon the best available science.
- Fire management plans and activities incorporate public health and environmental quality considerations.
- Federal, state, tribal, local, interagency, and international coordination and cooperation are essential.
- Standardization of policies and procedures among federal agencies is an ongoing objective.

National Fire Plan

The National Fire Plan, officially titled Managing the Impacts of Wildfire on Communities and the Environment: A Report to the President In Response to the Wildfires of 2000, was a presidential directive in 2000 as a response to severe wildland fires that had burned throughout the United States. The National Fire Plan focuses on reducing fire impacts on rural communities and providing assurance for sufficient firefighting capacity in the future. The plan addresses five key points: firefighting, rehabilitation, hazardous fuels reduction, community assistance, and accountability. The plan provides technical, financial, and resource guidance and support for wildland fire management across the United States. The U.S. Department of Agriculture and the Department of the Interior are working to successfully implement the key points outlined in the plan (DOI and USDA 2000).

International Fire Code

Created by the International Code Council, the International Fire Code addresses a wide array of conditions hazardous to life and property, including fire, explosions, and hazardous materials handling or usage (although not a federal regulation, but rather the product of the International Code Council). The International Fire Code places an emphasis on prescriptive and performance-based approaches to fire prevention and fire protection systems.

Updated every 3 years, the International Fire Code uses a hazards classification system to determine the appropriate measures to be incorporated to protect life and property (often times these measures include construction standards and specialized equipment). The International Fire Code uses a permit system (based on hazard classification) to ensure that required measures are instituted.

State

California Government Code

California Government Code Sections 51175 through 51189 provide guidance for classifying lands in California as fire hazard areas and requirements for management of property within those lands. CAL FIRE is responsible for classifying FHSZs based on statewide criteria and makes the information available for public review. Further, local agencies must designate, by ordinance, Very High FHSZs within their jurisdiction based on the recommendations of CAL FIRE.

Section 51182 sets forth requirements for maintaining property within fire hazard areas, such as defensible space, vegetative fuels management, and building materials and standards. Defensible space around structures in fire hazard areas must consist of 100 feet of fuel modification on each side of a structure, but not beyond the property line unless findings conclude that the clearing is necessary to significantly reduce the risk of structure ignition in the event of a wildfire. Clearance on adjacent property shall only be conducted following written consent by the adjacent owner. Further, trees must be trimmed from within 10 feet of the outlet of a chimney or stovepipe, vegetation near buildings must be maintained, and roofs of structures must be cleared of vegetative materials. Exemptions may apply for buildings with an exterior constructed entirely of nonflammable materials.

California Code of Regulations

Title 14 Natural Resources

Title 14, Division 1.5, Chapter 7, Subchapter 3, Fire Hazard, also sets forth requirements for defensible space if the distances specified above cannot be met. For example, options that have similar practical effects include noncombustible block walls or fences, 5 feet of noncombustible material horizontally around the structure, installing hardscape landscaping or reducing exposed windows on the side of the structure with a less-than-30-foot setback, or additional structure hardening such as those required in the California Wildland–Urban Interface Code, California Code of Regulations Title 24, Part 7, Chapter 5.

Title 24 California Building Standards Code

California Fire Code

Part 9 of Title 24 contains the CFC, which incorporates by adoption the International Fire Code with necessary California amendments. The purpose of this code is to establish the minimum requirements to safeguard the public health, safety, and general welfare from the hazards of fire, explosion, or dangerous conditions in new and existing buildings, structures, and premises, and to provide safety and assistance to firefighters and emergency responders during emergency operations.

The CFC and Office of the State Fire Marshal provide regulations and guidance for local agencies in the development and enforcement of fire safety standards. The CFC is updated and published every 3 years by the California Building Standards Commission. The 2025 CFC took effect on January 1, 2026.

California Wildland–Urban Interface Code

CRR Part 7 of Title 24 refers to the California Wildland–Urban Interface (WUI) Code. It establishes construction and site-development requirements for buildings located in fire-prone WUI areas, focusing on reducing structure ignitions during wildfires. It covers ignition-resistant building materials, exterior fire-resistant features such as roofing, siding, and glazing, vegetation management and defensible-space requirements, and standards for decks, vents, and accessory structures. The code also addresses fire-hazard severity classifications, access and water-supply criteria for firefighting, and design measures intended to limit ember intrusion, radiant-heat exposure, and direct flame contact. Together, these provisions support resilient development in communities facing increasing wildfire risk. The 2025 California Wildland–Urban Interface Code is a fully integrated code based on the 2024 IWUIC.

California Public Resources Code

California Public Resource Code, Section 4290, requires minimum fire safety standards related to defensible space that are applicable to residential, commercial, and industrial building construction in State Responsibility Area lands and Local Responsibility Area lands classified and designated as Very High FHSZs. These regulations include road standards for fire apparatus access, standards for signs identifying roads and buildings, fuel breaks and green belts, and minimum water supply requirements. It should be noted that these regulations do not supersede local regulations that equal or exceed minimum regulations required by the state.

California Public Resource Code, Section 4291, requires a reduction of fire hazards around buildings located adjacent to a mountainous area, forest-covered lands, brush-covered lands, grass-covered lands, or land that is covered in flammable material. It is required to maintain 100 feet of defensible space around all sides of a structure, but not beyond the property line unless required by state law, local ordinance, rule, or regulations. Further, California Public Resource Code, Section 4291, requires the removal of dead or dying vegetative materials from the roof of a structure, and trees and shrubs must be trimmed from within 10 feet of the outlet of a chimney or stovepipe. Exemptions may apply for buildings with an exterior constructed entirely of nonflammable materials.

Fire Hazard Severity Zones

CAL FIRE maps FHSZs based on fuel loading, slope, fire history, weather, and other relevant factors as directed by California Public Resources Code, Sections 4201–4204, and California Government Code, Sections 51175–51189. FHSZs are ranked from Moderate to Very High and are categorized for fire protection within a Federal Responsibility Area, State Responsibility Area, or Local Responsibility Area under the jurisdiction of a federal agency, CAL FIRE, or local agency, respectively. As shown in Figure 3-4, Fire Hazard Severity Zones, portions of the Project Site are in areas designated as Moderate and High FHSZs, and bordered by areas designated as Moderate, High and Very High FHSZs to the north and south.

California Strategic Fire Plan

The 2024 Strategic Fire Plan for California reflects CAL FIRE's focus on fire prevention and suppression activities to protect lives, property, and ecosystem services, and natural resource management to maintain the state's forests as a resilient carbon sink to meet California's climate change goals and to serve as important habitat for adaptation and mitigation. The Strategic Fire Plan for California provides a vision for a natural environment that is more fire resilient, buildings and infrastructure that are more fire resistant, and a society that is more aware of and responsive

to the benefits and threats of wildland fire, all achieved through local, state, federal, tribal, and private partnerships (CAL FIRE 2024).

Mutual Aid Agreements

The California Disaster and Civil Defense Master Mutual Aid Agreement, as provided by the California Emergency Services Act, provides statewide mutual aid between and among local jurisdictions and the state. The statewide mutual aid system exists to ensure that adequate resources, facilities, and other supports are provided to jurisdictions whenever resources prove to be inadequate for a given situation. Each jurisdiction controls its own personnel and facilities but can give and receive help whenever needed.

Local

California Disaster and Civil Defense Master Mutual Aid Agreement

As provided for in the California Emergency Services Act, this agreement was developed in 1950 and adopted by all 58 California counties. This statewide mutual aid system is designed to ensure that adequate resources, facilities, and other support are provided to jurisdictions whenever their own resources prove to be inadequate to cope with a given situation. San Diego County is located in Mutual Aid Region 6 of the state system, which also includes Imperial, Riverside, San Bernardino, Inyo, and Mono counties.

San Diego County Emergency Operations Plan

The San Diego County Emergency Operations Plan (EOP) is a comprehensive emergency management system that provides for a planned response to disaster situations associated with natural disasters, technological incidents and nuclear defense operations. The Plan includes operational concepts relating to various emergency situations, identifies components of the Emergency Management Organization and describes the overall responsibilities for protecting life and property and assuring the overall well-being of the population. The plan also identifies the source of outside support that might be provided (through mutual aid and specific statutory authorities) by other jurisdictions, state and federal agencies and the private sector (County of San Diego 2022).

San Diego County Multi-Jurisdictional Hazard Mitigation Plan

The purpose of the County's Multi-Jurisdictional Hazard Mitigation Plan (MJHMP) (County of San Diego 2023) is to identify the County's hazards, review and assess past disaster occurrences, estimate the probability of future occurrences, and set goals to mitigate potential risks to reduce or eliminate long-term risk to people and property from natural and human-made hazards. An important San Diego County MJHMP component is the Community Emergency Response Team, which educates community members about disaster preparedness and trains them in basic response skills, including fire safety.

City of Santee Emergency Operations Plan

According to the City's Safety and Environmental Justice Element, "The City's Emergency Operations Plan (EOP) was prepared with input from partnering jurisdictions within San Diego County to provide a system for the effective management of emergencies consistent with the County EOP, and to ensure the protection of life, property, and the environment before, during, and after an emergency event, natural disaster, or technological incident" (City of Santee 2025b).

Santee General Plan

Safety Element and Environmental Justice Element

The purpose of the Safety Element is to reduce loss of life, injuries, and damage to property resulting from natural and human-caused public safety hazards including flooding, geologic and seismic hazards, fire, traffic hazards and crime (City of Santee 2025b). The following goals and policies are applicable to wildfire:

Goal 1: Reduce impacts from and improve the City of Santee's capacity to adapt to natural hazards

Objective 3: Minimize injures, loss of life, and property damage resulting from fire hazards

Policy 3.13 Mandate that public and private landowners for all existing land uses comply with all applicable state and local requirements and implement site-specific safety measures that mitigate to a low-risk condition around or near public facilities, infrastructure, and natural resources.

Policy 3.15 Require public and private landowners to minimize the risk of wildfire moving from wildland areas to developed properties or from property to property by increasing structural hardening measures (e.g., fire-rated roofing and fire-resistant construction materials and techniques), maintaining and improving defensible space on site, and supporting vegetation management in adjacent undeveloped areas

Policy 3.21 Support the continuation of long-term maintenance of fire hazard reduction projects, such as a weed abatement program (existing), community fire breaks, and private and public road clearance.

Objective 12: Increase resiliency to the impacts of wildfire.

Policy 12.1 Continue to require fire prevention planning and defensible space in all new development within Very High Fire Hazard Severity Zones or wildland–urban interface.

Policy 12.4 Identify fire-prone habitats to plan for increased risk of larger and more frequent wildfires.

4.6.3 Thresholds of Significance

The significance criteria used to evaluate the Project impacts to wildfire are based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines. According to CEQA Guidelines Appendix G, a significant impact related to wildfire would occur if a Project located in or near State Responsibility Areas or lands classified as Very High FHSZs would incur the following:

A. Substantially impair an adopted emergency response plan or emergency evacuation plan.
B. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose Project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.

C. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment.

D. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.

4.6.4 Impact Analysis

As shown in Figure 3-4, portions of the Project Site are in areas designated as Moderate and High FHSZs, and bordered by areas designated as Moderate, High and Very High FHSZs to the north and south (CAL FIRE 2025c).

A. Would the Project substantially impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Impairment of an emergency response or EOP would occur if there was a substantial increase in the population evacuating an area that would not adequately be served by the existing circulation system, or planned potential evacuation routes are impaired during future construction or operation. As discussed above (Section 4.6.2, Relevant Plans, Policies, and Ordinances), the City has three primary documents related to emergency and evacuation planning (i.e., the County EOP, the Santee EOP, and the County MJHMP). The County MJHMP identifies risks, minimizes damage from natural and human-made disasters, and is generally intended to provide compliance with regulatory requirements associated with emergency response efforts (County of San Diego 2023). The County EOP is written in coordination with the MJHMP and contains an Evacuation Annex, which describes how emergency personnel shall implement a response to a disaster when and if evacuation is needed. The County EOP covers all of San Diego County, including Santee. According to the City's General Plan Safety and Environmental Justice Element, the Santee EOP was developed from the County EOP and provides a system for the effective management of emergencies consistent with the County EOP and tailored to the City's needs (City of Santee 2025b). The County EOP identifies major interstates and highways that serve as primary transportation routes in the case of an evacuation. Routes that run through the City to be used for evacuation include State Route 52 (east/west), State Route 67 (north/south), and State Route 125 (south) (USDCESO and County of San Diego 2022).

The Project includes the reduction of hazardous fuel loads within the San Diego River Corridor through the implementation of the Fuels Treatment Plan. Implementation of the Project would include vegetation removal and treatment of non-native, invasive, and dead plant material. The Project does not include any proposed development, nor would the Project result in an increased population that would impact evacuation.

As discussed in Section 4.3 Hazards and Hazardous Materials, the proposed Project may result in a temporary increase in traffic on roadways surrounding the Project Site due to increased truck loads or the transport of construction equipment to and from the Project Site during treatment and maintenance activities. Access to the Project Site would occur at designated routes that occur at the end of existing roadways and do not currently allow for through traffic (Figure 3-6, Access Routes). These routes will be confirmed by the vegetation management contractor prior to use and are subject to change. Furthermore, these routes are not previously identified evacuation routes. In addition to these routes, it is anticipated that overland travel by foot will be conducted by field crews along disturbed land to access vegetation management work locations. Implementation of vegetation management and treatment would prioritize

existing roads and trails to minimize the need for new disturbances. If access via public roadways is necessary, the contractor will be responsible for traffic control to maintain safe working conditions and ensure emergency access is not impaired. Therefore, the Project would not conflict with or impair implementation of the MJHMP and the County's or City's EOP, nor would the Project impair use of potential evacuation routes in the City, and impacts would be **less than significant**.

B. Due to slope, prevailing winds, and other factors, would the Project exacerbate wildfire risks, and thereby expose Project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

The Project Site is located along the San Diego River within the City's jurisdiction, which does not support or include residential development that houses permanent residents. Occupancy at the Project Site includes people accessing the San Diego River for recreational purposes such as walking, birding, etc. In addition, the San Diego River Foundation identifies that homeless encampments are a critical social and environmental challenge in and around the San Diego River. The unhoused population in the riverbed are harder to reach by service providers, medical crews, and emergency responders, further from existing homeless resource infrastructure, and at higher vulnerability to environmental hazards like fires and floods (San Diego River Park Foundation 2026). Therefore, although the Project Site does not include residential properties that house permanent occupants, recreational visitors and people experiencing homelessness in the riverbed would be vulnerable to exposure of pollutant concentrations from wildfire or the uncontrolled spread of a wildfire at the Project Site.

The Project would include vegetation management through the implementation of the Fuels Treatment Plan, the purpose of which is to reduce hazardous fuel loads within the San Diego River Corridor. The vegetation management techniques that are recommended for each zone are classified into three categories: hand labor (e.g., hand cutting, trimming), mechanical (e.g., mowing, masticating), and chemical (e.g., EPA-approved herbicide). Hand labor and chemical management techniques are not activities that pose a risk for wildfire ignition; however, mechanical vegetation management requires the use of heavy machinery, which could result in ignition during high-fire-hazard weather conditions.

The following analysis discusses the potential wildfire risks that could be exacerbated by vegetation management on site.

Topography and Terrain

As described above, the Project Site is located within a broad alluvial valley bounded by foothill terrain to the north and east. The east–west orientation of the corridor river reflects a broader regional drainage pattern that can channel Santa Ana winds toward the coast, increasing wind speeds within valley bottoms and contributing to rapid fire spread (CAL FIRE 2025a). Implementation of the Project would include vegetation management activities that would reduce fire risk in the San Diego River Corridor by creating and maintaining a defensible space and managing hazardous fuel loads. Additionally, the Project would implement Fire Protection BMPs (**Fire Protection BMP-1-5)** during the use of mechanical vegetation management techniques, which would reduce the potential for ignition and wildfire risk during Project implementation. Further, because the proposed Project does not include or encourage "occupants," it would not expose occupants to significant pollutant concentrations. Therefore, while the Project is located within a valley bottom that can contribute to rapid fire spread, implementation of the Project would not exacerbate wildfire risks.

Prevailing Winds

A defining feature of the region's fire weather is the occurrence of Santa Ana winds, which develop when warm, dry air flows from inland deserts toward the coast. These winds, which occur in late summer through the winter months, can reach sustained speeds of 25 to 35 mph on ridge tops and produce gusts exceeding 60 mph that travel efficiently through east–west oriented drainages such as the San Diego River valley. Relative humidity during Santa Ana events often drops into the single digits, rapidly drying fine fuels and enabling fast, wind-driven fire spread (RCD of Greater San Diego County and San Diego County Fire Safe Council 2019; CAL FIRE 2025b). Seasonal winds in the inland foothills generally blow west to southwest during the summer but shift to northerly and easterly directions during fall and winter storm cycles, reinforcing the potential for wind alignment within the corridor (Eucalyptus Hills Fire Safe Council 2009). During such events, ignitions have the potential to develop into fast-moving, high-intensity fires capable of significant spotting and embers carried long distances through the wildland–urban interface.

As mentioned above, implementation of the Project would include vegetation management activities that would reduce fire risk in the San Diego River Corridor by creating a defensible space and managing hazardous fuel loads. Ongoing maintenance activities would occur as needed based on biannual inspections to maintain a reduction in wildfire hazard on the Project Site after the initial treatment of the Project Site. In addition, the Project would not involve altering slopes or creating new wind patterns. Further, because the proposed Project does not include or encourage occupants, it would not expose occupants to significant pollutant concentrations. Therefore, while the Project is located in an area susceptible to prevailing winds, the Project would not exacerbate wildfire risk due to prevailing winds and impacts would be **less than significant.**

Vegetation

Vegetation at the Project Site reflects the composition typical of inland valleys and river corridors in western San Diego County. Riparian vegetation, including willows, cottonwoods, mulefat, and associated understory species, dominates the immediate river margins. Although riparian vegetation often retains higher moisture levels, it can contain dense stands of shrubs, branches, and debris, along with invasive species such as *Arundo donax,* which can contribute to elevated fire intensity. Implementation of the Project would include vegetation management activities that would reduce fire risk in the San Diego River Corridor by creating a defensible space and managing hazardous fuel loads. Ongoing maintenance activities would occur as needed based on biannual inspections to maintain a reduction in wildfire hazard on the Project Site after the initial treatment of the Project Site. Further, because the proposed Project does not include or encourage "occupants," it would not expose occupants to significant pollutant concentrations. Therefore, the Project would not increase fire risk through the introduction of vegetation at the Project Site, and impacts would be **less than significant.**

While the Project Site contains factors that exacerbate wildfire risk, implementation of the Project is intended to enhance community safety within the City through reduction of wildfire risk, and to reduce ignition potential and fire intensity within the San Diego River Corridor. Temporary risks associated with mechanical treatment would be reduced with implementation of BMPs **Fire Protection BMP-1-5)**. Project implementation would not exacerbate wildfire risks and thereby would not expose permanent occupants or employees to pollutant concentrations from wildfire or the uncontrolled spread of a wildfire, and impacts would be **less than significant.**

C. Would the Project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

The Project would include the implementation of the Fuels Treatment Plan, which includes vegetation management and removal. Ongoing maintenance activities would occur as needed based on biannual inspections to maintain a reduction in wildfire hazard on the Project Site after the initial treatment of the Project Site. It is expected that approximately one-quarter of the total Project Site will be maintained annually to preserve reduced hazardous fuel conditions. Access to the Project Site would use existing roads and trails in the San Diego River Corridor. A map of the access routes is presented in Figure 3-6. In addition to these routes, it is anticipated that overland travel by foot will be conducted by field crews along disturbed land to access vegetation management work locations. Implementation of the Project would include vegetation management activities that would reduce fire risk in the San Diego River Corridor by creating and maintaining a defensible space and managing hazardous fuel loads. Specific fuel breaks are not proposed as part of the Project. Therefore, the Project does not propose development that would result in the installation or maintenance of associated infrastructure such as public roadways, fuel breaks, emergency water sources, power lines, or other utilities that would exacerbate fire risk or that may result in temporary or ongoing impacts on the environment, and impacts would be **less than significant.**

D. Would the Project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

Wildfire can significantly alter the way water interacts with the landscape to the extent that even modest rainstorms can produce dangerous flash floods and debris flows. Burned landscapes are particularly susceptible to debris flow because wildfire removes vegetation, which plays a vital role in maintaining existing drainage patterns and the stability of soils. Removal of surface vegetation reduces the ability of the soil surface to absorb rainwater and can allow for increased runoff that may include large amounts of debris or mud-flows. If hydrophobic conditions exist post-fire, the rate of surface water runoff is increased as water percolation into the soil is reduced (Moench and Fusaro 2012). The potential for surface runoff and debris flows therefore increases for areas recently burned by large wildfires (Moench and Fusaro 2012).

The Project Site is located within the San Diego River Watershed and is in the San Diego River Corridor, which is designated as a Federal Emergency Management Agency Floodway (FEMA 2026). Because the Project Site is designated as a floodway, there is potential that people could be put at risk in post fire condition. However, as identified in Figure 1 of Appendix C of the City's Safety and Environmental Justice Element, the Project Site is not categorized as an area susceptible to landslides (City of Santee 2025a). Post-treatment, there is the potential for erosion caused by the removal of vegetation cover and dead or dying vegetative debris that previously had intercepted rain and runoff or slowed down the velocity of rainfall and runoff. This is an especially crucial consideration as erosion within the Project Site has the potential to contribute to sedimentation of the San Diego River, resulting in turbidity and potential infill. To minimize the risk of excessive erosion post-treatment, this Project includes a combination of erosion and sedimentation BMPs from the construction and forestry industries, including the California Forest Practice Rules, San Diego County Erosion and Sediment BMPs, and U.S. Environmental Protection Agency erosion and sediment control BMPs (**Slope Stability/Erosion BMP-1-10).** Furthermore, the proposed Project would not change the drainage pattern of the river. Therefore, with implementation of BMPs, the likelihood for downslope or downstream flooding or landslides as a result of runoff, post-fire slope instability, or drainage changes would be minimal, and impacts would be **less than significant**.

4.6.5 Mitigation Measures and Level of Significance After Mitigation

All impacts related to wildfire would be less than significant. No mitigation is required.

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5 Effects Found Not to Be Significant

Section 15128 of the California Environmental Quality Act Guidelines requires that an Environmental Impact Report briefly describe potential environmental effects that were determined not to be significant and therefore were not discussed in detail in the Environmental Impact Report. The environmental issues discussed in the following sections are not considered significant for the San Diego River Fire Hazard Mitigation Program: Fuels Treatment Plan (Project), and the reasons for these less-than-significant impact or no impact determinations are discussed herein.

5.1 Aesthetics

The Project Site consists of typical riverine open space within the San Diego River Corridor within Santee's jurisdictional limits. The Project Site contains recreational walking trails. The Project Site is surrounded by residential, commercial, industrial, recreational, and transportation related development. Views of the Project Site are generally visible from surrounding roadways adjacent to the Project Site and consist of dense trees and shrubs on site, some of which are dead. Due to the dense vegetation, views of the Project Site are limited to immediate views of trees and shrubs. The City of Santee does not identify designated scenic vistas in its General Plan (City of Santee 2020). The Project would include vegetation management activities that would remove invasive and dead and dying vegetation and have targeted thinning of vegetation within Zone 1 and Zone 2. In Zone 3, which includes the broader vegetated areas of the river corridor beyond 100 feet from structures, vegetation management is limited to the treatment or removal of non-native species, dead or dying vegetation, and storm-deposited accumulations, while maintaining riparian canopy and ecological structure; removal of native vegetation is not included in this zone. Vegetation management activities would not obstruct views, introduce structures, or alter the defining visual features of a designated scenic vista, therefore, impacts would be **less than significant**

The Project Site is not located within or adjacent to a state-designated or eligible scenic highway (Caltrans 2026). The nearest designated state scenic highway to the Project is a segment of State Route (SR) 52, that is approximately 1.6 miles from the Project Site. This designated scenic corridor ends near the Western edge of Santee and the Project Site and is not visible from SR-52 due to topography and vegetation. The closest eligible scenic highway is SR-52 south of the Project Site, approximately 0.3 miles away. Views of the Project Site from the eligible portion of SR-52 are not visible due to topography and vegetation. Therefore, because the Project Site is not visible from a scenic highway, the Project would not result in damage of scenic resources from a scenic highway and impacts would be **less than significant**.

The California Public Resource Code 2701 defines an urbanized area for an incorporated city that has a population of at least 100,000 persons or has a population of less than 100,000 persons if the population of that city and not more than two contiguous incorporated cities combined equals at least 100,000 persons. As of July 2024, the U.S Census Bureau estimates the population of Santee to be 59,104; however, the City of El Cajon adjacent to the City of Santee has a population of 103,291 (USCB 2024), and therefore, the City of Santee is considered an urbanized area. The City of Santee does not have any zoning regulations related to scenic quality that would be applicable to the Project. The City of Santee General Plan does contain policies intended to protect aesthetic resources. The Conservation Element specifically identifies Objective 2.0 and Policy 2.1, which seek to protect the aesthetic quality along water corridors, and scenic value of the San Diego River Corridor (City of Santee 2020).

As described above, the Project consists of vegetation management activities, including the removal of dead, dying and non-native and invasive vegetation, and targeted thinning of shrubs, fine fuels within Zone 1 and 2. The Project would result in less obstruction of visual resources within the San Diego River Corridor and would maintain the scenic resources within the San Diego River Corridor.

The Project would include vegetation management activities and occur during daytime hours. The Project would not introduce new light sources, reflective materials, or surfaces capable of producing glare. Therefore, the Project would not result in new substantial sources of light or glare, and impacts would be **less than significant**.

5.2 Agricultural and Forestry Resources

The California Department of Conservation has not identified the Project Site as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (DOC 2022). The Project would not result in the conversion of important farmland. The Project Site is designated as "Other and Urban Built-Up Land," by the California Department of Conservation, which is not a category under this California Environmental Quality Act criterion. Because the Project Site is not identified as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, there would be **no impact** related to converting Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use.

The Project Site is designated as Park/Open Space and Public land uses and is used as open space (City of Santee 2017). Surrounding lands are parks, preserves, and developed residential, commercial, industrial, and transportation uses. No portions of the Project Site or surrounding area are used for agricultural operations. No agricultural or forestry uses are located within or adjacent to the Project Site. According to the City's Draft Program Environmental Impact Report for the Housing Element Rezone Program Implementation, there are no lands protected by a Williamson Act Contract within the City (City of Santee 2022). Therefore, there would be **no impact** related to conflict with existing zones or a Williamson Act Contract.

No portion of the Project Site is zoned or mapped as forest land, timberland, or timberland production as defined in California Public Resources Code Section 12220(g). Timberland (as defined by California Public Resources Code Section 4526) or timberland-zoned timberland production (as defined by Section 51104[g] of the Government Code) is not present on site, nor are there any active or potential commercial timber operations present in the area. The Project involves vegetation management and would not involve the conversion of forest land to non-forest use. Therefore, the Project would not conflict with lands zoned for forest land, timberland, or timberland production and **no impact** would occur.

5.3 Air Quality

The San Diego County Air Pollution Control District (SDAPCD) implements regional air-quality planning through the San Diego Regional Air Quality Strategy (SDAPCD 2022) and the San Diego portion of the State Implementation Plan. These plans identify control measures and strategies needed for attainment and ambient air-quality standards. The Project consists of short-term vegetation management activities does not introduce new development, does not generate long-term emissions, and does not alter land-use or growth assumptions that Regional Air Quality Strategy/State Implementation Plan rely on for air-quality forecasting. Vegetation management activities would require short-term use of fuel-powered equipment such as chainsaws, chippers, and small mowers; however, these activities would be temporary in nature and limited in scale and duration. Ongoing maintenance activities would occur as needed based on biannual inspections and would not occur across the entire Project Site

during each maintenance cycle. The Project would also implement best management practices (BMPs) that have been identified in Section 3.6 of Chapter 3, Project Description, such as controlling fugitive dust, reducing idling times, and maintaining equipment to reduce generation of air pollution during vegetation management activities **(Air Quality BMP-1)**.

The Project's emissions are temporary, minimized through BMPs, and do not interfere with SDAPCD control measures; it does not obstruct or conflict with the air quality plan.

Sensitive receptors including nearby residential neighborhoods and recreational users on adjacent parks and multi-use trails are located near portions of the Project Site. All work would occur during daytime hours and incorporate dust control, access management, and equipment restrictions to minimize temporary exposure. Because vegetation management activities are temporary, intermittent, and would implement BMPs, the Project would not result in substantial pollutant exposure for nearby sensitive receptors.

The Project would also not introduce any long-term odor-emitting sources. Minor, short duration odors associated with equipment exhaust or vegetation handling may occur during implementation; however, these would be temporary and limited. Vegetation material would be transported off site for green waste processing rather than stockpiled, further reducing the potential for odor generation.

Based on the Project's temporary and minor nature of equipment-related emissions, the implementation of air quality BMPs, and the absence of long-term emission sources, the Project would not result in a substantial adverse air quality impact. Therefore, air quality impacts including those related to emissions, sensitive receptor exposure, and odor generation would be **less than significant.**

5.4 Energy

Energy use for vegetation management activities would be limited to temporary, short-term fuel usage associated with Project equipment. The Project does not require long-term energy consumption. BMPs, including idling limits and minimizing the amount of equipment operating at one time would further reduce temporary fuel use and avoid wasteful or inefficient consumption of energy **(Air Quality BMP-8)**. Therefore, the Project would not result in wasteful, inefficient, or unnecessary consumption of energy. The Project would not require new energy infrastructure, utility connections, or create long-term operational energy demand. Additionally, the Project consists of vegetation management using standard mechanical equipment and does not generate ongoing energy demand and would not interfere with or obstruct state or local renewable energy or energy efficiency plans. Therefore, the Project would not result in wasteful, inefficient, or unnecessary consumption of energy, and impacts would be **less than significant**.

5.5 Geology and Soils

The City's General Plan Safety Element does not identify the Project Site is not located within an Alquist–Priolo Earthquake Fault Zone or within an area susceptible to landslides; however, the Project Site does have potential for ground shaking associated with the nearby faults and contains liquefaction-susceptible soils (City of Santee 2025a). The Project involves vegetation management activities that would be temporary in nature and would not propose structural development that would introduce new people to the Project Site that would be exposed to these risks. Therefore, the Project would not expose people to risks associated with fault zones, seismic shaking, liquefaction, landslides, and unstable geologic units or soils.

The Project would involve vegetation management activities that could cause localized soil disturbance and temporarily expose soils to increased erosion potential, particularly near access points and trails within the river corridor. However, the Project includes erosion and slope-stability BMPs designed to minimize soil disturbance and sediment transport **(Slope Stability/Erosion BMP-1-10).** The BMPs include measures such as limit heavy equipment, avoid saturated soils, and use mats, which reduce erosion potential with vegetation management activities.

The Project involves vegetation management activities and does not include development that would require wastewater disposal systems. No septic tanks or alternative wastewater disposal systems are proposed. Therefore, **no impact** would occur.

The Project does not propose the excavation of the Project Site and ground disturbance would be limited to the top layers of soil. Therefore, no unique geological or paleontological resources would be disturbed. Impacts would be **less than significant**.

5.6 Greenhouse Gas Emissions

Vegetation management activities would involve temporary, short-term fuel use from portable equipment such as chainsaws, chippers, and small mowers. These sources would generate minor, short-duration greenhouse gas (GHG) emissions during implementation. Ongoing maintenance activities would occur as needed based on biannual inspections and would not occur across the entire Project Site during each maintenance cycle and would generate minimal greenhouse gas emissions over a smaller area. Additionally, the Project would implement BMPs, including use of Tier 4 equipment where feasible, idling limits, and minimizing the number of pieces of equipment operating simultaneously (**Air Quality BMP-2**), which would further reduce temporary fuel consumption and associated GHG emissions. Additionally, vegetation management activities would reduce the likelihood, intensity, and emissions profile of future wildfire events within the San Diego River Corridor. GHG emissions from the Project would be short-term, minor, and limited to temporary equipment use and would not conflict with state or local GHG reduction plans; impacts related to GHG emissions would be **less than significant.**

5.7 Land Use and Planning

The Project is located along the San Diego River Corridor within the City of Santee, which is adjacent to residential neighborhoods, commercial districts, industrial areas, and existing parks and recreational trails. Land uses within the Project Site include Park/Open Space and Public land uses (City of Santee 2017). The Project consists of public-safety vegetation management activities within established open-space areas. No structures, grading, or land-use changes are proposed, and the Project would not introduce new development, population, or uses that could physically divide an established community or conflict with applicable land-use plans. Work areas are limited to vegetation-management zones identified in the Fuel Treatment Plan and would not alter the function or accessibility of adjacent residential, commercial, industrial, or recreational uses.

As described in Section 4.1, Biological Resources, the Draft Santee Multiple Species Conservation Program Subarea Plan has not yet been approved or permitted; however, it is used as the guidance document for projects occurring within the City of Santee. Portions of the Project Site overlap defensible space areas identified within the San Diego River Subunit as shown on Figure 4-5 of the City of Santee Draft Multiple Species Conservation Program Subarea Plan (City of Santee 2025b), and no permanent impacts to habitat are expected. As concluded in Section 4.1, the Project would not conflict with the Draft Santee Multiple Species Conservation Program Subarea Plan

The Project would not divide an established community or conflict with a land use plan, policy, or regulation, and impacts would be **less than significant.**

5.8 Mineral Resources

Portions of the Project Site lie within MRZ-2 (areas with significant or highly likely aggregate deposits) along the San Diego River floodplain, with the remainder of the Project Site in MRZ-3 (deposits present but significance not evaluable with available data) (City of Santee 2025c). Given the open space nature of the Project Site, adjacent residential and commercial uses, and sensitive habitat/recreation constraints, extraction would not be compatible with existing and planned in this location. The Project consists of vegetation management activities and would not alter mineral resources or interfere with reclamation. Considering the existing surrounding land uses and the incompatibility of mineral resource extraction activities in the Project area, potential significant mineral resources within the Project area are considered unavailable for extraction. Therefore, impacts associated with mineral resources would be **less than significant.**

5.9 Population and Housing

The Project would not introduce new people to the Project Site or existing residences. Temporary crews would be present during vegetation management activities and would not result in long-term population increases. Therefore, the Project would not introduce new permanent population or create conditions that would indirectly encourage population growth in the surrounding area.

The Project Site consist primarily of open space lands within the San Diego River Corridor. Portions of the Project Site is known to be used periodically by unhoused individuals (San Diego River Park Foundation 2026); however, no housing is present within the Project Site. The Project would not displace existing housing or require the construction of replacement of housing. Impacts related to population growth, housing, and displacement would be **less than significant**.

5.10 Public Services

The Santee Fire Department (SFD) provides fire protection and Emergency Medical Service to the Project Site. SFD currently operates three fire stations: two permanent fire stations (SFD Fire Station 4 and SFD Fire Station 5) and one interim fire station (SFD Fire Station 20). SFD Fire Station 4 is located approximately 1 mile south of the Project Site at 8950 Cottonwood Avenue, and SFD Station 5 is located approximately 0.06 miles north of the Project Site at 9130 Carlton Oaks Drive (City of Santee 2025a). The City opened SFD Fire Station 20, which is located at the City Operation Yard at 9530 Via Zapador, approximately 1 mile south of the Project Site, in October 2025 (City of Santee 2025a). The San Diego County Sheriff's Department provides public safety services. The Santee Sheriff's Station is located approximately 0.5 miles from the Project Site (County of San Diego Sheriff's Department 2026).

The Project would include vegetation management, which would require additional support from SFD and San Diego Sheriff. Through BMPs, the Project would include advanced notice of planned activities through multiple channels, such as in-person outreach, posted signage, and collaboration with service providers to let recreational users and potential unhoused people within the Project Site **(Recreational Resources BMP-6)**. Clear messaging shall explain the timing, purpose, and safety risks of vegetation treatment. On the day of operations, SFD or the City shall confirm that sites are clear before work begins. Representatives of the San Diego Sheriff's Department may assist with

abatement of encampments under certain circumstances. This increased demand for fire and police services would be temporary and anticipated to be limited to the beginning of Project treatment activities. Ongoing maintenance activities would occur as needed based on biannual inspections and would not occur across the entire Project Site during each maintenance cycle. Project personnel would be temporarily on site during treatment activities but would not result in a long-term increase in demand for public services. Because the Project does not generate population growth, occupancy, or new built structures, it does not create additional demand for fire protection, police services, schools, or other public facilities. Impacts to public services would be **less than significant.**

5.11 Recreation

The Project Site includes open space areas of Mast Park and Walker Preserve. These areas contain established recreational amenities such as the San Diego River and Walker Preserve trail multi-use trails, used year-round by walkers, cyclists, and equestrians. Vegetation management activities within the Project Site would require portions of these trails to be temporarily unavailable to users. The Project would implement BMPs associated with recreational resources such as posting signage and notification of Project activities, focusing operations during weekdays when feasible, and restoring disturbed recreation-specific areas **(Recreational Resources BMP-1-6)**. The Project would not introduce new recreational facilities and would not result in a long-term increase in demand for parks or recreational services. Temporary, localized trail closures may occur during vegetation management activities but would not substantially affect the use or availability of recreational amenities. Therefore, impacts to recreation would be **less than significant.**

5.12 Transportation

The Project is located entirely within the San Diego River Corridor and is not situated within an existing roadway. The Project would use existing access routes within the San Diego River Corridor to reach vegetation management areas. As shown in Figure 3-6, Access Routes, access to the Project Site is available via public roadways, existing utility easements, maintenance paths, and disturbed land already present along the corridor. The Project would result in the temporary closure of existing trails within the San Diego River Corridor where work is occurring. The Project would not require the closure of -sidewalks, bicycle lanes, and roadways surrounding the Project Site.

Vehicle trips associated with the Project would be limited to vegetation management crews traveling to and from the Project Site. These trips would be temporary and would not generate substantial vehicle trips during implementation. Ongoing maintenance activities would occur as needed based on biannual inspections. Temporary crews would not generate consistent ongoing traffic; limited worker traffic associated with treatment and maintenance would be temporary and would not result in a measurable increase in vehicle miles traveled, congestion, or traffic on adjacent public roadways. Therefore, the Project would result in a **less-than-significant** impact related to trip generation.

The Project would introduce equipment to an open space area. Prior to Project initiation, notification and signage would be posted to explain the timing, purpose, and safety risks of vegetation treatment. The Project would not increase hazards due to a design feature or incompatible use.

All existing public roads and emergency response routes would remain open during implementation, and vegetation management activities are located within open space areas rather than with roadways. No closures or obstruction of emergency access routes are required as part of Project implementation. Therefore, the Project would not reduce emergency access, and impacts would be **less than significant**.

5.13 Utilities and Service Systems

The Project would include vegetation management within an open space area. Vegetation management activities would rely solely on portable equipment and would not require water, sewer, electricity, natural gas, or other utility connections. The Project would not introduce new residents, businesses, or long-term employees. Energy and water demand for the Project would be temporary and would not require the construction or upgrading of utility infrastructure.

Vegetation management would result in the generation of biomass. Disposal methods for the Project would include off-site disposal to a green waste facility, on-site broadcast of chips, lop-and-scatter, and to a lesser extent cranes and helicopters. Biomass would be handled, transported, and processed in accordance with applicable federal, state, and local solid-waste regulations. Compliance with these requirements ensures proper diversion and disposal. Impact would be **less than significant**.

The Project would not require new or expanded water, wastewater, stormwater, electricity, natural gas, telecommunication, or solid-waste facilities. Impacts to utilities and service systems would therefore be **less than significant.**

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6 Other CEQA Considerations

6.1 Cumulative Impacts

Section 15130(a) of the State California Environmental Quality Act (CEQA) Guidelines requires a discussion of the cumulative impacts of a project when the project's incremental effect is cumulatively considerable. Cumulatively considerable, as defined in CEQA Guidelines Section 15065(a)(3), means that the "incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects." The State CEQA Guidelines Section 15355 defines a cumulative impact as two or more individual effects that, when considered together, are considerable or that compound or increase other environmental impacts. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.

In many cases, the impact of an individual project may not be significant, but its cumulative impact may be significant when combined with impacts from other related projects. CEQA Guidelines Section 15130(b) states that "the discussion [of cumulative impacts] need not provide as great detail as is provided for the effects attributable to the project alone." Section 15130(b) further states that a cumulative impacts discussion "should be guided by standards of practicality and reasonableness."

Cumulative impacts can also occur from the interactive effects of a single project. For example, the combination of noise and dust generated during construction activities can be additive and can have a greater impact than either noise or dust alone. However, substantial cumulative impacts more often result from the combined effect of past, present, and future projects located in proximity to a proposed project. Thus, it is important for a cumulative impacts analysis to be viewed over time and in conjunction with other related past, present, and reasonably foreseeable future projects, the impacts of which might compound or interrelate with those of the project under review.

Probable future projects are those in the project vicinity that have the possibility of interacting with the project to generate a cumulative impact (based on proximity and construction schedule) and either:

- Are partially occupied or under construction
- Have received final discretionary approvals but are not yet constructed
- Have applications accepted as complete by local agencies and are currently undergoing environmental review
- Are projects that have been discussed publicly by an applicant or that otherwise become known to a local agency and have provided sufficient information about the project to allow at least a general analysis of environmental impacts

CEQA Guidelines Section 15130 identifies two basic methods for establishing the cumulative environment in which a project is considered: the use of a list of past, present, and probable future projects, or the use of adopted projections from a general plan, other regional planning document, or a certified environmental impact report (EIR) for such a planning document. This cumulative analysis uses a combination of the "list" approach and the "projections" approach to identify the cumulative setting.

Geographic Scope

The geographic area that could be affected by the Project varies depending on the type of environmental resource being considered. When the effects of the Project are considered in combination with those other past, present,

and probable future projects to identify cumulative impacts, the other projects that are considered may also vary depending on the type of environmental effects being assessed. Table 6-1 presents the general geographic areas associated with the different resources addressed in this analysis.

Table 6-1. Geographic Scope of Cumulative Impact Analyses

Environmental Issue	Geographic Scope of Cumulative Impact Analyses
Biological Resources	Local and regional vicinity
Cultural Resources, Tribal Cultural Resources	Project Site and immediate Project vicinity
Hazards and Hazardous Materials	Project Site and immediate Project vicinity
Hydrology and Water Quality	Project Site and immediate Project vicinity
Noise	Project Site and immediate Project vicinity
Wildfire	Project Site and immediate Project vicinity

Project List

For the analysis of cumulative impacts associated with the Project, a cumulative project list was developed through consultation with the City of Santee. Table 6-2, Cumulative Project List, provides a list of these cumulative projects and their associated land use.

Table 6-2. Cumulative Project List

City ID[1]	Project	Status	Address	Land Use/Description
1	Warmington Townhomes	Pending Entitlement	10939 Summit Avenue	50 residential condominium units
2	D'Lazio Condominiums	Approved 8/23/06 - Under Construction	8439 Fanita Drive	20 residential condominium units
3	Vactor Decanting Station	Approved – Not Built	9534 Via Zapador	Vactor truck dewatering station
4	Karl Strauss	Approved 12/17/15 - Not Built	300 Town Center Parkway	Brewery, tasting room, & restaurant
5	Integrated signs	Pending Entitlement	10756 Rockvill St.	27,044 sq. ft. industrial building
6	Prospect Estates II Subdivision	Approved 10/9/19 - Under Construction	8705 Marrokal Lane	38 condos, 15 single-family homes
7	Palazzo Villas	Approved 2/12/20 - Not Built	8842 Olive Lane	8 residential condominium units
8	Starbucks & 7-Eleven	Approved 6/10/20 - Not Built	8606 Graves Avenue	4,800 sq. ft. coffee shop & convenience store
9	Tyler Street Subdivision	Approved 4/24/24 - Not Built	8500 Tyler Street	14 single-family homes
10	North Palisade Industrial Building	Approved Not Built	10990 N. Woodside Avenue	300,145 sq. ft. industrial building
11	Shadowhill Commercial Building	Pending Entitlement	SW Corner Woodside Ave. and Shadowhill Rd.	6,197 sq. ft. commercial building

Table 6-2. Cumulative Project List

City ID[1]	Project	Status	Address	Land Use/Description
12	County Animal Shelter	Approved – Under Construction	Riverview Parkway	23,303 sq. ft. animal shelter
13	Woodspring Suites Hotel	Approved 9/18/19 - Under Construction	8807 Mission Gorge Road	120-guestroom, 4-story hotel
14	Carlton Oaks Country Club	Pending Entitlement	7200 Inwood Drive	243 residential units & hotel
15	All Right Storage	Approved 4/28/21 - Not Built	8708 Cottonwood Avenue	RV and self-storage facility
16	Prospect Avenue Subdivision	Pending Entitlement	8732 Prospect Avenue	4 single-family homes
17	New West Subdivision	Approved 4/10/24 - Not Built	9463 Slope Street	11 single-family homes
18	Graves Avenue RV & Self Storage	Approved 9/25/24 – Not Built	8355 Graves Avenue	RV and self-storage facility
19	Laurel Heights Condominiums	Approved 8/11/21 - Under Construction	7750 Laurel Heights Drive	80 residential condominium units
20	Extra Space Storage	Approved 5/14/25 – Not Built	10815 Woodside Avenue	88,390 sq. ft. (3-story) storage building
21	Debra Pember	Pending Entitlement	11009 Summit Ave	49 Units as 44 duplexes, and 5 condos
22	Lake Canyon Subdivision	Approved 12/14/22 - Not Built	9210 Lake Canyon Road	9 single-family homes
23	Atlas View Apartments	Pending Entitlement	8726 Atlas View Drive	10 residential apartments
24	Fanita Drive Townhomes	Approved 7/12/23 - Not Built	8504 Fanita Drive	8 residential condominium units
25	Laurel Park	Pending Entitlement	7735 Mission Gorge Rd.	Replace 67 mobile homes with 71 twin/single-family homes
26	Lantern Crest	Approved 2/22/23 - Under Construction	300 Lantern Crest Way	432- unit congregate care facility w/ density bonus
27	Fanita Ranch Planned Development	Pending Entitlement	Fanita Ranch	Master-planned community w/up to 3,008 homes
28	Paseo	Pending Entitlement	701 Park Center Drive	53-unit condominium units
29	Excel Hotel	Approved 4/26/23 - Not Built	381 Town Center Parkway	97 guestroom, 4-story hotel
30	Cuyamaca Business Center	Approved 3/12/24 – Not Built	9745 Cuyamaca Street	6,280 sq. ft. medical office building
31	Ukrainian Catholic Church	Approved 11/8/23 - Not Built	9308 Carlton Oaks Drive	4,400 sq. ft. church
32	Atlas Cell Phone Tower	Pending Entitlement	10400-CS Fanita Parkway	74' cell phone tower at Santee Lakes
33	Lutapaj Specialty Food Store	Approved 1/25/2024 - Not Built	282 Town Center Parkway	2,016 sq. ft. specialty food & tasting facility
34	Cuyamaca/Prospect Starbucks	Approved 6/12/2024 - Not Built	8606 Cuyamaca Street	1,270 sq. ft. drive-through coffee shop

Table 6-2. Cumulative Project List

City ID[1]	Project	Status	Address	Land Use/Description
35	The Exchange (Walmart Housing Site)	Approved 12/10/25 – Not Built	9056 Mission Gorge Rd	3-story, 100 residential townhomes
36	Santee Auto Center	Approved 10/25/23 – Under Construction	10335 Mission Gorge Road	Two car dealerships, auto body shop, & car wash
37	Fordyce Construction Office	Approved 9/22/25 – Not Built	9735 Prospect Avenue	11,295 sq. ft. commercial office and warehouse
38	Habitat for Humanity Townhomes	Approved 9/27/23 - Not Built	8932 First Street	17 residential condominium units
39	Super Star Car Wash	Approved 3/27/24 - Not Built	8837 Magnolia Avenue	4,980 sq. ft. tunnel car wash
40	Townsend Townhomes (Aubrey Glen)	Approved 5/28/25 – Under Construction	7737 Mission Gorge Road	52 residential townhomes
41	Santee Community Center	Approved – Under Construction	10123 Riverwalk Drive	12,500 sq. ft. Community Center w/ event space
42	Cuyamaca St Right Turn Pocket	Approved 3/22/23 - Not Built	Cuyamaca St & Mission Gorge Rd	New right-turn only lane
43	Parkvue	Approved 9/24/25 – Not Built	Cottonwood Ave. & Park Center	258 multifamily residential units
44	Soapy Joe's	Approved 1/18/2024 - Not Built	9015 Mission Gorge Road	Express Car Wash conversion
45	Interim Fire Station	Pending Entitlement	9532 Via Zapador	Fire Station No. 20 relocation
46	AT&T Princess Joann Tower	Pending Entitlement	North of Cuyamaca Street and west of Princess Joann Road	Cell tower for AT&T
47	Valvoline Instant Oil Change	Approved 1/28/26 – Not Built	10463 Mission Gorge Road	Valvoline Instant Oil Change Station
48	Santee Trailslide	Pending Entitlement	9185 Mission Gorge Road	New drive-thru restaurant/quick service eatery
N/A	Land Use Element Update	Pending Entitlement	Citywide	Comprehensive update to the 2003-2020 Land Use Element Update
N/A	Santee Multiple Species Conservation Plan Draft Subarea Plan And Draft Program Environmental Report	Pending Entitlement	10,484.4-acre Plan Area within the jurisdiction of the City of Santee	Multiple Species Conservation Plan for the City of Santee, California

Notes:

[1] Corresponds with the City's Active Projects Log, available on the City's website: https://www.cityofsanteeca.gov/business/active-projects-map, accessed March 2026.

6.1.1 Cumulative Impact Analysis

Consistent with State CEQA Guidelines Section 15130, the discussion of cumulative impacts in this Draft EIR focuses on significant and potentially significant cumulative impacts. Section 15130(b) of the State CEQA Guidelines provides, in part, the following:

> [t]he discussion of cumulative impacts shall reflect the severity of the impacts and their likelihood of occurrence, but the discussion need not provide as great detail as is provided for the effects attributable to the project alone. The discussion should be guided by the standards of practicality and reasonableness and should focus on the cumulative impact to which the identified other projects contribute rather than the attributes of other projects which do not contribute to the cumulative impact.

A proposed project is considered to have a significant cumulative effect if the following are true:

- The cumulative effects of development without the project are not significant and the project's additional impact is substantial enough, when added to the cumulative effects, to result in a significant impact.
- The cumulative effects of development without the project are already significant and the project contributes measurably to the effect.

The term "measurably" is subject to interpretation. The standards used herein to determine measurability are that the impact must be noticeable to a reasonable person or must exceed an established threshold of significance (defined throughout the resource sections in Chapter 4, Environmental Analysis, of this Draft EIR). This cumulative analysis also assumes that all mitigation measures identified in Chapter 4 to mitigate Project impacts are adopted and implemented.

The cumulative impact analysis provided in this chapter evaluates whether the residual impacts of the Project would cause a cumulatively significant impact or would contribute considerably to existing/anticipated (without the Project) cumulatively significant effects. Where the Project would so contribute, additional mitigation is recommended where feasible.

Biological Resources

Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

> As described in Section 4.1, Biological Resources, of this EIR, mitigation measures would reduce direct and indirect impacts to special-status plant or wildlife species to less than significant with Project implementation (refer to Section 4.1, of this EIR). There are six projects identified by the City of Santee's Active Projects Log that are in various stages of development (i.e., under construction, approved – not built, or pending entitlement) located adjacent to the San Diego River (City ID: 4, 10 12, 14, 33, 43). Similar to the proposed Project, these cumulative projects have the potential to result in indirect impacts to special-status plant or wildlife species located within the San Diego River. All projects, including the proposed Project, would be required to comply with applicable federal and/or state regulations that provide protections for special-status plant and wildlife species, such as the federal Endangered Species Act or California Endangered Species Act and may require approval from the U.S. Fish and Wildlife Service and/or

the California Department of Fish and Wildlife. If significant impacts occur from a particular cumulative project, it is expected that project-specific mitigation measures would be implemented to avoid or minimize impacts to the extent feasible and in compliance with applicable federal and/or state regulations.

Furthermore, the Project Site is within the boundaries of the Draft Santee MSCP Multiple Species Conservation Program (MSCP) Subarea Plan. The Draft Santee MSCP Subarea Plan, once finalized, would contribute to the regional MSCP for preservation, mitigation for impacts, and conservation of sensitive biological resources within San Diego County. The Draft Santee MSCP Subarea Plan is also intended to provide cumulative mitigation for impacts to Covered Species within the City of Santee's jurisdiction and to ensure sufficient biological resources are conserved to assist in the conservation and recovery of Covered Species under the MSCP. Therefore, projects within the City of Santee Draft MSCP Subarea Plan Area, including the proposed Project, would be required to be consistent with the Draft Santee MSCP Subarea Plan. Because cumulative projects and the proposed Project would be required to meet or exceed MSCP requirements directed toward regional conservation, and project-specific mitigation measures would be implemented, as required, to avoid or minimize potential impacts to sensitive plant and wildlife species, all projects within the boundaries of the MSCP Plan would contribute to species recovery. Therefore, the proposed Project's contribution to adverse effects on species within the MSCP **would not be cumulatively considerable**.

Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

The Project would result in direct and indirect impacts to riparian habitat; however, with implementation of mitigation measures, the Project's impacts would be reduced to less than significant. There are six projects identified by the City of Santee's Active Projects Log that are in various stages of development (i.e., under construction, approved – not built, or pending entitlement) located adjacent to the San Diego River (City ID: 4, 10 12, 14, 33, 43). Similar to the proposed Project, these cumulative projects have the potential to result in direct and/or indirect impacts to sensitive natural communities or riparian habitat located within the San Diego River. However, similar to the Project, other cumulative projects located within the Draft Santee MSCP Subarea Plan area would be required to meet or exceed MSCP requirements directed toward regional conservation and that project-specific mitigation measures would be implemented, as required, to avoid or minimize potential direct or indirect impacts to riparian habitat or other sensitive natural communities to a less-than-significant level. Therefore, the Project's contribution to adverse effects on riparian habitat or other sensitive natural communities with implementation of the Project's mitigation measures **would not be cumulatively considerable**.

Have a substantial adverse effect on any state or federally protected wetlands (including, but not limited to marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

The Project could result in direct and indirect impacts to jurisdictional aquatic resources; however, with implementation of mitigation measures, the Project's impacts would be reduced to less than significant. There are six projects identified by the City of Santee's Active Projects Log that are in various stages of development (i.e., under construction, approved – not built, or pending entitlement) located adjacent to the San Diego River. Similar to the proposed Project, these cumulative projects have the potential to result in direct and/or indirect impacts to state or federally protected wetlands located within the San Diego River. However, similar to the Project, other cumulative projects with the potential to impact jurisdictional aquatic resources would be required to obtain regulatory permit approvals, which would require identification of

avoidance, minimization, and mitigation measures if necessary that would reduce potentially significant adverse impacts to below a level of significance. Therefore, the Project's contribution to adverse effects on jurisdictional aquatic resources with implementation of the Project's mitigation measures **would not be cumulatively considerable**.

Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

All projects, regardless of which local jurisdiction they occur in, would be required to comply with all applicable regional or local tree preservation policies or ordinances, such as the City of Santee Urban Forestry Ordinance. The ordinance gives the City of Santee control of all trees, shrubs, and other plantings in any street, park, public right-of-way, landscape maintenance district or easement, or other City-owned property. Project implementation would require removal of trees that are dead or decaying or non-native trees. Mitigation measures are required to ensure that only dead, decaying, or non-native trees are targeted, which would ensure compliance with the City's Urban Forestry Ordinance. City review and approval of development plans for the proposed Project and other cumulative projects would ensure that any proposed tree removal would conform to the applicable requirements of the Urban Forestry Ordinance and/or zoning codes. Furthermore, City of Santee staff would also ensure there are no conflicts with the objectives and policies presented in the Conservation Element of the Santee General Plan and relevant urban forestry, floodway, and biological resources ordinances. Cumulative projects within the Project vicinity would similarly be required to comply with all applicable regional or local policies or ordinances as a condition of project approval. Therefore, the Project's contribution to conflicts with any local policies or ordinances protecting biological resources **would not be cumulatively considerable.**

Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

The Project Site is within the boundaries of the Draft Santee MSCP Subarea Plan. Although the Draft Santee MSCP Subarea Plan has not yet been approved or permitted, it is used as the guidance document for projects occurring within the City of Santee. Mitigation measures are proposed in Section 4.1 of this EIR to prevent any indirect impacts to special-status species, sensitive vegetation communities, and jurisdictional aquatic resources associated with the San Diego River Preserve. Similar to the Project, cumulative projects located adjacent to the San Diego River Preserve identified in the Draft Santee MSCP Subarea Plan have the potential to result in indirect impacts to special-status species, sensitive vegetation communities, and/or jurisdictional aquatic resources. Any project within the MSCP Subarea Plan Area, including the proposed Project, would be required to be consistent with the Subarea Plan. Because all projects within the MSCP Plan Area would be required to meet or exceed MSCP requirements directed toward regional conservation, and project-specific mitigation measures would be implemented to reduce impacts to sensitive plant and wildlife species to a level of less than significant, all projects would contribute to the attainment of conservation goals identified in regional or local Habitat Conservation Plans. Therefore, the Project's contribution to conflicts with an adopted Habitat Conservation Plan or Natural Community Conservation Plan **would not be cumulatively considerable**.

Cultural Resources, Tribal Cultural Resources

Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?

As discussed in Section 4.2, Cultural and Tribal Cultural Resources, no known built environment resources are located within the Project Site; none of the adjacent historic-age properties are listed in or determined to be eligible for listing in the National Register of Historic Places and the California Register of Historical Resources or included in a local register. Implementation of the Project would not include construction disturbance, demolition, non-compatible building or structural modifications, construction-related groundborne vibration, or property acquisitions. Project activities consist solely of vegetation management activities (hand labor, mechanical, and chemical application) that would not physically alter any building, structure, or object. Therefore, the Project would not contribute to the loss of historical resources and **would not be cumulatively considerable.**

Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

The South Coastal Information Center records search identified 79 cultural resources within a 1-mile radius of the Project Site. As described in Section 4.2, the records search and the Cultural Resources Pedestrian Survey for the Project Site identified a total of nine cultural resources within the Project Site. Due to resources being located on site, the numerous cultural resources previously identified in the Project vicinity, and the Project's location within the San Diego River Corridor, there is an increased potential that Project associated ground disturbance would have the potential to impact unanticipated archaeological resources. Implementation of the Project, in combination with cumulative projects, would involve ground-disturbing activities that could result in discovery of or damage to previously undiscovered archaeological resources as defined in State CEQA Guidelines Section 15064.5. This could result in potentially significant cumulative impacts to previously undiscovered or unrecorded archaeological sites and materials. However, when considered in combination with the impacts of other projects in the cumulative scenario, the Project would not be cumulatively considerable because implementation of **MM CUL-1** and **MM CUL-2** would reduce Project impacts associated with accidental damage to known and unknown resources to a less-than-significant level. Therefore, the Project's potential contribution to impacts related to previously undiscovered archaeological resources **would not be cumulatively considerable**.

Disturb any human remains, including those interred outside of dedicated cemeteries?

No prehistoric or historic burials were identified within or immediately adjacent to the Project Site as a result of the CHRIS records search, NAHC Sacred Lands File search, or pedestrian survey. Moreover, the Project Site is not part of a dedicated cemetery and as such, the likelihood of disturbing human remains is low. However, the possibility of encountering human remains within the Project Site exists. Future proposed projects within the surrounding Project area could potentially disturb human remains. With incorporation of **MM CUL-3**, impacts associated with human remains would be less than significant. As such, the Project's potential contribution to impacts related to potential to disturb human remains **would not be cumulatively considerable**.

Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?

Dudek's cultural resources inventory included a records search, NAHC Sacred Lands File request, and Native American outreach, which confirmed the presence of Native American cultural resources in the region. The Sacred Lands File returned a positive indication of cultural resources inventory in the vicinity of the Project Site; however, the City sent AB 52 letters on March 20, 2026, and no responses were received. Therefore, no Tribal Cultural Resources have been identified within the Project Site to date through the consultation process. The newly recorded resource (SDRFM-DF-S-003) contains a bedrock milling feature that may retain Native American cultural value; however, it is recommended not eligible for listing in the California Register of Historical Resources or National Register of Historic Places.

Although no known Tribal Cultural Resources have been formally identified at this time, there remains the potential for previously unknown (buried) tribal cultural resources to be encountered or adversely changed during vegetation management activities.

Cumulative projects within the surrounding Project area could potentially contribute to cumulative adverse changes to tribal cultural resources. As tribal cultural resources are often found along waterways and many of the cumulative projects are near the river, there is a possibility that cumulative projects could affect tribal cultural resources. Implementation of **MM CUL-1** and **MM CUL-2** would reduce the Project's impacts associated with accidental damage to currently unrecorded/unknown tribal cultural resources to a level of less than significant. Therefore, the Project's potential contribution to impacts related to unknown tribal cultural resources **would not be cumulatively considerable**.

Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?

Dudek's cultural resources inventory included a records search, NAHC Sacred Lands File request, and Native American outreach, which identified one newly recorded resource (SDRFM-DF-S-003) containing a bedrock milling feature within the Project Site. While this feature may have Native American cultural value, it does not meet the criteria for listing in the California Register of Historical Resources or National Register of Historic Places, appears to have been relocated, and lacks associated archaeological deposits; therefore, it does not qualify as a Tribal Cultural Resource under PRC Section 21074. In addition, the City sent AB 52 letters on March 20, 2026, and no responses were received. Therefore, no Tribal Cultural Resources have been identified within the Project Site to date through the consultation process. Although no known Tribal Cultural Resources have been identified at this time, there remains potential for unknown (buried) tribal cultural resources to be adversely affected during vegetation management activities due to the moderate archaeological sensitivity of the Project Site. Cumulative projects within the San Diego River Corridor may similarly encounter tribal cultural resources, as such resources are commonly found along waterways.

Implementation of MM-CUL-1 (Resource Avoidance) would avoid impacts to known cultural sites and areas of potential tribal cultural importance, and MM-CUL-2 (Inadvertent Discovery Procedures) would ensure appropriate treatment of any unanticipated tribal cultural resources that may be encountered. With mitigation incorporated, Project impacts would be less than significant, and the Project's potential contribution to cumulative impacts on tribal cultural resources would **not be cumulatively considerable.**

Hazards and Hazardous Materials

Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

Past, present, and reasonably foreseeable future projects within the cumulative study area would involve the routine use and transport of hazardous materials typical of urban development and maintenance activities, such as fuels, lubricants, solvents, and construction materials. Similar to the proposed Project, cumulative projects would be required to comply with applicable federal, state, and local regulations governing hazardous materials storage, handling, transport, and disposal.

As evaluated in Section 4.3.4, Impacts Analysis, the proposed Project would involve temporary and intermittent use of limited quantities of hazardous materials associated with vegetation management and would implement Project design features and BMPs to prevent releases and exposure. Because the Project's hazardous materials use would be short-term, controlled, and regulated, and because cumulative projects would be subject to similar regulatory requirements, the Project's incremental contribution to cumulative impacts related to the routine transport, use, or disposal of hazardous materials would **not be cumulatively considerable**.

Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

Cumulative upset or accident conditions could result from the combined presence of multiple projects that involve construction or operational activities using fuels, lubricants, or other hazardous materials. However, the proposed Project would implement spill prevention, containment, and cleanup BMPs that directly address foreseeable spill mechanisms, including equipment inspection, secondary containment, designated fueling areas, spill kits, and response procedures. In addition, the Project Site and adjacent areas include GeoTracker listed sites that have received regulatory closure, and no open hazardous materials cleanup sites are located within or directly adjacent to the Project Site. As a result, the Project would not introduce new exposure pathways or mobilize known contamination under cumulative conditions. Because cumulative projects would similarly be required to comply with spill prevention and response regulations, the Project's contribution to cumulative impacts related to upset and accident conditions involving release of hazardous materials into the environment would **not be cumulatively considerable**.

Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.

Schools are present within 0.25 miles of the Project Site, and cumulative development in the surrounding area could incrementally increase the presence of construction activities near school receptors. However, the proposed Project would not involve hazardous emissions or long-term hazardous materials handling

and would be limited to temporary vegetation management activities with controlled use of common fuels and, if needed, localized herbicide application subject to strict BMPs.

All cumulative projects involving hazardous materials within proximity to schools would be required to comply with applicable regulations intended to protect sensitive receptors, including schools. Given the Project's limited scope, temporary duration, and implementation of BMPs that minimize off-site movement of hazardous materials, the Project's incremental contribution to cumulative impacts related to hazardous materials' emissions or handling near schools would **not be cumulatively considerable**.

Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment.

Cumulative impacts could occur if a project were located on or near a hazardous materials site that could affect public health or the environment. As discussed in Section 4.3.1, Existing Conditions, while one GeoTracker listed site is located within the Project Site and 11 sites are located directly adjacent to the Project Site, all of these sites have received regulatory closure, and no open cleanup sites are present within or adjacent to the Project Site. The Project does not involve excavation, grading, or subsurface disturbance that could create new exposure pathways.

Other cumulative projects would be evaluated individually for proximity to listed hazardous materials sites and would be subject to regulatory oversight as required. Therefore, the Project's contribution to cumulative impacts related to hazardous materials sites compiled pursuant to Government Code Section 65962.5 would **not be cumulatively considerable**.

For a project located within an airport land use plan, or, where such a plan has not been adopted, whin two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

The Project Site is located within approximately 1.1 miles of Gillespie Field Airport and within the airport influence area governed by the Gillespie Field Airport Land Use Compatibility Plan (ALUCP). As discussed in Section 4.3.4(E), the proposed Project consists solely of vegetation management activities within an existing river corridor and does not include construction of occupied structures, new land uses, or features that could interfere with airport operations, navigable airspace, or safety zones.

Cumulative projects within the vicinity may include residential, commercial, or infrastructure development that could introduce new receptors within airport influence areas. However, each cumulative project would be subject to individual review for consistency with the ALUCP, Federal Aviation Administration height notification requirements, and applicable local land use compatibility standards. The proposed Project would not add new receptors, structures, or uses that could increase airport-related safety risks or noise exposure under cumulative conditions.

Because the Project would not alter land use patterns, introduce sensitive receptors, or create physical obstructions within airport safety or noise influence areas, its incremental contribution to cumulative airport-related safety hazards or excessive noise exposure would **not be cumulatively considerable**.

Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

Cumulative development within the City could increase demand on emergency response services and evacuation routes. However, the proposed Project would not introduce new land uses, structures, or permanent access restrictions. Temporary access controls associated with vegetation management would be localized, short term, and coordinated with the City and emergency service providers and would not affect designated emergency evacuation routes.

All cumulative projects would be required to comply with adopted emergency response and evacuation plans, as well as applicable fire and building codes. By reducing hazardous fuel loads and wildfire risk within the San Diego River Corridor, the proposed Project would support emergency response and evacuation objectives under cumulative conditions. Accordingly, the Project's contribution to cumulative impacts related to emergency response or evacuation would **not be cumulatively considerable**.

Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires.

The cumulative context for wildfire hazards includes the wildland–urban interface setting of the San Diego River Corridor and surrounding Moderate, High, and Very High Fire Hazard Severity Zones. While cumulative development could increase ignition sources and exposure of people and structures to additional ignition sources, the proposed Project is a hazard mitigation project designed to reduce fuel loads, fuel continuity, and wildfire intensity.

When considered together with other projects that would be required to comply with applicable fire codes and defensible space requirements, the Project would contribute to a net reduction in wildfire hazard rather than an increase. Therefore, the Project's contribution to cumulative wildfire risk would **not be cumulatively considerable**.

Hydrology and Water Quality

Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality.

The Project would result in short-term water quality impacts associated with vegetation management activities, including the use of small quantities of fuels and lubricants associated with hand labor and small, low ground-pressure equipment (e.g., line trimmers, chainsaws). Limited crew access could also result in minor, localized surface disturbance. Accidental releases or erosion could allow sediment or pollutants to enter surface waters if not properly controlled. The Project would implement BMPs that would avoid herbicide application during wet conditions **(Chemical BMP-3)**, implement erosion and sediment control measures **(Slope Stability/Erosion BMP-1-10),** and ensure proper maintenance of equipment **(Chemical BMP-1** and **Air Quality-2).** With implementation of these BMPs, the potential for sediment or pollutant releases would be minimized, and the Project would not violate water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality.

Similar to the Proposed Project, cumulative projects could also result in short-term water quality impacts during construction or vegetation related activities. Cumulative projects would be required to comply with applicable stormwater regulations and implement measure as required to avoid or minimize potential

sediment or pollutant discharges. Therefore, the Project's contribution to cumulative water quality impacts would **not be cumulatively considerable**.

Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin.

The geographic area under consideration for the topic of groundwater recharge includes the Santee Groundwater Basin. Vegetation management activities under the Project would involve selective hand labor, limited mechanical access, and removal of non-native or dead vegetation. Water use would be minimal and limited to short-term activities such as dust suppression, which would be supplied by water hauled on site by the contractor. The Project would not initiate groundwater extraction, increase pumping capacity, or create any new demand on groundwater supplies. The Project would not result in any new impervious surfaces. The potential for groundwater recharge would not change with respect to existing conditions and no impacts would occur.

Cumulative projects within the Project vicinity may introduce new impervious surfaces and minor reductions in infiltration. Given that the Project would not introduce impervious services or extract groundwater, the Project's contribution to impacts related to groundwater **would not be cumulatively considerable.**

Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

i) result in substantial erosion or siltation on or off-site;

ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site;

iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or

iv) impede or redirect flood flows?

The Project Site contains the San Diego River and adjacent wetland and floodplain areas, which is largely pervious. The Project does not propose the introduction of impervious surfaces or the alteration of the river. The Project would involve vegetation management activities that have the potential to disturb soil through foot traffic, equipment movement, and removal of surface vegetation. The Project would implement erosion prevention BMPs, which would help prevent rutting and compaction, further reducing changes to infiltration or runoff rates. As described in Section 4.3, Hazards and Hazardous Materials, BMPs have been identified to reduce potential for pollutants to enter waterways (**Hand Labor BMP-6**, **Water Quality BMP-1-4**, **Mechanical BMP-16**, and **Chemical BMP-1-11**).

The Project would not introduce impervious surfaces, grading, or channel modifications. It would not increase the rate or volume of surface runoff, redirect flood flows, or impede the capacity of the San Diego River or its floodplain. Cumulative projects listed could involve activities that include crews, small equipment, fuels, lubricants, and other materials within the San Diego River Corridor and adjacent floodplain areas, which are subject to periodic flooding. However, none of the cumulative projects would involve placement of impervious surfaces within the active river channel or the redirection or obstruction

of flood flows. Potential erosion or siltation associated with development adjacent to the river would be addressed through site specific BMPs.

Cumulative projects are required to incorporate on-site water quality treatment features and velocity and volume reduction measures to avoid a net increase in runoff to the river system. With implementation of these measures, temporary vegetation management activities associated with the Project would not create polluted runoff, exceed drainage system capacity, or result in the release of pollutants during flood conditions. Therefore, the Project's contribution to cumulative impacts related to polluted runoff or pollutant release associated with flooding **would not be cumulatively considerable.**

In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation.

The proposed Project lies within an inland river corridor and is not in a tsunami or seiche zone (CGS 2026). Portions of the Project Site lie within the San Diego River floodplain and may experience periodic flooding during high-flow events (FEMA 2026). The proposed Project would involve temporary vegetation-management activities that would introduce crews and small equipment into the floodplain but would be designed to avoid pollutant release during flood conditions through implementation of BMPs.

The cumulative projects listed are also not in a tsunami or seiche zone. However, some of the projects adjacent to the river could introduce temporary activities, equipment, or materials within areas subject to periodic flooding, which may have the potential to contribute pollutants if unmanaged. Cumulative projects would also be required to implement appropriate project-specific measures to avoid or minimize the potential for pollutant mobilization during flood events. As described above, the Project would implement BMPs that store and handle fuels and lubricants outside of drainage features with secondary containment and spill kits; conduct refueling only in designated, contained areas with spill kits present; perform routine equipment leak inspections and maintenance; and remove cut vegetation from jurisdictional areas so floodwaters cannot mobilize debris. Work would be suspended during and after significant rainfall and would avoid saturated soils to prevent disturbance and pollutant transport. With these measures in place, temporary vegetation-management activities would not risk the release of pollutants during flood conditions. Therefore, the Project's contribution to cumulative impacts related to flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation **would not be cumulatively considerable.**

Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

The Project Site is subject to the Water Quality Control Plan for the San Diego Basin (Basin Plan), which establishes beneficial uses, water quality objectives, and implementation programs for inland surface waters and groundwater in Region 9, including the San Diego River. The Project consists of vegetation management activities. The Project would include BMPs to prevent pollutants from reaching the San Diego River. These measures ensure the Project's activities avoid introducing discharges or altering water quality. With respect to groundwater, the Project would not extract groundwater and would not create impervious surfaces, thereby preserving infiltration and avoiding changes to recharge. Any minimal implementation of water use (e.g., dust control) is temporary and part of field operations and would not require groundwater pumping. Based on these Project elements, the Project would not include actions that would interfere with groundwater conditions or management.

Cumulative projects could involve short-term- activities that may have the potential to affect water quality or groundwater conditions if unmanaged. However, similar to the Project, cumulative projects would also

be required to implement appropriate project-specific measures to avoid or minimize the potential for pollutant mobilization. Cumulative projects within the Project vicinity may introduce new impervious surfaces and minor reductions in infiltration. However, the San Diego River Valley Groundwater Basin is classified as a very low priority basin with respect to the Sustainable Groundwater Management Act. Therefore, the Project's contribution to cumulative impacts related to the obstruction of a water quality plan or sustainable groundwater management plan **would not be cumulatively considerable.**

Noise

Result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.

The primary factor for the cumulative noise impact analysis is the consideration of future traffic volumes. Non-transportation noise sources (e.g., Project operation) and construction noise impacts are typically Project-specific and highly localized. Construction activities associated with anticipated development within the area would contribute temporarily to the noise levels in the cumulative ambient noise environment, but in a highly localized and transient manner. As other development occurs in the area, noise from different types of uses (e.g., traffic, aircraft, fixed noise sources) would continue to combine, albeit on a localized basis, to cause increases in overall background noise conditions within the area. As a result, such sources do not significantly contribute to cumulative noise impacts at distant locations and are not evaluated on a cumulative level.

Implementation of the Project as well as cumulative development Projects within its vicinity would all be subject to applicable noise standards (descriptions of the standards applicable within the City of Santee are described in Section 4.5, Noise, of this EIR). On this basis, and because noise impacts of the Project with respect to relevant standards would be less than significant, the Project would not contribute to cumulative exceedances of noise standards, and its incremental effect would be a less-than-significant impact.

As discussed in Section 4.5, the Project would result in temporary noise increases during vegetation management and treatment activities that could result in a potentially significant impact. The Project would implement **MM NOI-1,** which requires administrative noise control or temporary noise abatement if mobile or stationary heavy construction equipment would operate at distances closer than 45 feet horizontal to an off-site noise-sensitive receiver (e.g., exterior of an existing residence). With implementation of **MM NOI-1,** Project impacts would be reduced to less than significant.

Treatment activities associated with the Project have the potential to overlap with the construction of other development projects in the City (City ID: 4, 10, 12, 14, 33, 43). Due to the decrease in noise levels with distance and the presence of physical barriers (i.e., intervening buildings and topography), noise due to construction of other projects would not meaningfully combine with the proposed Project to produce a cumulative noise effect during construction. By way of illustration, if there are two concurrent construction projects of comparable sound emission intensity, and the activity nearest to the studied noise-sensitive receptor is compliant with the City's applicable noise threshold, the other activity could be no closer than three times the distance of the receptor to the nearest activity and not make a

cumulatively measurable contribution to the total and still result in a City-compliant noise exposure level. If two concurrent Projects were close to a receptor, the cumulative noise would be one of the following:

- The louder (in dBA) of the two concurrent activities
- A logarithmic sum of the two activity noise levels that, per acoustic principles, cannot be more than 3 dBA greater than the louder of the two individual noise-producing activities

In sum, cumulative construction noise is likely to be dominated by the closest or loudest activity to the receptor, and the combination would be no more than a barely perceptible difference (i.e., up to a 3 dBA change). Based on the cumulative project list, there are no construction projects that would potentially contribute construction noise that would, in combination with the Project, result in cumulative impacts. Thus, cumulative impacts associated with temporary increases in ambient noise levels would be considered less than significant and **not cumulatively considerable**.

Result in generation of excessive groundborne vibration or groundborne noise levels.

Potential cumulative construction vibration impacts would occur at separate sites specific to the cumulative projects listed in Table 6-1. Groundborne vibration attenuates rapidly over short distances, and the likelihood of two projects generating overlapping vibration levels at a common receptor is unlikely. Furthermore, all projects would be subject to applicable regulations that limit vibration impacts. For these reasons, cumulative vibration impacts would **not be cumulatively considerable.**

For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, expose people residing or working in the Project area to excessive noise levels.

There are no private airstrips within the vicinity of the Project Site. The closest airport to the proposed Project Site is the Gillespie Field regional airport, approximately 1.1 miles south of the Project boundary. Several nearby Projects in the cumulative project list (Table 6-1 above) are also located within 2 miles of Gillespie Field; however, operations from the public airport do not affect the noise exposure for the Project. Therefore, noise associated with aircraft overflights for any of the cumulative projects would be less than significant, and the Project's contribution would **not be cumulatively considerable**.

Wildfire

Substantially impair an adopted emergency response plan or emergency evacuation plan.

The Project Site would not result in inadequate emergency access or substantially impair an adopted emergency response plan. Additionally, all cumulative projects would be required to avoid conflict with the County Hazard Mitigation Plan, Santee EOP, and County Emergency Operations Plan and potential emergency evacuation routes in the area. Roads for all proposed projects are required to meet minimum widths, have all-weather surfaces, and be capable of supporting the imposed loads of responding emergency apparatus. The Project and all other future development projects in the service area would be subject to review by the Santee Fire Department and would be required to comply with all applicable State and County Building, WUI, and Fire Code requirements and other applicable local codes (e.g., City of Santee Municipal Code) and regulations related to fire safety, building construction, access, fire flow, and fuel

modification. Therefore, the Project's contribution to cumulative impacts related to impairment of an adopted emergency response or evacuation plan **would not be cumulatively considerable**.

Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose Project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.

The cumulative context considered for wildfire impacts is San Diego County, and more specifically, the San Diego River watershed, which encompasses 434 square miles. As discussed in Section 4.6, Wildfire, CAL FIRE has mapped areas of fire hazards in the state based on fuels, terrain, weather, and other relevant factors. As shown in Figure 3-4, Fire Hazard Severity Zones, portions of the Project Site are in areas designated as Moderate and High FHSZs and bordered by areas designated as Moderate, High, and Very High FHSZs to the north and south. The Project is a vegetation management plan and does not include occupants. Implementation of the Project would reduce wildfire risk at the Project Site; therefore, the Project's contribution to impacts related to slope, prevailing wind, or other factors contributing to exacerbating wildfire risk and exposing Project occupants **would not be cumulatively considerable**.

Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment.

The Project would not result in the installation or maintenance of associated infrastructure. All other future development projects in the service area would be subject to review by the fire department and would be required to comply with the State Fire Code other applicable local codes (e.g., City of Santee Municipal Code) and regulations related to fire safety, building construction, access, fire flow, and fuel modification. Therefore, the Project's contribution to impacts related to maintenance or installation of associated infrastructure on fire risk **would not be cumulatively considerable**.

Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes

The Project could result in post-erosion caused by the loss of vegetation cover that previously had intercepted rain and runoff or slowed down the velocity of rainfall and runoff. This is an especially crucial consideration as erosion within the Project Site has the potential to contribute to sedimentation of the San Diego River, resulting in turbidity and potential infill. However, the Project includes applicable BMPs that would minimize impacts related to erosion. Through implementation of BMPs, the Project would not result in an impact related to exposing people or structures to significant risks as a result of runoff, post fire instability, or drainage changes, and impacts **would not be cumulatively considerable**,

6.2 Growth-Inducing Impacts

As stated in Section 15126.2(e) of the CEQA Guidelines, an EIR is required to include a discussion of a project's growth-inducing effects. The CEQA Guidelines generally describe such effects as follows: (1) fosters economic growth, population growth, or construction of additional housing in the surrounding environment; (2) removes obstacles to population growth (e.g., a major expansion of a wastewater treatment facility that allows for more construction in the service area); (3) increases in population that tax existing services requiring construction of new facilities that could cause significant environmental effects; and (4) encourages and facilitates other activities that could significantly affect the environment, either individually or cumulatively.

The proposed Project would require a temporary workforce to perform vegetation management. The number of construction workers needed during any given period would largely depend on the type of vegetation management but would likely range from a dozen to several dozen workers on a daily basis. These jobs would be filled by the local workforce and would not result in population increase from job opportunities. In conclusion, the Project would not remove obstacles to population growth and would not cause an increase in population such that new community facilities or infrastructure would be required outside of the Project Site. Lastly, the Project is not expected to encourage or facilitate other activities that could significantly affect the environment, as explained above. For these reasons, the Project is not considered to be significantly growth inducing.

6.3 Significant Irreversible Changes

The CEQA Guidelines require that an EIR address any significant irreversible changes that would be caused by implementation of a project. According to CEQA Guidelines Section 15126.2(d), such a change would involve one or more of the scenarios discussed below.

6.3.1 Change in Land Use that Commits Future Generations to Similar Uses

According to the City's General Plan and the City's Zoning Map, the land use and zoning designations for the Project Site are Park/Open Space and Public land uses (City of Santee 2017). The Project would be consistent with Chapter 13.16.020 of the City's Municipal Code, which states that the Park/Open Space land use designation "indicates areas of permanent open spaces, biological resource protection, parks and/or areas precluded from major development because of land constraints or habitat preservation. The use regulations, development standards, and criteria are intended to provide low intensity development and encourage recreational activities and the preservation and management of natural resources. Recreational uses such as golf courses with customary support facilities are considered appropriate for these areas. Agricultural uses and sand extraction operations may, under special conditions, be allowed." The zoning is consistent with the Park/Open Space land use designation of the General Plan (City of Santee 2003). The Project would not change the use of the Project Site.

Land uses surrounding the Project Site include Planned Development, as well as Residential land uses including Low-Medium Density Residential, Medium-Density Residential, Medium-High Residential, Neighborhood Commercial, Light Industrial, and General Industrial (City of Santee 2017). Since the Project Site is located within an existing urbanized area, the Project would not result in land use changes that would commit future generations to uses that do not occur in the Project Site. Thus, implementation would not commit future generations to new uses, given that this proposed use is already found in the Project Site.

6.3.2 Irreversible Damage from Environmental Accidents

Potential environmental accidents of concern include those events that would adversely affect the environment or public due to the type and quantity of materials released and the receptors exposed to that release. Vegetation management activities associated with the Project would involve some risk of environmental accidents. However, in addition to applicable Project BMPs, these activities would be conducted in accordance with all applicable federal, state, and local regulations, and would follow professional industry standards for safety. Any materials and handling of materials associated with environmental accidents would comply with applicable federal, state, and

local regulations. Use of any such materials would not be expected to cause irreversible damage due to the type or quantity of materials released and the receptors exposed to that release.

6.3.3 Large Commitment of Nonrenewable Resources

Commitment of nonrenewable resources includes issues related to increased energy consumption, loss of agricultural lands, and lost access to mining reserves. The Project does not include demolition or development; rather, the Project is the implementation of fuel treatment through vegetation management in the San Diego River Corridor. Therefore, there would not be an irretrievable commitment of labor, capital, and materials used during the construction and operation of the Project. Nonrenewable resources would primarily be committed in the form of fossil fuels such as fuel, oil, natural gas, and gasoline used by equipment associated with equipment used for mechanical techniques of vegetation management.

To ensure that energy implications are considered in project decisions, CEQA requires that EIRs include a discussion of the potential energy impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy (California Public Resources Code Section 21100[b][3]). Energy conservation implies that a project's cost-effectiveness be reviewed not only in dollars, but also in terms of energy requirements. For many projects, cost-effectiveness may be determined more by energy efficiency than by initial dollar costs. A lead agency may consider the extent to which an energy source serving a project has already undergone environmental review that adequately analyzed and mitigated the effects of energy production.

Consistent with California Public Resources Code Section 211009(b)(3), CEQA Guidelines Appendix G, and a ruling set forth by the court in *California Clean Energy Committee v. City of Woodland*, potentially significant energy implications of a project must be considered in an EIR to the extent relevant and appliable to that project. Accordingly, based on the energy consumption thresholds set forth in both Appendix F and Appendix G of the CEQA Guidelines, the Project's estimated energy demands (both short- and long-term vegetation management demands) were not evaluated, because the proposed Project would not result in the use of energy long-term as no development would occur and vegetation management activities and associated energy consumption would be temporary. On this basis, the Project would not result in the inefficient, wasteful, or unnecessary consumption of energy.

6.4 Significant and Unavoidable Impacts

Pursuant to CEQA Guidelines Section 15126.2(c), an EIR must address any significant environmental impacts, including those that can be mitigated but not reduced to less than significant as a result of implementation of a project. As discussed throughout Chapter 4, Environmental Analysis, Chapter 5, Effects Found Not to be Significant, and Section 6.1, Cumulative Impacts, of this EIR, the Project would result in either less-than-significant impacts with mitigation, less-than-significant impacts, or no impact for all environmental issues areas.

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7 Alternatives

7.1 Alternatives to the Proposed Project

In accordance with CEQA Guidelines Section 15126.6, this Environmental impact Report (EIR) chapter contains a comparative evaluation of the San Diego River Fire Hazard Mitigation Program: Fuels Treatment Plan (Project) with alternatives to the Project, including a No Project Alternative. Consistent with California Environmental Quality Act (CEQA) Guidelines Section 15126.6, this chapter focuses on alternatives to the Project that are capable of avoiding or substantially reducing any significant adverse impacts associated with the Project, even if the alternatives may impede attainment of Project objectives or prove less cost efficient. In addition, implementation of a Project alternative may potentially result in new impacts that would not have resulted from the Project.

The CEQA Guidelines require that the analysis of alternatives provide sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with a proposed project. Specifically, CEQA Guidelines Section 15126.6(a) outlines the scope of alternatives to a proposed project that must be evaluated:

> An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project and evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation. An EIR is not required to consider alternatives which are infeasible. The lead agency is responsible for selection of a range of project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives. There is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the rule of reason.

Under case law and CEQA Guidelines Section 15126.6(f), the discussion of alternatives is subject to a rule of reason and need not be exhaustive. CEQA Guidelines Section 15126.6(d) states that "if an alternative would cause one or more significant effects in addition to those that would be caused by the project as proposed, the significant effects of the alternatives shall be discussed, but in less detail than the significant effects of the project as proposed." Determining factors that may be used to eliminate alternatives from detailed consideration in an EIR are (a) failure to meet most of the basic project objectives, (b) infeasibility, or (c) inability to avoid significant environmental impacts. CEQA Guidelines Section 15364 defines "feasibility" as "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors."

An EIR need not consider a project alternative whose effects cannot be reasonably ascertained, whose implementation is remote and speculative, or whose execution does not substantially lessen or avoid the significant effects of a proposed project.

As discussed throughout Chapter 4, Environmental Analysis, and Chapter 6, Other CEQA Considerations, of this EIR, at the project and cumulative levels, the Project would result in less-than-significant impacts with mitigation incorporated, less-than-significant impacts, or no impact.

7.2 Considerations for Selection of Alternatives

Project Objectives

Section 15124(b) of the CEQA Guidelines requires that an EIR include a statement of the project objectives that "include the underlying purpose of the project and may discuss the project benefits." The following objectives have been identified for the Project:

Objective 1 – Define strategy for specific fuel treatment zones for reducing hazardous fuel loads within the San Diego River corridor.

Objective 2 – Enhance community safety within the City of Santee through the reduction of wildfire risk.

Objective 3 – Reduce horizontal and vertical continuity of fuels and hazardous fuel loads through the removal of non-native and invasive species.

Objective 4 – Reduce ignition potential and fire intensity within the San Diego River corridor.

Summary of Project Impacts

Potentially feasible alternatives were developed with consideration of avoiding or lessening the significant adverse effects of the Project identified throughout this EIR. The following is a summary of significant impacts associated with the proposed Project.

Biological Resources

Direct impacts to special-status plants located in Zones 1 to 3 would be avoided through implementation of **MM BIO-1,** and impacts to special-status plant species would be **less than significant**.

Indirect impacts to special-status plants related to decreased water quality and altered hydrology, soil compaction, elevated dust levels, and the spread of invasive plant species would be reduced to below significance through implementation of **MM BIO-1**, **MM BIO-2**, and **MM BIO-3**. Indirect impacts to special-status plants would be **less than significant**.

Direct impacts to individual special-status wildlife species would be reduced to below significance through implementation of **MM BIO-3** that would ensure no special-status species would be injured or harmed during Project activities. Direct impacts to sensitive vegetation communities that support special-status species would be reduced to below significance through the implementation of **MM BIO-4** that would require compensatory mitigation for unanticipated impacts to riparian habitat and coastal sage scrub habitat within Zones 1 and 2. Thus, direct impacts to sensitive vegetation would be **less than significant.**

Impacts to nesting habitat for special-status avian species and other nesting and migratory birds and raptors during the nesting bird breeding season would be reduced to below significance through implementation of **MM BIO-5**, **MM BIO-6**, and **MM BIO-7** that would ensure impacts to nesting habitat would only occur outside the nesting bird breeding season (February 15 through September 30). Implementation of **MM BIO-3** would also reduce potentially adverse impacts to nesting birds by requiring a biological monitor be present to establish nest buffers if Project

activities cannot avoid the avian nesting season. Thus, direct impacts to nesting and migratory birds would be **less than significant**.

Indirect impacts to special-status wildlife, including nesting birds, due to decreased water quality and altered hydrology, soil compaction, elevated dust levels, and the spread of invasive plant species would be avoided through implementation of **MM BIO-2** and **MM BIO-3**. Indirect impacts to special-status wildlife species would be **less than significant**.

Direct Impacts to sensitive vegetation communities in Zones 1 and 2 would be reduced to below significance through implementation of **MM BIO-4** that would require compensatory mitigation. **MM BIO-3** that would require a biological monitor be present to ensure treatment and vegetation removal activities occur only within the designated areas and no unauthorized impacts to sensitive vegetation communities occur would further reduce impacts to sensitive vegetation. Direct impacts to trees within Zone 3 would be reduced through implementation of **MM BIO-9** that would require comprehensive mapping of tree species to be removed. Direct impacts to sensitive vegetation communities would be **less than significant.**

Indirect impacts to sensitive vegetation communities in Zones 1 to 3 through decreased water quality and altered hydrology, soil compaction, elevated dust levels, and the spread of invasive plant species. would be avoided through implementation of **MM BIO-2** and **MM BIO-3**. Indirect impacts to sensitive vegetation communities would be **less than significant**.

Direct impacts within Zones 1 and 2 from native brush thinning would be reduced to below significance through implementation of **MM BIO-10** that would require permitting from the appropriate resource agencies (i.e., USACE, RWQCB, and CDFW). In addition, a biological monitor shall be present in accordance with **MM BIO-3** to ensure treatment and vegetation removal activities occur in accordance with the Project's aquatic resource permits, and there are no direct impacts occurring outside the designated areas. Direct impacts to jurisdictional aquatic resources within Zones 1 and 2 would be **less than significant**.

No direct impacts to potentially jurisdictional resources in Zone 3 are anticipated from Project implementation. However, implementation of **MM BIO-11** that would ensure activities occurring in Zone 3 would only involve treatment or removal of dead, dying, or invasive species utilizing methods that would not adversely impact aquatic resources. A biological monitor shall also be present in accordance with **MM BIO-3** to ensure treatment and vegetation removal activities do not impact any aquatic resource areas located within Zone 3. Direct impacts to protected jurisdictional aquatic resources would be **less than significant**.

Indirect impacts to jurisdictional aquatic resources through decreased water quality and altered hydrology, soil compaction, elevated dust levels, and the spread of invasive plant species would be avoided through implementation of **MM BIO-2** and **MM BIO-3.** Indirect impacts to jurisdictional aquatic resources would be **less than significant**.

Cultural and Tribal Cultural Resources

The Project would result in potentially significant impacts with regard to a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5. With incorporation of **MM CUL-1** and **MM CUL-2**, impacts associated with archaeological resources would be **less than significant (Less Than Significant with Mitigation Incorporated).**

In the unexpected event that human remains are unearthed during vegetation management activities, impacts would be potentially significant. With implementation of **MM CUL-3**, potential impacts associated with human remains would be **less than significant** (**Less Than Significant with Mitigation Incorporated**).

No responses to the Assembly Bill 52 outreach letters to tribal contacts were received by the City requesting consultation. Although information regarding Tribal Cultural Resources has been received by the City, the archaeological sensitivity of the Project Site is considered to be moderate. For this reason, the Project Site should be treated as potentially sensitive for archaeological and Tribal Cultural Resources, and Mitigation Measure **MM CUL-1** and **MM CUL-2** is required to reduce potential impacts to unanticipated discovery of cultural resources and Tribal Cultural Resources. With implementation of **MM CUL-1** and **MM CUL-2**, potential impacts associated with any buried, currently unrecorded/unknown tribal cultural resources would be **less than significant** (**Less Than Significant with Mitigation Incorporated**).

Noise

The Project would result in potentially significant impacts with regard to generation of a substantial temporary increase in ambient noise levels when the equipment-to-receiver horizontal distances are less than 45 feet. With incorporation of **MM NOI-1,** potential impacts related to temporary noise increases would apply and impacts would be **less than significant** (**Less Than Significant with Mitigation Incorporated**).

7.3 Project Alternatives Considered and Rejected

An EIR is required to identify any alternatives that were considered by the lead agency but were rejected as infeasible. Among the factors described by CEQA Guidelines Section 15126.6 in determining whether to exclude alternatives from detailed consideration in an EIR are failure to meet most of the basic objectives of the Project, infeasibility, or inability to avoid significant environmental impacts.

With respect to the feasibility of potential alternatives to a proposed project, CEQA Guidelines Section 15126.6(t)(l) states the following:

> Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries… and whether the proponent can reasonably acquire, control, or otherwise have access to the alternative site.

In determining an appropriate range of Project alternatives to be evaluated in this EIR, a number of possible alternatives were initially considered and then rejected. Project alternatives were rejected because they could not accomplish the basic objectives of the Project, they would not have resulted in a reduction of significant adverse environmental impacts, or they were considered infeasible to construct or operate.

Thinning Across Entire Project Site

This Alternative would apply Zone 1 Treatment standards across the entire Project Site, which would consist of removal or treatment of all fine fuels, dead vegetation, leaf litter, and woody debris; mowing of grasses not to exceed 4 inches; thinning of shrubs to a residual surface coverage of approximately 30%; and reduction of vertical continuity beneath tree canopies to achieve a separation of three times the height of the surface vegetation. This alternative would not include removal of native species unless they are dead or dying. This alternative would achieve

Project Objective 2 (reduction of wildfire risk), Objective 3 (reduce continuity of fuels), and Objective 4 (reduce ignition and fire intensity). This alternative would not achieve Objective 1 because it would not include a strategy for specific zones. Due to the sensitivity of the Project Site, increased thinning activities closer to the river would result in additional impacts to sensitive species, jurisdictional features, and sensitive habitat. This alternative also would come at an increased cost to the City due to the increased amount of work required to meet the Zone 1 standards across the Project Site. Additionally, this alternative would result in increased impacts due to longer and more intensive treatment.

Alternate Sites

CEQA does not require that an analysis of alternate sites always be included in an EIR. However, if the surrounding circumstances make it reasonable to consider an alternate site, then a project alternative should be considered and analyzed in the EIR. Pursuant to CEQA Guidelines Section 15126.6(f)(2), in making the decision to include or exclude analysis of an alternate site, the "key question and first step in analysis is whether any of the significant effects of the project would be avoided or substantially lessened by putting the project in another location. Only locations that would avoid or substantially lessen any of the significant effects of the project need to be considered for inclusion in the EIR."

Vegetation and activities in a different location would likely have similar impacts to the Project. There are other locations within the City that represent a wildfire risk to the city. However, the San Diego River corridor uniquely is primarily owned by the city of Santee and other government agencies that allows for coordinated fuel reduction implementation. Additionally, Project funding is provided by grants from the Federal Emergency Management Agency and the San Diego River Conservancy, which has been specifically identified for this Project Site. Further, the Project Site has been identified as having high ignition potential due to the history of ignitions at the Project Site.

7.4 Project Alternatives Under Further Consideration

The following provides an analysis of the No Project (Alternative 1) and the two management alternatives: the Zone 3 standards alternative (Alternative 2), and the manual and mechanical treatment alternative (Alternative 3).

The evaluation below provides a relative comparison between the Project and each of the three Project alternatives. The analysis considers the issue areas evaluated in Chapter 4 and the cumulative analysis in Chapter 6 of this EIR. In many cases, the Project and a Project alternative may share the same level of significance (i.e., both scenarios would result in a less-than-significant impact). However, although they might share the same level of significance under CEQA, the actual degree of impact may be slightly different for each scenario, and this relative difference is the basis for a conclusion of greater or lesser impacts compared to the Project.

An environmentally superior alternative is identified among the alternatives evaluated in this EIR. An alternative would be environmentally superior to the Project if it would result in fewer or less significant environmental impacts while achieving most of the Project objectives.

7.4.1 No Project (Alternative 1)

Project Alternative 1

Under Alternative 1, vegetation management within the Project Site would not occur, and the existing environment would remain in its current state. The Project Site would remain unchanged, and non-native

vegetation would remain in the San Diego River corridor and thinning closer to existing structures would not occur. In the short term, consistent with the existing conditions, the Project Site would continue to experience frequent ignitions. Under Alternative 1, it is assumed any existing maintenance and recreational activity at the Project Site would remain unchanged from existing conditions.

Comparative Analysis of Environmental Effects

Less-than-significant impacts of the Project related to biological resources (with mitigation), cultural and tribal cultural resources (with mitigation), hazards and hazardous materials, hydrology and water quality, and noise would be *lesser* in magnitude under Alternative 1 overall because vegetation management would not occur. Relative to the Project, Alternative 1 would result in *greater* impacts related to wildfire because vegetation management activities implemented under the Project would further reduce the risk of wildfire at the Project Site compared to Alternative 1

The following analysis compares the Project's potentially significant environmental effects with those of Alternative 1.

Biological Resources

As discussed in Section 4.1, Biological Resources, the Project would result in less-than-significant impacts with mitigation incorporated with regard to special-status species, riparian habitat, or federally protected wetlands. The proposed Project would result in less-than-significant impacts regarding impediment of a migratory wildlife corridor, conflict with local policies, or conflict with an adopted or approved local, regional, or state habitat conservation plan. Under Alternative 1, conditions at the Project Site would remain unchanged, and no impacts to biological resources would occur. Therefore, the extent of potential impacts under Alternative 1 would be *less than* the Project.

Cultural and Tribal Cultural Resources

As discussed in Section 4.2, Cultural and Tribal Cultural Resources, the Project would result in ground-disturbing vegetation management activities on site that could result in a potentially significant impact related to discovery of buried archaeological resources, previously unknown or undiscovered human remains, and tribal cultural resources. However, **MM CUL-1** through **MM CUL-3** would reduce potential impacts to less than significant. Under Alternative 1, no vegetation management activities would occur, and therefore, the extent of potential impacts under Alternative 1 would be *less than* the Project.

Hazards and Hazardous Materials

As discussed in Section 4.3, Hazards and Hazardous Materials, of this EIR, the Project would result in less-than-significant impacts related to hazards and hazardous materials; however, Alternative 1 would further lessen these impacts overall because Alternative 1 would not include any vegetation management activities. Therefore, the extent of potential impacts related to thresholds A, B, C, D, E, and F (refer to Section 4.3 of this EIR) under Alternative 1 would be *less than* the proposed Project. The extent of potential impacts related to threshold G of Section 4.3, which states "would the project expose people or structures, either directly or indirectly to a significant risk of loss, injury, or death involving wildland fires?" would be *greater than* the impacts of the Project because implementation of Alternative 1 would increase the risk to people or structures involving wildland fires by retaining the existing vegetation in the river corridor.

Hydrology and Water Quality

As discussed in Section 4.4, Hydrology and Water Quality, of this EIR, the Project would result in less-than-significant impacts related to hydrology and water quality; however, Alternative 1 would further lessen these impacts overall because Alternative 1 would not include any vegetation management activities. Therefore, the extent of potential impacts under Alternative 1 would be *less than* the Project.

Noise

As discussed in Section 4.5, Noise, of this EIR, the analysis determined that the Project would not result in exceedances of local noise standards and concluded that the Project would result in less-than-significant construction- and operation-related noise impacts with implementation of **MM NOI-1**. However, Alternative 1 would further lessen these impacts overall because Alternative 1 would not include any vegetation management activities. Therefore, the extent of potential impacts under Alternative 1 would be *less than* the Project.

Wildfire

As discussed in Section 4.6, Wildfire, of this EIR, the implementation of the Project would reduce wildfire risk at the Project Site by removing or treating vegetation. Under Alternative 1, no vegetation management would occur, and wildfire risk at the Project Site would remain the same. The Project would result in the use of mechanical vegetation management, which requires the use of heavy machinery and could result in ignition during high-fire-hazard weather conditions. However, the Project overall would reduce fire risk in the San Diego River Corridor by creating and maintaining a defensible space and managing hazardous fuel loads. Therefore, potential impacts related to wildfire under Alternative 1 would be *greater than* the proposed Project.

Relationship to the Project Objectives

Alternative 1 would not meet any of the Project objectives as it would not define a strategy for specific fuel treatment zones for reducing hazardous fuel loads within the San Diego River corridor (Objective 1), enhance community safety within the City of Santee through the reduction of wildfire risk (Objective 2), reduce horizontal and vertical continuity of fuels and hazardous fuel loads through the removal of non-native and invasive species (Objective 3), or reduce ignition potential and fire intensity within the San Diego River corridor (Objective 4).

7.4.2 Zone 3 Standards Alternative (Alternative 2)

Project Alternative 2

Under Alternative 2, the Project would include treatment or removal of non-native species, dead or dying vegetation, and debris, consistent with the standard of Zone 3 across the entire Project Site. Alternative 2 would not include any thinning or mowing activities described in Zone 1 or Zone 2 standards. This alternative would have the same boundary and treatment area as the Project.

Comparative Analysis of Environmental Effects

Less-than-significant impacts of the Project related to biological resources (with mitigation), cultural and tribal cultural resources (with mitigation), hazards and hazardous materials, hydrology and water quality, and noise would be *lesser* in magnitude under Alternative 2 overall because vegetation management would be less invasive without

thinning or mowing activities. Relative to the Project, Alternative 1 would result in *greater* impacts related to wildfire because implementation of Alternative 1 retains more existing vegetation, which would increase the risk of wildfire at the Project Site.

The following analysis compares the Project's potentially significant environmental effects with those of Alternative 2.

Biological Resources

Similar to the Project, Alternative 3 would cover the same ground area as the Project and result in potential direct impacts to nesting birds and/or their habitat as well as indirect impacts to special-status wildlife species. However, impacts associated with fuel treatments identified as part of the vegetation management activities allowed for Zones 1 and 2 (manual, mechanical, and chemical) could result in decreased water quality and altered hydrology, soil compaction, elevated dust levels, and the spread of invasive plant species. Under Alternative 2, these vegetation management techniques would not occur. In addition, **MM BIO-1** through **MM BIO-11** would be implemented under Alternative 2 to reduce biological impacts to less than significant. Therefore, the extent of potential impacts under Alternative 2 would be *less than* the Project.

Cultural and Tribal Cultural Resources

Similar to the Project, Alternative 2 would cover the same ground area as the Project and result in the potential to impact known or unknown cultural and tribal cultural resources. However, Alternative 2 would avoid the use of the more ground-disturbing vegetation management such as thinning and mowing, and would focus on the removal of dead, dying, or invasive vegetation. Under Alternative 2, ground disturbance could still occur where vegetation management occurs outside of existing disturbed areas. However, **MM CUL-1** through **MM CUL-3** would be implemented under Alternative 2 to reduce the potential impacts to less significant, and the extent of ground disturbance would be less than the Project. Therefore, the extent of potential impacts under Alternative 2 would be *less than* the Project.

Hazards and Hazardous Materials

As discussed in Section 4.3, typical hazardous materials used for treatment activities would include fuel and lubricants for hand labor and mechanical equipment, and potentially herbicides where needed based on site conditions. In addition, the Project includes BMPs to reduce the potential for hazardous materials to create hazards during routine handling. Alternative 2 would implement all Project BMP's consistent with treatment or removal of non-native species, dead or dying vegetation, and debris. Alternative 2 would not include any thinning or mowing activities described in Zone 1 or Zone 2 standards, and therefore, BMPs related to mechanical treatment would not apply. Overall, the extent of potential impacts related to thresholds A, B, C, D, E, and F (refer to Section 4.3 of this EIR) under Alternative 2 would be *less than* the proposed Project. The extent of potential impacts related to threshold G of Section 4.3, which states "would the project expose people or structures, either directly or indirectly to a significant risk of loss, injury, or death involving wildland fires?" would be *greater than* the impacts of the Project because implementation of Alternative 2 would increase the risk to people or structures involving wildland fires by retaining more of the existing vegetation in the river corridor.

Hydrology and Water Quality

Alternative 2 would not include any thinning or mowing activities described in Zone 1 or Zone 2 standards. Similar to the Project, implementation of Alternative 2 would result in less-than-significant impacts to hydrology and water

quality, although the avoidance of thinning or mowing activities of Alternative 2 would result in a reduced extent of potential to impact hydrology and water quality. Therefore, the extent of potential impacts under Alternative 2 would be *less than* the Project.

Noise

As discussed in Section 4.5, of this EIR, the analysis determined that the Project would not result in exceedances of local noise standards with implementation of **MM NOI-1** and concluded that the Project would result in less-than-significant construction- and operation-related noise impacts. Like the Project, Alternative 2 would include new sources of temporary vegetation management activities; however, because Alternative 2 would not include any thinning or mowing activities described in Zone 1 or Zone 2 standards, mechanical equipment would not be required, and impacts regarding noise would be reduced overall. Therefore, the extent of potential impacts under Alternative 2 would be *less than* the Project.

Wildfire

Although Alternative 2 would include treatment or removal of non-native species, dead or dying vegetation, and debris, consistent with the standard of Zone 3 across the entire Project Site, Alternative 2 would not include any thinning or mowing activities described in Zone 1 or Zone 2 standards. Thinning and mowing requires the use of mechanical equipment, which increases the chance for an ignition to occur during Project implementation. Without these management activities, the risk from mechanical ignition sources is reduced. However, the Project would reduce hazardous vegetation and wildfire intensity within the San Diego River corridor, thereby reducing potential wildfire-related risks to existing infrastructure for the long-term. Alternative 2 would not result in the same removal or treatment as the Project, however, as only Zone 3 standards would apply and less vegetation in Zones 1 and 2 would be removed or treated. Therefore, the extent of potential wildfire impacts under Alternative 2 would be *greater than* the Project.

Relationship to the Project Objectives

Alternative 2 would meet Objective 2 and Objective 4; however, the objectives would be met to a lesser extent. Specifically, Objective 1 would not be met because there would not be a specific strategy at each specific Treatment Zone. Objective 3 would not be met because without the use of thinning or mowing activities, there would still be potential for tree canopy torching, and reduction of horizontal and vertical continuity would not occur.

7.4.3 Manual and Mechanical Treatment (Alternative 3)

Project Alternative 3

Under Alternative 3, the Project would only use manual and mechanical treatment methods to implement the standards for Zones 1-3. This Alternative would not include any chemical treatments. This alternative would have the same boundary and treatment area as the Project.

Comparative Analysis of Environmental Effects

Alternative 3 would result in hazards and hazardous materials, hydrology and water quality impacts *less than* the Project because the avoidance of chemical treatments would reduce the chance of hazardous materials exposure from herbicidal treatments and reduce the risk of hydrology and water quality impacts that could occur from

herbicide use. Relative to the Project, Alternative 3 would result in *similar* impacts related to biological, cultural, and tribal cultural resources because the Project Site and ground disturbance area would remain the same. In addition, Alternative 3 would result in impacts *similar to* the Project related to noise because noise generation from mechanical equipment would still occur under Alternative 3. The extent of potential impacts related to wildfire would be *greater than* the impacts identified in the Project because Alternative 3 would only use mechanical and manual techniques, in which greater use of mechanical equipment would result in a greater chance of ignition to occur from equipment use. In addition, some invasive species cannot be treated with only manual and mechanical treatment, and indirect impacts to sensitive status plant and wildlife species could occur through the spread of invasive species.

The following analysis compares the Project's potentially significant environmental effects with those of Alternative 3.

Biological Resources

Under Alternative 3, the Project Site would remain the same as the proposed Project. The use of only mechanical and manual vegetation management would not reduce the impact to biological resources, and Alternative 3 would result in the same impacts as the Project. **MM BIO-1** through **MM BIO-11** would still apply to Alternative 3 and would reduce impacts to less than significant. In addition, the Project's main purpose is fuel reduction of non-native invasive species that would result in functional uplift of the native vegetation communities throughout the Project Site. This would result in improved habitat quality for both wildlife movement corridors and nursery sites. Mechanical and manual treatments alone would not be able to treat all invasive species. Therefore, the extent of potential biological impacts under Alternative 3 would be *similar to* the Project.

Cultural and Tribal Cultural Resources

Similar to the Project, Alternative 3 would result in ground-disturbing construction vegetation management activities on site that could result in a potentially significant impact related to discovery of buried archaeological resources, previously unknown or undiscovered human remains, and tribal cultural resources. However, similar to the proposed Project, **MM CUL-1** through **MM CUL-3** would apply and be implemented under Alternative 3 to reduce the potential impacts to less than significant. Therefore, the extent of potential impacts cultural and tribal cultural resources under Alternative 3 would be *similar to* the Project.

Hazards and Hazardous Materials

Typical hazardous materials used for Alternative 3 would include fuel and lubricants for hand labor and mechanical equipment. As discussed in Section 4.3, under the Project, chemical (herbicidal) treatment would be a limited, secondary tool rather than a primary treatment method. Under Alternative 3, herbicidal treatment would be avoided entirely. Project BMPs require that tools/equipment be serviced and fueled only in locations that would not allow grease, oil, fuel, or other hazardous materials to pass into streams or retained vegetation (**Hand Labor BMP-6**, and **Water Quality BMP-1**); that spill kits be available (**Mechanical BMP-16** and **Water Quality BMP-3**); fueling would occur in identified refueling areas with secondary containment; and tools, lubricants, and fuels would be stored away from watercourses with secondary containment and labeling (**Water Quality BMP-1, BMP-2**, and **BMP-4**). All of these BMPs would still apply to Alternative 3. Overall, the extent of potential impacts related to thresholds A, B, C, D, E, and F (refer to Section 4.3 of this EIR) under Alternative 3 would be *less than* the proposed Project. The extent of potential impacts related to threshold G of Section 4.3, which states "would the project expose people or structures, either directly or indirectly to a significant risk of loss, injury, or death involving wildland fires?" would be

greater than the impacts of the Project because without herbicidal treatment, implementation of Alternative 3 would increase fuel biomass thereby increasing the risk involving wildland fires in the long-term.

Hydrology and Water Quality

Hydrology and water quality impacts from the Project would occur from the use of heavy equipment and worker activity, which could result in erosion and mobilize sediments adjacent to the San Diego River. Additionally, herbicides, animal waste, and accidental release or fuels/lubricants from equipment have the potential to enter the San Diego River and surrounding wetlands. Under Alternative 3, herbicidal treatments would be avoided, and the extent of impacts related to hydrology and water quality would be reduced compared to the Project. Therefore, Alternative 3 would result in impacts *less than* the Project.

Noise

As discussed in Section 4.5, of this EIR, the analysis determined that the Project would not result in exceedances of local noise standards with implementation of **MM NOI-1** and concluded that the Project would result in less-than-significant construction- and operation-related noise impacts. Like the Project, Alternative 3 would include new sources and temporarily increase noise in the area from the use of mechanical equipment and workers at the Project Site. Avoiding the use of herbicidal treatment would not reduce the noise impacts substantially, as the main sources of noise generation would come from the mechanical equipment. Therefore, the extent of potential impacts related to noise would be *similar to* the Project.

Wildfire

As discussed in Section 4.6, of this EIR, implementation of the Project would include vegetation removal and treatment of non-native, invasive, and dead plant material. Alternative 3 would rely only on mechanical and manual vegetation management treatment activities. Hand labor and chemical management techniques are not activities that pose a risk for wildfire ignition; however, mechanical vegetation management requires the use of heavy machinery which could result in ignition during high-fire-hazard weather conditions. Alternative 3 would still include vegetation management activities that would reduce fire risk in the San Diego River Corridor by creating and maintaining a defensible space and managing hazardous fuel loads. However, the comprehensive treatment of invasive species from chemical treatment to ensure invasive species are managed at the Project Site would not occur. Further, the use of only mechanical and manual techniques would increase the risk of wildfire ignition during the implementation of Alternative 3. Therefore, the extent of potential impacts to wildfire risk under Alternative 3 would be *greater than* the Project.

Relationship to Project Objectives

Alternative 3 would have the ability to meet Objective 1, Objective 2, and Objective 4 because Alternative 3 would define a strategy for specific fuel treatment zones for reducing hazardous fuel loads within the San Diego River corridor (Objective 1), enhance community safety within the City of Santee through the reduction of wildfire risk (Objective 2), and reduce ignition potential and fire intensity within the San Diego River corridor (Objective 4). Alternative 3 would reduce horizontal and vertical continuity of fuels and hazardous fuel loads through the removal of non-native and invasive species Objective 3, but to a lesser degree than the Project, because without the use of chemical treatment, Alternative 3 would be less effective in the removal invasive species.

7.5 Environmentally Superior Alternative

Section 15126(e)(2) of the State CEQA Guidelines requires an EIR to identify an "environmentally superior alternative." If the No Project/No Development Alternative is the environmentally superior alternative, the EIR must also identify an environmentally superior alternative from among the other Project alternatives.

Table 7-1 compares the Project's potentially significant environmental effects with those of the alternatives considered above.

Alternative 1 (No Project Alternative) would be the environmentally superior alternative because all impacts of the Project implementation would be avoided, and no environmental impacts would occur. However, Alternative 1 would not meet any of the Project's Objectives, and the risk of wildfire at the Project Site would be greater than under Alternative 1 relative to the Project. Alternative 2 (Zone 3 Standards Only Alternative) would result in the same potentially significant impacts as the Project, though impacts to biological resources and historic resources would be of a lesser magnitude compared to the Project. Alternative 2 would meet most of the Project objectives, though not to the same extent as the Project, and Alternative 2 would fall short of meeting Objective 3. However, because Alternative 2 would result in reduced environmental impact to most resources compared to the Project and Alternative 3, Alternative 2 would be considered environmentally superior. This alternative could also meet half of the Project's objectives. It should be noted that Alternative 2 would not avoid potentially significant impacts of the Project and would require mitigation outlined throughout the EIR.

Table 7-1. Project Alternatives Environmental Impacts Comparison

Environmental Issue	Project	No Project (Alternative 1)	Zone 3 Standards Alternative (Alternative 2)	Manual and Mechanical Alternative (Alternative 3)
Biological Resources	Less than Significant with Mitigation Incorporated	Lesser	Lesser	Greater
Cultural and Tribal Cultural	Less than Significant with Mitigation Incorporated	Lesser	Lesser	Similar
Hazards and Hazardous Materials	Less than Significant	Greater	Greater	Lesser, Greater (threshold G)
Hydrology and Water Quality	Less than Significant	Lesser	Lesser	Lesser
Noise	Less than Significant with Mitigation Incorporated	Lesser	Lesser	Similar
Wildfire	Less than Significant	Greater	Greater	Greater

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Chapter 7: Alternatives

None

Chapter 8: List of Preparers

None

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Appendix A
NOP and Public Comments

NOTICE OF PREPARATION
of a Draft Environmental Impact Report and
Notice of Public Scoping Meeting

Project: San Diego River Fire Hazard Mitigation Plan

Project Case Files: Environmental Impact Report ENV-2026-0001

Project Proponent: City of Santee

Project Location: The almost 300-acre Project Site is composed of 32 parcels along the San Diego River corridor through the center of the City of Santee as shown in Figure 1, Project Location. The Project Site extends along the river corridor from Forester Creek at the western boundary to the Lakeside boundary in the east, including Mast Park West, Mast Park Wetland Restoration Area, Mast Park East, Mission Creek, Walker Trails Open Space, and Walker Preserve. Surrounding the corridor are urban neighborhoods, commercial districts, transportation infrastructure, parks, and open space preserves, creating a landscape typical of a wildland-urban interface (WUI).

Environmental Impact Report: The City of Santee (City) is preparing an Environmental Impact Report (EIR) for the implementation of the San Diego River Fire Hazard Mitigation Plan (Project). The City will be the lead agency under the California Environmental Quality Act (CEQA) for the project. This Notice of Preparation (NOP) describes the proposed Project that will be analyzed in the EIR and identifies areas of probable environmental effects of the project.

As specified in the CEQA Guidelines, the NOP will be circulated for a 30-day scoping period. Agencies, organizations, and interested members of the public are invited to provide input on the scope of the environmental analysis. If you are a responsible or trustee agency, the views of your agency are requested as to the scope and content of the environmental information which is germane to your agency's statutory responsibilities in connection with the proposed project. If no response or well-justified request for additional time is received by any responsible agency or trustee agency by the end of the review period, we presume that these agencies have no response. All comments concerning the scope of the EIR must be submitted in writing during the review period and addressed to:

Harley Wallace, Fire Chief
Santee
Santee, California 92071
HWallace@CityofSanteeCa.gov
(619) 258-4100 ext. 207

Electronic comments whose file size exceeds 10 MB must request a link to upload the comments. The NOP comment period begins on **February 6, 2026** and closes at **5:00 p.m. on March 6, 2026.** The City will consider all written comments received during the noticed public scoping period in the preparation of the EIR.

Public Scoping Meeting:

The City will hold a scoping meeting to provide an opportunity to submit comments on the scope of the environmental issues to be addressed in the EIR. The public scoping meeting will be held on **Wednesday, February 18, 2026** at City Hall, 10601 Magnolia Avenue, Santee, CA 92071 in the Council Chambers, from **5:00 PM to 6:30 PM**. All parties are welcome to attend and are encouraged to recommend environmental issues, mitigation measures, and alternatives to the project that they believe should be addressed in the EIR.

Project Background and Description:

The City of Santee Fire Department has initiated development of the San Diego River Fire Hazard Mitigation Plan (FHMP) to reduce wildfire risk in and around high-priority sites along the San Diego River corridor. This area lies within the wildland-urban interface and includes critical public infrastructure, adjacent residential neighborhoods, and biologically sensitive habitats. The need for a targeted, ecologically conscious approach to vegetation management is underscored by increasing fire risk, invasive plant encroachment, and complex access and ownership constraints unique to the corridor. The Santee Fire Department responded to 174 fires in or near the Project Site in 2024 and 2025. Portions of the Project Site are located within Moderate and High, Fire Hazard Severity Zones. As part of the FHMP, a Fuels Treatment Plan (FTP) will provide a framework for vegetation management that includes treatment strategies tailored to each of the parcels' wildfire exposure, access conditions, existing vegetation, and proximity to sensitive resources. The FTP outlines defensible space creation/maintenance standards, prescribes vegetation treatments, and identifies zone boundaries to minimize wildfire risk in the wildland-urban interface. It also documents the species and quantities of vegetation to be removed, defines potential removal processes, and incorporates best management practices to minimize or avoid impacts to resources in the project site.

The objectives of the proposed project are identified below:

- Objective 1 – Define strategy for defined fuel treatment zones for reducing hazardous fuel loads within the San Diego River corridor.
- Objective 2 – Enhance community safety within the City of Santee through the reduction of wildfire risk.
- Objective 3 – Reduce horizontal and vertical continuity of fuels and hazardous fuel loads through the removal of non-native and invasive species.
- Objective 4 – Reduce ignition potential and fire intensity within the San Diego River corridor.

Discretionary Actions:

The City Council actions that would be considered for the proposed project include, but would not be limited to:

- Adopt the San Diego River Fire Hazard Mitigation Plan, including the Fuels Treatment Plan
- Certify the EIR for the San Diego River Fire Hazard Mitigation Plan

Project Alternatives:

The EIR will evaluate a reasonable range of project alternatives that would feasibly attain most of the project objectives but would avoid or substantially lessen any of the significant effects of the project, including the required No Project Alternative. The EIR will also identify any alternatives that were considered but rejected as infeasible and explain the rationale for this determination.

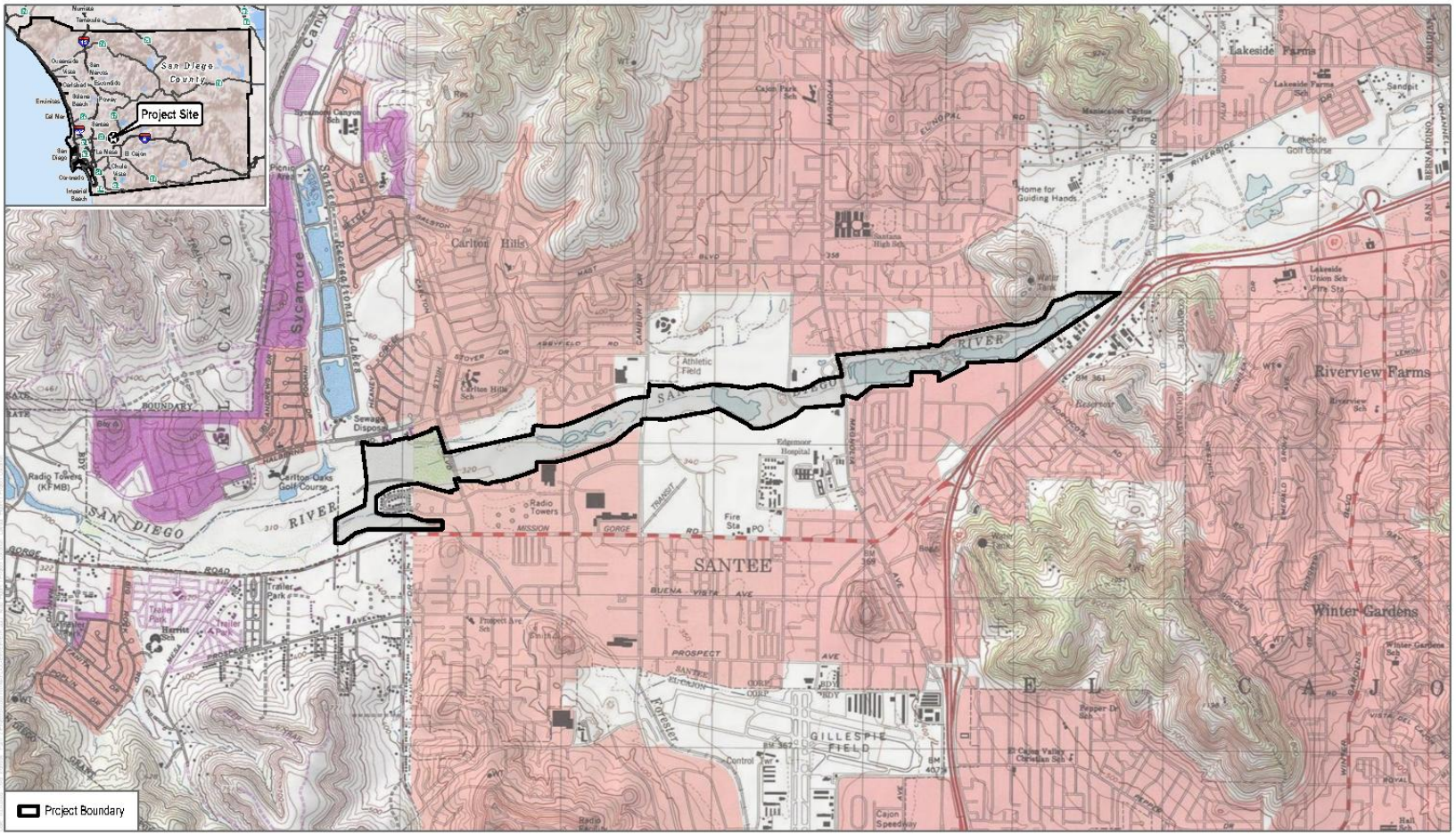
Potential Environmental Effect Areas:

The EIR will describe the reasonably foreseeable and potentially significant adverse effects of the proposed project (both direct and indirect) and identify which are found to be less than significant. The EIR will also evaluate the cumulative impacts of the project when considered in conjunction with other related past, present, and reasonably foreseeable future projects. The EIR will evaluate all of the topic areas, as follows:

- Biological Resources
- Cultural Resources
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Noise and Vibration
- Tribal Cultural Resources
- Wildfire

As environmental documentation for this project is completed, it will be available for review at the City's Fire Department located in Building 5 and at the City Clerk's Office in Building 3 at Santee City Hall, 10601 Magnolia Avenue, Santee CA 92071, and online at:

https://www.cityofsanteeca.gov/services/project-environmental-review



SOURCE: USGS 7.5-Minute Series La Mesa and El Cajon Quadrangles

DUDEK

0 1,000 2,000 Feet

FIGURE 1
Project Location
Notice of Preparation

I hope you are both doing well. I am writing regarding the San Diego River Fire Hazard Mitigation Plan (FHMP), listed under SCH No. 2026020351.
In reviewing the Notice of Completion (Appendix C), I noted the reference to an attached Assessor's Parcel Number (APN) list for the 32 parcels included in the project area. However, this parcel list does not appear in the publicly accessible CEQAnet documents or the NOP release. [vertikalrms.com], [arcgis.com]
To properly assess how the FHMP may interface with our properties near the corridor, I am kindly requesting the following:
Requested Documents

The full APN list for all parcels included in the FHMP project area
Any parcel boundary maps, shapefiles, or PDF exhibits depicting the project area
Any supporting documentation describing parcel-specific involvement (ownership, access easements, treatment areas, etc.)

These materials will help us evaluate adjacency, potential impacts, and coordination needs related to operations at:
Carlton Hills Plaza
8915–9312 Carlton Hills Blvd, Santee, CA 92071
(Associated APNs include: 383-156-01, 383-156-02, 383-156-03, 383-156-04, 383-156-05)
If there is a preferred formal process for requesting these documents, I'd be happy to follow it.

Thank you both for your time and support. We appreciate the City's work on wildfire mitigation along the San Diego River corridor and look forward to reviewing the additional materials.

Best regards,
Sara Kniffen
Property Manager
Carlton Hills Plaza / PPI Real Estate

RingCentral

Voice Message

Dear Harley Wallace,

You have a new voice message:

From:	NEW FRONTIER (619) 449-1800
Received:	Tuesday, February 10, 2026 at 10:14 AM
Length:	00:56
To:	(619) 258-4100 * 202 Harley Wallace

Voicemail Preview:

"Hi, good morning, Harley. This is Randy Northcote with New Frontier Mobile Home Park. I'm the park manager and we own a sliver of property in the uh River Bottom next to the Walker Trail and I was calling regarding the um fire hazard mitigation plan and notice of preparation. And I know back in 2021 I had worked with Tom Romstad when the city got some funding to do some clearing and remove non-native species. Um but I just want to let you know that we are 100% in support of that. So if you need a uhrelease liability or anything from us. If you guys could remove some of the dead brush out of there and the eucalyptus and other stuff, that would be great. So, if you need anything from me, um, the best phone number is our office 619-449-1800 and we're typically in Monday through Friday from 9:00 a.m. till noon. So, once again, it's Randy at New Frontier Mobile Home Park 619-449-1800. Thanks and have a great day."

Listen to this voicemail over your phone or by opening the attached sound file. You can also sign in to your RingCentral account with your main number, extension number, and password to manage and listen to voicemails.

Thank you for using RingCentral!

Hello AI Receptionist (AIR).

AIR turns missed calls into new customers and works with any phone. AIR answers calls, schedules appointments, routes callers, and captures leads. Learn more about how AIR can transform your customer interactions and boost your business growth.**Learn more**

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Vacant

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Andrew Alejandre
Paskenta Band of Nomlaki Indians

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov

February 10, 2026

Harley Wallace
City of Santee
Santee Fire Department Administration
10601 Magnolia Avenue
Santee CA 92071

Re: 2026020351 San Diego River Fire Hazard Mitigation Plan Project, San Diego County

To Whom It May Concern:

The Native American Heritage Commission (NAHC) has received the Notice of Preparation (NOP), Draft Environmental Impact Report (DEIR) or Early Consultation for the project referenced above. The California Environmental Quality Act (CEQA) (Pub. Resources Code §21000 et seq.), specifically Public Resources Code §21084.1, states that a project that may cause a substantial adverse change in the significance of a historical resource, is a project that may have a significant effect on the environment. (Pub. Resources Code § 21084.1; Cal. Code Regs., tit.14, §15064.5 (b) (CEQA Guidelines §15064.5 (b)). If there is substantial evidence, in light of the whole record before a lead agency, that a project may have a significant effect on the environment, an Environmental Impact Report (EIR) shall be prepared. (Pub. Resources Code §21080 (d); Cal. Code Regs., tit. 14, § 5064 subd.(a)(1) (CEQA Guidelines §15064 (a)(1)). In order to determine whether a project will cause a substantial adverse change in the significance of a historical resource, a lead agency will need to determine whether there are historical resources within the area of potential effect (APE).

CEQA was amended significantly in 2014. Assembly Bill 52 (Gatto, Chapter 532, Statutes of 2014) (AB 52) amended CEQA to create a separate category of cultural resources, "tribal cultural resources" (Pub. Resources Code §21074) and provides that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment. (Pub. Resources Code §21084.2). Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource. (Pub. Resources Code §21084.3 (a)). **AB 52 applies to any project for which a notice of preparation, a notice of negative declaration, or a mitigated negative declaration is filed on or after July 1, 2015.** If your project involves the adoption of or amendment to a general plan or a specific plan, or the designation or proposed designation of open space, on or after March 1, 2005, it may also be subject to Senate Bill 18 (Burton, Chapter 905, Statutes of 2004) (SB 18). **Both SB 18 and AB 52 have tribal consultation requirements**. If your project is also subject to the federal National Environmental Policy Act (42 U.S.C. § 4321 et seq.) (NEPA), the tribal consultation requirements of Section 106 of the National Historic Preservation Act of 1966 (154 U.S.C. 300101, 36 C.F.R. §800 et seq.) may also apply.

The NAHC recommends consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of your proposed project as early as possible in order to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources. Below is a brief summary of portions of AB 52 and SB 18 as well as the NAHC's recommendations for conducting cultural resources assessments.

Consult your legal counsel about compliance with AB 52 and SB 18 as well as compliance with any other applicable laws.

AB 52

AB 52 has added to CEQA the additional requirements listed below, along with many other requirements:

1. Fourteen Day Period to Provide Notice of Completion of an Application/Decision to Undertake a Project: Within fourteen (14) days of determining that an application for a project is complete or of a decision by a public agency to undertake a project, a lead agency shall provide formal notification to a designated contact of, or tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, to be accomplished by at least one written notice that includes:

a. A brief description of the project.

b. The lead agency contact information.

c. Notification that the California Native American tribe has 30 days to request consultation. (Pub. Resources Code §21080.3.1 (d)).

d. A "California Native American tribe" is defined as a Native American tribe located in California that is on the contact list maintained by the NAHC for the purposes of Chapter 905 of Statutes of 2004 (SB 18). (Pub. Resources Code §21073).

2. Begin Consultation Within 30 Days of Receiving a Tribe's Request for Consultation and Before Releasing a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report: A lead agency shall begin the consultation process within 30 days of receiving a request for consultation from a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project. (Pub. Resources Code §21080.3.1, subds. (d) and (e)) and prior to the release of a negative declaration, mitigated negative declaration or Environmental Impact Report. (Pub. Resources Code §21080.3.1(b)).

a. For purposes of AB 52, "consultation shall have the same meaning as provided in Gov. Code §65352.4 (SB 18). (Pub. Resources Code §21080.3.1 (b)).

3. Mandatory Topics of Consultation If Requested by a Tribe: The following topics of consultation, if a tribe requests to discuss them, are mandatory topics of consultation:

a. Alternatives to the project.

b. Recommended mitigation measures.

c. Significant effects. (Pub. Resources Code §21080.3.2 (a)).

4. Discretionary Topics of Consultation: The following topics are discretionary topics of consultation:

a. Type of environmental review necessary.

b. Significance of the tribal cultural resources.

c. Significance of the project's impacts on tribal cultural resources.

d. If necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend to the lead agency. (Pub. Resources Code §21080.3.2 (a)).

5. Confidentiality of Information Submitted by a Tribe During the Environmental Review Process: With some exceptions, any information, including but not limited to, the location, description, and use of tribal cultural resources submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public, consistent with Government Code §6254 (r) and §6254.10. Any information submitted by a California Native American tribe during the consultation or environmental review process shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public. (Pub. Resources Code §21082.3 (c)(1)).

6. Discussion of Impacts to Tribal Cultural Resources in the Environmental Document: If a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document shall discuss both of the following:

a. Whether the proposed project has a significant impact on an identified tribal cultural resource.

b. Whether feasible alternatives or mitigation measures, including those measures that may be agreed to pursuant to Public Resources Code §21082.3, subdivision (a), avoid or substantially lessen the impact on the identified tribal cultural resource. (Pub. Resources Code §21082.3 (b)).

7. Conclusion of Consultation: Consultation with a tribe shall be considered concluded when either of the following occurs:

a. The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or

b. A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached. (Pub. Resources Code §21080.3.2 (b)).

8. Recommending Mitigation Measures Agreed Upon in Consultation in the Environmental Document: Any mitigation measures agreed upon in the consultation conducted pursuant to Public Resources Code §21080.3.2 shall be recommended for inclusion in the environmental document and in an adopted mitigation monitoring and reporting program, if determined to avoid or lessen the impact pursuant to Public Resources Code §21082.3, subdivision (b), paragraph 2, and shall be fully enforceable. (Pub. Resources Code §21082.3 (a)).

9. Required Consideration of Feasible Mitigation: If mitigation measures recommended by the staff of the lead agency as a result of the consultation process are not included in the environmental document or if there are no agreed upon mitigation measures at the conclusion of consultation, or if consultation does not occur, and if substantial evidence demonstrates that a project will cause a significant effect to a tribal cultural resource, the lead agency shall consider feasible mitigation pursuant to Public Resources Code §21084.3 (b). (Pub. Resources Code §21082.3 (e)).

10. Examples of Mitigation Measures That, If Feasible, May Be Considered to Avoid or Minimize Significant Adverse Impacts to Tribal Cultural Resources:

a. Avoidance and preservation of the resources in place, including, but not limited to:

i. Planning and construction to avoid the resources and protect the cultural and natural context.

ii. Planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.

b. Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:

i. Protecting the cultural character and integrity of the resource.

ii. Protecting the traditional use of the resource.

iii. Protecting the confidentiality of the resource.

c. Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.

d. Protecting the resource. (Pub. Resource Code §21084.3 (b)).

e. Please note that a federally recognized California Native American tribe or a non-federally recognized California Native American tribe that is on the contact list maintained by the NAHC to protect a California prehistoric, archaeological, cultural, spiritual, or ceremonial place may acquire and hold conservation easements if the conservation easement is voluntarily conveyed. (Civ. Code §815.3 (c)).

f. Please note that it is the policy of the state that Native American remains and associated grave artifacts shall be repatriated. (Pub. Resources Code §5097.991).

11. Prerequisites for Certifying an Environmental Impact Report or Adopting a Mitigated Negative Declaration or Negative Declaration with a Significant Impact on an Identified Tribal Cultural Resource: An Environmental Impact Report may not be certified, nor may a mitigated negative declaration or a negative declaration be adopted unless one of the following occurs:

a. The consultation process between the tribes and the lead agency has occurred as provided in Public Resources Code §21080.3.1 and §21080.3.2 and concluded pursuant to Public Resources Code §21080.3.2.

b. The tribe that requested consultation failed to provide comments to the lead agency or otherwise failed to engage in the consultation process.

c. The lead agency provided notice of the project to the tribe in compliance with Public Resources Code §21080.3.1 (d) and the tribe failed to request consultation within 30 days. (Pub. Resources Code §21082.3 (d)).

The NAHC's PowerPoint presentation titled, "Tribal Consultation Under AB 52: Requirements and Best Practices" may be found online at: http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation_CalEPAPDF.pdf

SB 18

SB 18 applies to local governments and requires local governments to contact, provide notice to, refer plans to, and consult with tribes prior to the adoption or amendment of a general plan or a specific plan, or the designation of open space. (Gov. Code §65352.3). Local governments should consult the Governor's Office of Planning and Research's "Tribal Consultation Guidelines," which can be found online at: https://www.opr.ca.gov/docs/09_14_05_Updated_Guidelines_922.pdf.

Some of SB 18's provisions include:

1. Tribal Consultation: If a local government considers a proposal to adopt or amend a general plan or a specific plan, or to designate open space it is required to contact the appropriate tribes identified by the NAHC by requesting a "Tribal Consultation List." If a tribe, once contacted, requests consultation the local government must consult with the tribe on the plan proposal. **A tribe has 90 days from the date of receipt of notification to request consultation unless a shorter timeframe has been agreed to by the tribe.** (Gov. Code §65352.3 (a)(2)).
2. No Statutory Time Limit on SB 18 Tribal Consultation. There is no statutory time limit on SB 18 tribal consultation.
3. Confidentiality: Consistent with the guidelines developed and adopted by the Office of Planning and Research pursuant to Gov. Code §65040.2, the city or county shall protect the confidentiality of the information concerning the specific identity, location, character, and use of places, features and objects described in Public Resources Code §5097.9 and §5097.993 that are within the city's or county's jurisdiction. (Gov. Code §65352.3 (b)).
4. Conclusion of SB 18 Tribal Consultation: Consultation should be concluded at the point in which:
    a. The parties to the consultation come to a mutual agreement concerning the appropriate measures for preservation or mitigation; or
    b. Either the local government or the tribe, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached concerning the appropriate measures of preservation or mitigation. (Tribal Consultation Guidelines, Governor's Office of Planning and Research (2005) at p. 18).

Agencies should be aware that neither AB 52 nor SB 18 precludes agencies from initiating tribal consultation with tribes that are traditionally and culturally affiliated with their jurisdictions before the timeframes provided in AB 52 and SB 18. For that reason, we urge you to continue to request Native American Tribal Contact Lists and "Sacred Lands File" searches from the NAHC. The request forms can be found online at: http://nahc.ca.gov/resources/forms/.

NAHC Recommendations for Cultural Resources Assessments

To adequately assess the existence and significance of tribal cultural resources and plan for avoidance, preservation in place, or barring both, mitigation of project-related impacts to tribal cultural resources, the NAHC recommends the following actions:

1. Contact the appropriate regional California Historical Research Information System (CHRIS) Center (https://ohp.parks.ca.gov/?page_id=30331) for an archaeological records search. The records search will determine:
    a. If part or all of the APE has been previously surveyed for cultural resources.
    b. If any known cultural resources have already been recorded on or adjacent to the APE.
    c. If the probability is low, moderate, or high that cultural resources are located in the APE.
    d. If a survey is required to determine whether previously unrecorded cultural resources are present.

2. If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
    a. The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum and not be made available for public disclosure.
    b. The final written report should be submitted within 3 months after work has been completed to the appropriate regional CHRIS center.

3. Contact the NAHC for:
   a. A Sacred Lands File search. Remember that tribes do not always record their sacred sites in the Sacred Lands File, nor are they required to do so. A Sacred Lands File search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with the geographic area of the project's APE.
   b. A Native American Tribal Consultation List of appropriate tribes for consultation concerning the project site and to assist in planning for avoidance, preservation in place, or, failing both, mitigation measures.

4. Remember that the lack of surface evidence of archaeological resources (including tribal cultural resources) does not preclude their subsurface existence.
   a. Lead agencies should include in their mitigation and monitoring reporting program plan provisions for the identification and evaluation of inadvertently discovered archaeological resources per Cal. Code Regs., tit. 14, §15064.5(f) (CEQA Guidelines §15064.5(f)). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American with knowledge of cultural resources should monitor all ground-disturbing activities.
   b. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the disposition of recovered cultural items that are not burial associated in consultation with culturally affiliated Native Americans.
   c. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the treatment and disposition of inadvertently discovered Native American human remains. Health and Safety Code §7050.5, Public Resources Code §5097.98, and Cal. Code Regs., tit. 14, §15064.5, subdivisions (d) and (e) (CEQA Guidelines §15064.5, subds. (d) and (e)) address the processes to be followed in the event of an inadvertent discovery of any Native American human remains and associated grave goods in a location other than a dedicated cemetery.

If you have any questions or need additional information, please contact me at my email address: Andrew.Green@NAHC.ca.gov.

Sincerely,

Andrew Green

Andrew Green
Cultural Resources Analyst

cc: State Clearinghouse

San Diego County Archaeological Society, Inc.

Environmental Review Committee

February 17, 2026

To: Mr. Harley Wallace, Fire Chief
Santee Fire Department Administration
10601 Magnolia Avenue
Santee, California 92071

Subject: Notice of Preparation of a Draft Environmental Impact Report
San Diego River Fire Hazard Mitigation Plan
Environmental Impact Report ENV-2026-0001

Dear Chief Wallace:

Thank you for the Notice of Preparation for the subject project, which was received by this Society last week.

We are pleased to note the inclusion of cultural resources in the list of subject areas to be addressed in the DEIR, as is appropriate for a project of this nature. The river and its surrounding area would have been well-utilized by Native Americans, and by subsequent people. Therefore, there is potential for encountering surface and/or subsurface cultural resources. Potential impacts could be direct, through surface disturbance and equipment operation, and indirect, if the project provides access to previously inaccessible sites. Both need to be addressed in the DEIR.

We look forward to reviewing the DEIR during the upcoming public comment period. To that end, please include us in notification of the public review of the DEIR and ensure availability of a copy of the cultural resources technical report(s) that has been edited for public distribution.

SDCAS appreciates being included in the environmental review process for this project.

Sincerely,

James W. Royle, Jr., Chairperson
Environmental Review Committee

cc: SDCAS President
File

P.O. Box 81106 San Diego, CA 92138-1106 (858) 538-0935

Hello Chief Wallace,

Thank you for taking the time to meet with my husband (CC'd) and I at last week's fire hazard mitigation plan meeting. As we mentioned, our home is very close to Forester Creek (9009 Gorge Ave). Caltrans has the right of way to the land behind our house. We submit customer service requests for maintenance to clear out the hazardous brush.

Our most recent request was on 8/2/24. Jon has followed up regularly with Caltrans since then, but we are still awaiting service. At one point our ticket was erroneously closed by Caltrans and we had to reopen it. The latest communication we received states that the service might be performed this summer. They said that they had difficulty securing the money to complete the job. We feel that it wouldn't be so cumbersome or expensive if they had addressed it sooner. We have never been able to get on a regular maintenance schedule.

We are very excited about the grant secured for the fire mitigation plan and look forward to the work beginning in October. We're hopeful that some of the ongoing maintenance that's part of that plan will be done in conjunction with Caltrans to avoid this situation in the future. That said, we're looking for any assistance or insight you might be able to provide to get our current request addressed before the grant work begins.

Information about our requests:
Ticket numbers

- New ticket #1136594 (supposed to be addressed this summer)
- Old ticket #1038607 (erroneously closed by Caltrans)

Contacts

- Tyler.Hicks@dot.ca.gov
- Stephen.Welborn@dot.ca.gov

Thank you again. We have no further input about the EIR for the fire hazard mitigation plan, but we wanted to note that we have access to the area behind our house via a gate in our backyard should anyone need it. We look forward to the next public review period for the plan.

Best,
Amy & Jon Newton

PUBLIC WORKS
5510 OVERLAND AVENUE, SUITE 410, SAN DIEGO, CALIFORNIA 92123-1237
(858) 694-2212

MARISA K. BARRIE, PE
DIRECTOR

KATHRYN A. STEWART, PE
ASSISTANT DIRECTOR

March 3, 2026

VIA E-MAIL
Mr. Harley Wallace, Fire Chief
Santee Fire Department Administration
10601 Magnolia Avenue
Santee, CA 92071
HWallace@CityofSanteeCA.gov

Subject: **CITY OF SANTEE NOTICE OF PREPARATION OF DRAFT EIR FOR SAN DIEGO RIVER FIRE HAZARD MITIGATION PLAN PROJECT**
Public Review Comments from County of San Diego, Department of Public Works

Dear Mr. Wallace,

The County of San Diego (County), Department of Public Works staff have reviewed the Notice of Preparation of a Draft Environmental Impact Report for the San Diego River Fire Hazard Mitigation Plan Project (Project). County staff appreciate the opportunity to review the Project and offer the following comments for your consideration. Please note, none of the comments should be construed as the County's support for the Project.

The County's Department of Public Works, Transportation Division – Traffic Engineering strives to achieve and maintain a safe and efficient County Maintained Road system for motorists, bicyclists, pedestrians, and equestrians through traffic safety improvements such as signals, signs, striping, guard rails, etc.

Traffic Engineering has completed its review and offers the following comments:

- The IJN documents indicate that the 300-acre project site is located within the City of Santee's (City) jurisdiction. The City should confirm that the entire project site and all areas proposed for vegetation removal are fully within the City's jurisdiction. If any of the work were to extend into the adjacent unincorporated areas or County-maintained Right-of-Way (ROW), there could be implications for the County, such as potentially requiring ongoing, long-term vegetation maintenance.

The County DPW requests that the City confirm in the EIR there will be no overlap in vegetation removal/work with the County's property or ROW. Alternatively, please include a discussion and a visual figure in the EIR showing locations where an overlap may occur and what actions the City will take to ensure ongoing maintenance of these areas.

Let us know if you have any questions, by contacting Richard Chin, DPW Project Manager, at Richard.Chin@sdcounty.ca.gov.

Thank you,

Ernest Bartley III, Program Manager
County of San Diego, Department of Public Works
Transportation Division, Traffic Engineering

Dear Mr. Wallace,
Attached please find County of San Diego, Department of Public Works' comments to the NOP prepared for the DEIR for City of Santee's San Diego Fire Hazard Mitigation Plan Project (https://www.cityofsanteeca.gov/departments/fire-life-safety-services/san-diego-river-hazard-mitigation-grant-program).
Let us know if you have any questions.
Thank you,

Masha Landau, Land Use/Environmental Planner III
Department of Public Works, Environmental Services Unit
County of San Diego Land Use and Environment Group
C: 619-385-7591
Email: Masha.Landau@sdcounty.ca.gov

Good Morning,

My name is Kelly Debenham and I am a resident of Santee. I live along the river walk from Cuyamaca to Mast Park. This walk is lovely, green and dense with foliage. The river walk has tall trees, shrubs, pussy willows and grassy banks There is a literal symphony of birdsong that brings a smile to my face on my daily walks. Hawks have built annual nests in the tall trees, migratory birds stop over, rabbits, skunks, possum and coyotes lives in the under growth. I even saw a mule deer one evening! I am ***Concerned*** about the mitigation plan. I am afraid that the non-native plants and shrubs will be stripped away leaving a muddy river bed with a few tall native trees and, during the rainy season, refuse.

Please consider the wildlife who make this area their home and the humans who escape every day to this lovely walk to nature bathe. It is an oasis in the middle of a busy, noisy city and gives me Great joy.

Thank you for your time.

Kelly Debenham
375 Whispering Willow Drive, Unit C
Santee, CA

California Department of Transportation

DISTRICT 11
4050 TAYLOR STREET, MS-240
SAN DIEGO, CA 92110
(619) 985-1587 | FAX (619) 688-4299 TTY 711
www.dot.ca.gov

March 9, 2026

11-SD-52
PM 16.544
San Diego River Fire Hazard Mitigation Plan
NOP/SCH#2026020351

Mr. Harley Wallace
Fire Chief
City of Santee
Fire Department
10601 Magnolia Street
Santee, CA 92071

Dear Mr. Wallace:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the Notice of Preparation of an Environmental Impact Report (NOP) for the San Diego River Fire Hazard Mitigation Plan located near State Routes 52 (SR-52) and 67 (SR-67). The mission of Caltrans is to provide a safe and reliable transportation network that serves all people and respects the environment. The Local Development Review (LDR) Program reviews land use projects and plans to ensure consistency with our mission and state planning priorities.

Safety is one of Caltrans' strategic goals. Caltrans strives to make the year 2050 the first year without a single death or serious injury on California's roads. We are striving for more equitable outcomes for the transportation network's diverse users. To achieve these ambitious goals, we will pursue meaningful collaboration with our partners. We encourage the implementation of new technologies, innovations, and best practices that will enhance the safety on the transportation network. These pursuits are both ambitious and urgent, and their accomplishment involves a focused departure from the status quo as we continue to institutionalize safety in all our work.

Caltrans is committed to prioritizing projects that are equitable and provide meaningful benefits to historically underserved communities, to ultimately improve transportation accessibility and quality of life for people in the communities we serve.

We look forward to working with the City of Santee in areas where the City and Caltrans have joint jurisdiction to improve the transportation network and connections between various modes of travel, with the goal of improving the experience of those who use the transportation system.

Caltrans has the following comments:

Hauling
The California Department of Transportation (Caltrans) has discretionary authority with respect to highways under its jurisdiction and may, upon application and if good cause appears, issue a special permit to operate or move a vehicle or combination of vehicles or special mobile equipment of a size or weight of vehicle or load exceeding the maximum limitations specified in the California Vehicle Code. The Caltrans Transportation Permits Issuance Branch is responsible for the issuance of these special transportation permits for oversize/overweight vehicles on the State Highway network. Additional information is provided online at: https://dot.ca.gov/programs/traffic-operations/transportation-permits.

Environmental
Caltrans welcomes the opportunity to be a Responsible Agency under the California Environmental Quality Act (CEQA), as we have some discretionary authority of a portion of the project that is in Caltrans' R/W through the form of an encroachment permit process. We look forward to the coordination of our efforts to ensure that Caltrans can adopt the alternative and/or mitigation measure for our R/W. We would appreciate meeting with you to discuss the elements of the Environmental Document that Caltrans will use for our subsequent environmental compliance.

An encroachment permit will be required for any work within the Caltrans' R/W prior to construction. As part of the encroachment permit process, the applicant must provide approved final environmental documents for this project, corresponding technical studies, and necessary regulatory and resource agency permits. Specifically, CEQA determination or exemption. The supporting documents must address all environmental impacts within the Caltrans' R/W and address any impacts from avoidance and/or mitigation measures.

We recommend that this project specifically identifies and assesses potential impacts caused by the project or impacts from mitigation efforts that occur within Caltrans' R/W that includes impacts to the natural environment, infrastructure including but not limited to highways, roadways, structures, intelligent transportation systems elements, on-ramps and off-ramps, and appurtenant features including but not limited to fencing, lighting, signage, drainage, guardrail, slopes and landscaping. Caltrans is interested in any additional mitigation measures identified for the project's Final Environmental Document.

Sustainability
The City of Santee Climate Action Plan (CAP) contains several actions and strategies that align with Caltrans' responsibilities and priorities. Caltrans recommends collaboration between our agency and the City of Santee on the proposed transportation related topics including adaptation strategies to help improve the City's resilience to potential climate change impacts and strategies to reduce vehicle miles traveled (VMT), and off-road and on-road greenhouse gas (GHG) emissions.

The existing climate hazards discussed in this document will have an impact of the transportation system. We recommend working with Caltrans on determining the preventative

strategies the Caltrans can take to keep roadways operational and ensure their longevity against climate stressors such as increased temperatures, changes in precipitation patterns, wildfire, and flooding. Caltrans recognizes the central role that transportation planning plays in safety and ensuring that when these natural hazards do occur, citizens have a reliable evacuation route.

Right-of-Way
Per Business and Profession Code 8771, perpetuation of survey monuments by a licensed land surveyor is required, if they are being destroyed by any construction.

Any work performed within Caltrans' R/W will require discretionary review and approval by Caltrans and an encroachment permit will be required for any work within the Caltrans' R/W prior to construction.

Additional information regarding encroachment permits may be obtained by visiting the website at https://dot.ca.gov/programs/traffic-operations/ep. Projects with the following:

- require a Caltrans Encroachment Permit
- have completed the Caltrans Local Development Review (LDR) process
- have an approved environmental document

need to have documents submitted for Quality Management Assessment Process (QMAP) process via email to D11.QMAP.Permits@dot.ca.gov. Early coordination with Caltrans is strongly advised for all encroachment permits.

If you have any questions or concerns, please contact Mark McCumsey, LDR Coordinator, at (619) 985-4957 or by e-mail sent to Mark.McCumsey@dot.ca.gov.

Sincerely,

Kimberly D. Dodson

KIMBERLY D. DODSON, GISP
Branch Chief
Local Development Review

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STATE OF CALIFORNIA
DEPARTMENT OF FISH AND WILDLIFE

GAVIN NEWSOM, Governor
MEGHAN HERTEL, Director

South Coast Region
3883 Ruffin Road
San Diego, CA 92123
wildlife.ca.gov

Via Electronic Mail Only

March 11, 2026

Harley Wallace
Santee Fire Department Administration
City of Santee
10601 Magnolia Avenue
Santee, CA 92071
HWallace@CityofSanteeCa.gov

Subject: Notice of Preparation of a Draft Environmental Impact Report for the San Diego River Fire Hazard Mitigation Plan Project, SCH No. 2026020351, San Diego County, CA

Dear Harley Wallace:

The California Department of Fish and Wildlife (CDFW) reviewed the Notice of Preparation (NOP) of a Draft Environmental Impact Report (DEIR) from the City of Santee (City) for the San Diego River Fire Hazard Mitigation Plan (FHMP, or Project) pursuant to the California Environmental Quality Act (CEQA) and CEQA Guidelines[1].

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

CDFW ROLE

CDFW is California's Trustee Agency for fish and wildlife resources and holds those resources in trust by statute for all the people of the State (Fish & G. Code, §§ 711.7, subd. (a) & 1802; Pub. Resources Code, § 21070; CEQA Guidelines § 15386, subd. (a)). CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and

[1] CEQA is codified in the California Public Resources Code in section 21000 et seq. The "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with section 15000.

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management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species (Fish & G. Code, § 1802). Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect fish and wildlife resources.

CDFW may also act as a Responsible Agency under CEQA (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381). CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code. As proposed, for example, the Project may be subject to CDFW's lake and streambed alteration regulatory authority (Fish & G. Code, § 1600 et seq.). Likewise, to the extent implementation of the Project as proposed may result in "take" as defined by State law[2] of any species protected under the California Endangered Species Act (CESA; Fish & G. Code, § 2050 et seq.) or the Native Plant Protection Act (NPPA; Fish & G. Code, § 1900 et seq.), the Project proponent may seek related take authorization as provided by the Fish and Game Code.

CDFW also administers the Natural Community Conservation Planning (NCCP) Program, a California regional habitat conservation planning program (Fish & G. Code, § 2800 et seq.). The City is in the process of developing an NCCP/HCP under the Multiple Species Conservation Program (MSCP) Subregional Plan. A draft MSCP Subarea Plan was circulated for public review in late summer 2025 and CDFW provided comments on the DEIR jointly with the U.S. Fish and Wildlife Service in a letter dated September 22, 2025 (SCH No. 2023030471); however, the MSCP Subarea Plan has not yet been adopted by the City and both state and federal take authorizations have not been issued to the City.

PROJECT DESCRIPTION SUMMARY

Proponent: City of Santee, Santee Fire Department Administration

Objective: The objective of the Project is to reduce wildfire risk around critical public infrastructure, adjacent residential neighborhoods, and biologically sensitive habitats within the San Diego River corridor through the removal of non-native and invasive plant species. As part of the Project, a Fuels Treatment Plan (FTP) will be developed that includes treatment strategies specific to wildfire exposure, access conditions, existing vegetation, and proximity to sensitive resources. The FTP will also incorporate

[2] "Take" is defined in Section 86 of the Fish and Game Code as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill."

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best management practices to avoid or minimize impacts to natural resources within the project site.

Location: The nearly 300-acre project site encompasses 32 parcels within the San Diego River corridor where it runs through the center of the City. The project site is bound by the unincorporated community of Lakeside in the east and the confluence of the San Diego River with Forester Creek in the west.

Biological Setting: The Project site includes a roughly 3.5-mile stretch of the San Diego River bound by City park recreation facilities and residential and commercial development to the north and south. Natural vegetation communities within the project area include riparian forest and woodland, freshwater marsh, open water, and smaller areas of coastal sage scrub, grassland, and unvegetated channel.

These natural vegetation communities support a variety of sensitive plant and wildlife species. A search of the California Natural Diversity Database (CNDDB; La Mesa and El Cajon U.S.G.S. 7.5 min. quads) returned observation data for 86 special status species. Sensitive species known to occur within or in proximity to the site include[3]:

Plants:

- San Diego ambrosia (*Ambrosia pumila*; ESA-endangered, CRPR 1B.1)
- smooth tarplant (*Centromadia pungens* ssp. *laevis*; CRPR 1B.1)

Invertebrates:

- Crotch's bumble bee (*Bombus crotchii*; CESA candidate endangered)
- Quino checkerspot butterfly (*Euphydyras editha quino*; ESA-endangered)
- Hermes copper butterfly (*Lycaena hermes*; ESA-threatened)

Amphibians/Reptiles:

- western spadefoot (*Spea hammondii*; ESA proposed threatened, SSC, proposed for CESA listing)
- California glossy snake (*Arizona elegans occidentalis*; SSC)

Birds:

- least Bell's vireo (*Vireo bellii pusillus*; ESA-endangered, CESA-endangered)

[3] Nomenclature and species status follows the CNDDB Special Animals List (CDFW, January 2026) and Special Vascular Plants, Bryophytes, and Lichens List (CDFW, January 2026). ESA = Federal Endangered Species Act, CESA = California Endangered Species Act, SSC = state Species of Special Concern, CRPR = California Rare Plant Rank

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Birds (cont.):

- coastal California gnatcatcher (*Polioptila californica californica*; ESA-threatened, SSC)

Mammals:

- big free-tailed bat (*Nyctinomops macrotis*; SSC)
- pallid bat (*Antrozous pallidus*; SSC)

The riparian corridor also provides a critical linkage for wildlife movement between open space to the east and west of the City's boundaries.

COMMENTS AND RECOMMENDATIONS

CDFW offers the following comments and recommendations to assist the City in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts to fish and wildlife (biological) resources.

Specific Comments

1) Lake and Streambed Alteration. As described in the NOP, the Project proposes activities within and adjacent to the San Diego River. CDFW has regulatory authority over activities in streams that will divert or obstruct the natural flow of water, or change the bed, channel, or bank (which may include associated riparian resources) of any river, stream, or lake or use material from a river, stream, or lake. For any such activities, the Project applicant (or "entity") must provide written notification to CDFW pursuant to section 1600 et seq. of the Fish and Game Code. Based on this notification and other information, CDFW determines whether a Lake and Streambed Alteration Agreement (LSAA) with the applicant is required prior to conducting the proposed activities. CDFW's issuance of a LSAA for a project that is subject to CEQA will require CEQA compliance actions by CDFW as a Responsible Agency. CDFW recommends that the City assess whether notification is appropriate. A Notification package for a LSAA may be obtained by accessing CDFW's Lake and Streambed Alteration Program website[4].

2) Potential Impacts to Listed Species. CDFW considers adverse impacts to a species protected by CESA to be significant. Take of any endangered, threatened, candidate species, or NPPA-listed plant species that results from the Project is prohibited, except as authorized by state law (Fish & G. Code §§ 2080, 2085; Cal. Code Regs., tit. 14, §786.9). CESA-listed species with potential to occur within the project site include least Bell's vireo and CESA candidate species Crotch's bumble

[4] http://www.wildlife.ca.gov/Conservation/LSA

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bee. Consequently, if the Project or any Project-related activity will result in take of a species designated as endangered or threatened, or a candidate for listing under CESA, CDFW recommends that the Project proponent seek appropriate take authorization prior to implementing the Project.

CDFW is aware that the City may pursue take coverage for the Project under the MSCP Subarea Plan currently in draft. However, should the Project proceed before the MSCP Subarea Plan has been finalized and approved by the City, and an NCCP Permit issued by CDFW, other take authorizations should be considered. Appropriate authorization from CDFW may include an Incidental Take Permit (ITP) or a consistency determination in certain circumstances, among other options (Fish & G. Code, §§ 2080.1, 2081, subds. (b) and (c)). Per Figure 1 of the NOP, it appears that a portion of the Project site at the far western end extends into an area that is proposed as 'Not a Part' of the MSCP Subarea Plan. If accurate, that area would not be covered for incidental take under the MSCP Subarea Plan and, if determined necessary, would require separate take authorization. Early consultation is encouraged, as significant modification to a Project and mitigation measures may be required to obtain a CESA Permit. To ensure CDFW will be able to use the City's CEQA document for the issuance of an ITP, the DEIR should address all Project impacts to CESA-listed and CESA candidate species and specify a mitigation, monitoring, and reporting program that will meet the requirements of an ITP.

3) Plant Species to Target for Removal. As described in the NOP, the Project proposes to lower wildfire risk within the San Diego River corridor through targeted removal of non-native and invasive plant species. CDFW recommends targeting non-native, invasive species listed as '*Moderate, High, Limited, and Watch*' by the California Invasive Plant Council[5].

4) Compliance with Current Land Protections. The Project site encompasses several parcels identified as existing protected open space, preserves, prior mitigation sites, and/or otherwise conserved for natural resource purposes. Several but not all the protected properties within or adjacent to the Project site have recorded Conservation Easements (i.e., Mast Park West, Lowe's Mitigation Preserve, and the Smooth Tarplant Preserve). Others have Conservation Easements in progress (Mast Park Preserve), are protected by Restrictive Covenants (Walker Preserve) and City ordinance (Mast Park East) or provide mitigation for previous projects (Caltrans Forester Creek Mitigation Site). Some also have associated habitat management plans. The DEIR should disclose any approvals required to conduct Project activities within the protected lands and include an analysis of whether the proposed Project

[5] https://www.cal-ipc.org/plants/inventory/

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activities are consistent with the various protection mechanisms and/or management plans for these properties, as well as the conservation strategy of the MSCP Subarea Plan; and if not, how any inconsistencies would be addressed.

General Comments

5) Disclosure. The DEIR should provide an adequate, complete, and detailed disclosure about the effects which a proposed project is likely to have on the environment (Pub. Resources Code, § 20161; CEQA Guidelines, § 15151). Such disclosure is necessary so CDFW may provide comments on the adequacy of proposed avoidance, minimization, or mitigation measures, as well as assess the significance of the specific impact relative to plant and wildlife species impacted (e.g., current range, distribution, population trends, and connectivity).

6) Project Description and Alternatives. To enable adequate review and comment on the proposed Project from the standpoint of the protection of fish, wildlife, and plants, CDFW recommends the following information be included in the DEIR.

   a. A complete discussion of the purpose and need for, and description of the proposed Project.

   b. A range of feasible alternatives to the Project location to avoid or otherwise minimize direct and indirect impacts to sensitive biological resources and wildlife movement areas. CDFW recommends the City select Project designs and alternatives that would avoid or otherwise minimize direct and indirect impacts to biological resources. CDFW also recommends the City to consider establishing appropriate setbacks from sensitive and special status biological resources. Setbacks should not be impacted by ground disturbance or hydrological changes from any future Project-related construction, activities, maintenance, and development.

   c. Project alternatives should be thoroughly evaluated, even if an alternative would impede, to some degree, the attainment of the Project objectives or would be more costly (CEQA Guidelines, § 15126.6). The DEIR shall include sufficient information about each alternative to allow meaningful evaluation, public participation, analysis, and comparison with the proposed Project (CEQA Guidelines, § 15126.6).

   d. Where the Project may impact aquatic and riparian resources, CDFW recommends the City select Project designs and alternatives that would fully avoid impacts to such resources. CDFW also recommends an alternative that would not impede, alter, or otherwise modify existing surface flow, watercourse and meander, and water-dependent ecosystems and natural communities.

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Any modifications to a river, creek, or stream may cause or magnify upstream bank erosion, channel incision, and drop in water level, which may cause the watercourse to alter its course of flow.

7) Biological Baseline Assessment. An adequate biological resources assessment should provide a complete assessment and impact analysis of the flora and fauna within and adjacent to the Project site and where the Project may result in ground disturbance. The assessment and analysis should place emphasis on identifying endangered, threatened, rare, and sensitive species; regionally and locally unique species; and sensitive habitats. An impact analysis will aid in determining the Project's potential direct, indirect, and cumulative biological impacts, as well as specific mitigation or avoidance measures necessary to offset those impacts. CDFW also considers impacts to Species of Special Concern (SSC) a significant direct and cumulative adverse effect without implementing appropriate avoidance and/or mitigation measures. The DEIR should include the following information.

   a. Information on the regional setting that is critical to an assessment of environmental impacts, with special emphasis on natural resources that are rare or unique to the region (CEQA Guidelines, § 15125(c)). The DEIR should include measures to fully avoid and otherwise protect Sensitive Natural Communities. CDFW considers Sensitive Natural Communities as threatened habitats having both regional and local significance. Natural communities, alliances, and associations with a State-wide rarity ranking of S1, S2, and S3 should be considered sensitive and declining at the local and regional level. These ranks can be obtained by visiting the Vegetation Classification and Mapping Program - Natural Communities webpage[6].

   b. A thorough, recent, floristic-based assessment of special status plants and natural communities following CDFW's *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities*[7]. Botanical field surveys should be comprehensive over the entire Project site, including areas that will be directly or indirectly impacted by the Project. Adjoining properties should also be surveyed where direct or indirect Project effects could occur, such as those from fuel modification, herbicide application, invasive species, and altered hydrology. Botanical field surveys should be conducted in the field at the times of year when plants will be both evident and identifiable. Usually, this is during flowering or fruiting. Botanical field survey visits should be spaced throughout the growing season to accurately determine what plants exist in the Project site. This usually involves multiple visits

[6] https://wildlife.ca.gov/Data/VegCAMP/Natural-Communities
[7] https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18959&inline

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to the Project site (e.g., in early, mid, and late season) to capture the floristic diversity at a level necessary to determine if special status plants are present.

c. Floristic alliance- and/or association-based mapping and vegetation impact assessments conducted in the Project site and within adjacent areas. The Manual of California Vegetation[8], second edition, (Sawyer, Keeler-Wolf, & Evens, 2009) should also be used to inform this mapping and assessment. Adjoining habitat areas should be included in this assessment where the Project's construction and activities could lead to direct or indirect impacts off-site.

d. A complete and recent assessment of the biological resources associated with each habitat type in the Project site and within adjacent areas. A full literature review includes but is not limited to CDFW's California Natural Diversity Database[9] (CNDDB). The CNDDB should be accessed to obtain current information on any previously reported sensitive species and habitat. An assessment should include a minimum nine-quadrangle search of the CNDDB to determine a list of species potentially present in the Project site. A nine-quadrangle search should be provided in the Project's CEQA document for adequate disclosure of the Project's potential impact on biological resources.

e. A complete, recent, assessment of endangered, rare, or threatened species and other sensitive species within the Project site and adjacent areas, including SSC and California Fully Protected Species (Fish & G. Code, §§ 3511, 4700, 5050, and 5515). Species to be addressed should include all those which meet the CEQA definition of endangered, rare, or threatened species (CEQA Guidelines, § 15380). Seasonal variations in use of the Project site should also be addressed such as wintering, roosting, nesting, and foraging habitat. Focused species-specific surveys, conducted at the appropriate time of year and time of day when the sensitive species are active or otherwise identifiable, may be required if suitable habitat is present. See CDFW's Survey and Monitoring Protocols and Guidelines[10] for established survey protocol. Acceptable species-specific survey procedures may be developed in consultation with CDFW and U.S. Fish and Wildlife Service.

f. A recent wildlife and rare plant survey. A lack of records in the CNDDB does not mean that rare, threatened, or endangered plants and wildlife do not occur. Field verification for the presence or absence of sensitive species is necessary to provide a complete biological assessment for adequate CEQA review (CEQA Guidelines, § 15003(i)). CDFW generally considers biological field assessments for

[8] https://vegetation.cnps.org/
[9] https://wildlife.ca.gov/Data/CNDDB
[10] https://wildlife.ca.gov/conservation/survey-protocols

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wildlife to be valid for a one-year period, and assessments for rare plants may be considered valid for a period of up to three years. Some aspects of the proposed Project may warrant periodic updated surveys for certain sensitive taxa, particularly if Project implementation could occur over a protracted time frame or in phases.

8) Direct and Indirect Impacts to Biological Resources. The DEIR should provide a thorough discussion of direct and indirect impacts expected to affect biological resources with specific measures to offset such impacts. The DEIR should address the following.

   a. A discussion of potential impacts from lighting, noise, temporary human activity, and exotic species, and identification of any mitigation measures. A discussion regarding Project-related indirect impacts to biological resources. These include resources in nearby public lands, open space, adjacent natural habitats, riparian ecosystems, and any designated and/or proposed or existing reserve lands (e.g., preserve lands associated with a Natural Community Conservation Plan (Fish & G. Code, § 2800 et. seq.)).

   b. A discussion of both the short-term and long-term effects of the Project on species population distribution and concentration, as well as alterations of the ecosystem supporting those species impacted (CEQA Guidelines, § 15126.2(a)).

   c. Impacts to, and maintenance of, wildlife corridor/movement areas, including access to undisturbed habitats in areas adjacent to the Project, should be fully analyzed and discussed in the DEIR.

   d. A discussion of post-Project fate of drainage patterns, surface flows, and soil erosion and/or sedimentation in streams and water bodies. The discussion should also address any potential water extraction activities and the potential resulting impacts to habitat supported by the groundwater. Measures to mitigate such impacts should be included.

   e. An analysis of impacts from proposed changes to land use designations and zoning, and existing land use designation and zoning located nearby or adjacent to natural areas that may inadvertently contribute to wildlife-human interactions. A discussion of possible conflicts and mitigation measures to reduce these conflicts should be included in the DEIR.

9) Cumulative Impacts. Cumulative impacts to biological resources can result from collectively significant projects which are individually insignificant. The Project, when considered collectively with prior, concurrent, and probable future projects, may have a significant cumulative effect on biological resources. The Project may

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substantially reduce the number or restrict the range of endangered, rare, or threatened species. Species that may be impacted by the Project include, but are not limited to, the biological resources described in this letter.

Accordingly, CDFW recommends the DEIR evaluate the Project's potential cumulative impacts to biological resources. The Project may have a "significant effect on the environment" if the possible effects of the Project are individually limited but cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects (Pub. Resources Code, § 21083(b)). The City's conclusions regarding the significance of the Project's cumulative impact should be justified and supported by evidence to make those conclusions. Specifically, if the City concludes that the Project would not result in cumulative impacts to biological resources, the City, "shall identify facts and analysis supporting the Lead Agency's conclusion that the cumulative impact is less than significant" (CEQA Guidelines section § 15130(a)(2)).

10) Nesting Birds. To avoid impacts to nesting birds, CDFW recommends that clearing of vegetation occur outside of the peak avian breeding season, which generally runs from February 1 through September 1 (as early as January 1 for some raptors). If Project activities are necessary during the bird breeding season, a qualified biologist with experience in conducting bird surveys should conduct a nesting bird survey within three days prior to work in the area. If an active nest is identified, a buffer shall be established between the construction activities and the nest so that nesting activities are not interrupted. CDFW generally recommends a 100-foot buffer for common avian species, 300 feet for listed or highly sensitive birds, and 500 feet for raptors. An appropriate buffer should be determined by a qualified biologist and delineated by temporary fencing and remain in effect as long as project activities are occurring. No Project construction shall occur within any nest buffer zone until the young have fledged, are no longer being fed by the parents, have left the nest, and will no longer be impacted by Project activities. Reductions in nest buffer distances may be allowable depending on the avian species involved, ambient levels of human activity, screening vegetation, or possibly other factors.

11) Mitigation Measures. Public agencies have a duty under CEQA to prevent significant, avoidable damage to the environment by requiring changes in a project through the use of feasible alternatives or mitigation measures (CEQA Guidelines, §§ 15002(a)(3), 15021). Pursuant to CEQA Guidelines section 15126.4, an environmental document shall describe feasible measures which could mitigate impacts below a significant level under CEQA. Mitigation measures must be

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feasible, effective, implementable, and fully enforceable/imposed by the lead agency through permit conditions, agreements, or other legally binding instruments (Pub. Resources Code, § 21081.6(b); CEQA Guidelines, § 15126.4).

a. The DEIR should provide mitigation measures that are specific and detailed (i.e., responsible party, timing, specific actions, location) in order for a mitigation measure to be fully enforceable and implemented successfully via a mitigation monitoring and/or reporting program (Pub. Resources Code, § 21081.6; CEQA Guidelines, § 15097).

b. If a proposed mitigation measure would cause one or more significant effects, in addition to impacts caused by the proposed Project, the DEIR should include a discussion of the effects of proposed mitigation measures (CEQA Guidelines, § 15126.4(a)(1)). In that regard, the DEIR should provide an adequate, complete, and detailed disclosure about the Project's proposed mitigation measure(s). Adequate disclosure is necessary so CDFW may assess the potential impacts of proposed mitigation measures.

12) Compensatory Mitigation. The DEIR should include compensatory mitigation measures for the Project's significant impacts (direct and/or through habitat modification) to sensitive and special status plants, animals, and habitats. Mitigation measures should emphasize avoidance and minimization of Project-related impacts. For unavoidable impacts, on-site habitat restoration or enhancement should be discussed in detail. If on-site mitigation is not feasible or would not be biologically viable and therefore inadequate to mitigate the loss of biological functions and values, off-site mitigation through habitat creation and/or acquisition and preservation in perpetuity should be proposed. Areas proposed as mitigation lands should be protected in perpetuity with a conservation easement and financial assurance and dedicated to a qualified entity for long-term management and monitoring.

13) Long-term Management of Mitigation Lands. For proposed mitigation lands, the DEIR should include measures to protect the targeted habitat values in perpetuity. The mitigation should offset Project-induced qualitative and quantitative losses of biological resources. Issues that should be addressed include (but are not limited to) restrictions on access, proposed land dedications, monitoring and management programs, control of illegal dumping, water pollution, and increased human intrusion. An appropriate endowment should be set aside to provide for long-term management of mitigation lands.

14) Salvage, Relocation and Translocation of Plants and Animal Species. Salvage, relocation and translocation require the collection, handling, capturing or possession of wildlife and/or plants with the goal of moving or removing them from

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one location and permanently moving them to a new location. CDFW generally does not support the use of relocation or translocation as a mitigation measure for unavoidable impacts to endangered, rare, or threatened plants and animals. These efforts are often not monitored over the long-term and successful outcomes are dubious. CDFW has found that permanent preservation and management of habitat to support affected species is often a more effective long-term strategy for conserving plants and animals and their habitats.

15) Scientific Collecting Permit and Voucher Collecting Permit. A Scientific Collecting Permit would be necessary if Project activities necessitate capture and relocation of wildlife. Pursuant to the California Code of Regulations, title 14, section 650, qualified biologist(s) must obtain appropriate handling permits to capture, temporarily possess, and relocated wildlife to avoid harm or mortality in connection with Project-related activities. CDFW has the authority to issue permits for the take or possession of wildlife, including mammals; birds, nests, and eggs; reptiles, amphibians, fish, plants; and invertebrates (Fish & G. Code, §§ 1002, 1002.5, 1003). A Scientific Collecting Permit is required to monitor project impacts to wildlife resources, as required by environmental documents, permits, or other legal authorizations; and, to capture, temporarily possess, and relocate wildlife to avoid harm or mortality in connection with otherwise lawful activities (Cal. Code Regs., tit. 14, § 650). For more information, please see CDFW's Scientific Collecting Permit webpage[11].

A voucher collection permit is required to collect state-listed plant species for identification purposes during field surveys, or to collect voucher specimens to document a newly discovered or previously unvouchered occurrence of a state-listed plant. There is no charge to apply for a voucher collection permit. Anyone who collects scientific plant specimens of state-listed species, or who may encounter a state-listed species during field surveys should have a plant voucher collection permit. To apply for a Voucher Collecting Permit please see CDFW's Voucher Collecting Permit Page.

16) Use of Native Plants and Trees. If restoration is a component of the Project, CDFW recommends the DEIR include a native plant palette. The Project's revegetation plan should be disclosed and evaluated in the DEIR. CDFW supports the use of native species found in naturally occurring plant communities within or adjacent to the Project site. In addition, CDFW supports planting native species of trees, such as willows (*Salix spp*.), and understory vegetation (e.g., ground cover, vines, subshrubs, and shrubs) that create habitat and provide a food source for birds as well as high insect and pollinator value.

[11] https://wildlife.ca.gov/Licensing/Scientific-Collecting

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ENVIRONMENTAL DATA

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be used to make subsequent or supplemental environmental determinations. (Pub. Resources Code, § 21003, subd. (e).) Accordingly, please report any special status species and natural communities detected during Project surveys to the California Natural Diversity Database (CNDDB). The CNDDB website[12] provides direction regarding the types of information that should be reported and allows on-line submittal of field survey forms.

In addition, information on special status native plant populations and sensitive natural communities, should be submitted to CDFW's Vegetation Classification and Mapping Program using the Combined Rapid Assessment and Relevé Form[13].

The City should ensure data collected for the preparation of the DEIR is properly submitted.

FILING FEES

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

CONCLUSION

CDFW appreciates the opportunity to comment on the NOP to assist the City in identifying and mitigating Project impacts to biological resources. Questions regarding this letter or further coordination should be directed to Heather Schmalbach[14], Senior Environmental Scientist (Specialist).

[12] https://wildlife.ca.gov/Data/CNDDB
[13] https://wildlife.ca.gov/Data/VegCAMP/Natural-Communities/Submit
[14] Email: Heather.Schmalbach@wildlife.ca.gov, Phone: 858-775-7399

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Sincerely,

Signed by:
Glen Lubcke
AD7D070BCB66466...

Glen M. Lubcke
Environmental Program Manager
South Coast Region

ec: California Department of Fish and Wildlife
Glen M. Lubcke, Environmental Program Manager
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REFERENCES

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Appendix B
Biological Resources Letter Report

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July 24, 2026 18611

Dustin DeMatteo
City of Santee Emergency Manager
10601 Magnolia Avenue
Santee, California 92071

Subject: Biological Resources Letter Report for the San Diego River Fire Hazard Mitigation Program Project, Santee, California

Dear Dustin DeMatteo:

Dudek understands that the City of Santee must comply with the Federal Emergency Management Agency-compliant Hazard Mitigation Grant Program prior to implementing vegetation management activities within approximately 300 acres of the San Diego River channel located in the City. This biological resources letter report summarizes the methods and results of Dudek's biological reconnaissance survey and analysis of the San Diego River Fire Hazard Mitigation Program Project (Project) Site. The report also provides recommendations to avoid and minimize potential impacts on special-status species, sensitive habitats, and wetland resources.

1 Project Location and Description

1.1 Project Location

The approximately 300-acre Project Site is located within the San Diego River corridor in the City of Santee, eastern San Diego County (Figure 1, Project Location). The Project Site is mapped within the El Cajon and La Mesa, California U.S. Geological Survey (USGS) 7.5-minute topographic quadrangles (USGS 2021, 2023). The Project Site spans wildland–urban interface lands; vegetation management/treatment areas extend from Forester Creek at the western boundary to the city limit with Lakeside in the eastern boundary, encompassing Mast Park West, Mast Park Wetland Restoration Area, Mast Park East, Mission Creek, Walker Trails Open Space, and Walker Preserve.

The Project Site is accessible via North Magnolia Avenue from the west as well as Lakeside Sports Park from the east and is approximately 0.1 miles to 1 mile north of State Route 52 (Figure 1). The Project Site consists of a portion of the San Diego River corridor. Multiple pedestrian access paths, residential and commercial developments border the Project Site. The Project Site occurs within the boundaries of the Multiple Species Conservation Program (MSCP; MSCP Plan) (City of San Diego 1998) and the City of Santee Draft MSCP Subarea Plan (City of Santee 2025). Figure 2, MSCP Lands, depicts the spatial distribution of the Project Site within the City of Santee MSCP Subarea Plan.

1.2 Project Purpose and Description

1.2.1 Project Purpose

The Santee Fire Department responded to 174 fires near the Project Site in 2024 and 2025, 81 of which were located at the Project Site, underscoring the need for proactive fuel reduction to reduce the risk of fire from flammable vegetation. The City of Santee, as lead agency, proposes implementation of the Project within the San Diego River corridor segment within Santee's jurisdiction. The Project is funded by the Federal Emergency Management Agency through Hazard Mitigation Grant Program 4610-917-009, with matching funds from the San Diego River Conservancy under Grant Agreement SDRG-B21-17.

The primary objective of the Project is to reduce wildfire risk by decreasing hazardous fuel loads (flammable vegetation) and mitigating conditions that increase risk of wildfire and fire intensity should a wildfire occur within the Project Site. The Project shall incorporate the City of Santee's San Diego River Fire Hazard Mitigation Program: Fuels Treatment Plan (City of Santee 2026; FTP) developed to reduce wildfire risk in and around high-priority sites along the San Diego River corridor. The FTP (City of Santee 2026) is designed to balance fire risk reduction with environmental stewardship. It emphasizes selective vegetation modification techniques that support defensible space and risk reduction while preserving ecological function, minimizing soil disturbance, and protecting sensitive resources. The plan framework supports applicable California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) requirements and would inform the implementation activities.

1.2.2 Project Description

The fuel treatment goals for the Project would be achieved by reducing the overall volume of vegetation as well as disrupting the horizontal and vertical continuity of fuels across the treated area. Treatments would be focused on defensible space areas proximate to adjacent structures and on the removal of non-native and invasive species occurring within the river corridor, which in their abundance, pose a significant wildfire hazard. Sensitive environmental zones, including wetlands, riparian habitats, and parcels adjacent to developed structures within the City's jurisdiction, would be considered during Project implementation.

Vegetation management/fuel reduction activities would include thinning brush, removing non-native invasive species, and clearing dead vegetation and debris across the wildland–urban interface, where the San Diego River corridor meets adjacent development. Treatments may employ hand labor (hand cutting tools, chainsaws), mechanical (masticators, chippers), and targeted herbicide applications using only EPA-approved herbicides, (applied to cut stumps of sprouting species) to address invasive species that elevate fire severity and threaten adjacent development and infrastructure.

Figure 3, Project Components, details the vegetation treatment zones within the Project Site. Three vegetation treatment zones have been identified to clarify the spatial application of prescriptions appropriate for each zone. They are based on the type and condition of the flammable vegetation present, terrain, land use, and the presence of protected resources or habitat within the treatment area, as detailed in the FTP (City of Santee 2026). Specific fuel reduction activities within Zone 1 (sections of the Project Site that are 0 to 50 feet from adjacent structures) would include removal or treatment of all fine fuels, dead vegetation, leaf litter, and woody debris and shrubs will be thinned to reduce horizontal continuity to a residual surface cover of approximately 30%. Sections of the Project

Site within Zone 2 (between 50 and 100 feet from adjacent structures) would include treating or removing all non-native and dead vegetation, including invasive species and shrubs or trees with extensive dead or desiccated material, and shrubs will be thinned to reduce horizontal continuity to a residual surface coverage of approximately 50%. Zone 3 encompasses the broader vegetated areas of the San Diego River corridor outside Zones 1 and 2, including most riparian zones, floodplain terraces, and open space areas such as portions of Mast Park and Walker Preserve. Treatments in Zone 3 focus on reducing hazardous vegetation while preserving riparian canopy, hydrologic function, and recreational access. Vegetation management in Zone 3 is focused on treatment or removal of non-native species, dead vegetation, and debris, including accumulations deposited during storm events. Removal and other treatment of live and healthy native species is not anticipated within Zone 3.

In addition to the removal of dead and invasive plants, thinning of native plants is proposed in the defensible space areas (Zones 1 and 2), live and healthy native species may be treated as allowed through additional permitting only. All trimming activities of native plants would be done to industry standards (International Society of Arboriculture [ISA], American National Standards Institute [ANSI]) to minimize likelihood of plant death. Only dead and invasive plants would be treated or removed in the remaining portions of the Project Site (Zone 3). Individual dead trees and invasive plants would be 100% removed throughout Zones 1, 2, and 3 encompassing the Project Site. The FTP (City of Santee 2026) details the specific fuel treatment methods, recommended vegetation removal methods, and best management practices to implement during Project activities.

The Project will also include ongoing maintenance of the Project Site to ensure that initial vegetation treatments continue to reduce wildfire hazard over time. Maintenance activities are intended to: (1) prevent the re-accumulation of hazardous fuels, (2) sustain desired vegetation structure and species composition, (3) protect initial treatment investments, and (4) improve firefighter access and suppression effectiveness during wildfire events. Maintenance intervals will vary depending on vegetation type, treatment zone, and treatment technique. The Project Site will be inspected biannually by the City to determine maintenance needs. It is expected that maintenance within Zones 1 and 2 will occur at least once annually. Maintenance within Zone 3 will be determined during biannual inspections and will be based on the establishment (or re-establishment) or non-native plant species, vegetation mortality (dead plant material presence), and accumulation or deposition of combustible debris (including dead and dying non-native and native vegetation). The frequency of maintenance activities in Zone 3 will be dependent on observations made during biannual inspections. It is expected that approximately one-quarter of the total Project Site will be maintained annually to preserve reduced hazardous fuel conditions. Maintenance will use the techniques outlined in the FTP (i.e., hand labor, mechanical, and chemical; City of Santee 2026).

Any trimming of native vegetation shall occur only following acquisition of required permits. Depending on the timing of permitting, it may be necessary to phase implementation of the FTP (City of Santee 2026), with initial treatment focused on non-native species and dead or dying vegetation in Zones 1 to 3, followed by permitted native vegetation treatments in Zone 1 and Zone 2, as necessary, to achieve the intended fire protection objectives. If necessary to phase implementation, non-native regrowth or newly dead vegetation treated during the initial phase may also require follow-up treatment. In an effort to balance fire risk reduction with habitat value, removal of native vegetation is not recommended within Zone 3. Accordingly, permits associated with native vegetation removal are not anticipated for this zone. Native vegetation thinning activities associated with Zones 1 and 2 would require permits from the wildlife and aquatic resource agencies. All vegetation removal activities shall comply with the requirements of any applicable aquatic resource permits (California Department of Fish and Wildlife [CDFW] Lake and Streambed Alteration Agreements, Section 401 of the Clean Water Act for a Regional Water Quality Control Board [RWQCB] Water Quality Certification, and Section 404 of the Clean Water

Act for a U.S. Army Corps of Engineers [USACE] permit) as well as any required incidental take permits through Section 7 and/or 10 of the Federal Endangered Species Act administered by the U.S. Fish and Wildlife Service (USFWS) and Section 2081 of the California Fish and Game Code administered through CDFW. These authorizations include specific conditions related to vegetation removal and protection of riparian and aquatic resources. Vegetation removal activities near channels must avoid unauthorized deposition of material, prevent the spread of invasive propagules to waterways, and maintain consistency with all permit conditions.

2 Methodology

Dudek conducted a literature review of pertinent biological data and a biological reconnaissance field survey to determine the existing biotic and abiotic conditions, and the potential presence of sensitive biological resources within the Project Site.

2.1 Literature Review

Prior to conducting the biological reconnaissance field survey, the CDFW California Natural Diversity Database (CNDDB) (CDFW 2025a) and California Native Plant Society (CNPS 2025) inventories were queried based on the USGS 7.5-minute topographic quadrangle maps for La Mesa and El Cajon, California (USGS 2023, 2021). The purpose of the literature review was to determine whether special-status plant and wildlife species are known to occur in the vicinity of or within the Project Site.

Other literature reviewed included the California Natural Community List (CDFW 2025b); State and Federally Listed Endangered, Threatened, and Rare Plants of California (CDFW 2025c); State and Federally Listed Endangered and Threatened Animals of California (CDFW 2025d); the San Diego Geographic Information Source database (SanGIS 2025), the CDFW California Wildlife Habitat Relationships Life History Accounts and Range Maps (CDFW 2025e), and data gathered to support the City's Subarea Planning efforts.

The following available resources were reviewed to assess the potential for jurisdictional waters and wetlands: aerial and historic photographs (Google Earth 2025; NETR 2025); the USGS La Mesa and El Cajon 7.5-minute topographic quadrangle maps (USGS 2023 and 2021, respectively); the National Hydrography Dataset and Watershed Boundary Dataset (USGS 2025); the USFWS National Wetlands Inventory (USFWS 2025a); and the U.S. Department of Agriculture Natural Resources Conservation Service Web Soil Survey (USDA 2025a).

2.2 Biological Reconnaissance

Dudek Biologists conducted biological reconnaissance field surveys throughout November and December 2025 (Table 1). The biological reconnaissance field survey included vegetation mapping, mapping of sensitive biological resources, if present, and an evaluation of the potential for special-status species to occur. Although a formal jurisdictional aquatic resources delineation was not conducted during the biological reconnaissance, Dudek performed a preliminary assessment of wetlands on the Project Site by assessing presence of hydrophytic vegetation, riparian habitat, and existing hydrologic conditions, and mapping the extent of jurisdictional boundaries.

In addition, survey data gathered for several recent projects within the City of Santee, whose boundaries or mitigation assessments overlapped the Project Site were included (e.g., Fanita Ranch mitigation assessments,

Carlton Oaks Country Club and Resort Project, Santee Community Center, Palisade Santee Commerce Center Project, Cottonwood and Park Project, and Mast Park Bioretention Swale Project).

Table 1. Schedule of Biological Reconnaissance Surveys

Date	Hours	Biologist(s)	Weather Conditions
11/13/2025	8:15 a.m.–11:00 a.m.	Anna Touchstone, Megan Minter	70°F–77°F; 20%–0% cloud cover; 0-3 mph wind
11/18/2025	9:00 a.m.–4:00 p.m.	Erin Bergman	57°F–62°F; 80%–100% cloud cover; 2–4 mph wind
11/24/2025	10:30 a.m.–3:30 p.m.	Katelin Pedersen, Shana Carey	64°F–66°F; 50% cloud cover; 0–4 mph wind
11/25/2025	8:00 a.m.–1:30 p.m.	Katelin Pedersen, Shana Carey	62°F–85°F; 0% cloud cover; 0–4 mph wind
12/03/2025	7:45 a.m.–2:10 p.m.	Katelin Pedersen, Olivia Koziel	57°F–70°F; 10% cloud cover; 0–5 mph wind
12/04/2025	8:30 a.m.–2:15 p.m.	Katelin Pedersen, Shana Carey	53°F–70°F; 0% cloud cover; 1–8 mph wind

Notes: F = Fahrenheit; mph = miles per hour.

2.2.1 Vegetation Community and Land Cover Mapping

Vegetation communities and land cover types within the Project Site were mapped in the field using an ArcGIS mobile data collection application. Following completion of the fieldwork, all vegetation linework was finalized using ArcGIS and geographic information system coverage was created. Once in ArcGIS, the acreage of each vegetation community and land cover present within the Project Site was determined. In areas with dense vegetation or intense topography that could not be assessed via binoculars, desktop verification was conducted using aerial imagery and existing SanGIS vegetation community mapping (City of San Diego 1998).

The vegetation community and land cover mapping for the Project Site follows the Preliminary Descriptions of the Terrestrial Natural Communities of California (Holland 1986) as modified by the County and noted in Draft Vegetation Communities of San Diego County (Oberbauer et al. 2008). Some vegetation communities were added or given additional descriptions to identify unique characteristics or highly dominant species within certain communities.

2.2.2 Plants

All native and non-native plant species observed during the biological reconnaissance field surveys were identified and recorded to the extent feasible given plant phenology. The biological reconnaissance was conducted in late fall, outside the spring and summer blooming periods. Seasonal and annual species were largely absent or senescent, limiting full species richness assessment. Latin and common names for species with a California Rare Plant Rank (CRPR) follow the California Native Plant Society Online Inventory of Rare and Endangered Plants (CNPS 2025). For species without a CRPR, Latin names follow the Jepson Interchange List of Currently Accepted Names of Native and Naturalized Plants of California (Jepson Flora Project 2025), and common names follow the U.S. Department of Agriculture Natural Resources Conservation Service Plants Database (USDA 2025b).

2.2.3 Wildlife

The biological reconnaissance covered 100% of the Project Site to document wildlife detected by sight, calls, tracks, scat, or other signs. Conducted in November and December, the biological reconnaissance surveys occurred outside the breeding season, and some species may have migrated; therefore, special-status species presence was based on standard database searches.[1] Binoculars (10 × 42) aided identification of species during the biological reconnaissance. Expected wildlife use was inferred from habitat preferences and distributions as well as prior surveys. No trapping or nocturnal surveys were performed. Latin and common names of animals follow Crother (2012) for reptiles and amphibians, American Ornithologists' Society (AOS 2025) for birds, Wilson and Reeder (2005) for mammals, North American Butterfly Association (NABA 2018) for butterflies, and Moyle (2002) for fish.

2.2.4 Jurisdictional Aquatic Resources

A formal wetlands delineation was not conducted during the biological reconnaissance field survey. However, the Project Site was evaluated for the potential to support jurisdictional aquatic resources regulated under the federal Clean Water Act, California Fish and Game Code, and Porter–Cologne Water Quality Act. Any potential jurisdictional aquatic resources encountered during the biological reconnaissance field survey were mapped informally based on the presence of hydrology or hydrophytic vegetation indicators; for example, streams were mapped via aerial imagery/topographic maps and approximate dimensions of such features were recorded. The USFWS National Wetlands Inventory (NWI) and USGS National Hydrography Dataset were used as a baseline for mapping of potentially jurisdictional aquatic resources within the Project Site (USFWS 2025b; USGS 2025).

2.3 Special-Status Species Habitat Assessment

2.3.1 Special-Status Plants

Endangered, rare, or threatened plant species as defined in Section 15380(b) of the CEQA Guidelines (14 CCR 15000 et seq.) are referred to as "special-status plant species" and, as used in this report, include (1) plant species listed, proposed for listing, or candidates for listing as endangered or threatened recognized in the context of California Endangered Species Act and the federal Endangered Species Act (FESA) (CDFW 2025d); and/or (2) plant species with a CRPR 1B (plants that are rare, threatened, or endangered in California and elsewhere) or 2B (Plants rare, threatened, or endangered in California but more common elsewhere) as designated by the California Native Plant Society (CNPS 2025). CRPR list 3 (plants about which more information is needed) and 4 (plants of limited distribution) are not defined as species that are identified as a candidate, sensitive, or special-status species and are not discussed in this report. Plant species covered under the City of Santee Draft MSCP Subarea Plan (City of Santee 2025) are also considered special-status.

[1] Although surveys were conducted outside the typical breeding season for most wildlife species, this document analyses all special-status species with moderate or high potential to occur whose geographic ranges fall within the general vicinity based on standard database searches. These databases (i.e., CNDDB and USFWS occurring in the nine U.S. Geological Survey 7.5-minute quadrangles containing and surrounding the Project Site) provide survey data from other sites within the Project Site vicinity and are used to inform baseline. Special-status species' potential to occur within the study area were evaluated based on known species distribution, species-specific habitat preferences, field surveys conducted within the site, and Dudek biologists' knowledge of regional biological resources. Because there were no species-specific surveys conducted and surveys were conducted outside typically breeding periods, Dudek took a very conservative approach when determining species' potential to occur to provide an accurate evaluation of significant impacts to special-status species.

For each special-status plant species listed, a determination was made regarding the potential for the species to occur within the Project Site based on site-specific information gathered during the biological reconnaissance, such as the vegetation communities and soils present, current site conditions, and each species' known range, habitat associations, preferred soil substrate, life form, elevation, and blooming period.

2.3.1.1 Protocol-Level Botanical Survey

A fall-season focused botanical survey was conducted concurrently with the biological reconnaissance surveys to map any special-status plants identified on the Project Site (Table 1). The botanical survey was conducted in November and December, outside of the spring and summer blooming periods, due to Project timing constraints. Therefore, special-status species presence was based on standard database searches.[2] Focused special-status plant surveys conformed to the California Native Plant Society Botanical Survey Guidelines (CNPS 2001); Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities (CDFW 2018); and the USFWS's General Rare Plant Survey Guidelines (Cypher 2002). All plant species encountered during the field surveys were identified to subspecies or variety, if applicable, to determine sensitivity status. For target species encountered, field personnel shall record data points demarcating the edge of the polygon and assess population numbers using the Esri ArcGIS mobile application.

2.3.2 Special-Status Wildlife

Endangered, rare, or threatened wildlife species as defined in CEQA Guidelines, Section 15380(b) (14 CCR 15000 et seq.), are referred to as "special-status wildlife species" and, as used in this report, include (1) wildlife species listed, proposed for listing, or candidates for listing as endangered or threatened recognized in the context of California Endangered Species Act and FESA Act (CDFW 2025e); (2) California Species of Special Concern as designated by CDFW (2025e); and (3) mammals and birds that are fully protected species as described in the California Fish and Game Code, Sections 4700 and 3511 (CDFW 2025g). Wildlife species covered under the City of Santee Draft MSCP Subarea Plan (City of Santee 2025) are also considered special-status.

For each special-status wildlife species listed, a determination was made regarding potential use within the Project Site based on site-specific information gathered during the biological reconnaissance, such as the location of the site, vegetation communities and soils present, current site conditions, and each species' known range, habitat preferences, and knowledge of the species' relative distributions in the area.

[2] Although surveys were conducted outside the typical blooming periods for most plant species, this document analyses all special-status species with moderate or high potential to occur whose geographic ranges fall within the general vicinity based on standard database searches. These databases (i.e., CNDDB, USFWS, and CNPS occurring in the nine U.S. Geological Survey 7.5-minute quadrangles containing and surrounding the Project Site) provide survey data from other sites within the Project Site vicinity and are used to inform baseline. Special-status species' potential to occur within the study area were evaluated based on known species distribution, species-specific habitat preferences, field surveys conducted within the site, and Dudek biologists' knowledge of regional biological resources. Because there were no species-specific surveys conducted and surveys were conducted outside typically breeding periods, Dudek took a very conservative approach when determining species' potential to occur to provide an accurate evaluation of significant impacts to special-status species.

3 Environmental Setting

The Project Site is located within an urbanized portion of the City of Santee in eastern San Diego County and encompasses upland, riparian, and wetland vegetation communities associated with the San Diego River. The western end of the site begins approximately 0.25 miles north of the intersection of State Routes 52 and 125. The immediate vicinity of the Project Site includes residential development, schools, and parks to the north, commercial development and public facilities (including Las Colinas Detention Facility) to the south, Carlton Oaks Country Club to the west, and State Route 67 to the east.

3.1 Topography

The Project Site and surrounding suburbs are generally flat, with the San Diego River running east–west through the center between wetland, riparian, and disturbed vegetation. Elevations range from approximately 310 to 360 feet above mean sea level (Google Earth 2025). Historical aerial imagery from 1953 shows the Project Site surrounded by agricultural land with little riparian or wetland aerial signature; most residential development was south of the river. By 1964, four built Santee Lakes appeared north of the western end of the site, and residential development began north of the San Diego River. Between 1968 and 1971, agriculture rapidly converted to residential and commercial uses. Increased flow and riparian vegetation became evident in aerial imagery from the late 1970s to mid-1980s, likely due to urbanization, runoff, and major flood events in early 1980. Construction of State Route 52 by 2012 added runoff, but the Project Site has remained largely unchanged for the past 30 years aside from increasing urban runoff.

3.2 Soils

According to the U.S. Department of Agriculture Natural Resources Conservation Service Web Soil Survey (USDA 2025a), 10 soil map units occur within the Project Site: Fallbrook sandy loam (2% to 5% slopes); Cieneba-Fallbrook rocky sandy loams (30% to 65% slopes), eroded; Grangeville fine sandy loam (0% to 2% slopes); Greenfield sandy loam (5% to 9% slopes); Placentia sandy loam, thick surface (2% to 9% slopes); Riverwash; Tujunga sand (0% to 5% slopes); Salinas clay loam (0% to 2% slopes); Visalia sandy loam (0% to 2% slopes); and Water (USDA 2025a). Of these, Riverwash is classified as a hydric soil in the Arid West Region (USDA 2025b). Water is a land cover type rather than a specific soil series description, so lacks a hydric soil classification. Figure 4, Soils, depicts the spatial distribution of soils on the Project Site.

4 Results

4.1 Vegetation Communities and Land Cover Types

The Project Site is characterized by a mix of natural as well as non-native vegetation communities and land cover types. A total of 19 vegetation communities (including subforms) and/or land cover types were identified in the Project Site during the biological reconnaissance surveys, consisting of 11 native vegetation communities and 8 non-native vegetation communities or land cover types. Of the 19 vegetation communities, 12 are considered wetland/riparian habitats: southern arroyo willow (*Salix lasiolepis*) riparian forest; southern cottonwood–willow

(*Populus* spp. – *Salix* spp.) riparian forest; coastal and valley freshwater marsh; southern riparian scrub; southern willow scrub; mulefat (*Baccharis salicifolia*) scrub; emergent wetland; open water; disturbed wetland; non-native riparian; tamarisk (*Tamarix* spp.) scrub; and non-vegetated channel or floodway. The vegetation communities and land cover types on the Project Site are described below, their acreages are presented in Table 1, and their spatial distributions are presented in Figure 5, Biological Resources. Representative photos of the Project Site are included in Attachment A, Site Photographs.

Several vegetation communities within the Project Site are referenced in Table 5-13 in the Draft Santee MSCP Subarea Plan (City of Santee 2025) as sensitive; impacts to these vegetation communities typically require mitigation for consistency with the provisions of the City's future MSCP Subarea Plan and Implementing Agreement, and applicable state and federal regulations. Table 2 details which vegetation communities and land cover types are considered sensitive under the Draft Santee MSCP Subarea Plan (City of Santee 2025). Of the 21 vegetation communities present in the Project Site, 15 are considered sensitive according to the Draft Santee MSCP Subarea Plan. The specific vegetation communities dominated by hydrophytic plant species that may be regulated by CDFW as riparian/wetland habitat are also detailed in Table 2.

4.1.1 Native Vegetation Communities

4.1.1.1 Southern Arroyo Willow Riparian Forest

According to Oberbauer et al. (2008), southern arroyo willow riparian forest consists of winter-deciduous riparian forests dominated by moderately tall broadleafed trees, dominated by arroyo willow, and having closed or nearly closed canopies. Understories are usually shrubby willows. Characteristic species include willows (*Salix* ssp.), mulefat, western sycamore (*Platanus racemosa*), and Fremont cottonwood (*Populus fremontii*), and Douglas's sagewort (*Artemisia douglasiana*).

Southern arroyo willow riparian forest is present throughout the Project Site along the northern and southern banks of the San Diego River (Figures 5A and 5B). Characteristic species observed include arroyo willow, red willow (*Salix laevigata*), sandbar willow (*Salix exigua*), and Douglas's sagewort within the shrub canopy. Southern arroyo willow riparian forest is a wetland community that is typically under the jurisdiction of the aquatic resource agencies and is considered sensitive under the Draft Santee MSCP Subarea Plan (City of Santee 2025).

4.1.1.2 Southern Cottonwood – Willow Riparian Forest

According to Oberbauer et al. (2008), southern cottonwood–willow riparian forest consists of tall, open, broadleafed winter-deciduous riparian forests dominated by Fremont cottonwood, black cottonwood (*Populus trichocarpa*), and several tree willows. Understories are usually shrubby willows. Characteristic species include cottonwoods (*Populus* spp.), willows, mulefat, Douglas's sagewort, and western sycamore.

Southern cottonwood–willow riparian forest is present throughout the Project Site surrounding the San Diego River (Figures 5A through 5E). Characteristic species observed include Fremont cottonwood, Goodding's willow (*Salix gooddingii*), and western sycamore. Southern cottonwood–willow riparian forest is a wetland community that is typically under the jurisdiction of the aquatic resource agencies (CDFW) and is considered sensitive under the Draft Santee MSCP Subarea Plan (City of Santee 2025).

Table 2. Vegetation Communities and Land Cover Types in the Project Site

Vegetation Community/Land Cover Type[1]	Project Site (Acres)	Sensitive (Y/N)[2]
Native Vegetation Communities		
Riparian and Bottomland Habitat		
Southern Arroyo Willow (*Salix lasiolepis*) Riparian Forest	9.00	Y
Southern Cottonwood–Willow (*Populus* spp.–*Salix* spp.) Riparian Forest	122.08	Y
Southern Riparian Scrub	1.22	Y
Southern Willow (*Salix* spp.) Scrub	17.26	Y
Mulefat (*Baccharis salicifolia*) Scrub	0.44	Y
Open Water	42.89	Y
Non-Vegetated Channel or Floodway	0.08	Y
Subtotal	*192.97*	*N/A*
Bog and Marsh		
Coastal and Valley Freshwater Marsh	29.71	Y
Emergent Wetland	3.85	Y
Subtotal	*33.56*	N/A
Woodlands		
Coast Live Oak (*Quercus agrifolia*) Woodland (Including Open Subform)	1.84	Y
Scrub and Chaparral		
Diegan Coastal Sage Scrub (Including *Baccharis*-Dominated Subform)	27.76	Y
Subtotal of Native Vegetation Communities	*256.13*	N/A
Non-Native Vegetation Communities and Land Covers		
Riparian and Bottomland Habitat		
Non-Native Riparian	0.76	Y
Disturbed Wetland	2.75	Y
Tamarisk Scrub	1.49	Y
Subtotal	*5.00*	*N/A*
Woodlands		
Non-Native Woodland	0.48	N
Eucalyptus Woodland	2.29	N
Subtotal	*2.77*	*N/A*
Grasslands		
Non-Native Grassland	1.85	Y
Disturbed or Developed Areas		
Disturbed Habitat	27.71	N
Urban/Developed	6.52	N
Subtotal	*34.23*	*N/A*
Subtotal of Non-Native Vegetation Communities/Land Covers	*43.85*	*N/A*
Grand Total	**299.93**	**N/A**

Notes: N/A = Not Applicable. Totals may not sum due to rounding.

1 According to Oberbauer et al. (2008).

2 Considered sensitive under the Draft Santee MSCP Subarea Plan (City of Santee 2025).

4.1.1.3 Coastal and Valley Freshwater Marsh

According to Oberbauer et al. (2008), coastal and valley freshwater marsh consists of freshwater marsh habitat dominated by perennial, emergent monocots up to 13 to 16 feet tall, often forming completely closed canopies. Prolonged saturation or permanently flooded areas support this vegetation community. Characteristic species include sedges (*Carex* spp., *Schoenoplectus* spp.), cattails (*Typha* spp.), and reeds (*Phragmites* spp.).

Coastal and valley freshwater marsh is present adjacent to open water throughout the Project Site (Figures 5A through 5E). Characteristic species observed include broadleaf cattail (*Typha latifolia*), southwestern spiny rush (*Juncus acutus* spp. *leopoldii*), and San Diego marsh-elder (*Iva hayesiana*). Coastal and valley freshwater marsh is a wetland community typically under the jurisdiction of the aquatic resource agencies and is considered sensitive under the Draft Santee MSCP Subarea Plan (City of Santee 2025).

4.1.1.4 Emergent Wetland

According to Oberbauer et al. (2008), emergent wetland is a generally persistent wetland type dominated by low-growing, perennial wetland species. These can be found in channels, seeps and springs, floodplains, margins of lakes and rivers, and various basins such as pools and ponds, palustrine lakes, montane meadows, and dune swales. These may be freshwater or alkali wetlands. In San Diego County, these are often in previously disturbed areas where wetlands are emerging but have not yet established a full suite of species; however, disturbance is not a necessary element of this vegetation community.

The emergent wetland occurs adjacent to open water throughout the Project Site (Figures 5A through 5E). The emergent wetland is dominated by southwestern spiny rush and San Diego marsh-elder. Emergent wetland is a wetland community typically under the jurisdiction of the aquatic resource agencies and is considered sensitive under the Draft Santee MSCP Subarea Plan (City of Santee 2025).

4.1.1.5 Southern Riparian Scrub

According to Oberbauer et al. (2008), southern riparian scrub consists of riparian zones dominated by small trees or shrubs, lacking taller riparian trees. Site factors include major river systems where flood scour occurs. Characteristic species include willows (*Salix* spp.) and broom baccharis (*Baccharis sarothroides*).

Southern riparian scrub is present along the banks of the San Diego River in the Project Site (Figures 5A through 5E). Characteristic species observed include willows, broom Baccharis, arrowweed (*Pluchea sericea*) and mulefat. Southern riparian scrub is a wetland community typically under the jurisdiction of the aquatic resource agencies and is considered sensitive under the Draft Santee MSCP Subarea Plan (City of Santee 2025).

4.1.1.6 Southern Willow Scrub

According to Oberbauer et al. (2008), southern willow scrub consists of dense, broad-leaved, winter-deciduous riparian thickets dominated by several willow species, with scattered emergent Fremont cottonwood and western sycamore. Site factors include loose, sandy or fine gravelly alluvium deposited near stream channels during flood flows. Characteristic species include willows (*Salix* spp.), western sycamore, arrowweed, and Fremont cottonwood.

Southern willow scrub is present along the banks of the San Diego River in the Project Site (Figures 5A through 5E). Characteristic species observed include willows, Fremont cottonwood, western sycamore, San Diego Sagewort (*Artemesia palmeri*), mulefat, broom Baccharis, San Diego marsh-elder, and arrowweed. As a wetland community, southern willow scrub is typically under the jurisdiction of the aquatic resource agencies and is considered sensitive under the Draft Santee MSCP Subarea Plan (City of Santee 2025).

4.1.1.7 Mulefat Scrub

According to Oberbauer et al. (2008), mulefat scrub consists of a depauperate, tall, herbaceous riparian community dominated by mulefat and maintained by frequent flooding. Site factors include intermittent stream channels with fairly coarse substrate and moderate depth to the water table. Characteristic species include mulefat and willows.

Southern riparian scrub is present along the banks of the San Diego River in the Project Site (Figures 5A through 5E). Characteristic species observed include mulefat interspersed with scattered non-native tree tobacco (*Nicotiana glauca*) and broom Baccharis. Mulefat scrub is a wetland community typically under the jurisdiction of the aquatic resource agencies and is considered sensitive under the Draft Santee MSCP Subarea Plan (City of Santee 2025).

4.1.1.8 Disturbed Wetland

According to Oberbauer et al. (2008), disturbed wetland consists of areas permanently or periodically inundated by water, which have been significantly modified by human activity. This includes portions of wetlands with obvious artificial structures such as concrete lining, barricades, riprap, piers, or gates. It is often unvegetated but may contain scattered native or non-native vegetation. Examples include lined channels, Arizona crossings, detention basins, culverts, and ditches. Characteristic species include giant reed (*Arundo donax*), tamarisk, Eucalyptus (*Eucalyptus* spp.), fan palms (*Washingtonia* spp.), pampas grass (*Cortaderia* spp.), and various other non-native wetland plants.

Disturbed wetland is present in the western portion of the Project (Figures 5A through 5E). Characteristic species included pampas grass (*Cortaderia selloana*) at approximately 40% relative cover in the herbaceous and shrub layers, interspersed with spiny rush (*Juncus acutus*) in the herbaceous layer. Disturbed wetlands are typically under the jurisdiction of the aquatic resource agencies and are considered sensitive under the Draft Santee MSCP Subarea Plan (City of Santee 2025).

4.1.1.9 Non-Vegetated Channel or Floodway

According to Oberbauer et al. (2008), non-vegetated channel or floodway consists of the sandy, gravelly, or rocky fringe of waterways or flood channels, and is unvegetated on a relatively permanent basis. Variable water limits inhibit the growth of vegetation, although some weedy species of grasses may occur along the outer edges of the wash. Vegetation may exist here but it is less than 10% total cover.

Non-vegetated channel or floodway occurs in the northwestern area of the Project Site (Figures 5A through 5E). It consists of an ephemeral swale with exposed soils and ruderal herbaceous vegetation that likely conveys stormwater flows from the adjacent roadway during rain events. Non-vegetated channel is typically considered a jurisdictional resource by the resource agencies and a sensitive community in the Draft Santee MSCP Subarea Plan (City of Santee 2025).

4.1.1.10 Open Water

According to Oberbauer et al. (2008), open water consists of year-round bodies of fresh water (extremely low salinity) in the form of lakes, streams, ponds, or rivers. This includes portions of water bodies that are usually covered by water and contain less than 10% vegetative cover.

Open water in the Project Site consists of the unvegetated portions of the main flow channel of the San Diego River (Figures 5A through 5E). As a wetland, open water is typically under the jurisdiction of the aquatic resource agencies and is considered a sensitive vegetation community in the Draft Santee MSCP Subarea Plan (City of Santee 2025).

4.1.1.11 Coast Live Oak Woodland (Including Open Coast Live Oak Woodland)

According to Oberbauer et al. (2008), coast live oak woodland consists of woodland dominated by coast live oak, an evergreen oak that reaches up to 30 to 80 feet in height. The shrub layer is poorly developed, but may include toyon (*Heteromeles arbutifolia*), laurel sumac (*Malosma laurina*), or elderberry (*Sambucus* spp.) The herb component is continuous and can include poison oak (*Toxicodendron diversilobum*) and introduced grasses such as bromes (*Bromus* spp.). Open coast live oak woodland contains a relatively sparse, open herbaceous and shrub understory.

Coast live oak woodland and open coast live oak woodland are scattered throughout, often adjacent to Southern Cottonwood–Willow Riparian Forest (Figures 5A through 5E). Characteristic species observed include coast live oak, laurel sumac, and elderberry. Oak woodland containing Engelman oak (*Quercus engelmannii*), as well as individual oaks with at least one trunk of 6 inches or more diameter breast height or multi-trunked native oaks with aggregate diameter of 10 inches or more, are considered a sensitive community in the Draft Santee Subarea Plan (City of Santee 2025). No Engelman oaks were identified on the Project Site during the biological reconnaissance surveys. However, mature coast live oak woodland and open coast live oak woodland on the Project Site likely contain oak trees that meet the size and multi-trunk criteria to be considered sensitive. As such, to be conservative, coast live oak woodland (including Open subform) is considered a sensitive vegetation community according to the Draft Santee MSCP Subarea Plan.

4.1.1.12 Coastal Sage Scrub (Including *Baccharis*-Dominated)

Diegan coastal sage scrub is a native vegetation community that, according to Oberbauer et al. (2008), is composed of various soft, low, aromatic shrubs, characteristically dominated by drought-deciduous species—such as coastal sagebrush (*Artemisia californica*), California buckwheat (*Eriogonum fasciculatum*), and sages (*Salvia* spp.)—with scattered evergreen shrubs, including lemonade berry (*Rhus integrifolia*) and laurel sumac.

Diegan coastal sage scrub (*Baccharis*-dominated) is similar to Diegan coastal sage scrub but dominated by *Baccharis* species (broom baccharis and/or coyote brush [*Baccharis pilularis*]) (Oberbauer et al. 2008). This community typically occurs on disturbed sites or those with nutrient-poor soils and is often found within other forms of Diegan coastal sage scrub and on upper terraces of river valleys. Diegan coastal sage scrub, including *Baccharis*-dominated coastal sage scrub, is considered a sensitive vegetation community in the Draft Santee MSCP Subarea Plan (City of Santee 2025).

Diegan coastal sage scrub in the Project Site is dominated by broom baccharis, California sagebrush, toyon, laurel sumac, sugar bush (*Rhus ovata*), Menzie's Goldenbush (*Isocoma menziesii*), California buckwheat, black sage (*Salvia mellifera*), and white sage (*Salvia apiana*). It occurs along the northern and southern boundaries of the Project Site in uplands (Figures 5A through 5E). Baccharis-dominated Diegan coastal sage scrub also occurs in Project Site adjacent to emergent wetlands and in uplands, dominated by broom baccharis and Menzie's goldenbush.

4.1.2 Non-Native Vegetation Communities and Land Cover Types

4.1.2.1 Non-Native Riparian

According to Oberbauer et al. (2008), non-native riparian habitat consists of densely vegetated riparian thickets dominated by non-native, invasive species that account for greater than 50% of the total vegetative cover. Characteristic species include giant reed, tamarisk, Eucalyptus, fan palms, castor bean (*Ricinus communis*), and pampas grass.

Non-native riparian habitat is present throughout the Project Site and is dominated by giant reed (*Arundo donax*) and pampas grass, with scattered castor bean (Figures 5A through 5E). Non-native riparian habitat consists of non-native invasive species; however, it could be considered a disturbed wetland vegetation type as presented in Table 5-13 of the Draft Santee MSCP Subarea Plan (City of Santee 2025). Therefore, to be conservative, it is assumed this vegetation community is considered sensitive and may be considered a jurisdictional resource by the resource agencies.

4.1.2.2 Tamarisk Scrub

According to Oberbauer et al. (2008), tamarisk scrub consists of a weedy, virtual monoculture of any of several tamarisk species, usually supplanting native vegetation following major disturbance. Site factors include sandy or gravelly braided washes or intermittent streams. Characteristic species include tamarisk species (*Tamarix chinensis, Tamarix ramosissima*).

Tamarisk scrub is present in an isolated patch within the Project Site (Figure 5C). Tamarisk scrub on the Project Site consisted of non-native invasive species; however, it could be considered a disturbed wetland vegetation type as presented in Table 5-13 of the Draft Santee MSCP Subarea Plan (City of Santee 2025). Therefore, to be conservative, it is assumed this vegetation community is considered sensitive and may be considered a jurisdictional resource by the resource agencies.

4.1.2.3 Non-Native Grassland

Non-native grassland consists of dense to sparse cover of annual grasses with flowering culms between 0.5 to 3 feet in height (Oberbauer et al. 2008). In San Diego County, the presence of wild oat (*Avena* spp.), bromes, stork's bill (*Erodium* spp.), and mustard (*Hirschfeldia* spp.) are common indicators. In some areas, depending on past disturbance and annual rainfall, annual forbs may be the dominant species; however, it is presumed that grasses will dominate.

Non-native grassland occurs in the central portion of the Project Site in uplands (Figures 5B and 5C). Dominant species are non-native wild oats and bromes, as well as mustards and artichoke thistle (*Cynara cardunculus*). Non-native grassland is considered a sensitive community in the Draft Santee MSCP Subarea Plan (City of Santee 2025).

4.1.2.4 Eucalyptus Woodland

Eucalyptus woodland, according to Oberbauer et al. (2008), includes eucalyptus species (*Eucalyptus globulus*, *E. camaldulensis*, or *E.* spp.) planted as trees, groves, and windbreaks that form thickets with minimal shrubby understory to scattered trees with a well-developed understory. In most cases however, eucalyptus trees form dense stands with closed canopies where the understory is either depauperate or absent owing to shade and the possible allelopathic (toxic) properties of the eucalyptus leaf litter. Although eucalyptus woodlands are of limited value to most native plants and animals, they frequently provide nesting and perching sites for several raptor species.

Eucalyptus woodland occurs intermittently throughout the Project Site boundary in uplands (Figures 5A through 5E). Eucalyptus trees are dominant, and the understory is mainly leaf litter. In some areas of the Project Site, eucalyptus woodland has an understory of sagebrush and broom Baccharis.

4.1.2.5 Disturbed Habitat

According to Oberbauer et al. (2008), disturbed habitat is characterized by predominantly non-native species introduced and established through human action. These areas have been physically disturbed by previous human activity and are no longer recognizable as a native or naturalized vegetation association but continue to retain a soil substrate. Typically, vegetation, if present, is nearly exclusively composed of non-native plant species such as ornamentals or ruderal exotic species that take advantage of disturbance or show signs of past or present animal usage that removes any capability of providing viable natural habitat for uses other than dispersal. Examples include areas that have been graded, repeatedly cleared for fuel management purposes, and pedestrian trails.

Disturbed habitat on the Project Site consists of dirt pedestrian hiking trails as well as an isolated, cleared and graded area with exposed soils (Figure 5A through 5E).

4.1.2.6 Urban/Developed Land

According to Oberbauer et al. 2008, urban/developed land represents areas that have been constructed upon or otherwise physically altered to an extent that native vegetation communities are not supported. This land cover type generally consists of semi-permanent structures, homes, parking lots, pavement or hardscape, and landscaped areas that require maintenance and irrigation (e.g., ornamental greenbelts). Typically, this land cover type is unvegetated or supports various ornamental plants and landscaping.

Within the Project Site, urban/developed land includes asphalt-paved public access roads (Figure 5A through 5E).

4.2 Plant Diversity

A total of 83 species of native or naturalized plants, 52 (63%) native and 31 (37%) non-native, were detected within the Project Site during the biological reconnaissance surveys. A complete list of plant species observed during the biological reconnaissance is included in Attachment B, Species Compendium. Note that the biological

reconnaissance was conducted during the fall, and many spring and summer-blooming plants may not have been detectible or identifiable yet. As such, plant diversity and abundance are likely underrepresented.

4.3 Wildlife Diversity

A total of 44 wildlife species consisting of 41 native and 3 non-native birds were detected within the Project Site during the biological reconnaissance surveys. A complete list of wildlife species observed during the biological reconnaissance is included in Attachment B. Wildlife diversity was moderate during the biological reconnaissance surveys due to the presence of multiple native riparian and upland vegetation communities. However, nocturnal species, cryptic species, and fossorial species are likely underrepresented.

4.4 Special-Status Species

4.4.1 Special-Status Plants

A total of 32 plant species meet the special-status definition in Section 2.3.1, Special-Status Plants, above and have recorded occurrences in the USGS La Mesa and El Cajon 7.5-minute quadrangles (CDFW 2025h; CNPS 2025). Each special-status plant species is assessed in Attachment C, Special-Status Plant Species with a Potential to Occur. The Project Site is not within any designated critical habitat for special-status plant species (USFWS 2025b). Of the 32 special-status plants known to occur in the region, one species was observed present within the Project Site during field surveys: San Diego marsh-elder (CRPR 2B.2). San Diego marsh-elder populations were incidentally observed on the Project Site during the biological reconnaissance surveys within freshwater marsh habitat. A total of 7 of the 32 special-status plant species were determined to have a moderate to high potential to occur in the native vegetation communities on the Project Site. A total of 9 of the 32 special-status plants were determined to have a low potential to occur due to suitable elevation ranges but limited habitat suitability or lack of recent or nearby occurrence records; 15 of the 32 special-status plants are not expected to occur on the Project Site due to lack of suitable habitat, soils, and/or elevation range requirements. The remaining special-status plant species that are not expected to occur or were determined to have a low potential to occur on the Project Site due to lack of suitable habitat, elevation range, and/or soils are included in Attachment C but not discussed further.

Although a protocol-level botanical survey was conducted concurrently with the biological reconnaissance, it was conducted outside of the spring and summer blooming periods; therefore, only one special-status species was observed during surveys: San Diego marsh-elder. Known locations of white rabbit-tobacco (*Pseudognaphalium leucocephalum*) that are present immediately outside of the Project Site boundary are shown on Figure 6C, Suitable Special-Status Plant Habitats, as well as the observed San Diego marsh-elder individuals. Figures 6A through 6E depict the habitats that can support the other special-status plant species that were determined to have a moderate to high potential to occur, as described in Table 3 below.

Table 3. Special-Status Plant Species Present or with a Moderate to High Potential to Occur on the Project Site

Scientific Name	Common Name	Status* (Federal/State/CRPR/ Santee MSCP)	Primary Habitat Associations/Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Ambrosia pumila	San Diego ambrosia	FE/None/1B.1/None	Chaparral, Coastal scrub, valley and foothill grassland, Vernal pools; alkaline (sometimes), clay (sometimes), disturbed areas (often), loam (sometimes), sandy (sometimes)/perennial rhizomatous herb/ Apr–Oct/65–1,360	Moderate potential to occur. The Project Site is within the species known elevation range; coastal scrub, non-native grassland, and suitable substrates are present. CNDDB occurrence records from 2006 overlap the Project Site (CDFW 2025a). However, this species prefers vernal pools and none were detected on the Project Site during the biological reconnaissance.
Centromadia pungens ssp. *laevis*	smooth tarplant	None/None/1B.1/ None	Chenopod scrub, meadows and seeps, playas, riparian woodland, valley and foothill grassland; alkaline/ annual herb/Apr–Sep/ 0–2,100	Moderate potential to occur. The Project Site is within the species known elevation range; riparian woodland and non-native grassland are present but the Project Site lacks alkaline soils. CNDDB occurrence records from 2008 to 2017 located 1 mile from the Project Site (CDFW 2025a).
Isocoma menziesii var. *decumbens*	decumbent goldenbush	None/None/1B.2/ None	Chaparral, coastal scrub (often disturbed areas, sandy)/perennial shrub/Apr–Nov/35–820	Moderate potential to occur. The Project Site is within the species known elevation range; coastal scrub with sandy soils and disturbed areas are present. Multiple CNDDB occurrence records from 2005 and 2019 located 2 miles from the Project Site (CDFW 2025a).
Iva hayesiana	San Diego marsh-elder	None/None/2B.2/ None	Marshes and swamps, playas/perennial herb/ Apr–Oct/0–1,640	**Present**. Observed during the biological reconnaissance surveys within the freshwater marsh habitat on the Project Site.

Table 3. Special-Status Plant Species Present or with a Moderate to High Potential to Occur on the Project Site

Scientific Name	Common Name	Status* (Federal/State/CRPR/ Santee MSCP)	Primary Habitat Associations/Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Monardella viminea	willowy monardella	FE/SE/1B.1/Covered	Chaparral, Coastal scrub, Riparian forest, Riparian scrub, Riparian woodland; Alluvial Terraces, Washes/ perennial herb/June–Aug/ 165–740	Moderate to occur. The Project Site is within the species known elevation range and suitable modeled habitat occurs within the Project Site (City of Santee 2025); however, this perennial species was not observed during field surveys and the site does not contain suitable alluvial terraces. Closest CNDDB occurrence record from 2007 is located 1 mile from the Project Site (CDFW 2025a).
Pseudognaphalium leucocephalum	white rabbit-tobacco	None/None/2B.2/ None	Chaparral, cismontane woodland, coastal scrub, riparian woodland; gravelly, sandy/perennial herb/ (July) Aug–Nov (Dec)/ 0–6,890	High potential to occur. Although not detected during the biological reconnaissance surveys, Dudek biologists have documented this species along sandy areas immediately adjacent to the San Diego River while working on other projects. The Project Site is within the species known elevation range; riparian woodland and sandy soils are present. Consortium of California Herbaria (CCH) occurrence records from 2011 are located immediately outside of the southern Project Site boundary (CCH 2025).

Table 3. Special-Status Plant Species Present or with a Moderate to High Potential to Occur on the Project Site

Scientific Name	Common Name	Status* (Federal/State/CRPR/ Santee MSCP)	Primary Habitat Associations/Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Quercus dumosa	Nuttall's scrub oak	None/None/1B.1/ None	Chaparral, closed-cone coniferous forest, coastal scrub; clay, loam, sandy/ perennial evergreen shrub/ Feb–Apr (May–Aug)/ 50–1,310	High potential to occur. The Project Site is within the species known elevation range; coastal scrub and suitable soils present; may occur within coast live oak woodland on the Project Site. CNDDB occurrence records from 2009 overlap the Project Site (CDFW 2025a).
Stylocline citroleum	oil neststraw	None/None/1B.1/ None	Chenopod scrub, coastal scrub, valley and foothill grassland; clay/annual herb/Mar–Apr/165–1,310	Moderate potential to occur. The Project Site is within the species known elevation range; coastal scrub and non-native grassland are present along with clay soils. Historic CNDDB occurrence records from 1883 are 5 miles from the Project Site and presumed extant (CDFW 2025a).

*** Status Legend:**
Federal
FE: Federally listed as endangered
CRPR: California Rare Plant Rank
1A: Plants presumed extirpated in California and either rare or extinct elsewhere
1B: Plants rare, threatened, or endangered in California and elsewhere
2A: Plants presumed extirpated in California but common elsewhere
2B: Plants rare, threatened, or endangered in California but more common elsewhere
Threat Rank
.1 Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)
.2 Moderately threatened in California (20% to 80% occurrences threatened/moderate degree and immediacy of threat)
Other Designations
MSCP: Multiple Species Conservation Program (City of Santee Draft MSCP Subarea Plan).

4.4.2 Special-Status Wildlife

A total of 41 wildlife species meet the special-status definition in Section 2.3.2, Special-Status Wildlife, above and have recorded occurrences in the USGS La Mesa and El Cajon 7.5-minute quadrangles (CDFW 2025h). These special-status wildlife with a potential to occur on the Project Site are included in Attachment D. Of the 41 special-status wildlife known to occur in the region, total of 24 species were observed or determined to have a moderate to high potential to occur based on overlapping or nearby known occurrence records, as well as suitable habitats present. The remaining 17 special-status wildlife species that are not expected to occur or were determined to have a low potential to occur due to lack of suitable habitat are included in Attachment D but not discussed in this report further.

In addition, 2 of the 41 special-status wildlife are considered present on the Project Site: yellow warbler (*Setophaga petechia*) (CDFW Species of Special Concern when nesting) and least Bell's vireo (*Vireo bellii pusillus*) (federally and state endangered). The western portion of the Project Site is within designated critical habitat for least Bell's vireo as shown on Figure 7A, Suitable Special-Status Wildlife Habitats, and there are recent occurrence records that overlap the Project Site (USFWS 2025b) (CDFW 2025a) (Attachment D). Multiple riparian woodlands, forests, scrubs, and emergent vegetation can support this species nesting and foraging on the Project Site. Dudek biologists have documented least Bell's vireo along the San Diego River in Santee for other projects. Yellow warbler is also considered present since the Project Site supports suitable nesting and foraging habitat and Dudek biologists have documented it along the San Diego River in Santee for other projects.

Furthermore, coastal sage scrub habitats on the Project Site have a moderate potential to support the coastal California gnatcatcher (*Polioptila californica californica*) as there are recent occurrence records and designated critical habitat immediately adjacent to the Project Site. Yellow warbler, least Bell's vireo, and coastal California gnatcatcher are all covered species under the City of Santee Draft MSCP Subarea Plan. These four special-status wildlife species are described in further detail herein. Table 4, Special-Status Wildlife Present, Considered Present, or with a Moderate to High Potential to Occur on the Project Site, summarizes the listing status, habitat requirements, and potential to occur determinations for the 24 special-status wildlife species. Figure 7A and 7E also depicts the suitable habitats for special-status wildlife present, considered present, or determined to have a moderate or high potential to occur on the Project Site as listed in Table 4.

Table 4. Special-Status Wildlife Present, Considered Present, or with a Moderate to High Potential to Occur on the Project Site

Scientific Name	Common Name	Status* (Federal/State/Draft Santee MSCP)	Habitat	Potential to Occur
Reptiles				
Anniella stebbinsi	southern California legless lizard	None/SSC/None	Coastal dunes, stabilized dunes, beaches, dry washes, valley–foothill, chaparral, and scrubs; pine, oak, and riparian woodlands; associated with sparse vegetation and moist sandy or loose, loamy soils	High potential to occur. Suitable habitats present (coastal scrub, wash, oak woodland, riparian woodland; moist sandy soils). CNDDB occurrence record from 2012 overlap the western portion of the Project Site (CDFW 2025a).
Arizona elegans occidentalis	California glossy snake	None/SSC/None	Arid scrub, rocky washes, grasslands, chaparral, open areas with loose soil	High potential to occur. Suitable substrate present. Historic CNDDB occurrence records from 1973 overlap the Project Site (CDFW 2025a).
Aspidoscelis hyperythrabeldingi	Belding's orange-throated whiptail	None/WL/Covered	Low-elevation coastal scrub, chaparral, and valley–foothill hardwood	High potential to occur. Suitable coastal scrub habitat and hardwood present. CNDDB occurrence records from 1999 border the northern Project Site boundary (CDFW 2025a).
Aspidoscelis tigris stejnegeri	San Diegan tiger whiptail	None/SSC/None	Hot and dry areas with sparse foliage, including chaparral, woodland, and riparian areas	High potential to occur. Riparian woodland is present. CNDDB occurrence records from 2008 are located 4 miles from the Project Site (CDFW 2025a).
Crotalus ruber	red diamond-back rattlesnake	None/SSC/None	Coastal scrub, chaparral, oak and pine woodlands, rocky grasslands, cultivated areas, and desert flats	Moderate potential to occur. Coastal scrub and oak woodland present could provide suitable habitat for this species. CNDDB occurrence record from 1998 within 1 mile of the Project Site (CDFW 2025a).

Table 4. Special-Status Wildlife Present, Considered Present, or with a Moderate to High Potential to Occur on the Project Site

Scientific Name	Common Name	Status* (Federal/State/Draft Santee MSCP)	Habitat	Potential to Occur
Phrynosoma blainvillii	Blainsville's horned lizard	None/SSC/Covered	Open areas of sandy soil in valleys, foothills, and semi-arid mountains including coastal scrub, chaparral, valley–foothill hardwood, conifer, riparian, pine–cypress, juniper, and annual grassland habitats	Moderate potential to occur. Coastal scrub, riparian woodland, and grassland with sandy soils present. Historic CNDDB occurrence records from 1937 overlap the Project Site; however, the Project Site is currently fairly isolated (CDFW 2025a).
Salvadora hexalepis virgultea	coast patch-nosed snake	FPT/SSC/None	Brushy or shrubby vegetation; requires small mammal burrows for refuge and overwintering sites	Moderate potential to occur. Suitable brushy or shrubby vegetation present. A CNDDB occurrence record from 2004 is located 4 miles from the Project Site (CDFW 2025a).
Thamnophis hammondii	two-striped gartersnake	None/SSC/None	Streams, creeks, pools, streams with rocky beds, ponds, lakes, vernal pools	High potential to occur. San Diego River on site provides suitable habitat. A CNDDB occurrence record from 1998 is within 1 mile of the Project Site (CDFW 2025a).
Birds				
Athene cunicularia (burrow sites and some wintering sites)	burrowing owl	BCC/SSC, SC/Covered	Nests and forages in grassland, open scrub, and agriculture, particularly with ground squirrel burrows	Moderate potential to occur. Coastal scrub and grassland present. The nearest CNDDB occurrence record within 1 mile of the Project Site is from 1921 and extirpated; however, there are occurrence records from 2024 located 2 miles from the Project Site (CDFW 2025a).

Table 4. Special-Status Wildlife Present, Considered Present, or with a Moderate to High Potential to Occur on the Project Site

Scientific Name	Common Name	Status* (Federal/State/Draft Santee MSCP)	Habitat	Potential to Occur
Coturnicops noveboracensis	yellow rail	BCC/SSC/None	Nesting requires wet marsh/ sedge meadows or coastal marshes with wet soil and shallow, standing water	Moderate potential to occur. Suitable nesting habitat present (freshwater marsh, shallow standing water) along San Diego River in the Project Site. CNDDB occurrence records from 1998 overlap the Project Site (CDFW 2025a).
Icteria virens (nesting)	yellow-breasted chat	None/SSC/None	Nests and forages in dense, relatively wide riparian woodlands and thickets of willows, vine tangles, and dense brush	**Considered present**. Suitable nesting and foraging habitat present; San Diego River supports relatively wide riparian thickets of willows and dense brush throughout the Project Site. CNDDB occurrence record from 1994 are located 4 miles from the Project Site (CDFW 2025a).
Polioptila californica californica	coastal California gnatcatcher	FT/SSC/Covered	Nests and forages in various sage scrub communities, often dominated by California sagebrush and buckwheat; generally avoids nesting in areas with a slope of greater than 40%; majority of nesting at less than 1,000 feet above mean sea level	**Considered present**. Coastal sage scrub is present within uplands along the north and south Project Site boundaries. There are CNDDB occurrence records from 1999 border the north Project Site boundary (CDFW 2025a). There is designated critical habitat for this species approximately 1 mile north and south of the Project Site (USFWS 2025b).
Setophaga petechia (nesting)	yellow warbler	None/SSC/None	Nests and forages in riparian and oak woodlands, montane chaparral, open ponderosa pine, and mixed-conifer habitats	**Considered present**. Suitable nesting and foraging habitat present throughout the riparian areas along the San Diego River in the Project Site. CNDDB occurrence record from 1972 located 2 miles from the Project Site (CDFW 2025a). Although not detected during the biological

Table 4. Special-Status Wildlife Present, Considered Present, or with a Moderate to High Potential to Occur on the Project Site

Scientific Name	Common Name	Status* (Federal/State/Draft Santee MSCP)	Habitat	Potential to Occur
				reconnaissance surveys, Dudek biologists have documented this species along the San Diego River within Santee while working on other projects.
Vireo bellii pusillus (nesting)	least Bell's vireo	FE/SE/Covered	Nests and forages in low, dense riparian thickets along water or along dry parts of intermittent streams; forages in riparian and adjacent shrubland late in nesting season	**Considered present**. Suitable nesting and foraging habitat present (riparian woodlands, mulefat scrub, willow scrub) along San Diego River. CNDDB occurrence records from 2012 overlap the Project Site (CDFW 2025a). The western portion of the Project Site overlaps designated critical habitat for this species (USFWS 2025b). Although not detected during the biological reconnaissance surveys, Dudek biologists have documented this species along the San Diego River within Santee while working on other projects.
Botaurus exilis (nesting)	least bittern	None/SSC/None	Nests in freshwater and brackish marshes with dense, tall growth of aquatic and semi-aquatic vegetation	Moderate potential to occur. Suitable nesting habitat present. CNDDB occurrence record from 2007 located 2 miles from the Project Site (CDFW 2025a).

Table 4. Special-Status Wildlife Present, Considered Present, or with a Moderate to High Potential to Occur on the Project Site

Scientific Name	Common Name	Status* (Federal/State/Draft Santee MSCP)	Habitat	Potential to Occur
Mammals				
Antrozous pallidus	pallid bat	None/SSC/ None	Grasslands, shrublands, woodlands, forests; most common in open, dry habitats with rocky outcrops for roosting, but also roosts in built structures and trees	Moderate potential to occur. Suitable habitat (grassland, woodlands, riparian forest) is present although the site lacks rocky outcrops for roosting; there are CNDDB occurrence records from 1951 that overlap the Project Site (CDFW 2025a).
Corynorhinus townsendii	Townsend's big-eared bat	None/SSC/ None	Mesic habitats characterized by coniferous and deciduous forests and riparian habitat, but also xeric areas; roosts in limestone caves and lava tubes, built structures, and tunnels	Moderate potential to occur. No roosting habitat present but may forage over San Diego River's riparian habitats throughout the Project Site. CNDDB occurrence record from 1991 located 5 miles from the Project Site (CDFW 2025a).
Dasypterus xanthinus	western yellow bat	None/SSC/None	Valley–foothill riparian, desert riparian, desert wash, and palm oasis habitats; below 2,000 feet above mean sea level; roosts in riparian and palms	High potential to occur. Suitable roosting habitat (riparian) present. CNDDB occurrence records from 1979 are immediately east of the Project Site (CDFW 2025a).
Eumops perotis californicus	western mastiff bat	None/SSC/None	Chaparral, coastal and desert scrub, coniferous and deciduous forest and woodland; roosts in crevices in rocky canyons and cliffs where the canyon or cliff is vertical or nearly vertical, trees, and tunnels	Moderate potential to occur. Coastal scrub and woodlands present could provide roosting habitat. CNDDB occurrence records from 2003 located 4 miles from the Project Site (CDFW 2025a).
Neotoma lepida intermedia	San Diego desert woodrat	None/SSC/None	Coastal scrub, desert scrub, chaparral, cacti, rocky areas	Moderate potential to occur in coastal scrub throughout the Project Site, although rocky areas are absent. CNDDB

Table 4. Special-Status Wildlife Present, Considered Present, or with a Moderate to High Potential to Occur on the Project Site

Scientific Name	Common Name	Status* (Federal/State/Draft Santee MSCP)	Habitat	Potential to Occur
				occurrence record from 1998 within 1 mile of the Project Site (CDFW 2025a).
Nyctinomops femorosaccus	pocketed free-tailed bat	None/SSC/None	Pinyon–juniper woodlands, desert scrub, desert succulent shrub, desert riparian, desert wash, alkali desert scrub, Joshua tree, and palm oases; roosts in high cliffs or rock outcrops with drop-offs, caverns, and buildings	Moderate potential to occur. No roosting habitat present; however, CNDDB occurrence records from 1990 overlap the Project Site and there is riparian/wash habitat along the Project Site that can be seasonally arid. Multiple CNDDB occurrence records from 1983 to 2003 located 3 to 5 miles from the Project Site (CDFW 2025a).
Nyctinomops macrotis	Big free-tailed bat	None/SSC/None	Rocky areas; roosts in caves, holes in trees, buildings, and crevices on cliffs and rocky outcrops; forages over water	High potential to occur. May forage over San Diego River in the Project Site. Not expected to roost as no suitable roosting habitat present. CNDDB occurrence records from 1989 overlap the Project Site (CDFW 2025a).
Lasiurus frantzii	western red bat	None/SSC/None	Forest, woodland, riparian, mesquite bosque, and orchards, including fig, apricot, peach, pear, almond, walnut, and orange; roosts in tree canopy	Moderate potential to occur. Suitable roosting habitat present (riparian forest and woodland). A CNDDB occurrence record from 2003 is located 4 miles from the Project Site (CDFW 2025a).
Invertebrates				
Bombus crotchii	Crotch's bumble bee	None/SCE/ Covered	Open grassland and scrub communities supporting suitable floral resources	Moderate potential to occur. Suitable habitat present along with floral resources for foraging. Nearest CNDDB occurrence record is 2 miles from the Project Site, from 2020 (CDFW 2025a).

*** Status Abbreviations:**
Federal
FE: Federally listed as endangered
FT: Federally listed as threatened
FPT: Federally proposed for listing as threatened
BCC: U.S. Fish and Wildlife Service Bird of Conservation Concern
State
SSC: California Species of Special Concern
WL: California Watch List Species
SE: State listed as endangered
SC: State candidate for listing as threatened or endangered
SCE: State candidate for listing as endangered
Other Designations
MSCP: Multiple Species Conservation Program (City of Santee Draft MSCP Subarea Plan).

Yellow-Breasted Chat

Yellow-breasted chat (*Icteria virens*) is a CDFW Species of Special Concern when nesting. It nests and forages in dense, relatively wide riparian woodlands and thickets of willows, vine tangles, and dense brush. Yellow warblers breed from early May into early August. In Southern California, it nests in riparian thickets of willow and other brushy thickets associated with watercourses. Yellow-breasted chat is not a City of Santee Draft MSCP Subarea Plan Covered Species (City of Santee 2025).

Suitable nesting and foraging habitat is present throughout the riparian areas along the San Diego River in the Project Site, and historic CNDDB occurrence records from 1994 are located 4 miles from the Project Site (CDFW 2025a). Although not detected during the biological reconnaissance surveys, Dudek biologists have documented this species along the San Diego River within Santee while working on other projects and those locations are shown on Figures 7A, 7D, and 7E. As such, it is considered present in riparian vegetation communities on the Project Site.

Yellow Warbler

Yellow warbler is a CDFW Species of Special Concern when nesting. It nests and forages in riparian and oak woodlands, montane chaparral, open ponderosa pine, and mixed-conifer habitats. Yellow warblers breed from April into early August. In Southern California, it nests in lowland and foothill riparian woodlands dominated by cottonwoods, alders (*Alnus* spp.), or willows, and other small trees and shrubs typical of low, open canopy riparian woodland (Garrett and Dunn 1981). Yellow warbler is not a City of Santee Draft MSCP Subarea Plan Covered Species (City of Santee 2025).

Suitable nesting and foraging habitat is present throughout the riparian areas along the San Diego River in the Project Site, and historic CNDDB occurrence records from 1972 are located 2 miles from the Project Site (CDFW 2025a). Although not detected during the biological reconnaissance surveys, Dudek biologists have documented this species along the San Diego River within Santee while working on other projects and those locations are shown on Figures 7A, 7C, and 7D. As such, it is considered present in riparian vegetation communities on the Project Site.

Least Bell's Vireo

This federal and state- endangered subspecies of the Bell's vireo winters in the southern end of the Baja California peninsula, Mexico, and migrates north in mid-March to early April to nest in southern and coastal California, with some desert oases. Its breeding habitat is primarily willow-dominated riparian woodlands, although it sometimes forages and nests in neighboring mulefat scrub, oak woodlands, and chaparral. Least Bell's vireo is a City of Santee MSCP Draft Subarea Plan Covered Species.

Suitable nesting and foraging habitat is present throughout the riparian areas along the San Diego River in the Project Site and USFWS designated Critical Habitat for least Bell's vireo occurs within the western portion of the site. Although not detected during the biological reconnaissance surveys, Dudek biologists have documented this species along the San Diego River within Santee while working on other projects and those locations are shown on Figure 7A, 7C, and 7D. As such, it is considered present in riparian vegetation communities on the Project Site.

Coastal California Gnatcatcher

This federally threatened and CDFW Species of Special Concern is found on the coastal slopes of Southern California, from southwestern Ventura southward to Baja California, Mexico, usually below 1,640 feet in elevation. It occurs in or near coastal sage scrub dominated by California sagebrush and California buckwheat. Breeding season extends from late February through early August. Coastal California gnatcatcher is a City of Santee MSCP Draft Subarea Plan Covered Species.

Due to the presence of suitable nesting and foraging habitat (Diegan coastal sage scrub) as well as recent occurrence records immediately adjacent to the Project Site and designated critical habitat located within 1 mile of the Project Site, this species is determined to have a moderate potential to occur within suitable habitat areas (e.g., coastal sage scrub) of the Project Site. Although not detected during the biological reconnaissance surveys, Dudek biologists have documented this species while working on other projects and those locations are shown on Figure 7E. This species is discussed further in Section 4.6, Wildlife Movement, Wildlife Corridors, and Wildlife Nursery Sites.

4.5 Potentially Jurisdictional Aquatic Resources

Although a formal jurisdictional delineation was not conducted during the biological reconnaissance field surveys, the Project Site was evaluated for the potential to support jurisdictional waters regulated under the federal Clean Water Act, California Fish and Game Code, and Porter–Cologne Water Quality Act. Baseline wetland mapping from the USFWS NWI and USGS National Hydrography Dataset were used as a basis to inform the outer limits of potentially jurisdictional waters, such as streams or wetlands, on the Project Site (USFWS 2025a; USGS 2025).

Potential non-wetland waters of the United States and State regulated by USACE and/or RWQCB and CDFW streambed/associated riparian habitat were identified in the Project Site, consisting of the San Diego River, its tributary (Forester Creek), and multiple associated riparian/wetland vegetation communities/land covers. These features were informally mapped and examined based on the observable presence of an ordinary high water mark, hydrology indicators and/or hydrophytic (wetland) vegetation. For the purposes of this review, no formal wetland determination points were taken in the Project Site.

Potentially jurisdictional aquatic resources on the Project Site are depicted on Figure 8, Potentially Jurisdictional Aquatic Resources. Table 5 summarizes the acreages of the riparian/wetland vegetation communities (all considered sensitive by the City of Santee MSCP Draft Subarea Plan) and NWI-mapped wetlands on the Project Site that would be considered potentially jurisdictional aquatic resources. Note that the acreage of jurisdictional aquatic resources on the Project Site was calculated based off the riparian/wetland vegetation communities mapping conducted during the biological reconnaissance surveys; any NWI-mapped resources that did not overlap the vegetation communities were added to the overall potential jurisdictional resources acreage to conservatively estimate the extent of potentially jurisdictional resources on the Project Site.

Table 5. Potentially Jurisdictional Aquatic Resources Within the Project Site

Aquatic Resource Type	Acreage
USACE/RWQCB/CDFW	
Non-wetland Waters/Streambeds	40.18
Wetlands/Riparian Habitat	195.47
Potential Jurisdictional Aquatic Resource Total	**236.65**

Source: USFWS National Wetlands Inventory (USFWS 2025a).
Notes: USACE = U.S. Army Corps of Engineers; RWQCB = Regional Water Quality Control Board; CDFW = California Department of Fish and Wildlife.

Aquatic Resources Narrative

A total of 236.65 acres of riparian/wetland vegetation communities occur on the Project Site, associated with the San Diego River and Forester Creek. The San Diego River begins in uplands within the Cuyamaca mountains northwest of the town of Julian, then flows southwest through Santee and San Diego until it discharges to the Pacific Ocean, a Traditionally Navigable Water. The San Diego River bisects the center of the Project Site and flows from east to west. Forester Creek is a tributary of the San Diego River that drains the runoff from the north facing slopes of hills within the City of El Cajon and bisects the southwestern portion of the Project Site. Portions of Forester Creek and the San Diego River within the City of Santee have been partially improved to mitigate potential flood hazards or prevent localized erosion (City of Santee 2023). Based on wetland parameters observed in the field and connectivity to a Traditionally Navigable Water, the entire reach of the San Diego River and Forester Creek within the Project Site would be considered aquatic resources regulated under the jurisdiction of USACE, RWQCB, and CDFW, with CDFW also taking jurisdiction over the riparian/wetland habitats within the Project Site.

Specifically, the reaches of the San Diego River and Forester Creek within the Project Site would be regulated by USACE under Section 404 of the Clean Water Act, RWQCB under Section 401 of the Clean Water Act and Porter–Cologne Act, and riparian/wetland habitats by CDFW under Sections 1600–1616 of the California Fish and Game Code. Emergent wetland meets the definition of three-parameter wetlands and would be considered Wetlands of the State under the jurisdiction of RWQCB. Note that this preliminary assessment provides an overview of the potential jurisdictional resources in the Project Site and does not constitute a formal jurisdictional delineation.

National Wetlands Inventory and National Hydrography Dataset

The Project Site supports multiple NWI-mapped aquatic features (USFWS 2025a) (Figure 8). The NWI-mapped resources on the Project Site include palustrine and riverine features, specifically the following:

PEM1F(x)- Palustrine; Emergent; Persistent; Semi-permanently Flooded; Excavated: This designation describes a palustrine persistent freshwater emergent wetland system with a semi-permanently flooded water regime and excavated areas.

PEM1C(x) – Palustrine; Emergent; Persistent; Seasonally Flooded. This designation describes a palustrine persistent freshwater emergent wetland system with a seasonally flooded water regime.

PFOC – Palustrine; Forested; Seasonally Flooded. This designation describes a palustrine freshwater forested wetland system with a seasonally flooded water regime.

PFOAx- Palustrine; Forested; Temporarily Flooded; Excavated. This designation describes a palustrine freshwater forested wetland system with a temporarily flooded water regime and excavated areas.

PSSC(x)- Palustrine; Scrub-Shrub; Seasonally Flooded; excavated. This designation describes a palustrine freshwater shrub wetland system with a seasonally flooded water regime and excavated areas.

PSSA- Palustrine; Scrub-Shrub; Temporarily Flooded. This designation describes a freshwater shrub wetland system with a temporarily flooded water regime.

PUBHx – Palustrine; Unconsolidated Bottom; Permanently Flooded; Excavated. This designation describes an excavated freshwater pond with a permanently flooded water regime.

PUBFx – Palustrine; Unconsolidated Bottom; Semi-permanently Flooded; Excavated. This designation describes an excavated palustrine freshwater pond with a semi-permanently flooded water regime.

PUSCx – Palustrine; Unconsolidated Shore; Seasonally Flooded; Excavated. This designation describes an excavated palustrine freshwater Pond with a seasonally flooded water regime.

R4SBC – Riverine; Intermittent; Streambed; Seasonally Flooded. This designation describes a riverine intermittent streambed with a non-tidal, seasonally flooded water regime.

R5UBF– Riverine; Unknown Perennial Class; Unconsolidated Bottom; Semi-permanently Flooded. This designation describes a riverine system with a semi-permanently flooded water regime and unknown perennial class.

The riparian/wetland vegetation communities associated with the San Diego River and Forester Creek correspond with these mapped NWI-features on the Project Site. There are also National Hydrography Dataset mapped features that overlap the Project Site. Specifically, Forester Creek is mapped as a 'blue-line' intermittent stream/river in the southwestern portion of the Project Site. Additionally, the San Diego River is mapped as a 'blue-line' intermittent stream/river with connector, pipeline, and artificial path sections (USGS 2025). Note that National Hydrography Dataset lines are not depicted on Figure 8 or included in calculations for approximate acreage of jurisdictional resources on the Project Site to avoid redundancy and duplication, as the National Hydrography Dataset lines bisected the riparian/wetland vegetation communities and NWI-mapped features.

4.6 Wildlife Movement, Wildlife Corridors, and Wildlife Nursery Sites

The MSCP Plan (City of San Diego 1998) defines core and linkage areas as those maintaining ecosystem function and processes, including large animal movement. Each core area is connected to other core areas or to habitat areas outside of the MSCP study area either through common boundaries or through linkages. Core areas have multiple connections to help ensure that the balance in the ecosystem would be maintained. Biological core and linkage areas represent the largest remaining habitat blocks with relatively high biological value and include critical linkages connecting the habitat blocks for species dispersal and movement in San Diego County (City of San Diego 1998). Biological core and linkage areas are identified in the MSCP Plan (City of San Diego 1998) and used without revision on Figure 2-12 in the Draft Santee MSCP Subarea Plan (City of Santee 2025) as shown on Figure 2.

According to the City of Santee Draft MSCP Subarea Plan, the San Diego River within the Project Site provides a corridor for wildlife movement and connectivity through the urbanized portion of the City of Santee (City of Santee 2025). The western portion of the San Diego River in the Project Site from Forester Creek up to Mast Park is mapped as a San Diego County MSCP biological core and linkage area (Figure 2-12; City of Santee 2025). City of Santee MSCP Draft Subarea Plan also includes Hardlines Conservation Areas and Existing Protected Open Space (City of Santee 2025). The Project Site is outside the boundaries of a Hardline Conservation Area. However, Existing Protected Open Space is included in the Project Site (Figure 2). The Draft City of Santee MSCP Subarea Plan maps habitat connectivity and linkages throughout the City's jurisdiction. The San Diego River segment within the Project Site is identified as a "Habitat Linkage/Wildlife Corridor" and there is a "Habitat Connectivity Connection with Surrounding Open Space" associated with the Forrester Creek portion of the site and adjacent golf course (Figure 5-3; City of Santee 2025). The Draft City of Santee MSCP Subarea Plan also maps a "Coastal California Gnatcatcher Stepping Stone Linkage" across the easternmost portion of the Project Site to connect two mapped "Coastal Sage Scrub/Gnatcatcher Habitat Blocks" that are present in uplands that border the easternmost portion of the northern and southern Project Site boundaries. Figure 9, Wildlife Corridors and Habitat Linkages, depicts the City of Santee MSCP Draft Subarea Plan San Diego River Corridor and coastal California gnatcatcher habitat blocks/linkages, mapped within and immediately adjacent to the Project Site.

The Project Site could potentially function as a wildlife habitat for local populations of common mammal species. Species most likely to use the Project Site include coyote (*Canis latrans*), mule deer (*Odocoileus hemionus*), raccoon (*Procyon lotor*), striped skunk (*Mephitis mephitis*), and Virginia opossum (*Didelphis virginiana*). Larger species, such as bobcat (*Lynx rufus*) and mountain lion (*Puma concolor*) are not expected to use this highly urbanized vicinity of the San Diego River corridor due to the amount of adjacent commercial and industrial uses, large presence of human encampments, and general lack of connectivity to larger core areas of suitable habitat.

Bat roosting opportunities for multiple special-status bat species are present throughout the riparian habitats surrounding San Diego River in the Project Site but surrounding commercial and residential development causes noise disturbance. In addition, no diagnostic signs of bird rookeries (e.g., numerous nests, whitewash) or large maternal or overwintering bat roosts (e.g., large concentrations of guano or guano odors) were identified in the Project Site during the biological reconnaissance field surveys. Therefore, it is unlikely for the Project Site to support wildlife nursery sites.

The Project Site contains multiple native vegetation communities that could provide nesting habitat for birds protected under the Migratory Bird Treaty Act and California Fish and Game Code Sections 3503, 3503.5, and 3513. These include raptors and special-status wildlife species as well as common species adapted to urban environments.

4.7 Habitat Conservation Plan/Natural Community Conservation Plan

The Project Site occurs within the boundaries of the MSCP Plan; the Project Site is also within the boundaries of the San Diego River Subunit of the Draft City of Santee MSCP Subarea Plan (Subarea Plan) (Figure 2). The Draft Santee MSCP Subarea Plan would serve as a Habitat Conservation Plan under the MSCP Plan (City of San Diego 1998) pursuant to Section 10(a)(1)(B) of the federal Endangered Species Act, and as a Natural Community Conservation Plan pursuant to the California Natural Community Conservation Planning Act of 1991. The Draft Santee MSCP

Subarea Plan, once approved, would contribute to the regional MSCP for preservation, mitigation for impacts, and conservation of sensitive biological resources within San Diego County. The Draft Santee MSCP Subarea Plan is also intended to provide cumulative mitigation for impacts to Covered Species within the City of Santee's jurisdiction, as long as projects are consistent with and covered by provisions of the Santee MSCP Subarea Plan, and to ensure sufficient biological resources are conserved to assist in the conservation and recovery of Covered Species under the MSCP. The majority of Zones 1 and 2 overlap defensible space areas identified within the San Diego River Subunit as shown on Figure 4-5 of the City of Santee Draft MSCP Subarea Plan (0 to 100 feet from structures), and Zone 3 is identified as a fuel hazard reduction area (City of Santee 2025).

4.8 Local Policies and Ordinances

In the Conservation Element of the City of Santee General Plan, biological resources are discussed, and specific objectives and policies are presented (City of Santee 2003). In addition, the City of Santee's Urban Forestry Ordinance contains tree-related policies, regulations, and generally accepted standards for planting, trimming, and removing trees on public property and public rights-of-way (Santee Municipal Code, Section 8.06 [City of Santee 2020]). The ordinance gives the City of Santee control of all trees, shrubs, and other plantings in any street, park, public right-of-way, landscape maintenance district or easement, or other City-owned property.

The Project Site is zoned as Open Space lands (San Diego River, Forester Creek) by the City of Santee General Plan Conservation Element (City of Santee 2003). The San Diego River is recognized by the City of Santee Conservation Element as a significant central open space corridor, emphasizing its visual integrity, natural resources, and recreational opportunities (City of Santee 2003). The San Diego River corridor that overlaps the Project Site is zoned by the City of Santee General Plan as Open Space and is a generally uninterrupted band of natural floodplain, open water, and riparian/wetland vegetation communities that are considered to be significant wildlife habitat (City of Santee 2003). The City of Santee encourages maintenance of appropriate open space uses adjacent to natural watercourses (San Diego River, Forester Creek) that would reduce flood damage hazards, improve water quality, protect visual quality, and maintain use as wildlife habitats (City of Santee 2003). The Project consists of fuel reduction within the San Diego River and Forester Creek that would improve the overall habitat quality of these natural watercourses and not alter its current land use zoning as Open Space. The Project would comply with the City's Forestry Ordinance and biological resources policies within the Conservation Element as no development is proposed, and the Project is intended to improve the San Diego River and Forester Creek through fuel reduction of mostly non-native trees and trees that are dead or decaying. Therefore, the Project is consistent with respect to the relevant City of Santee biological, floodway, and urban forestry municipal codes as well as the goals outlined in the City of Santee General Plan's Conservation Element.

5 Impacts

This section addresses potential impacts (e.g., permanent, temporary, direct, and indirect) to special-status biological resources that could result from implementation of the Project. This section addresses each CEQA significance threshold, identifies potential impacts, and provides mitigation measures (MM), as applicable, to compensate for the Project's significant impacts.

5.1 California Environmental Quality Act Significance Thresholds

The following are the significance thresholds for biological resources provided in the CEQA Appendix G Environmental Checklist, which states that Project activities could potentially have a significant effect if the following occur:

A. **Threshold BIO-1:** Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS.
B. **Threshold BIO-2:** Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS.
C. **Threshold BIO-3:** Have a substantial adverse effect on state and federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
D. **Threshold BIO-4:** Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites.
E. **Threshold BIO-5:** Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
F. **Threshold BIO-6:** Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state Habitat Conservation Plan.

5.1.1 Threshold BIO-1: Special-Status Species

5.1.1.1 Special-Status Plants

One special-status plant species was observed within the Project Site: San Diego marsh-elder. White rabbit-tobacco has also been documented immediately outside of the Project Site boundary (CCH 2025) (Attachment C; Figures 10A through 10E, Impacts to Biological Resources). Both San Diego marsh-elder and white rabbit-tobacco are not Covered Species under the City of Santee Draft MSCP Subarea Plan. Further, the native vegetation communities within the Project Site have potential to support an additional five special-status plant species determined to have a moderate to high potential to occur on the Project Site that cannot be considered absent as the focused botanical survey was conducted outside of the spring and summer blooming period (Table 3). Direct impacts to special-status plants from Project implementation would be considered significant absent mitigation.

The Project consists of removing hazardous (dead or dying/diseased) non-native trees from within Zone 3 of the Project Site and native and non-native brush trimming in upland defensible space areas (Zones 1 and 2). Special-status plant species present or considered present (San Diego marsh-elder and white rabbit-tobacco) and the five additional special-status plant species determined to have a moderate to high potential to occur on the Project Site could be present in native habitats located in Zones 1 to 3. The Project shall completely avoid directly impacting special-status plants located in Zones 1 to 3 through implementation of **MM BIO-1: Pre-Construction Survey and Special-Status Plant Species Avoidance**, as described in Section 6, Mitigation Measures. As such, direct impacts to special-status plant species would be **less than significant with mitigation**.

Indirect impacts could occur to special-status plants through decreased water quality and altered hydrology, soil compaction, elevated dust levels, and the spread of invasive plant species. These indirect impacts would be avoided through implementation of **MM BIO-1: Pre-Construction Survey and Special-Status Plant Species Avoidance**, **MM BIO-2: Standard Best Management Practices (BMPs)**, and **MM BIO-3: Biological Monitor** as described in Section 6. As such, indirect impacts to special-status plant species would be **less than significant with mitigation**.

5.1.1.2 Special-Status Wildlife

There are 25 special-status wildlife species that are known to occur within the Project Site or have a moderate to high potential to occur within the native portions of the Project Site, in both uplands (coastal sage scrub) and wetland/riparian habitats (southern arroyo willow riparian forest, southern cottonwood–willow riparian forest, mulefat scrub, southern willow scrub, emergent wetland, freshwater marsh, disturbed wetland) (Table 4). Impacts to individuals would be unlikely during Project implementation due to the mobility of these species to move out of harm's way. However, the Project would implement **MM BIO-3: Biological Monitor** to ensure no special-status species would be injured or harmed during Project activities.

Suitable riparian nesting habitat for least Bell's vireo, yellow-breasted chat, and yellow warbler is present in Zones 1 and 2 of the Project Site (Figures 7A, 7C, 7D, and 7E). Treatment activities occurring within riparian habitat are not anticipated to result in removal of habitat for these special-status species. However, it is possible that unanticipated impacts (e.g., sensitive vegetation removal) to riparian habitat could occur, which would be considered significant and require mitigation. The Project would implement **MM BIO-4: Sensitive Vegetation Communities** to mitigate for any unanticipated impacts to riparian habitat within Zones 1 and 2 in accordance with the mitigation ratios in Table 5-13 of the Draft Santee MSCP Subarea Plan (City of Santee 2025). Additionally, the Project would implement **MM BIO-5: Avoidance of Listed Species Take: Least Bell's Vireo** to ensure all Project activities occur outside the least Bell's vireo breeding season (March 15 through September 15). No impacts to native riparian habitat are anticipated within Zone 3, which would only result in the dead/dying and invasive species removal, and all Project activities would occur outside the least Bell's vireo breeding season. If any unintended impacts occur to riparian habitat within Zone 3, then **MM BIO-4** would be implemented.

Although a very limited amount is proposed, thinning of approximately 3 acres of non-contiguous areas (i.e., thinning would occur in unconnected slivers across many polygons throughout the Project Site) of coastal sage scrub has the potential to adversely impact coastal California gnatcatchers known to nest within that vegetation community. Treatment activities occurring within coastal sage scrub are not anticipated to result in the removal of suitable habitat for coastal California gnatcatcher. However, if Project activities result in unintended impacts to coastal sage scrub, then these impacts would be considered significant and require mitigation. Impacts to coastal sage scrub habitat and coastal California gnatcatcher individuals would be considered significant. Therefore, implementation

of **MM BIO-4: Sensitive Vegetation Communities**, would require mitigation for any unintended impacts to coastal sage scrub habitat within Zones 1 and 2 in accordance with the mitigation ratios in Table 5-13 of the Draft Santee MSCP Subarea Plan (City of Santee 2025). Implementation of **MM BIO-6: Avoidance of Listed Species Take: Coastal California Gnatcatcher** would ensure all Project activities occur outside the coastal California gnatcatcher breeding season (March 1 to August 15). No impacts to coastal sage scrub habitat are anticipated within Zone 3, which would only result in the dead/dying and invasive species removal, and all Project activities would occur outside the coastal California gnatcatcher breeding season. If any unintended impacts occur within Zone 3, then **MM BIO-4** would be implemented.

Although no evidence of roost or nursery sites was identified on the Project Site during the biological reconnaissance field surveys, impacts to maternity bat roosts would be significant. The Project would avoid the native bat breeding season (i.e., April 1 through August 31), as it overlaps the nesting bird season as required by **MM BIO-7: Nesting Bird Survey.** Additionally, implementation of **MM BIO-3: Biological Monitor** would ensure no special-status bat species or native bat colonies or maternity roosts would be injured or harmed during Project activities through establishment of a buffer if these resources are observed.

The Project Site supports multiple wetland and upland habitats that contain suitable vegetation for nesting and migratory birds and raptors protected by the Migratory Bird Treaty Act and Section 3500 of the California Fish and Game Code. The Project is expected to remove invasive and hazardous trees only, which have a low potential to support nesting birds compared to the high-quality surrounding native wetland and upland habitats along the San Diego River in the Project Site. All nesting bird habitat removal or thinning shall occur outside the nesting bird breeding season (February 15 through September 30), as directed by **MM BIO-7: Nesting Bird Survey.** Implementation of **MM BIO-3: Biological Monitor** shall also reduce potentially adverse impacts to nesting birds to a less-than-significant level by requiring a biological monitor be present to establish nest buffers if Project activities cannot avoid the avian nesting season. With implementation of these measures, potentially significant impacts to nesting and migratory birds would be reduced to **less than significant.**

Crotch's bumble bee (*Bombus crotchii*) could occur within areas of the Project Site containing upland habitats, and impacts to this species would be considered significant. Treatment activities occurring within upland habitats are not anticipated to result in the removal of suitable habitat for Crotch's bumble bee. However, if Project activities result in unintended impacts to upland habitats, then these impacts would be considered significant and require mitigation. Therefore, implementation of **MM BIO-4** would require mitigation for impacts to sensitive upland communities within Zones 1 and 2 in accordance with the mitigation ratios in Table 5-13 of the Draft Santee MSCP Subarea Plan (City of Santee 2025). Implementation of **MM BIO-8: Avoidance of Listed Species Take: Crotch's Bumble Bee** would require a pre-construction survey within Zones 1, 2, and 3 to ensure avoidance of impacts to individuals. No impacts to sensitive upland habitats are anticipated within Zone 3, which would only result in the dead/dying and invasive species removal, and ground disturbance activities that could impact Crotch's bumble bee nests are not anticipated in Zones 1, 2, or 3. If any unintended impacts occur within Zone 3, then **MM BIO-4** would be implemented.

There is potential for Project activities to have indirect impacts to special-status wildlife, including nesting birds, from decreased water quality and altered hydrology, soil compaction, elevated dust levels, and the spread of invasive plant species. These indirect impacts would be avoided through implementation of **MM BIO-2: Standard Best Management Practices (BMPs)** and **MM BIO-3: Biological Monitor**, as described in Section 6. As such, indirect impacts to special-status wildlife species would be **less than significant**.

5.1.2 Threshold BIO-2: Riparian and Sensitive Vegetation Communities

A total of approximately 31.68 acres of the Project Site shall be treated within Zones 1 and 2. Figures 10A through 10E depict the spatial distribution of the three treatment zones with the biological resources observed on the Project Site. Table 6A, Vegetation Communities and Land Cover Types in Zones 1 and 2, details the vegetation communities within Zone 1 and Zone 2 that encompass the direct treatment footprint.

A total of 18.02 acres of sensitive vegetation communities would be treated within Zones 1 and 2, including 2.88 acres of sensitive vegetation communities within Zone 1 and 15.14 acres of sensitive vegetation communities within Zone 2. Although vegetation management within Zones 1 and 2 would include activities such as shrub trimming and grass mowing, all trimming activities would be done to industry standards (ISA, ANSI) to minimize likelihood of plant death. Vegetation management in Zones 1 and 2 is not expected to result in removal of any sensitive vegetation communities. However, if Project activities result in unintended impacts to sensitive vegetation communities, then these impacts would be considered significant and would require mitigation. Therefore, implementation of **MM BIO-4: Sensitive Vegetation Communities** would require mitigation for any unintended impacts to sensitive vegetation communities in accordance with the mitigation ratios in Table 5-13 of the Draft Santee MSCP Subarea Plan (City of Santee 2025). A biological monitor shall be present in accordance with **MM BIO-3: Biological Monitor** to ensure treatment and vegetation removal activities occur only within the designated areas.

Table 6A. Vegetation Communities and Land Cover Types in Zones 1 and 2

Vegetation Community/Land Cover Type[1]	Project Site (Acres)	Sensitive (Y/N)[2]
Zone 1		
Native Vegetation Communities		
Coast Live Oak Woodland	0.07	Y
Mulefat Scrub	0.02	Y
Southern Arroyo Willow Riparian Forest	0.01	Y
Southern Cottonwood–Willow (*Populus* spp.–*Salix* spp.) Riparian Forest	2.13	Y
Southern Riparian Scrub	0.02	Y
Southern Willow (*Salix* spp.) Scrub	0.14	Y
Diegan Coastal Sage Scrub (Including *Baccharis*-Dominated Subform)	0.50	Y
Native Vegetation Communities Subtotal	*2.89*	*N/A*
Non-Native Vegetation Communities and Land Cover Types		
Eucalyptus Woodland	0.01	N
Non-Native Woodland	0.02	N
Disturbed Habitat	5.18	N
Urban/Developed[1]	1.06	N
Non-native Vegetation Communities Subtotal	*6.27*	*N/A*
Zone 1 Subtotal	**9.15**	**N/A**
Zone 2		
Native Vegetation Communities		
Coast and Valley Freshwater Marsh	0.14	Y

Table 6A. Vegetation Communities and Land Cover Types in Zones 1 and 2

Vegetation Community/Land Cover Type[1]	Project Site (Acres)	Sensitive (Y/N)[2]
Open Water	0.24	Y
Mulefat Scrub	0.13	Y
Southern Arroyo Willow Riparian Forest	0.13	Y
Southern Cottonwood–Willow Riparian Forest	8.78	Y
Southern Riparian Scrub	0.76	Y
Southern Willow Scrub	1.75	Y
Diegan Coastal Sage Scrub (Including *Baccharis*-Dominated Subform)	2.60	Y
Coast Live Oak Woodland	0.61	Y
Native Vegetation Communities Subtotal	*15.14*	*N/A*
Non-Native Vegetation Communities and Land Cover Types		
Eucalyptus Woodland	0.34	N
Non-Native Woodland	0.04	N
Disturbed Habitat	6.11	N
Urban/Developed[1]	0.90	N
Non-Native Vegetation Communities *Subtotal*	*7.39*	N/A
Zone 2 Total	**22.53**	**N/A**
Total	**31.68**	**N/A**

Notes: N/A = not applicable. Totals may not sum due to rounding.
1 Fuel treatment in Urban/Developed land consists of any ornamental plantings, maintained grass, or other landscaping.
2 Vegetation community considered sensitive under the Draft Santee MSCP Subarea Plan (City of Santee 2025).

Vegetation management activities occurring in Zone 3 would only involve removal of dead, dying, or invasive species, and as such, no direct impacts to sensitive vegetation communities are anticipated in Zone 3 from Project implementation. However, if any unintended impacts occur to sensitive vegetation communities within Zone 3, then **MM BIO-4** would be implemented to reduce those impacts to less than significant. A biological monitor shall be present in accordance with **MM BIO-3: Biological Monitor** to ensure vegetation management activities occur only for dead, dying, and invasive species. A total of 1,379 trees (or approximately 29.0 acres) are estimated for removal within Zone 3 as shown on Figures 10A through 10E. It should be noted that the data collected during field assessments is only a preliminary mapping of the potential areas slated for treatment within Zone 3. The Project would implement **MM BIO-9: Tree Survey** to provide comprehensive mapping, by a Certified Arborist, of the dead, dying, and invasive species that would be removed under the proposed Project. The plant species identified during field assessments for the FTP (City of Santee 2026) presented in Table 6B are located in Zone 3 and are proposed for treatment.

Table 6B. Plant Species Identified for Treatment or Removal in Zone 3

Non-Tree Species	Tree Species	Tree Species Continued
Arrowweed	Aleppo pine	Fig (spp.)
Arundo donax	American sweetgum	Glossy privet
Bamboo	Arizona cypress	Golden raintree
Blackberry	Arroyo willow	Italian stone pine
Bougainvillea	Shamel ash	Laurel sumac
California sagebrush	Bottlebrush (spp.)	Mexican fan palm
Cape honeysuckle	Brazilian pepper	Monterey pine
Castor bean	California fan palm	Olive (spp.)
Desert broom	Canary island date palm	Paloverde (spp.)
Pampas grass	Canary island pine	Pepper tree (spp.)
Prickly Russian thistle	Carob	Pine (spp.)
Smilo grass	Carrotwood	Red willow
Tobacco tree	Chinese elm	Siberian elm
Toyon	Chinese flame tree	Silk oak
Yucca	Coast live oak	Tree of heaven
	Date palm (spp.)	Weeping bottlebrush
	Eucalyptus (spp.)	Yellowwood (spp.)
	Fan palm (spp.)	Willow (spp.)

Notes: All native tree or non-tree species listed in the table would only be removed if the individual was dead or dying.

Indirect impacts could occur to sensitive vegetation communities in Zones 1 to 3 through decreased water quality and altered hydrology, soil compaction, elevated dust levels, and the spread of invasive plant species. These indirect impacts would be avoided through implementation of **MM BIO-2: Standard Best Management Practices (BMPs)** and **MM BIO-3: Biological Monitor**, as described in Section 6. As such, indirect impacts to sensitive vegetation communities would be **less than significant**.

5.1.3 Threshold BIO-3: Jurisdictional Waters

Table 7, Potentially Jurisdictional Aquatic Resources in Zones 1 and 2, summarizes the treatment footprint containing potentially jurisdictional aquatic resources acreages in Zones 1 and 2 on the Project Site. A total of 14.98 acres of potentially jurisdictional aquatic resources would be treated within the Project Site as result of native and non-native brush thinning located up to 100 feet from the edge of the existing development areas. The ultimate decisions on the amount and location of jurisdictional aquatic resources would be made by the resource agencies (i.e., USACE, CDFW, and RWQCB).

Table 7. Potentially Jurisdictional Aquatic Resources in Zones 1 and 2

Impact Zone	Non-Wetland Water/ Streambed Acreage	Wetland/Riparian Habitat Acreage	Total Acreage
Zone 1	0.03	2.37	2.40
Zone 2	0.68	11.90	12.58
Total	**0.71**	**14.27**	**14.98**

Note: Vegetation management activities occurring in Zone 3 would only involve removal of dead, dying, or invasive species, and as such, no direct impacts to potentially jurisdictional resources in Zone 3 are anticipated from Project implementation.

Treatment activities to jurisdictional aquatic resources occurring within Zones 1 and 2 would require regulatory resources permitting from the appropriate resource agencies (USACE, RWQCB, and CDFW) (**MM BIO-10: Jurisdictional Aquatic Resources Permitting**). A biological monitor shall be present in accordance with **MM BIO-3: Biological Monitor** to ensure treatment and vegetation removal activities occur in accordance with the Project's aquatic resource permits and there are no direct impacts occurring outside the designated areas. As such, direct impacts to jurisdictional aquatic resources within Zones 1 and 2 would be **less than significant**. **MM BIO-11: Jurisdictional Aquatic Resources Avoidance** would be implemented to further avoid impacting streams by using temporary rubber mats or pads to distribute weight and minimize vegetation trampling and soil disturbance, and helicopter and/or crane removal where equipment access is constrained and hand carry is infeasible. Treatment activities occurring within Zones 1 and 2 are not anticipated to result in the removal or filling of any jurisdictional aquatic resources. However, if Project activities result in any unintended impacts to jurisdictional aquatic resources, then these impacts would be considered significant and require mitigation. Therefore, implementation of **MM BIO-4** would require mitigation for any unintended impacts to jurisdictional aquatic resources within Zones 1 and 2 in accordance with the mitigation ratios in Table 5-13 of the Draft Santee MSCP Subarea Plan (City of Santee 2025).

Vegetation management activities occurring in Zone 3 would only involve removal of dead, dying, or invasive species, and as such, no direct impacts from removal or filling of potentially jurisdictional resources in Zone 3 are anticipated from Project implementation. If any unintended impacts occur to riparian habitat within Zone 3, then **MM BIO-4** would be implemented. **MM BIO-11: Jurisdictional Aquatic Resources Avoidance** would be implemented to ensure activities occurring in Zone 3 would only involve treatment or removal of dead, dying, or invasive species. As directed by **MM BIO-11**, the Project is committed to avoiding impacts to streams by using temporary rubber mats or pads to distribute weight and minimize vegetation trampling and soil disturbance, and helicopter and/or crane removal where equipment access is constrained and hand carry is infeasible. A biological monitor shall be present in accordance with **MM BIO-3: Biological Monitor** to ensure treatment and vegetation removal activities do not impact any aquatic resource areas located within Zone 3. As such, direct impacts to jurisdictional aquatic resources within Zone 3 would be avoided.

Indirect impacts could occur to jurisdictional aquatic resources through decreased water quality and altered hydrology, soil compaction, elevated dust levels, and the spread of invasive plant species. These indirect impacts would be avoided through implementation of **MM BIO-2: Standard Best Management Practices (BMPs)** and **MM BIO-3: Biological Monitor**, as described in Section 6. As such, indirect impacts to jurisdictional aquatic resources would be **less than significant**.

5.1.4 Threshold BIO-4: Wildlife Corridors/Nursery Sites

The western portion of the San Diego River in the Project Site from Forester Creek up to Mast Park and the eastern portion of the Project Site are mapped as a wildlife corridors and linkage areas, as shown on Figure 9. The western portion of the site is mapped a critical habitat for the least Bell's vireo (Figure 7A). The purpose of the Project is fuel hazard management that shall not modify the width of the San Diego River, its tributary (Forester Creek), or its land use as Open Space. Additionally, tree removal and native and non-native brush thinning would improve fuel hazard risk within the San Diego River Corridor, reducing forest fires that adversely impact the San Diego River's function as a wildlife corridor due to habitat and species loss. Removal of non-native vegetation would improve the overall quality of the San Diego River as a wildlife corridor by reducing competition for resources from invasives that are usable for native wildlife species. Native and non-native brush thinning is not expected to adversely impact nursery sites or wildlife corridors through avoidance of the nesting bird season, and the loss of habitat is marginal compared

to the net benefit of hazardous fuel reduction for fire management within the San Diego River Corridor. As a result, implementation of the Project would result in **less-than-significant** impacts to wildlife corridors and nursery sites.

5.1.5 Threshold BIO-5: Local Policies and Ordinances

No conflicts with local policies and ordinances are anticipated from Project implementation. The Project would comply with Section 8.06 of the Santee Municipal Code and biological resources policies within the Conservation Element as no development is proposed, and the Project is intended to improve the San Diego River and Forester Creek through fuel reduction of mostly non-native trees and trees that are dead or decaying. Therefore, the Project is consistent with respect to the relevant City of Santee biological, floodway, and urban forestry municipal codes and the goals outlined in the City of Santee General Plan Conservation Element. The Project would comply with the City of Santee's municipal code and the biological resources policies outlined within the City of Santee General Plan Conservation Element. Furthermore, City of Santee staff shall review the Project to ensure there are no conflicts with the objectives and policies presented in the Conservation Element of the Santee General Plan and relevant urban forestry, floodway, and biological resources ordinances (City of Santee 2003, 2023).

5.1.6 Threshold BIO-6: Habitat Conservation Plans

Although the Draft Santee MSCP Subarea Plan has not yet been approved or permitted, it is used as the guidance document for projects occurring within the City of Santee. As such, BMPs included in Section 5.5 of the Subarea Plan have been incorporated into the Project-specific mitigation measures below.

The majority of Zones 1 and 2 overlap defensible space areas identified within the San Diego River Subunit as shown on Figure 4-5 of the City of Santee Draft MSCP Subarea Plan, and Zone 3 is identified as a fuel hazard reduction area (City of Santee 2025). Because this is a fuel hazard reduction project (as opposed to a development project) that is designed to target removal of non-native vegetation and treatment of native vegetation within the San Diego River Corridor wildland–urban interface, no permanent removal of habitat is anticipated. Any trimming of native vegetation shall occur only following acquisition of required permits. Project implementation would not conflict with the provisions of the San Diego County MSCP or Draft Santee MSCP Subarea Plan, nor would it prevent the Draft Santee MSCP Subarea Plan from being approved or compromise continued implementation of the MSCP in San Diego County.

6 Mitigation Measures

The following mitigation measures shall be implemented to avoid and reduce potentially significant impacts to sensitive and riparian vegetation communities, special-status species, and potentially jurisdictional aquatic resources to a less-than-significant level. Any trimming of native vegetation shall occur only following acquisition of required permits.

MM BIO-1 Pre-Construction Survey and Special-Status Plant Species Avoidance. No vegetation management activities occurring in Zone 3 or other native and non-native brush thinning occurring in Zones 1 and 2 shall occur within known populations of San Diego marsh-elder and white rabbit-tobacco or any other special-status plant species. Prior to initiation of Project activities, a qualified biologist (i.e., a person having at minimum a BS or BA in wildlife

management, ecology, zoology, botany, biology, or other closely related field, and at least 2 years' experience conducting field investigations in San Diego County) approved by the City of Santee shall conduct a pre-construction presence/absence survey for special-status plants within the impact footprint and flag any special-status plants, including the known locations of San Diego marsh-elder and white rabbit-tobacco. If surveys are conducted pursuant to the FEMA Programmatic Biological Opinion for federally listed plant species, the qualified biologist shall be approved by the Carlsbad Fish and Wildlife Office (CFWO) in accordance with Gen AMM 16. If a special-status plant is observed, the biological monitor shall delineate an appropriate buffer zone (a minimum of 10 feet) depending on the sensitivity of the resource and the nature of the activity being conducted. Project activities shall completely avoid impacts to any special-status plant species.

MM BIO-2 Standard Best Management Practices (BMPs). The following BMPs, when applicable, shall be included as part of the Project in accordance with Section 5.5.1.1 of the Draft Santee Multiple Species Conservation Program Subarea Plan (City of Santee 2025). The City of Santee shall have the right to access and inspect any treatment sites for compliance with Project approval conditions including these BMPs.

Delineation of Environmentally Sensitive Areas

- Prior to Project implementation, highly visible barriers (such as orange construction fencing, stakes, or flagging depending on the size of the treatment area and the sensitivity and proximity of the biological resources) shall be installed to designate environmentally sensitive areas (e.g., special-status plant locations, nesting birds, etc.) to be protected from vegetation management related activities. Environmentally sensitive areas to be avoided shall be identified during the pre-construction surveys described in MM BIO-1 and MM BIO-3 and implemented by a qualified biologist approved by the City of Santee. No Project activity of any type shall be permitted within these environmentally sensitive areas (with exceptions for removal of dead/decaying and non-native species within jurisdictional aquatic resource areas in Zone 3). In addition, heavy equipment, including motor vehicles, shall not be allowed to operate within the environmentally sensitive areas. All vegetation management equipment shall be operated in a manner so as to prevent accidental damage to environmentally sensitive areas and associated barriers. No structure of any kind, equipment staging, incidental storage of equipment or supplies, or access roads shall be allowed within these protected zones. Silt fence barriers shall be installed, as appropriate, at the environmentally sensitive area boundary to prevent accidental deposition of fill material or sediment runoff into areas where sensitive biological features are adjacent to treatment areas. Flagging and/or fencing shall be removed upon completion of the activities.

Invasive Species Control

- Invasive exotic plant species shall be removed from the Project work area and controlled during vegetation management periods. Project measures shall be included to ensure invasive plant material is not spread from the Project Site to other areas by disposal off site or by tracking seed on equipment, clothing, and shoes. Equipment/material imported from an area of

invasive plants must be identified and measures implemented to prevent importation and spreading of non-native plant material within the Project Site. Disposal of the plant debris shall follow the regulations set by the County of San Diego agriculture commissioner. All vegetation management equipment shall be cleaned to remove dirt, seeds, vegetative material, or other debris that could contain or hold seeds of noxious weeds before arriving to and leaving from the Project Site. Eradication strategies (i.e., exotic plant abatement programs) shall be employed should an invasion occur during vegetation management activities.

Trash Control

- To avoid attracting predators of Covered Species and other special-status species, the Project Site shall be kept clean of debris. All food-related trash items shall be enclosed in sealed containers and regularly removed from the site(s) daily.

On-Site Training and Monitoring

- All personnel involved in the on-site Project activities shall be required to participate in a pre-activity training and education program administered by the City, or their designee, to understand the avoidance and minimization obligations of the Project.
- The City shall require that a qualified biologist monitor Project activities for the duration of the Project to ensure that measures are being employed to avoid incidental disturbance of habitat, species of concern, and other sensitive biological resources. The biological monitor shall notify the City immediately of any non-compliance, and the City shall make an assessment that generates appropriate measures for the contractor to implement for remediation.

Water Quality Best Management Practices

- The vegetation treatment contractors shall implement BMPs to protect water quality. To minimize soil disturbance, the vegetation treatment contractors shall leave stumps from removed trees and shrubs intact, with stump heights not exceeding 6 inches, as measured from the uphill side as described in the Fuels Treatment Plan (City of Santee 2026).

- Actions to prevent sediment or debris from entering watercourses, aquatic areas, wetlands, and riparian areas during and after Project activities may include, but are not limited to, the following BMPs: silt fencing, fiber rolls and other erosion control blankets, gravel bag berms, sand bag barriers, tracking controls, stockpile management, dry season scheduling, preservation of existing vegetation, temporary soil stabilization, and dust and erosion control.

- No site personnel shall dsicharge solid or liquid materials into jurisdictional water features, wetland or riparian areas, or other sensitive habitats. Service and refueling of equipment shall only occur in areas that will not allow grease, oil, fuel, or other hazardous materials to pass into streams or retained vegetation. If discharged materials are observed during work activities, the biological monitor shall notify the City and appropriate entities immediately, including but not limited to applicable jurisdictional City or County, U.S. Fish and Wildlife Service, U.S. Army Corps of Engineers, California Department of Fish and Wildlife, and/or Regional Water Quality Control

Board, and the City shall make an assessment that generates appropriate measures for the contractor to implement for remediation. Spills shall be cleaned up immediately and contaminated soils removed to approved disposal areas.

MM BIO-3 Biological Monitor. A qualified biological monitor (i.e., a person having at minimum a BS or BA in wildlife management, ecology, zoology, botany, biology, or other closely related field, and at least 2 years' experience conducting field investigations in San Diego County) approved by the City of Santee shall be present to conduct a pre-activity sweep (i.e., pre-construction survey) of the work area prior to the commencement of work activities. Where monitoring is required pursuant to the FEMA Programmatic Biological Opinion for federally listed species, monitoring shall be conducted by or under the supervision of a CFWO-approved biologist in accordance with Gen AMM 16. The qualified monitor shall remain present during any Project activities in Zones 1 to 3 that occur in sensitive vegetation communities, as defined herein, to ensure no sensitive biological resources (i.e., sensitive vegetation communities, special-status species, and jurisdictional aquatic resources) are being adversely impacted from Project implementation in Zone 3 and that no special-status species or nesting birds are being adversely impacted from Project implementation in Zones 1 and 2. If a sensitive biological resource is observed during Project activities or during pre-construction surveys, the biological monitor shall delineate an appropriate buffer zone (a minimum of 10 feet) depending on the sensitivity of the resource and the nature of the activity being conducted.

If fencing for temporary noise abatement (i.e., 8-foot-tall [minimum height] plywood sheet barriers or acoustical blankets suspended on chain-link fencing or other support means) is required along or parallel with an extent of the Project boundary that adjoins the receiving noise-sensitive property then prior to the use of temporary noise abatement, a qualified biologist shall confirm and verify with the City that the placement of the barriers are not located within any environmentally sensitive areas (e.g., special-status plant locations, sensitive vegetation communities, or jurisdictional aquatic resources) and would not impact any wildlife species or their movement.

MM BIO-4 Sensitive Vegetation Communities. Unintended impacts (i.e. sensitive vegetation removal) to sensitive natural communities occurring from thinning or trimming activities in Zones 1 and 2 would be remedied through restoration of the affected area. This would entail restoring the disturbed area to pre-project or ecologically improved conditions typically within one year of completing activities. A restoration plan will be prepared for and approved by the City, and depending on the area affected any other appropriate regulatory agency (i.e. USFWS, CDFW, USACE, and/or RWQCB), that includes: details for the restoration activities, a description of how the proposal provides offsets for the temporal loss, success criteria and the timeline for restoration. If habitat is unable to be restored, or the restoration does not meet the success criteria, the impacts would be considered permanent and would require mitigation consistent with the ratios identified in Table 1 below. This mitigation would entail a mitigation plan outlining the enhancement or restoration of habitat within City Owned Preserve Lands or through acquisition of a conservation easement within the Upland Standards Areas or San Diego River Subunit depending on the type of habitat being impacted so that impacts will be mitigated in-kind. The mitigation plan shall include at a minimum: details for the mitigation activities including the target function and services for the native plant communities established, mitigation work

plan, performance standards, funding mechanism, and the timeline for completion of the mitigation program. The mitigation site would be included in the Managed Preserve and managed and monitored in perpetuity with funding for long-term management and monitoring provided through a non-wasting endowment.

Mitigation Ratios for Permanent Unintended Impacts

Vegetation Type [a]	Habitat Criteria	Mitigation Ratio
Riparian Forest/Woodland	All riparian forest, including oak riparian	3:1
Riparian Scrub	Drainages with riparian scrub	3:1
Freshwater Marsh, Freshwater Seep, Disturbed Wetlands, Natural Channel, Open Water [e]	Absence of native species or small (<0.25 acre) amount of habitat	2:1 [f]
	Presence of native species or large (>0.25 acre) amount of habitat	3:1
Vernal Pools [b]	Natural Vernal Pool	4:1
	Man-made vernal pools with indicator plant species	3:1
	Man-made pools with covered wildlife species	3:1
Oak Woodland	Oak woodland containing any Engelmann oaks	3:1
Individual Oaks	Trees with at least on trunk of 6" or more Dbh [c] or multi-trunked native oaks with aggregate diameter of 10" of more.	10:1 by tree
Coastal Sage Scrub Coastal Sage/Chaparral Scrub	Habitat small, isolated patches <1 acres	2:1
	Habitat patches >1 acre	3:1
Chaparral	All	2:1
Native Grassland	All	3:1
Non-native grassland	All	1:1
Disturbed lands, Eucalyptus, agricultural lands [d]	No known habitat value for Covered Species	None
	Habitat value for or presence of burrowing owls	1:1 as appropriate to ensure like value

Notes:

[a] Vegetation types based on the Holland Vegetation classification system. See Appendix E, *Vegetation Communities Descriptions*. All other natural habitat types not listed in this table have a 1:1 mitigation ratio requirement.

[b] Vernal pool mitigation must meet a 'no net loss' criteria through creation of new vernal pool habitat and/or restoration or enhancement of existing vernal pool habitat. Preservation of existing vernal pool alone does not provide mitigation credits. If an existing vernal pool is significantly disturbed, enhancement of the existing pool can be implemented to provide up to a 1:1 mitigation credits towards the total requirement.

[c] Dbh = Diameter at Breast Height. Tree diameter is measured at 4 ½ feet above ground level. This measure is known as diameter at breast height or DBH. Diameter can be measured with diameter tape

[d] Disturbed land may include agricultural lands, ruderal, eucalyptus, and previously authorized graded areas.

[e] Any impacts to open water areas within abandoned sand mining pits along the San Diego River should be mitigated with creation of riparian scrub or riparian woodland, as these open water areas are unnatural, are relatively common, and these same areas likely supported riparian areas before mining occurred.

[f] Different ratios may be required under separate regulatory programs under the Clean Water Act, the Porter-Cologne Water Quality Control Act, and Section 1600 et seq. of the Fish and Game Code.

MM BIO-5 Avoidance of Listed Species Take: Least Bell's Vireo. All riparian habitat tree trimming or thinning within Zones 1 and 2 and invasive species removal in Zone 3 shall occur outside the least

Bell's vireo breeding season (April 1 through August 15[3]). If that is not possible then no vegetation management activities shall occur during the least Bell's vireo breeding season until the following requirements have been met:

1. A qualified biologist shall conduct a focused pre-construction-level survey for least Bell's vireo using the most recent protocol within all fuel reduction areas containing suitable riparian habitat including a 500-foot buffer. A minimum of three surveys shall be performed 3 days prior to Project activities. If presence of least Bell's vireo is determined or assumed to occur on the Project Site, the following measures shall be required to be implemented:
    a. No vegetation removal shall occur within occupied habitat during the least Bell's vireo breeding season (April 1 to August 15) or until the nest has shown to be vacated. A 500-foot buffer shall be required around the nest site. If 100% avoidance of occupied habitat is not feasible, consultation with USFWS and California Department of Fish and Wildlife (CDFW) shall be initiated prior to implementation of any activities that may impact occupied habitat, directly or indirectly.

MM BIO-6 Avoidance of Listed Species Take: Coastal California Gnatcatcher. To the maximum extent feasible, staging areas, equipment storage areas, and access routes shall be located outside coastal sage scrub, alluvial fan scrub, and other suitable coastal California gnatcatcher habitat and shall utilize existing disturbed areas and roads whenever practicable.

All coastal sage scrub thinning shall occur outside the coastal California gnatcatcher breeding season (March 15 through August 15). If that is not possible then no vegetation management activities shall occur during the coastal California gnatcatcher breeding season (February 15 through August 15) until the following requirements have been met:

1. A permitted biologist (i.e., possessing a valid Endangered Species Act Section 10(a)(1)(a) Recovery Permit) shall conduct a focused protocol-level survey (i.e., three visit survey) for coastal California gnatcatcher (*Polioptila californica californica*) using the most recent protocol (U.S. Fish and Wildlife Service [USFWS] 1997 Coastal California Gnatcatcher Presence/ Absence Survey Guidelines) 3 days prior to Project activities within all fuel reduction areas containing coastal sage scrub including a 500-foot buffer. If presence of coastal California gnatcatcher is determined or assumed to occur on the Project Site, the following measures shall be required to be implemented by the applicant:
    a. No vegetation removal or thinning shall occur within occupied habitat during the coastal California gnatcatcher breeding season (February 15 to August 15). A minimum 500-foot buffer shall be established around occupied nests unless a larger buffer is determined necessary by the permitted biologist based on species behavior, topography, existing disturbance conditions, or other site-specific factors.

    b. The buffer shall be required around the nest site until it is shown to be vacated. If 100% avoidance of occupied habitat is not feasible, consultation with USFWS and California

[3] Unitt and Klovstad (2004) states that the nesting season generally lasts from April to July and dates for fledglings ranged between 27 April to 21 August.

Department of Fish and Wildlife (CDFW) shall be initiated prior to implementation of any activities that may impact occupied habitat, directly or indirectly.

c. Other measures from FWS-CFWO-16B0293-18F1358; Section 7 Consultation on FEMA Disaster, Mitigation and Preparedness Programs in Imperial, Inyo, Kern, Los Angeles, Orange, Riverside, San Bernardino, and San Diego Counties, California Coastal California Gnatcatcher CAGN-1 through CAGN-4 will apply. CAGN-5 through CAGN-7 do not apply as this project is intended to enhance native habitat and species.

MM BIO-7 Nesting Bird Survey. All nesting bird habitat trimming or thinning shall occur outside the nesting bird breeding season (February 15 through September 30). If the Project requires that work be initiated during the breeding season for nesting birds, in order to avoid direct impacts on active nests, a pre-construction survey shall be conducted in the Project Site and within 500 feet of the Project Site containing suitable nesting resources, by qualified biologists for nesting birds and/or raptors within 3 days prior to Project activities. If the biologist does not find any active nests within or immediately adjacent to the impact areas (i.e., 500 feet), the vegetation clearing work shall be allowed to proceed. If the biologist finds an active nest within or immediately adjacent to the work area and determines that the nest may be impacted or breeding activities substantially disrupted, the biologist shall delineate an appropriate buffer zone. A minimum buffer ranging from 50 feet for common or disturbance-tolerant species to 500 feet for raptors and special-status species. Larger buffers may be established by the qualified biologist based on species sensitivity, nesting stage, line-of-sight conditions, topography, ambient noise levels, observed behavioral responses, or the nature of the proposed activity. The nest area and buffer zone shall be avoided until the nest is vacated and the juveniles have fledged or the nest fails. Status of the nest shall be monitored by a qualified biologist. A report shall be submitted to the City of Santee and Wildlife Agencies (i.e., U.S. Fish and Wildlife Service and California Department of Fish and Wildlife) for review prior to discontinuing the noise limits and nest buffers. The nest buffer area shall be demarcated in the field with flagging and stakes or construction fencing. Personnel, including all contractors working on site, are required to be instructed on the sensitivity of the area. No Project activities shall encroach into established buffers without the consent of a monitoring biologist. The buffer shall remain in place until it is determined that the nestlings have fledged and the nest is no longer active. Work can proceed into the buffer when the qualified biologist has determined that the nest is no longer active or if appropriate noise mitigation is in place.

MM BIO-8 Avoidance of Listed Species Take: Crotch's Bumblebee. A pre-construction survey shall be conducted by a qualified biologist with expertise in surveying for bumble bees no more than 5 days prior to any Project activities occurring within Zones 1, 2, or 3. If a Crotch's bumble bee nest is detected during the pre-construction survey, the Project's biological monitor shall establish, monitor, and maintain a no-work buffer around the nest. The size and configuration of the no-work buffer shall be based on best professional judgment of the Project biologist in consultation with the Wildlife Agencies. The buffer shall provide at least 50 feet of clearance around nest entrances. Project activities shall not occur within the no-work buffer until the colony is no longer active. To determine that a nest is no longer active, the nest shall be observed for a minimum of 60 minutes each day across a minimum of 3 days during suitable flight weather (i.e., ambient air temperature between 60 and 90 degrees F, winds under 10 mph, and no precipitation higher than a drizzling rain). If no bees

are seen flying in or out of the nest by the end of the observation period, it shall be determined that the nest is no longer active. If Project activities occur outside of the colony active period (April 1–August 31), then pre-construction surveys for active bee nest colonies are not required.

If Crotch's bumble bee is observed during the pre-construction survey, the Project's biological monitor shall ensure the individual(s) are not impacted by Project activities through establishment of a no-work area. The biological monitor shall also review the immediate vicinity to ensure no nests are present.

MM BIO-9 Tree Survey. Prior to the commencement of vegetation management activities within Zones 1 to 3, a Certified Arborist shall be present to conduct a comprehensive tree inventory to determine the exact locations for dead, dying, and invasive species slated for removal. The comprehensive tree inventory may also occur concurrently with vegetation management activities so as not to interfere with Project timing. Trees shall be marked or flagged by the Certified Arborist for the contractor and the tree inventory and removal tracking shall be provided to the City of Santee.

MM BIO-10 Jurisdictional Aquatic Resources Permitting. The City of Santee shall obtain the applicable permits for treatment activities (i.e., trimming or thinning of native or non-native vegetation within Zones 1 and 2) occurring within jurisdictional aquatic resources, such as a Section 404 permit from USACE, a Streambed Alteration Agreement from CDFW, and a 401 Water Quality Certification/Waste Discharge Requirement from the RWQCB. No native or non-native vegetation trimming or thinning in Zones 1 and 2 shall occur within any jurisdictional riparian/wetland vegetation communities on the Project Site prior to issuance of aquatic resources permits.

MM BIO-11 Jurisdictional Aquatic Resources Avoidance. Vegetation management activities occurring within Zone 3 shall only involve treatment or removal of dead, dying, or invasive species. The Project shall commit to avoid impacting streams within Zones 1, 2, and 3 by crossing them using temporary rubber mats or pads to distribute weight and minimize vegetation trampling and soil disturbance, and helicopter and/or crane removal where equipment access is constrained and hand carry is infeasible.

7 Conclusion

The Project involves fuel reduction activities to remove hazardous, non-native, and invasive trees in the San Diego River Corridor wildlands-urban interface within the City of Santee, San Diego County, California. The fuel reduction activities shall focus on removing non-native, dead, or decaying vegetation as well as prescribed treatment zones, with native or non-native brush thinning restricted to upland defensible space areas after required permits are obtained.

The Project is consistent with the City of Santee Draft MSCP Subarea Plan. Potentially significant impacts to special-status species, sensitive or riparian vegetation communities, jurisdictional waters, nesting/migratory birds and wildlife corridors/nursery sites, local policies and ordinances, or regional habitat conservation plans from Project implementation are reduced to a less-than-significant level provided the specific features and mitigation measures described in this report are incorporated. Specific features and mitigation measures include seasonal restrictions, pre-construction surveys, and best management practices to ensure compliance with CEQA, the Migratory Bird Treaty Act, and other applicable regulations. The City of Santee would be responsible for any necessary local, state, or federal permits needed to conduct the proposed work.

Sincerely,



Brock Ortega
Principal Biologist

cc: *Kimberly Narel, Dudek*
Danielle Mullen, Dudek
Att: *Figures 1–10*
A, Site Photographs
B, Species Compendium
C, Special-Status Plant Species with a Potential to Occur
D, Special-Status Wildlife Species with a Potential to Occur

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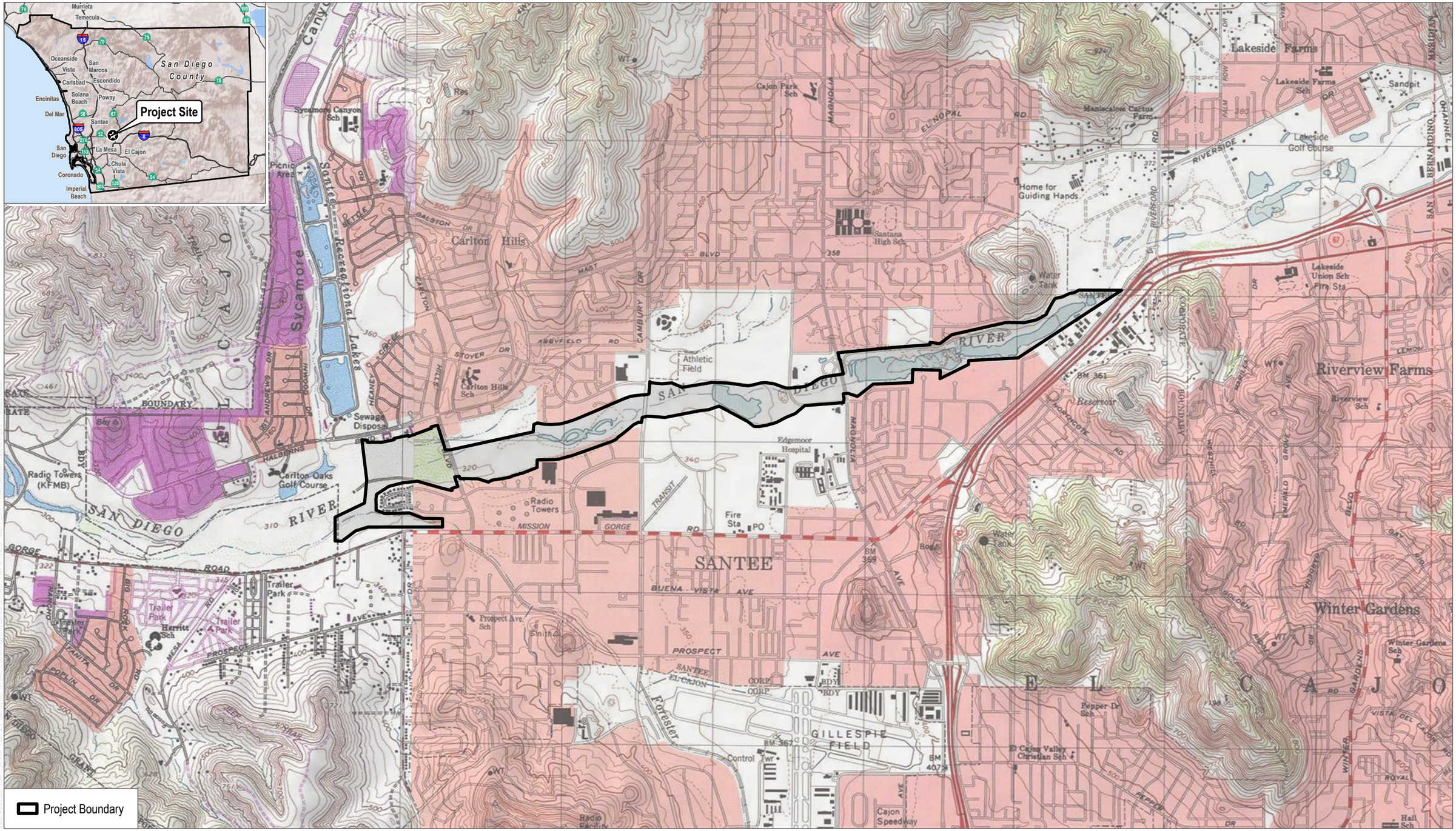
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SOURCE: USGS 7.5-Minute Series La Mesa and El Cajon Quadrangles

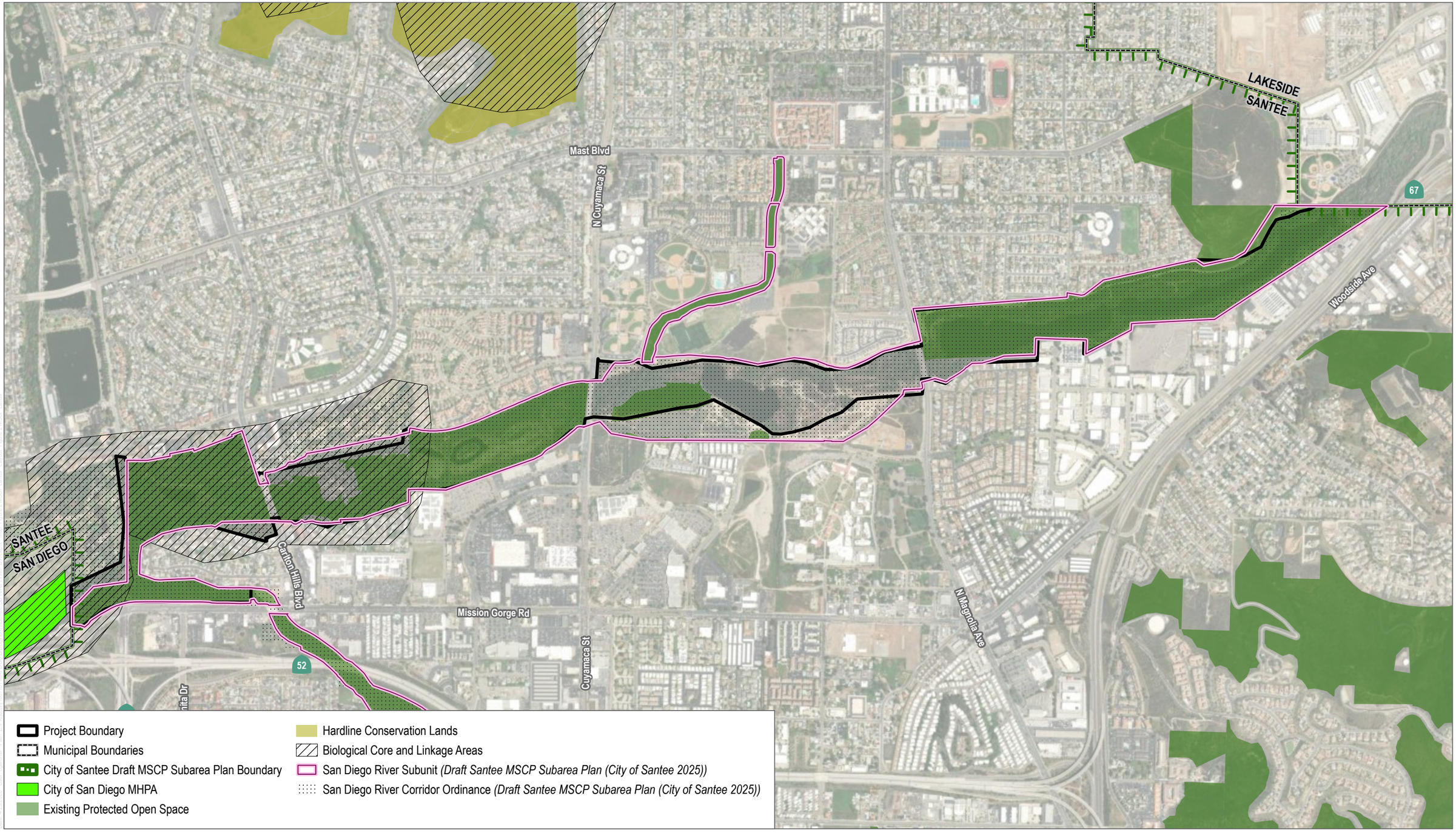
DUDEK

0 1,000 2,000 Feet

FIGURE 1

Project Location

San Diego River Fire Hazard Mitigation Program



SOURCE: Vantor 2025; Open Street Map 2025; SanGIS 2025; City of Santee 2025

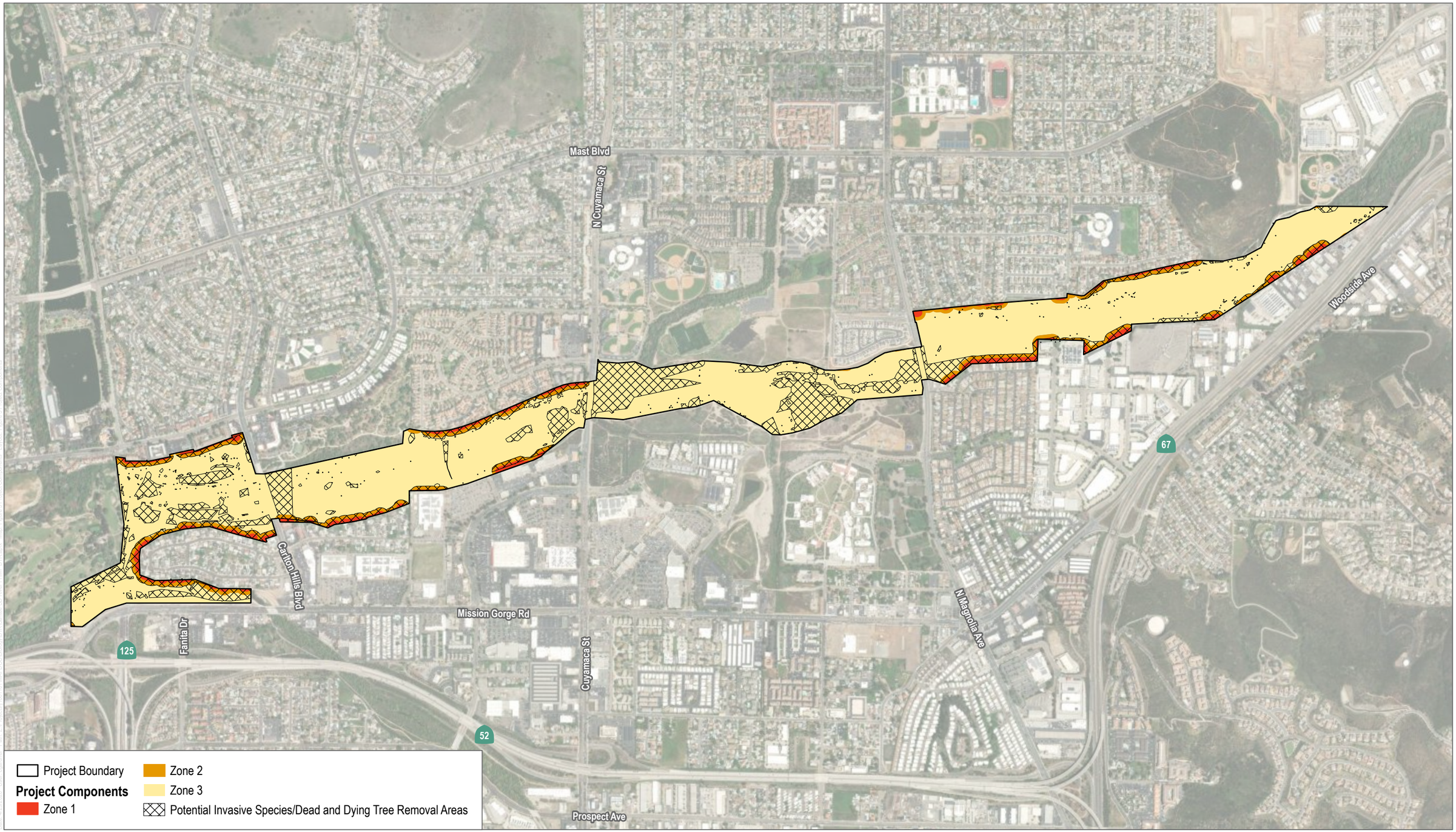
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FIGURE 2

MSCP Lands

San Diego River Fire Hazard Mitigation Program



SOURCE: Vantor 2025; Open Street Map 2025

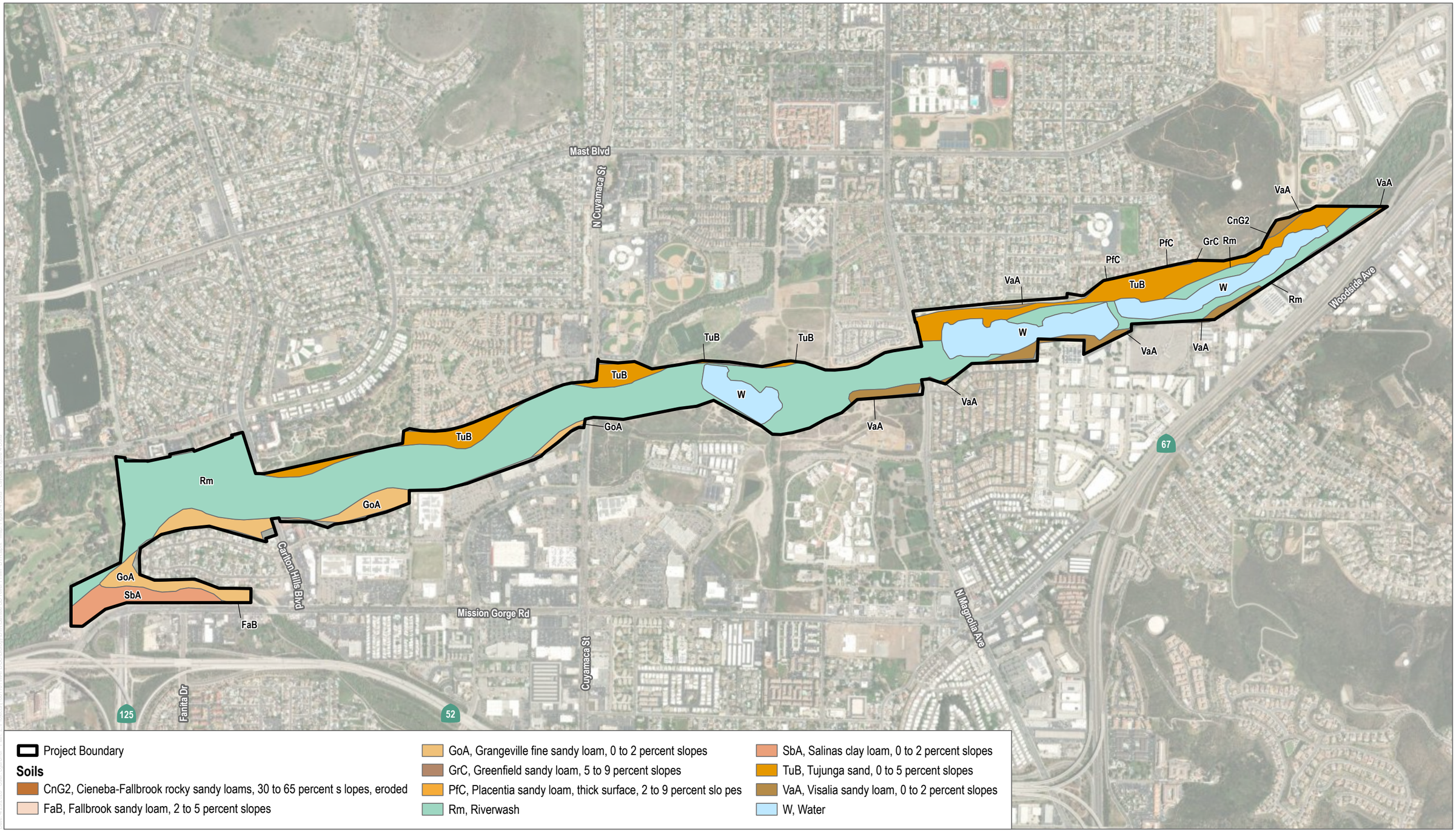
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FIGURE 3

Project Components

San Diego River Fire Hazard Mitigation Program



SOURCE: Vantor 2025; Open Street Map 2025; USGS SSURGO

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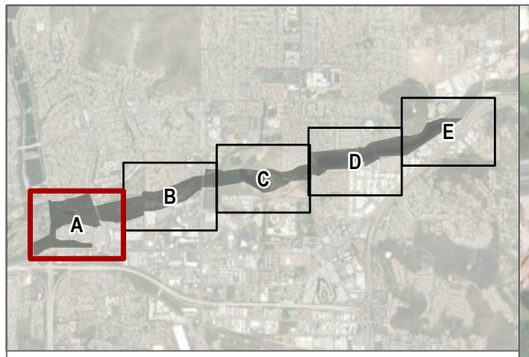
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FIGURE 4

Soils

San Diego River Fire Hazard Mitigation Program



Project Boundary

Vegetation Removal Areas

Potential Non-Native/Dead and Dying Vegetation Removal Areas

Cortaderia selloana (Uruguayan pampas grass)

Special-Status Plant Species

Iva hayesiana (San Diego marsh-elder)

Vegetation Communities and Land Covers

Sensitive Riparian Vegetation Communities

Sensitive Upland Vegetation Communities

CLOW, Coast Live Oak Woodland

CSS, Diegan Coastal Sage Scrub

CSSB, Diegan Coastal Sage Scrub: Baccharis-dominated

DEV, Urban/Developed

DH, Disturbed Habitat

DW, Disturbed Wetland

EUC, Eucalyptus Woodland

EW, Emergent Wetland

FWM, Coastal and Valley Freshwater Marsh

MFS, Mule Fat Scrub

NNR, Non-Native Riparian

NNW, Non-Native Woodland

NVC, Non-Vegetated Channel or Floodway

OW, Open Water

SCWRF, Southern Cottonwood-Willow Riparian Forest

SWS, Southern Willow Scrub

SOURCE: Vantor 2025; Open Street Map 2025

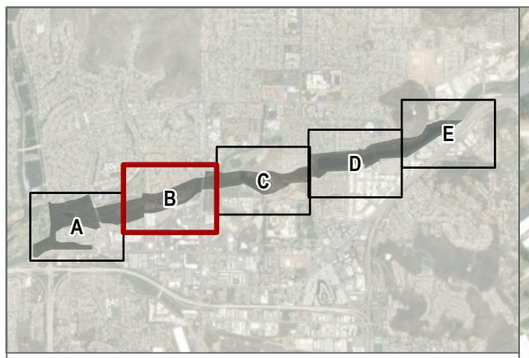
DUDEK

0 150 300 Feet

FIGURE 5A

Biological Resources

San Diego River Fire Hazard Mitigation Program



Project Boundary

Vegetation Removal Areas

Potential Non-Native/Dead and Dying Vegetation Removal Areas

Arundo donax (giant reed)

Special-Status Plant Species

Iva hayesiana (San Diego marsh-elder)

Vegetation Communities and Land Covers

Sensitive Riparian Vegetation Communities

Sensitive Upland Vegetation Communities

CLOW, Coast Live Oak Woodland

CSS, Diegan Coastal Sage Scrub

CSSB, Diegan Coastal Sage Scrub: Baccharis-dominated

DEV, Urban/Developed

DH, Disturbed Habitat

EUC, Eucalyptus Woodland

EW, Emergent Wetland

FWM, Coastal and Valley Freshwater Marsh

NNG, Non-Native Grassland

NNR, Non-Native Riparian

OW, Open Water

SCWRF, Southern Cottonwood-Willow Riparian Forest

SWS, Southern Willow Scrub

SOURCE: Vantor 2025; Open Street Map 2025

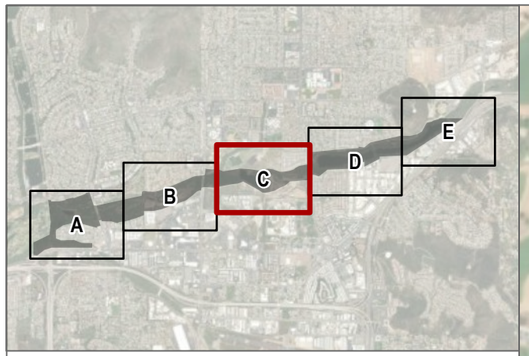
DUDEK

0 150 300 Feet

FIGURE 5B

Biological Resources

San Diego River Fire Hazard Mitigation Program



Project Boundary

Vegetation Removal Areas

Potential Non-Native/Dead and Dying Vegetation Removal Areas

Arundo donax (giant reed)

Vegetation Communities and Land Covers

Sensitive Riparian Vegetation Communities

Sensitive Upland Vegetation Communities

CLOW, Coast Live Oak Woodland

CSS, Diegan Coastal Sage Scrub

CSSB, Diegan Coastal Sage Scrub: Baccharis-dominated

DEV, Urban/Developed

DH, Disturbed Habitat

EUC, Eucalyptus Woodland

EW, Emergent Wetland

FWM, Coastal and Valley Freshwater Marsh

NNG, Non-Native Grassland

OW, Open Water

SCWRF, Southern Cottonwood-Willow Riparian Forest

SWRF, Southern Arroyo Willow Riparian Forest

TS, Tamarisk Scrub

Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

SOURCE: Vantor 2025; Open Street Map 2025

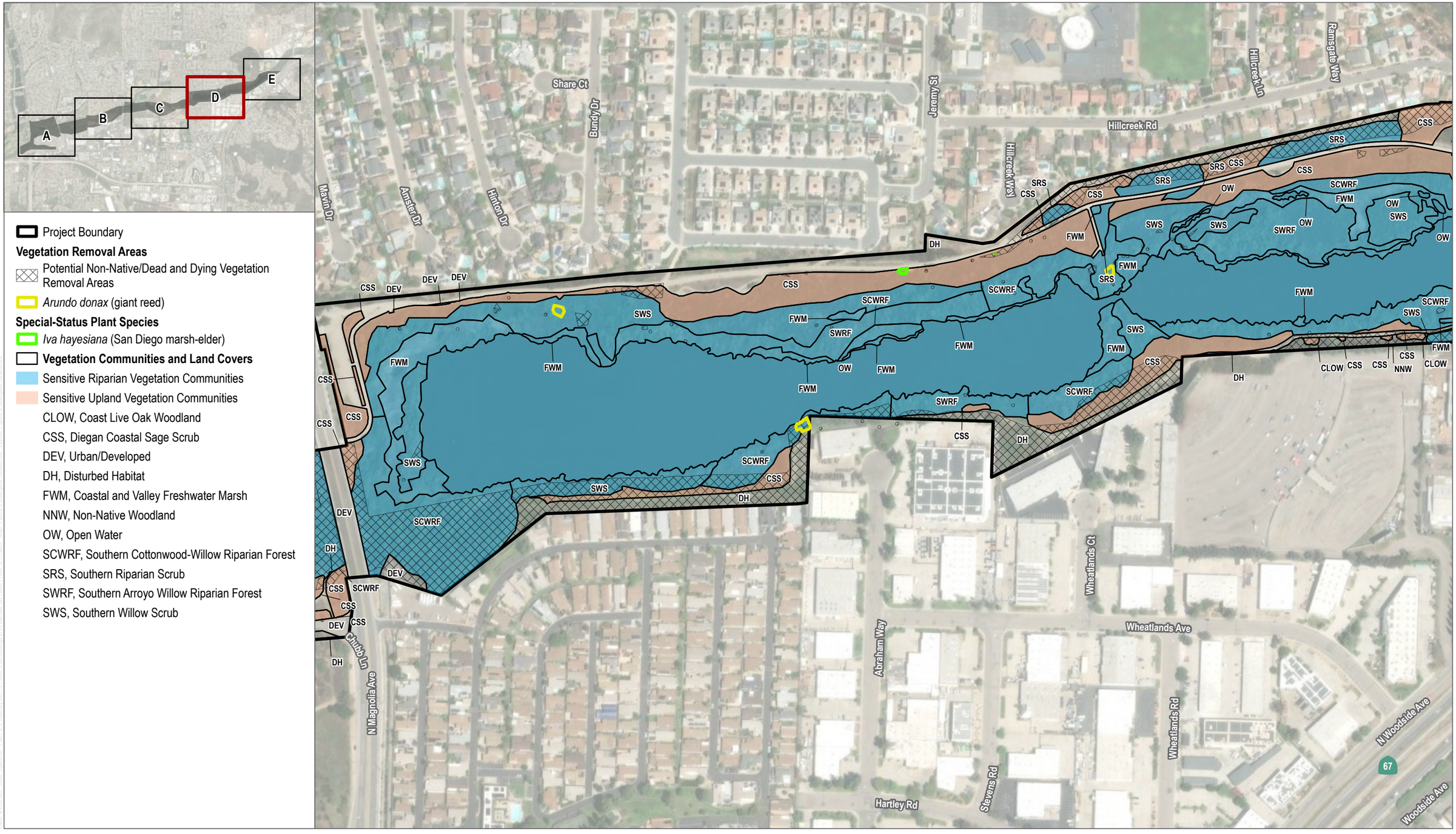
DUDEK

0 150 300 Feet

FIGURE 5C

Biological Resources

San Diego River Fire Hazard Mitigation Program



Project Boundary

Vegetation Removal Areas

Potential Non-Native/Dead and Dying Vegetation Removal Areas

Arundo donax (giant reed)

Special-Status Plant Species

Iva hayesiana (San Diego marsh-elder)

Vegetation Communities and Land Covers

Sensitive Riparian Vegetation Communities

Sensitive Upland Vegetation Communities

CLOW, Coast Live Oak Woodland

CSS, Diegan Coastal Sage Scrub

DEV, Urban/Developed

DH, Disturbed Habitat

FWM, Coastal and Valley Freshwater Marsh

NNW, Non-Native Woodland

OW, Open Water

SCWRF, Southern Cottonwood-Willow Riparian Forest

SRS, Southern Riparian Scrub

SWRF, Southern Arroyo Willow Riparian Forest

SWS, Southern Willow Scrub

SOURCE: Vantor 2025; Open Street Map 2025

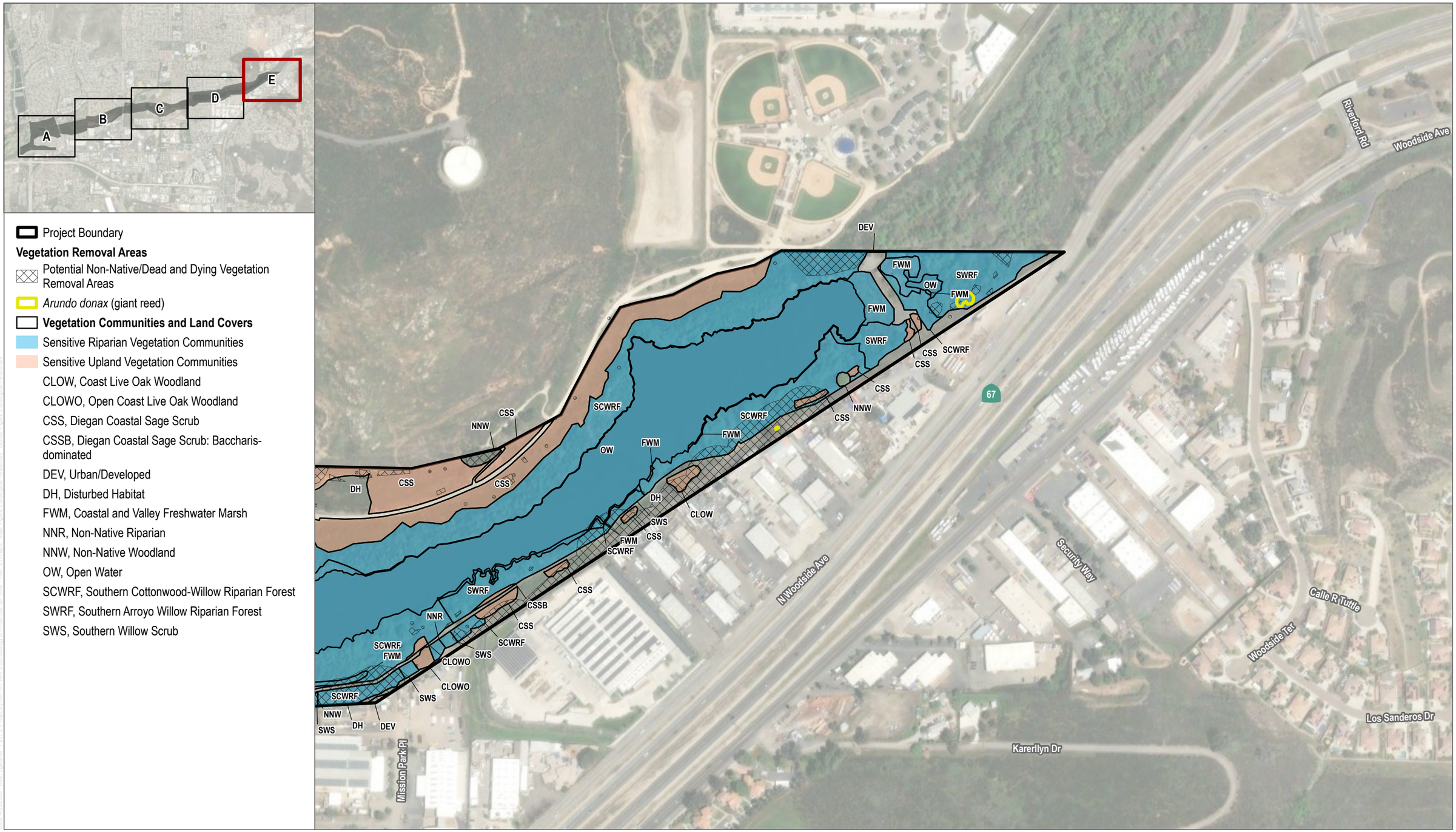
DUDEK

0 150 300 Feet

FIGURE 5D

Biological Resources

San Diego River Fire Hazard Mitigation Program



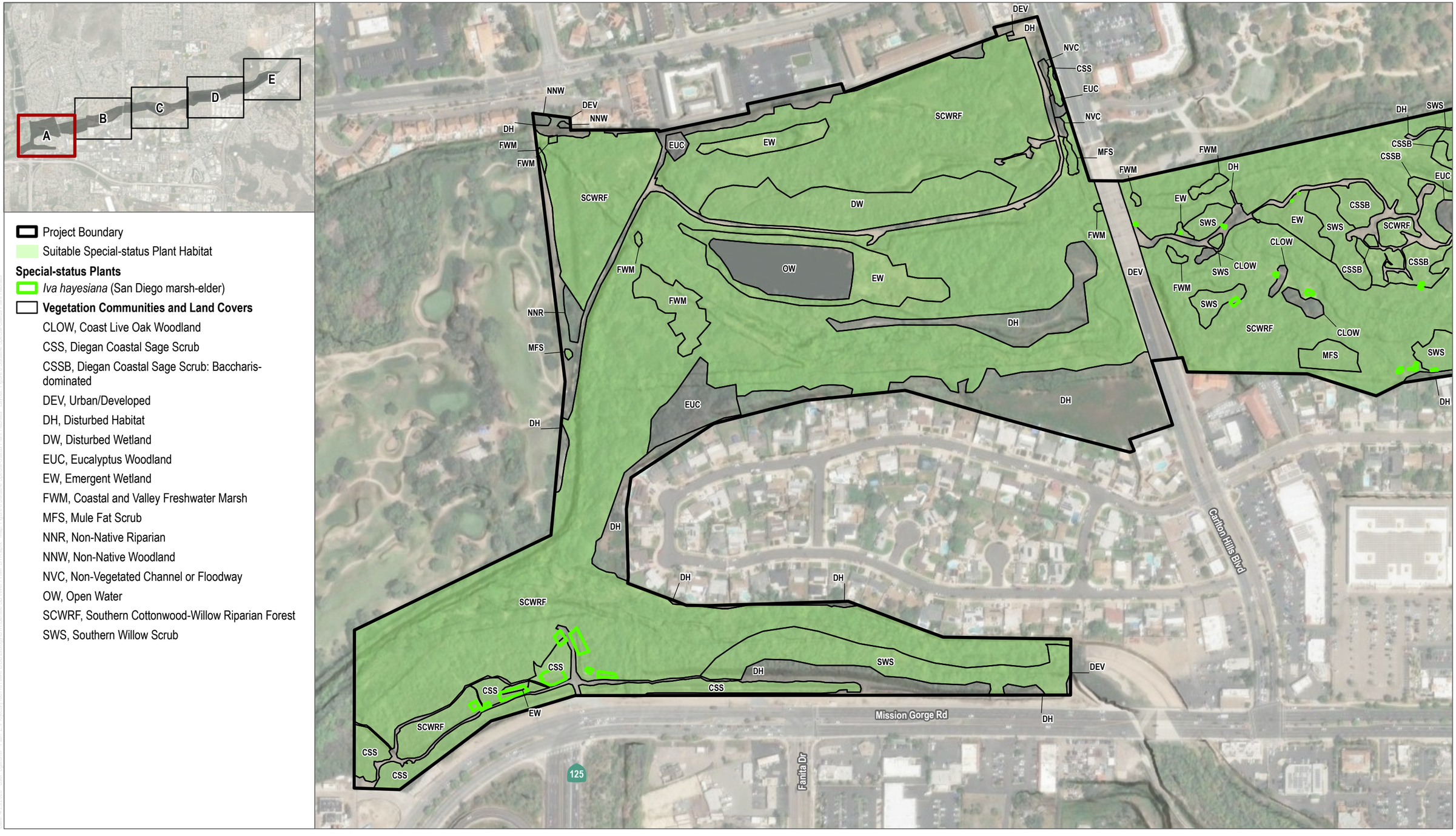
SOURCE: Vantor 2025; Open Street Map 2025

FIGURE 5E

Biological Resources

San Diego River Fire Hazard Mitigation Program

DUDEK



SOURCE: Vantor 2025; Open Street Map 2025

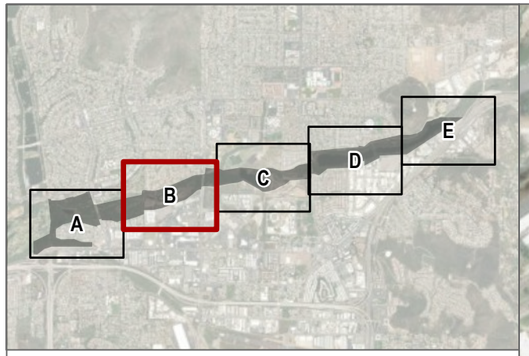
DUDEK

0 150 300 Feet

FIGURE 6A

Suitable Special-Status Plant Habitats

San Diego River Fire Hazard Mitigation Program



Project Boundary

Suitable Special-status Plant Habitat

Special-status Plants

Iva hayesiana (San Diego marsh-elder)

Vegetation Communities and Land Covers

CLOW, Coast Live Oak Woodland

CSS, Diegan Coastal Sage Scrub

CSSB, Diegan Coastal Sage Scrub: Baccharis-dominated

DEV, Urban/Developed

DH, Disturbed Habitat

EUC, Eucalyptus Woodland

EW, Emergent Wetland

FWM, Coastal and Valley Freshwater Marsh

NNG, Non-Native Grassland

NNR, Non-Native Riparian

OW, Open Water

SCWRF, Southern Cottonwood-Willow Riparian Forest

SWS, Southern Willow Scrub



SOURCE: Vantor 2025; Open Street Map 2025

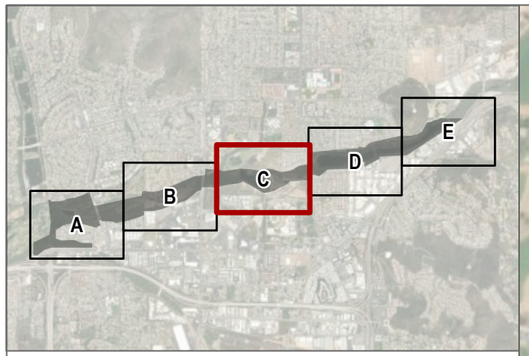
DUDEK

0 150 300 Feet

FIGURE 6B

Suitable Special-Status Plant Habitats

San Diego River Fire Hazard Mitigation Program



- Project Boundary
- Suitable Special-status Plant Habitat
- White rabbit-tobacco *(Pseudognaphalium leucocephalum)*
- **Vegetation Communities and Land Covers**
  - CLOW, Coast Live Oak Woodland
  - CSS, Diegan Coastal Sage Scrub
  - CSSB, Diegan Coastal Sage Scrub: Baccharis-dominated
  - DEV, Urban/Developed
  - DH, Disturbed Habitat
  - EUC, Eucalyptus Woodland
  - EW, Emergent Wetland
  - FWM, Coastal and Valley Freshwater Marsh
  - NNG, Non-Native Grassland
  - OW, Open Water
  - SCWRF, Southern Cottonwood-Willow Riparian Forest
  - SWRF, Southern Arroyo Willow Riparian Forest
  - TS, Tamarisk Scrub

SOURCE: Vantor 2025; Open Street Map 2025

DUDEK

0 150 300 Feet

FIGURE 6C

Suitable Special-Status Plant Habitats

San Diego River Fire Hazard Mitigation Program



SOURCE: Vantor 2025; Open Street Map 2025

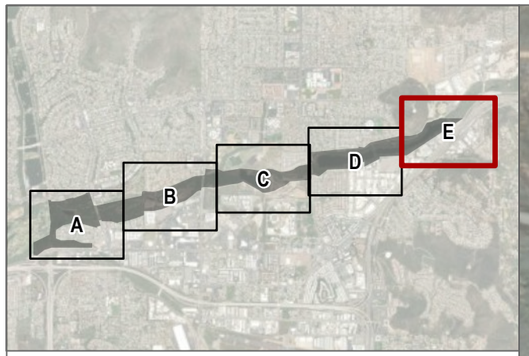
DUDEK

0 150 300 Feet

FIGURE 6D

Suitable Special-Status Plant Habitats

San Diego River Fire Hazard Mitigation Program



Project Boundary

Suitable Special-status Plant Habitat

Vegetation Communities and Land Covers

CLOW, Coast Live Oak Woodland

CLOWO, Open Coast Live Oak Woodland

CSS, Diegan Coastal Sage Scrub

CSSB, Diegan Coastal Sage Scrub: Baccharis-dominated

DEV, Urban/Developed

DH, Disturbed Habitat

FWM, Coastal and Valley Freshwater Marsh

NNR, Non-Native Riparian

NNW, Non-Native Woodland

OW, Open Water

SCWRF, Southern Cottonwood-Willow Riparian Forest

SWRF, Southern Arroyo Willow Riparian Forest

SWS, Southern Willow Scrub

SOURCE: Vantor 2025; Open Street Map 2025

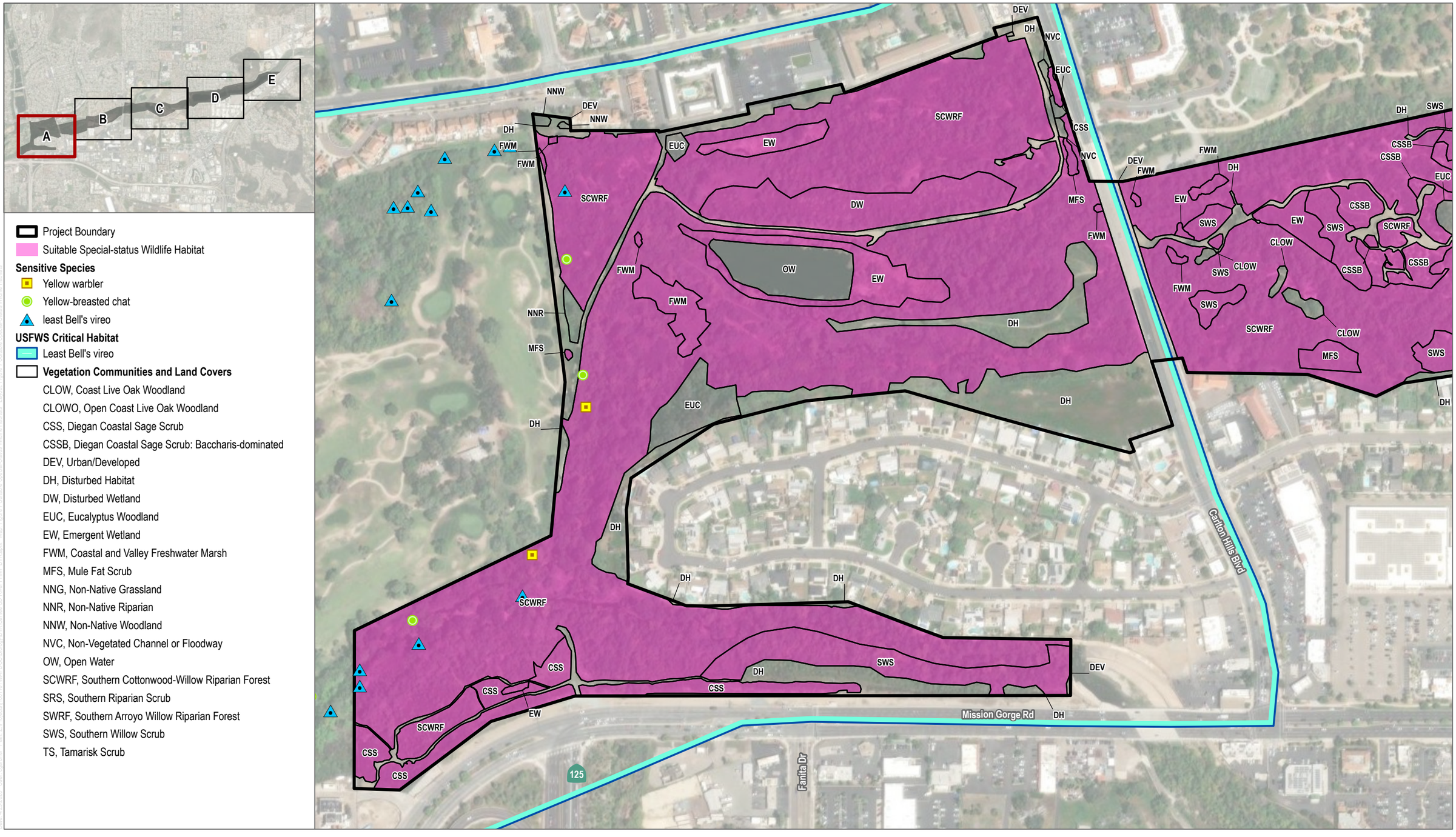
DUDEK

0 150 300 Feet

FIGURE 6E

Suitable Special-Status Plant Habitats

San Diego River Fire Hazard Mitigation Program



SOURCE: Vantor 2025; Open Street Map 2025

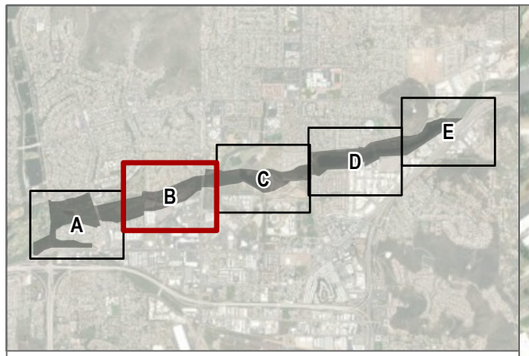
DUDEK

0 150 300 Feet

FIGURE 7A

Suitable Special-Status Wildlife Habitats

San Diego River Fire Hazard Mitigation Program



- Project Boundary
- Suitable Special-status Wildlife Habitat
- **Vegetation Communities and Land Covers**
  - CLOW, Coast Live Oak Woodland
  - CLOWO, Open Coast Live Oak Woodland
  - CSS, Diegan Coastal Sage Scrub
  - CSSB, Diegan Coastal Sage Scrub: Baccharis-dominated
  - DEV, Urban/Developed
  - DH, Disturbed Habitat
  - DW, Disturbed Wetland
  - EUC, Eucalyptus Woodland
  - EW, Emergent Wetland
  - FWM, Coastal and Valley Freshwater Marsh
  - MFS, Mule Fat Scrub
  - NNG, Non-Native Grassland
  - NNR, Non-Native Riparian
  - NNW, Non-Native Woodland
  - NVC, Non-Vegetated Channel or Floodway
  - OW, Open Water
  - SCWRF, Southern Cottonwood-Willow Riparian Forest
  - SRS, Southern Riparian Scrub
  - SWRF, Southern Arroyo Willow Riparian Forest
  - SWS, Southern Willow Scrub
  - TS, Tamarisk Scrub



SOURCE: Vantor 2025; Open Street Map 2025

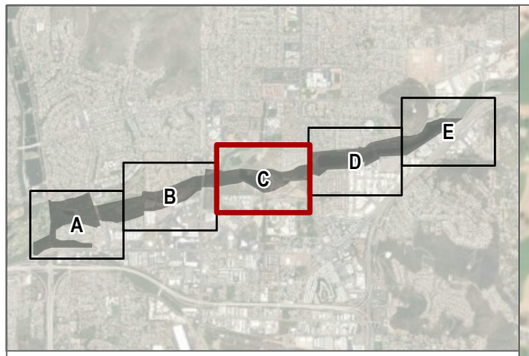
DUDEK

0 150 300 Feet

FIGURE 7B

Suitable Special-Status Wildlife Habitats

San Diego River Fire Hazard Mitigation Program



Project Boundary

Suitable Special-status Wildlife Habitat

Sensitive Species

- Yellow warbler
- least Bell's vireo

Vegetation Communities and Land Covers

- CLOW, Coast Live Oak Woodland
- CLOWO, Open Coast Live Oak Woodland
- CSS, Diegan Coastal Sage Scrub
- CSSB, Diegan Coastal Sage Scrub: Baccharis-dominated
- DEV, Urban/Developed
- DH, Disturbed Habitat
- DW, Disturbed Wetland
- EUC, Eucalyptus Woodland
- EW, Emergent Wetland
- FWM, Coastal and Valley Freshwater Marsh
- MFS, Mule Fat Scrub
- NNG, Non-Native Grassland
- NNR, Non-Native Riparian
- NNW, Non-Native Woodland
- NVC, Non-Vegetated Channel or Floodway
- OW, Open Water
- SCWRF, Southern Cottonwood-Willow Riparian Forest
- SRS, Southern Riparian Scrub
- SWRF, Southern Arroyo Willow Riparian Forest
- SWS, Southern Willow Scrub
- TS, Tamarisk Scrub

N Magnolia Ave

SOURCE: Vantor 2025; Open Street Map 2025

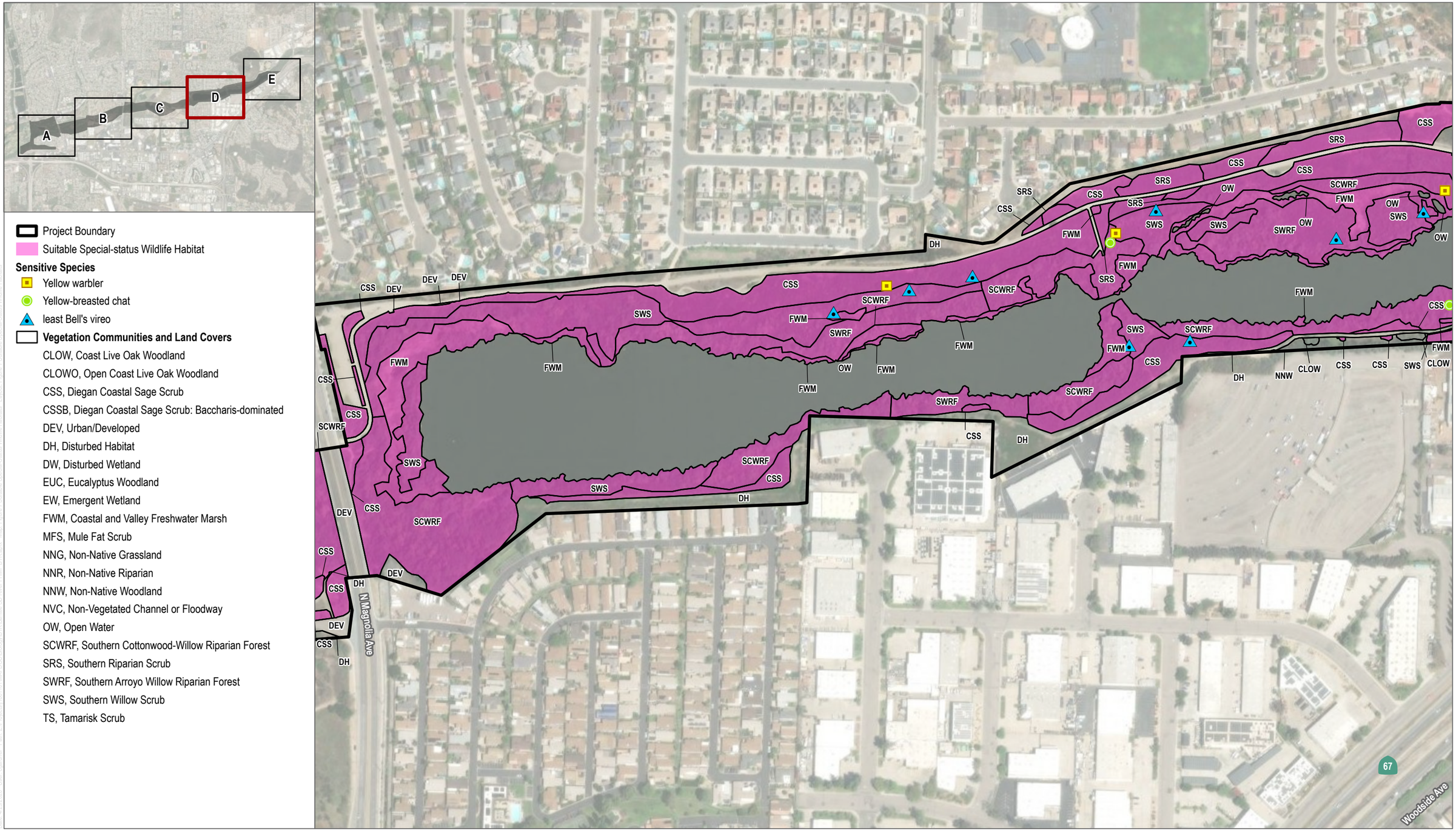
DUDEK

0 150 300 Feet

FIGURE 7C

Suitable Special-Status Wildlife Habitats

San Diego River Fire Hazard Mitigation Program



SOURCE: Vantor 2025; Open Street Map 2025

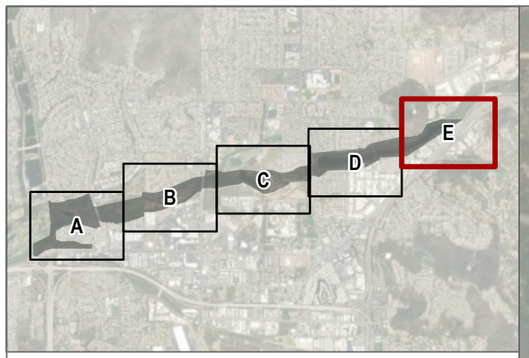
DUDEK

0 150 300 Feet

FIGURE 7D

Suitable Special-Status Wildlife Habitats

San Diego River Fire Hazard Mitigation Program



Project Boundary

Suitable Special-status Wildlife Habitat

Sensitive Species

Yellow-breasted chat

coastal California gnatcatcher

Vegetation Communities and Land Covers

CLOW, Coast Live Oak Woodland

CLOWO, Open Coast Live Oak Woodland

CSS, Diegan Coastal Sage Scrub

CSSB, Diegan Coastal Sage Scrub: Baccharis-dominated

DEV, Urban/Developed

DH, Disturbed Habitat

DW, Disturbed Wetland

EUC, Eucalyptus Woodland

EW, Emergent Wetland

FWM, Coastal and Valley Freshwater Marsh

MFS, Mule Fat Scrub

NNG, Non-Native Grassland

NNR, Non-Native Riparian

NNW, Non-Native Woodland

NVC, Non-Vegetated Channel or Floodway

OW, Open Water

SCWRF, Southern Cottonwood-Willow Riparian Forest

SRS, Southern Riparian Scrub

SWRF, Southern Arroyo Willow Riparian Forest

SWS, Southern Willow Scrub

TS, Tamarisk Scrub

SOURCE: Vantor 2025; Open Street Map 2025

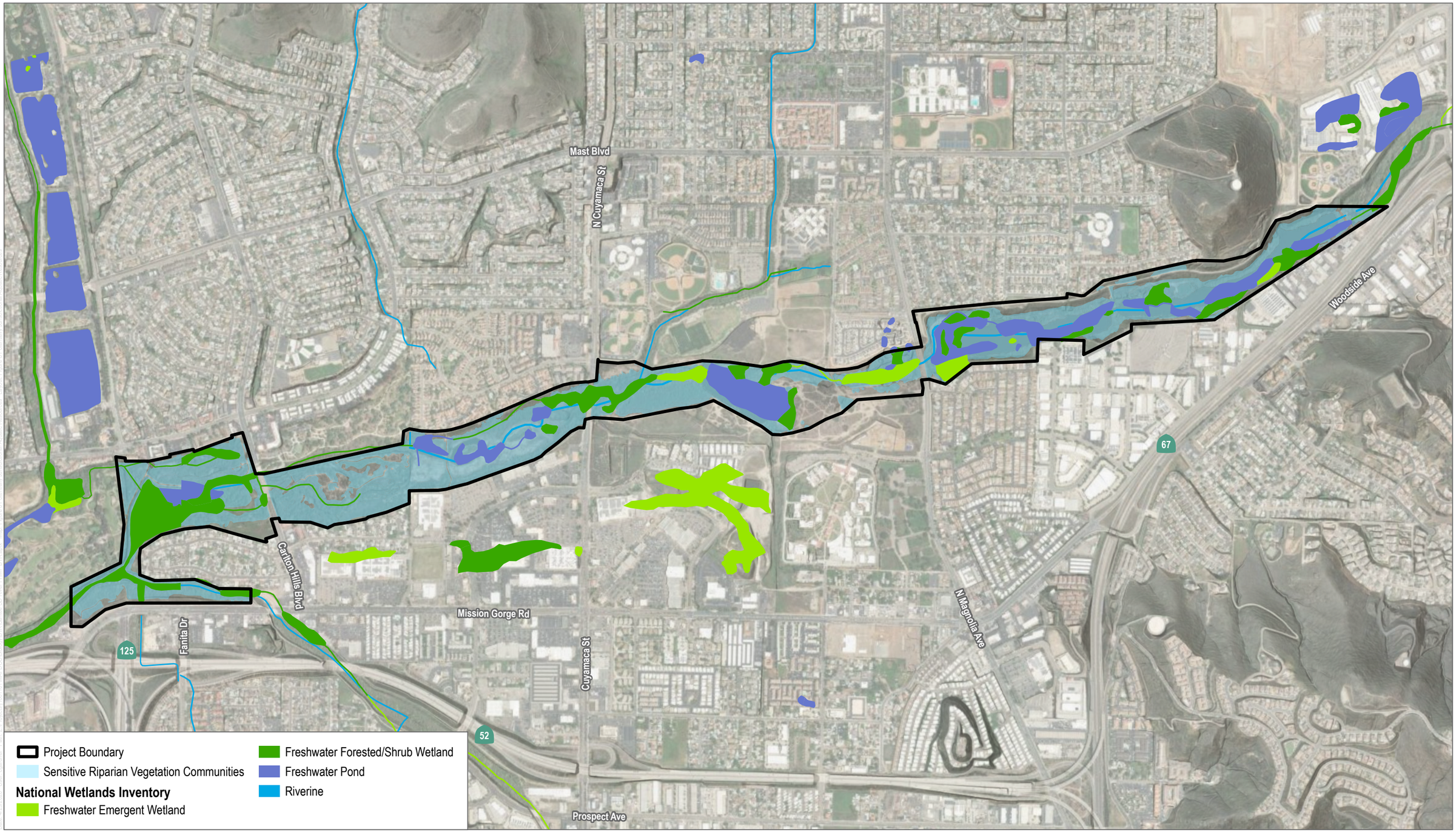
DUDEK

0 150 300 Feet

FIGURE 7E

Suitable Special-Status Wildlife Habitats

San Diego River Fire Hazard Mitigation Program



SOURCE: Vantor 2025; Open Street Map 2025; USGS NHD 2025; USFWS NWI 2025

DUDEK

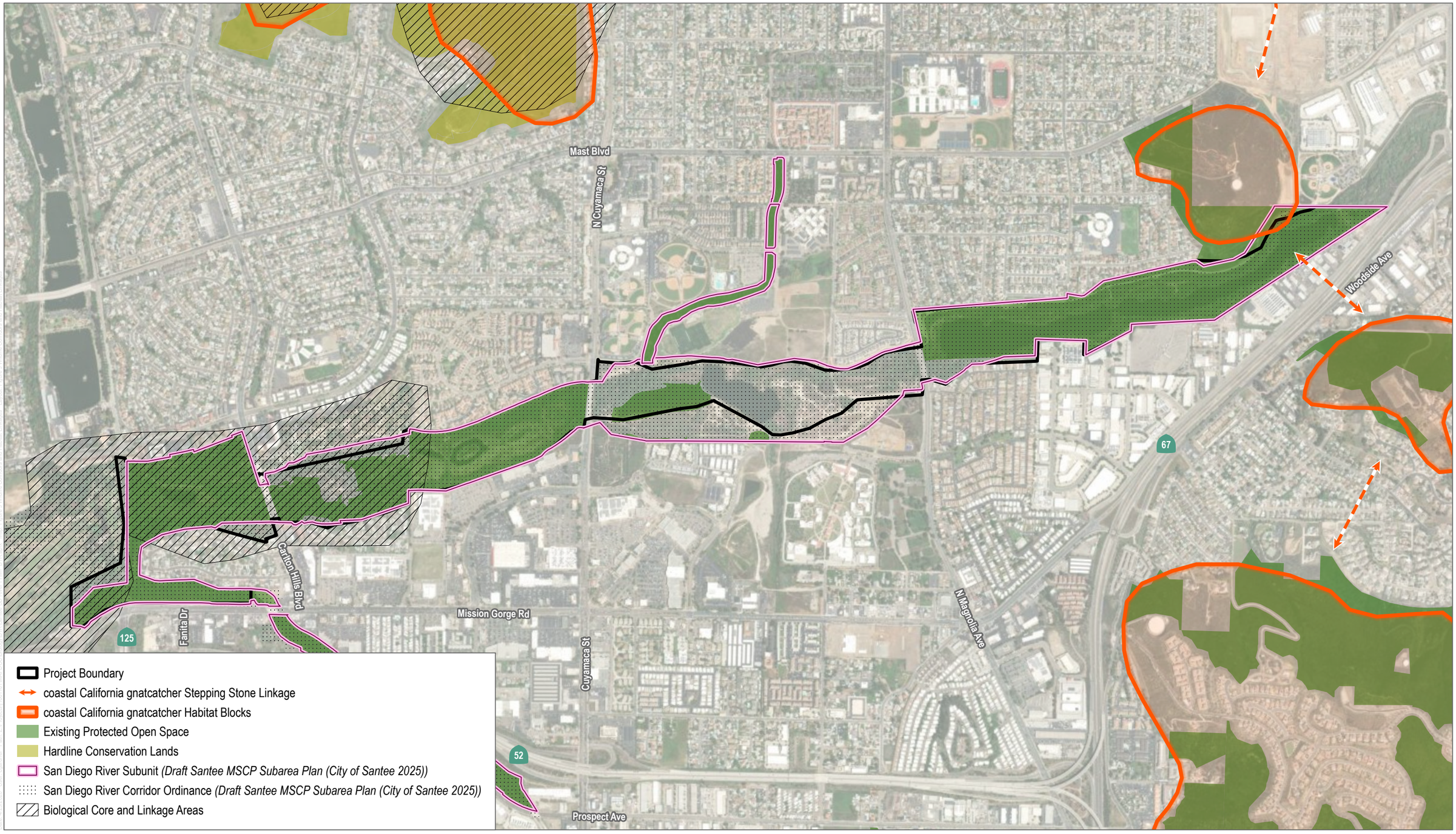
N

0 500 1,000 Feet

FIGURE 8

Potentially Jurisdictional Aquatic Resources

San Diego River Fire Hazard Mitigation Program



SOURCE: Vantor 2025; Open Street Map 2025; SanGIS 2025; City of Santee 2025

DUDEK

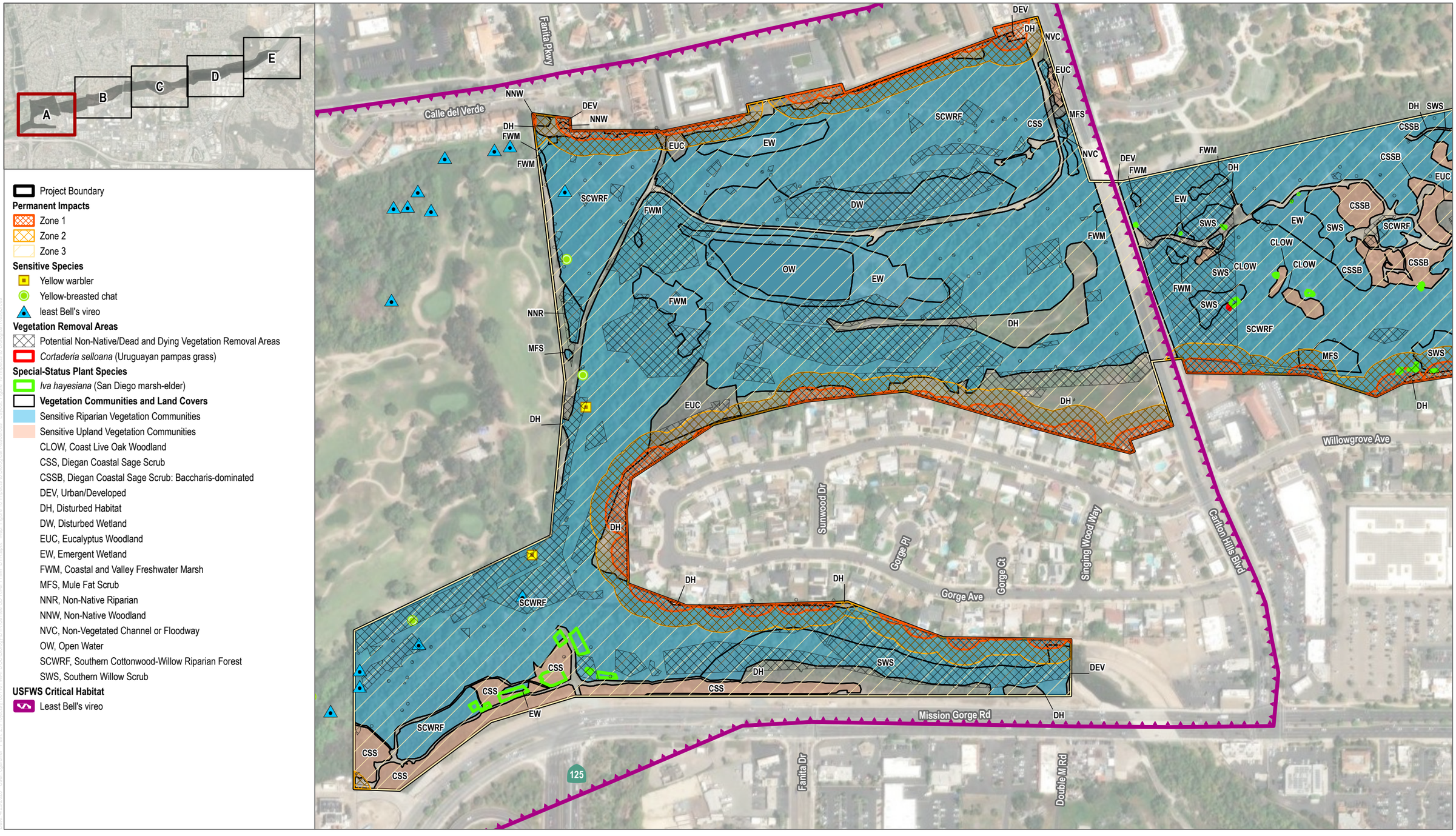
N

0 500 1,000 Feet

FIGURE 9

Wildlife Corridors and Habitat Linkages

San Diego River Fire Hazard Mitigation Program



SOURCE: Vantor 2025; Open Street Map 2025

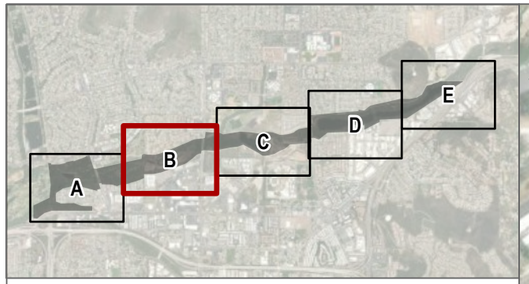
DUDEK

0 150 300 Feet

FIGURE 10A

Impacts to Biological Resources

San Diego River Fire Hazard Mitigation Program



Project Boundary

Permanent Impacts

Zone 1

Zone 2

Zone 3

Vegetation Removal Areas

Potential Non-Native/Dead and Dying Vegetation Removal Areas

Arundo donax (giant reed)

Special-Status Plant Species

Iva hayesiana (San Diego marsh-elder)

Vegetation Communities and Land Covers

Sensitive Riparian Vegetation Communities

Sensitive Upland Vegetation Communities

CLOW, Coast Live Oak Woodland

CSS, Diegan Coastal Sage Scrub

CSSB, Diegan Coastal Sage Scrub: Baccharis-dominated

DEV, Urban/Developed

DH, Disturbed Habitat

EUC, Eucalyptus Woodland

EW, Emergent Wetland

FWM, Coastal and Valley Freshwater Marsh

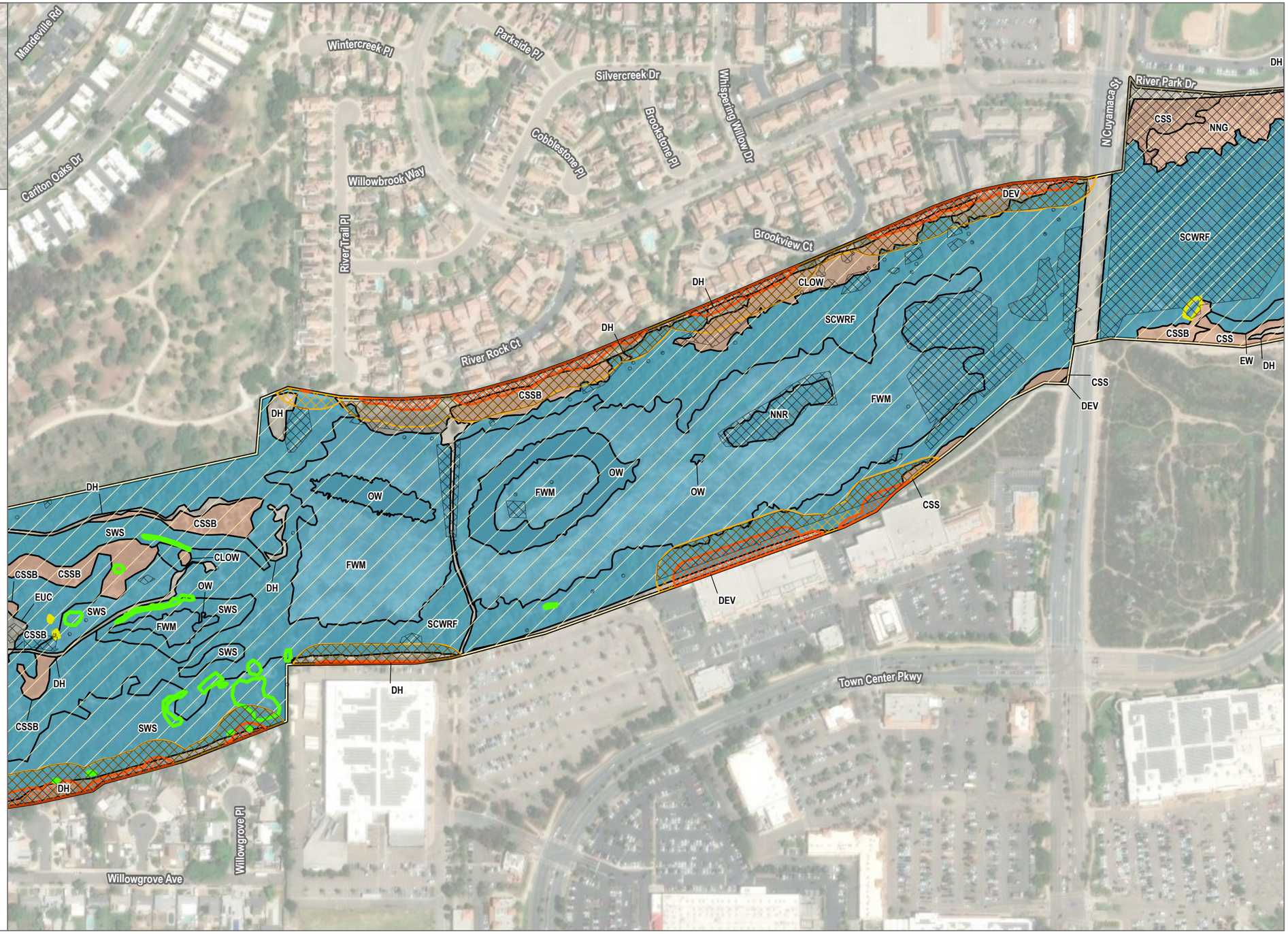
NNG, Non-Native Grassland

NNR, Non-Native Riparian

OW, Open Water

SCWRF, Southern Cottonwood-Willow Riparian Forest

SWS, Southern Willow Scrub



SOURCE: Vantor 2025; Open Street Map 2025

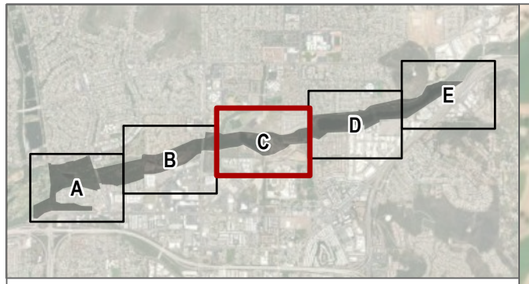
DUDEK

0 150 300 Feet

FIGURE 10B

Impacts to Biological Resources

San Diego River Fire Hazard Mitigation Program



Project Boundary

Permanent Impacts

Zone 1

Zone 2

Zone 3

Sensitive Species

Yellow warbler

least Bell's vireo

Vegetation Removal Areas

Potential Non-Native/Dead and Dying Vegetation Removal Areas

Arundo donax (giant reed)

Special-Status Plant Species

White rabbit-tobacco *(Pseudognaphalium leucocephalum)*

Vegetation Communities and Land Covers

Sensitive Riparian Vegetation Communities

Sensitive Upland Vegetation Communities

CLOW, Coast Live Oak Woodland

CSS, Diegan Coastal Sage Scrub

CSSB, Diegan Coastal Sage Scrub: Baccharis-dominated

DEV, Urban/Developed

DH, Disturbed Habitat

EUC, Eucalyptus Woodland

EW, Emergent Wetland

FWM, Coastal and Valley Freshwater Marsh

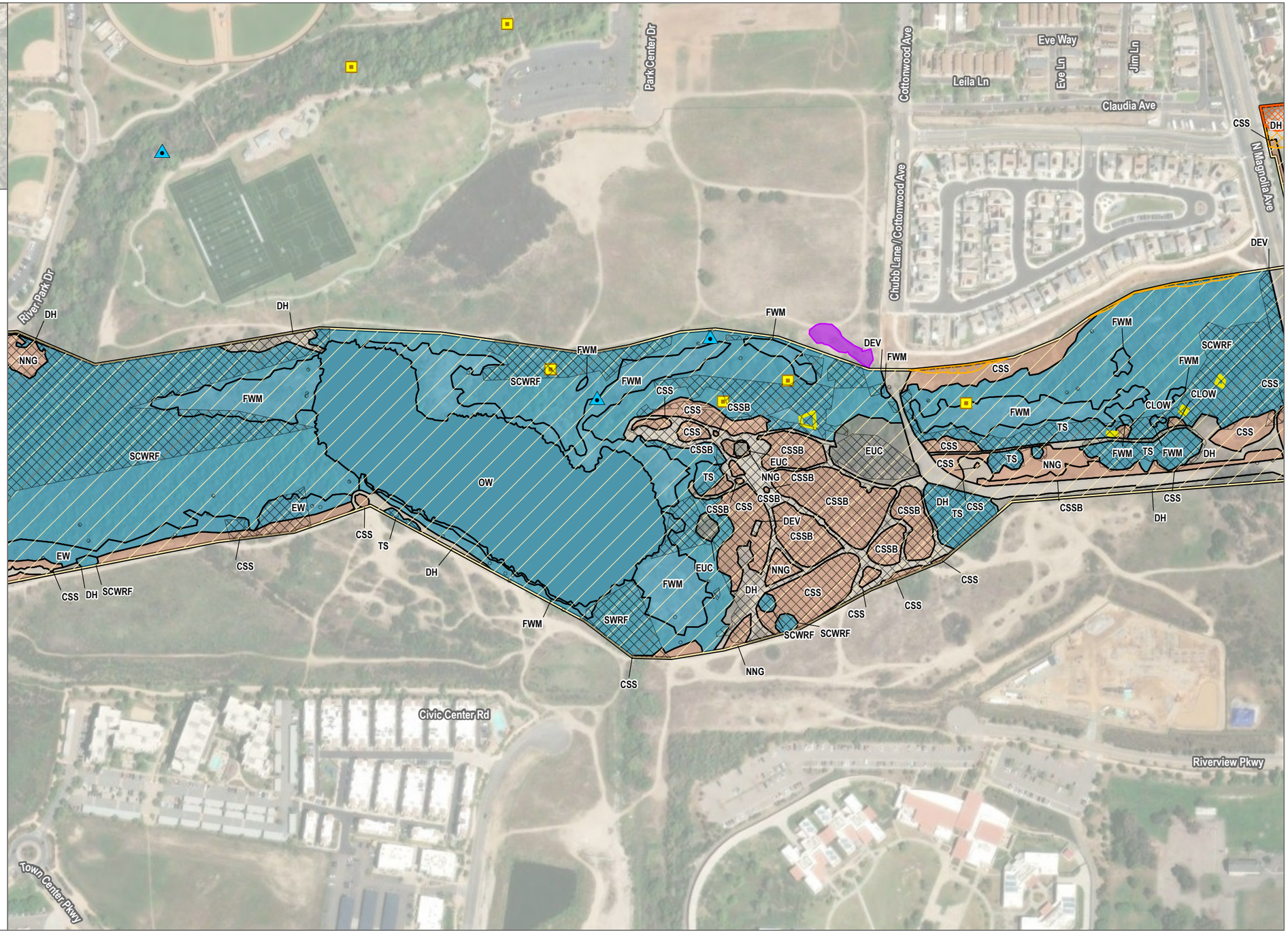
NNG, Non-Native Grassland

OW, Open Water

SCWRF, Southern Cottonwood-Willow Riparian Forest

SWRF, Southern Arroyo Willow Riparian Forest

TS, Tamarisk Scrub



SOURCE: Vantor 2025; Open Street Map 2025

DUDEK

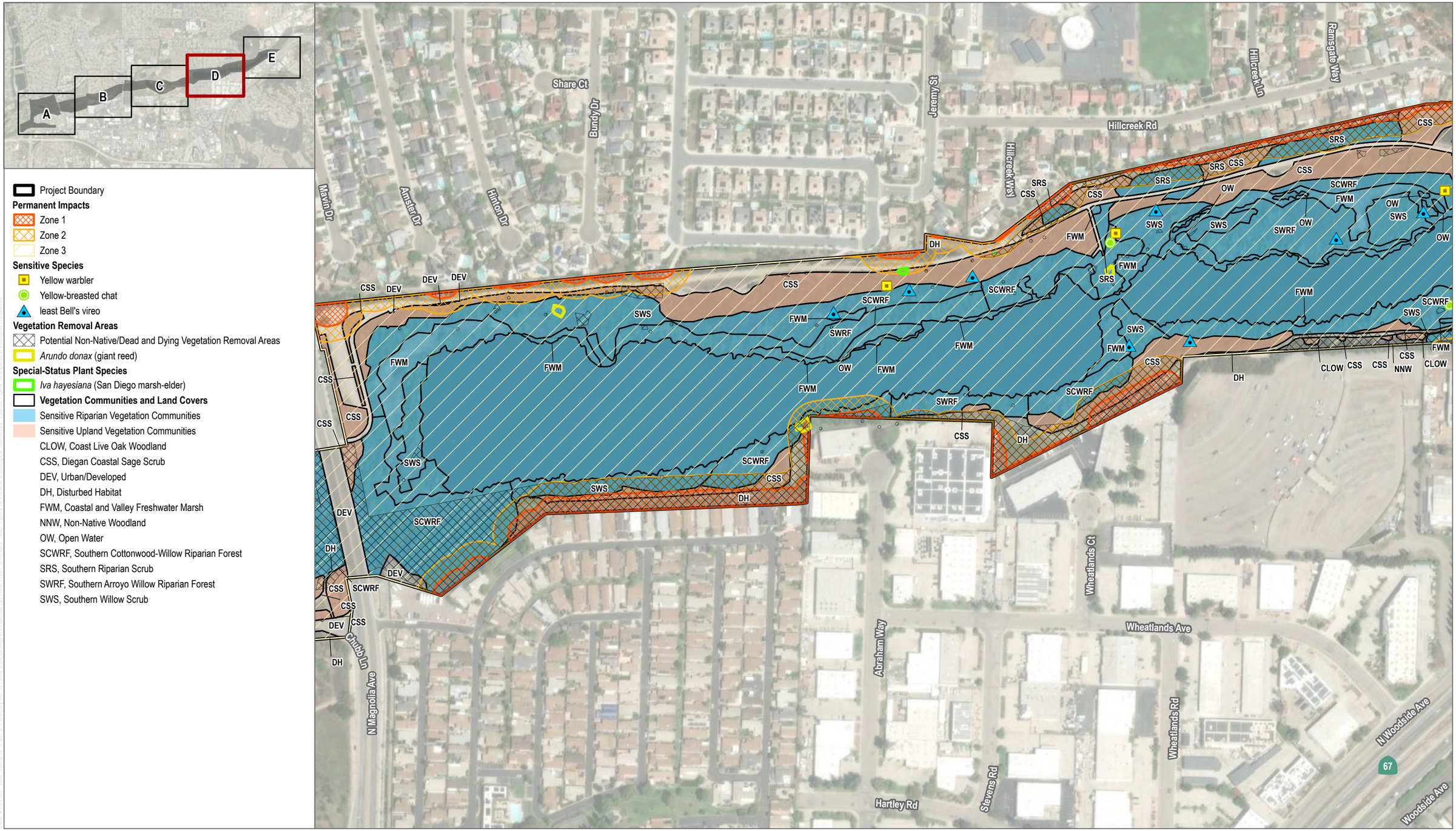
N

0 150 300 Feet

FIGURE 10C

Impacts to Biological Resources

San Diego River Fire Hazard Mitigation Program



- Project Boundary

Permanent Impacts

- Zone 1
- Zone 2
- Zone 3

Sensitive Species

- Yellow warbler
- Yellow-breasted chat
- least Bell's vireo

Vegetation Removal Areas

- Potential Non-Native/Dead and Dying Vegetation Removal Areas
- *Arundo donax* (giant reed)

Special-Status Plant Species

- *Iva hayesiana* (San Diego marsh-elder)

Vegetation Communities and Land Covers

- Sensitive Riparian Vegetation Communities
- Sensitive Upland Vegetation Communities
- CLOW, Coast Live Oak Woodland
- CSS, Diegan Coastal Sage Scrub
- DEV, Urban/Developed
- DH, Disturbed Habitat
- FWM, Coastal and Valley Freshwater Marsh
- NNW, Non-Native Woodland
- OW, Open Water
- SCWRF, Southern Cottonwood-Willow Riparian Forest
- SRS, Southern Riparian Scrub
- SWRF, Southern Arroyo Willow Riparian Forest
- SWS, Southern Willow Scrub

SOURCE: Vantor 2025; Open Street Map 2025

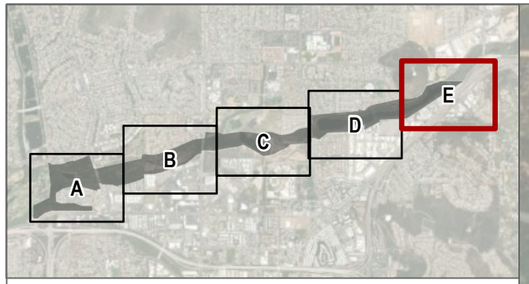
DUDEK

0 150 300 Feet

FIGURE 10D

Impacts to Biological Resources

San Diego River Fire Hazard Mitigation Program



Project Boundary

Permanent Impacts

- Zone 1
- Zone 2
- Zone 3

Sensitive Species

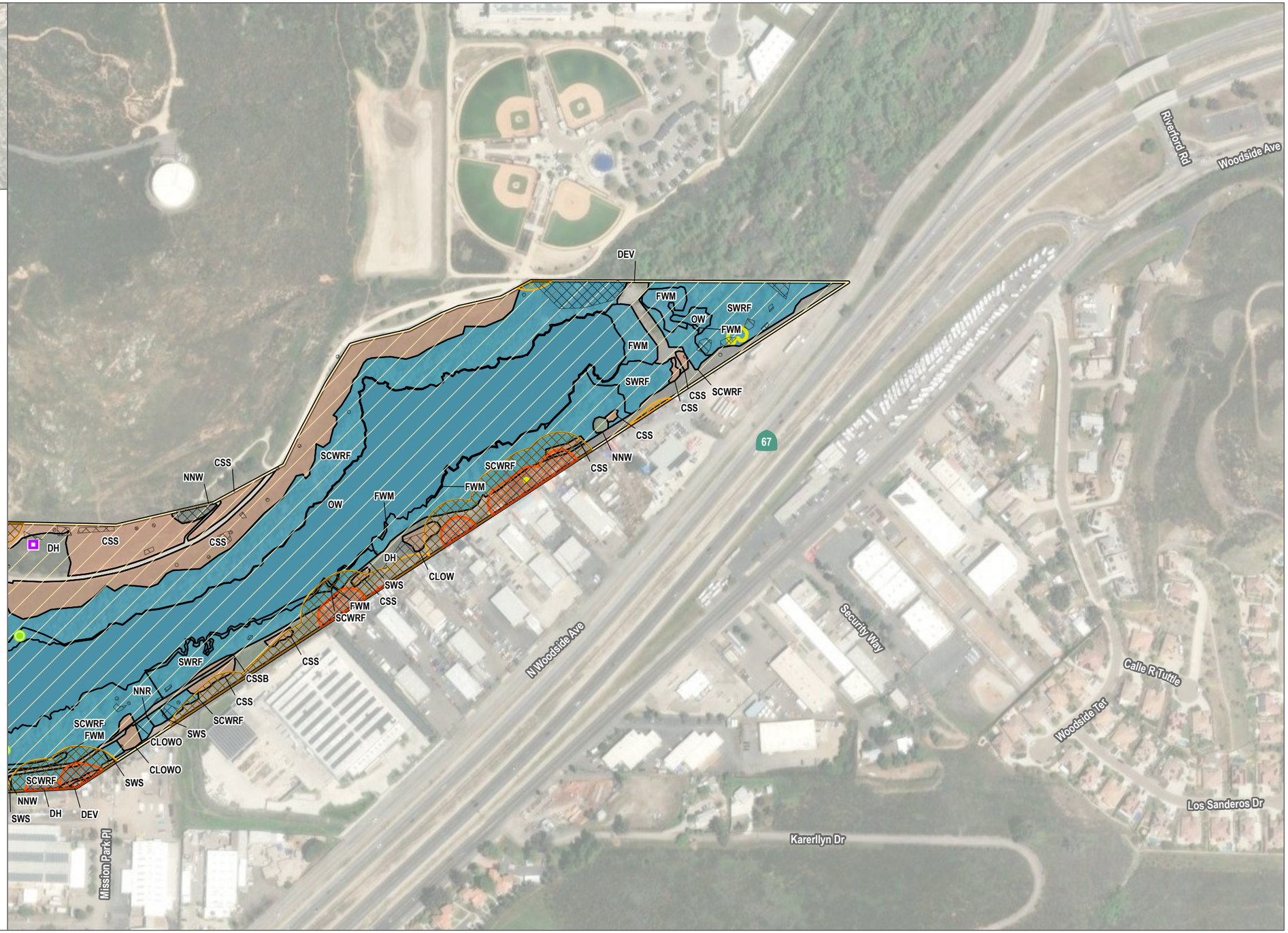
- Yellow-breasted chat
- coastal California gnatcatcher

Vegetation Removal Areas

- Potential Non-Native/Dead and Dying Vegetation Removal Areas
- *Arundo donax* (giant reed)

Vegetation Communities and Land Covers

- Sensitive Riparian Vegetation Communities
- Sensitive Upland Vegetation Communities
- CLOW, Coast Live Oak Woodland
- CLOWO, Open Coast Live Oak Woodland
- CSS, Diegan Coastal Sage Scrub
- CSSB, Diegan Coastal Sage Scrub: Baccharis-dominated
- DEV, Urban/Developed
- DH, Disturbed Habitat
- FWM, Coastal and Valley Freshwater Marsh
- NNR, Non-Native Riparian
- NNW, Non-Native Woodland
- OW, Open Water
- SCWRF, Southern Cottonwood-Willow Riparian Forest
- SWRF, Southern Arroyo Willow Riparian Forest
- SWS, Southern Willow Scrub



SOURCE: Vantor 2025; Open Street Map 2025

DUDEK

0 150 300 Feet

FIGURE 10E

Impacts to Biological Resources

San Diego River Fire Hazard Mitigation Program

Attachment A

Site Photographs



1. Overview of the project site, facing northeast from the southern project site boundary along Cuyamaca Street



2. Overview of San Diego River within the eastern portion of the project site



3. Dense riparian forest in the eastern portion of the project site, viewed from the southern project site boundary



4. Representative defensible space area along southern project site boundary at terminus of Abraham Way.

Attachment B

Species Compendium

Plant Species

Angiosperms (Dicots)

AIZOACEAE—FIG-MARIGOLD FAMILY

* *Carpobrotus edulis*—hottentot fig

ANACARDIACEAE—SUMAC FAMILY

Malosma laurina—laurel sumac
Rhus integrifolia—lemonade berry
Rhus ovata–sugarbush
* *Schinus molle*—Peruvian pepper tree
* *Schinus terebinthifolia*—Brazilian pepper tree

APIACEAE—CARROT FAMILY

* *Apium graveolens*—wild celery
* *Foeniculum vulgare*—fennel

ASTERACEAE—SUNFLOWER FAMILY

Ambrosia psilostachya—western ragweed
Artemisia californica—California sagebrush
Artemisia douglasiana — Douglas's sagewort
Artemisia palmeri–San Diego sagewort
Baccharis pilularis—coyote brush
Baccharis salicifolia—mulefat, seep-willow, water-wally
Baccharis sarothroides—desertbroom
Encelia californica—California brittle bush
Erigeron canadensis—Canadian horseweed
* *Glebionis coronaria*—crowndaisy
Heterotheca grandiflora—telegraph weed
Isocoma menziesii—Menzies' goldenbush
Isocoma menziesii ssp. *menziesii*—spreading goldenbush
Iva hayesiana—San Diego marsh-elder
Pluchea odorata—sweetscent
Pluchea sericea—arrow weed

BORAGINACEAE—BORAGE FAMILY

Heliotropium curassavicum—alkali heliotrope

BRASSICACEAE—MUSTARD FAMILY

* *Hirschfeldia incana*—short-pod mustard

CACTACEAE—CACTUS FAMILY

Cylindropuntia prolifera—coastal cholla

Opuntia littoralis—coast prickly pear

CHENOPODIACEAE—GOOSEFOOT FAMILY

Atriplex canescens—fourwing saltbush

CLEOMACEAE—CLEOME FAMILY

Cleomella arborea—bladderpod

CUCURBITACEAE—GOURD FAMILY

* *Cupaniopsis anacardioides*—carrotwood

EUPHORBIACEAE—SPURGE FAMILY

Croton californicus—California croton

Croton setiger—dove weed

* *Ricinus communis*—castor bean

FABACEAE—LEGUME FAMILY

Acmispon glaber—deerweed

Acmispon tomentosus—Heermann's bird's-foot trefoil

* *Melilotus indicus*—yellow sweetclover

* *Parkinsonia aculeata*—Jerusalem thorn

FAGACEAE—OAK FAMILY

Quercus agrifolia—coast live oak

HYDROPHYLLACEAE—WATERLEAF FAMILY

Phacelia ramosissima—branching phacelia

LAMIACEAE—MINT FAMILY

* *Marrubium vulgare*- horehound

Salvia apiana—white sage

Salvia mellifera—black sage

LYTHRACEAE—LOOSESTRIFE FAMILY

* *Lythrum portula*—spatulaleaf loosestrife

MORACEAE—MULBERRY FAMILY

* *Ficus carica*—edible fig

MYTRACEAE—MYRTLE FAMILY

* *Eucalyptus camaldulensis*—river redgum

* *Melaleuca viminalis*—weeping bottlebrush

OLEACEAE—OLIVE FAMILY

* *Fraxinus uhdei*—evergreen ash
* *Olea europaea*—olive

ONAGRACEAE—EVENING PRIMROSE FAMILY

Camissoniopsis cheiranthifolia—beach suncup

Oenothera elata—Hooker's evening primrose

PLANTAGINACEAE—PLANTAIN FAMILY

* *Plantago lanceolata*—narrowleaf plantain

PLATANACEAE—PLANE TREE, SYCAMORE FAMILY

Platanus racemosa—California sycamore

POLYGONACEAE—BUCKWHEAT FAMILY

Eriogonum fasciculatum—California buckwheat

ROSACEAE—ROSE FAMILY

Heteromeles arbutifolia—toyon

* *Pyracantha koidzumii*—Formosa firethorn

Rosa californica—California rose

Rubus ursinus—California blackberry

SALICACEAE—WILLOW FAMILY

Populus fremontii—Fremont cottonwood

Salix exigua—sandbar willow

Salix gooddingii—Goodding's willow

Salix laevigata -red willow

Salix lasiolepis—arroyo willow

SAURURACEAE—LIZARD'S TAIL FAMILY

Anemopsis californica—yerba mansa

SOLANACEAE—NIGHTSHADE FAMILY

Datura wrightii—jimsonweed, sacred thornapple

* *Nicotiana glauca*—tree tobacco

TAMARICACEAE—TAMARISK FAMILY

* *Tamarix ramosissima*—tamarisk

VIBURNACEAE—MUSKROOT FAMILY

Sambucus mexicana—blue elderberry

VISCACEAE—MISTLETOE FAMILY

Phoradendron leucarpum—oak mistletoe

VITACEAE—GRAPE FAMILY

Vitis californica—California wild grape

Angiosperms (Monocots)

ARECACEAE—PALM FAMILY

* *Phoenix canariensis*—Canary Island fan palm
* *Washingtonia robusta*—Washington fan palm

CYPERACEAE—SEDGE FAMILY

* *Cyperus involucratus*—umbrella plant

JUNCACEAE—RUSH FAMILY

Juncus acutus ssp. *leopoldii*—southwestern spiny rush

POACEAE—GRASS FAMILY

* *Arundo donax*—giant reed
* *Cortaderia jubata*—purple pampass grass
* *Cortaderia selloana* –Uruguayan pampass grass
* *Ehrharta calycina*—perennial veldtgrass

Elymus condensatus—giant wild rye

* *Pennisetum setaceum*—fountain grass

TYPHACEAE—CATTAIL FAMILY

Typha latifolia—broadleaf cattail

Gymnosperms

PINACEAE—PINE FAMILY

Pinus spp.—Pine species

Wildlife Species–Vertebrates

Birds

ACCIPITRIDAE—HAWKS

Buteo jamaicensis—red-tailed hawk
Buteo lineatus—red-shouldered hawk
Astur cooperii—Cooper's hawk

AEGITHALIDAE—LONG-TAILED TITS AND BUSHTITS

Psaltriparus minimus–bushtit

APODIDAE—SWIFTS

Aeronautes saxatalis—white-throated swift

ARDEIDAE—HERONS, BITTERNS, AND ALLIES

Ardea alba—great egret
Ardea herodias—great blue heron
Egretta thula—snowy egret

BOMBYCILLIDAE—WAXWINGS

Bombycilla cedrorum—cedar waxwing

COLUMBIDAE—PIGEONS AND DOVES

Zenaida macroura—mourning dove

CORVIDAE—JAYS AND CROWS

Corvus brachyrhynchos—American crow
Corvus corax—common raven

ESTRILDIDAE—WAXBILLS

* *Lonchura punctulata*—scaly-breasted munia

FALCONIDAE—CARACARAS AND FALCONS

Falco sparverius—American kestrel

FRINGILLIDAE—FINCHES

Carpodacus mexicanus—house finch
Carduelis psaltria—lesser goldfinch
Spinus tristis—American goldfinch

ICTERIDAE—BLACKBIRDS

Agelaius phoeniceus—red-winged blackbird
Quiscalus mexicanus—great-tailed grackle

MIMIDAE—MOCKINGBIRDS AND THRASHERS

Mimus polyglottos—northern mockingbird

PARULIDAE—WOOD-WARBLERS

Geothlypis trichas—common yellowthroat
Setophaga coronata—yellow-rumped warbler
Leiothlypis celata—orange-crowned warbler

PASSERELLIDAE—NEW WORLD WARBLERS

Junco hyemalis—dark-eyed junco
Melospiza melodia—song sparrow
Melozone crissalis—California towhee
Passerella iliaca—fox sparrow
Pipilo maculatus—spotted towhee
Zonotrichia leucophrys—white-crowned sparrow

PASSERIDAE—OLD WORLD SPARROWS

* *Passer domesticus*—house sparrow

PICIDAE—WOODPECKERS AND ALLIES

Colaptes auratus—northern flicker
Melanerpes formicivorus—acorn woodpecker
Dryobates nuttallii—Nuttall's woodpecker

POLIOPTILIDAE—GNATCATCHERS

Polioptila caerulea—blue-grey gnatcatcher

RALLIDAE—RAILS, GALLINULES, AND COOTS

Fulica americana—American coot

REGULIDAE—KINGLETS

Corthylio calendula—ruby-crowned kinglet

SITTIDAE—NUTHATCHES

Sitta carolinensis—white-breasted nuthatch

STURNIDAE—STARLINGS

* *Sturnus vulgaris*—European starling

SYLVIIDAE—SYLVIID WARBLERS

Chamaea fasciata—wrentit

TROCHILIDAE—HUMMINGBIRDS

Calypte anna—Anna's hummingbird

TROGLODYTIDAE—WRENS

Thryomanes bewickii— Bewick's wren

TYRANNIDAE—TYRANT FLYCATCHERS

Sayornis nigricans—black phoebe

Tyrannus vociferans—Cassin's kingbird

* signifies introduced (non-native) species

Attachment C

Special-Status Plants with a Potential to Occur

Scientific Name	Common Name	Status* (Federal/State/CRPR/ Santee Draft MSCP)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Acanthomintha ilicifolia	San Diego thorn-mint	FT/SE/1B.1/Covered	Chaparral, Coastal scrub, Valley and foothill grassland, Vernal pools; Clay, Openings/annual herb/Apr–June/ 35–3,150	Not expected to occur. The project site is within the species known elevation range; although clay soils and coastal sage scrub are present in the project site, there are no vernal pools to support this species.
Adolphia californica	California adolphia	None/None/2B.1/None	Chaparral, Coastal scrub, Valley and foothill grassland; Clay/perennial deciduous shrub/Dec–May/35–2,430	Low potential to occur. The project site is within the species known elevation range; coastal scrub and non-native grassland as well as clay soils are on site. CNDDB occurrence record from 1936 located 3 miles from the project site but is possibly extirpated (CDFW 2025).
Ambrosia monogyra	singlewhorl burrobrush	None/None/2B.2/None	Chaparral, Sonoran desert scrub; washes; Sandy/perennial shrub/Aug–Nov/35–1,640	Low potential to occur. Although the project site is within the species known elevation range, it is a large conspicuous plant that would have likely been observed during vegetation mapping.
Ambrosia pumila	San Diego ambrosia	FE/None/1B.1/Covered	Chaparral, Coastal scrub, Valley and foothill grassland, Vernal pools; Alkaline (sometimes), Clay (sometimes), Disturbed areas (often), Loam (sometimes), Sandy (sometimes)/perennial rhizomatous herb/Apr–Oct/65–1,360	Moderate potential to occur. The project site is within the species known elevation range; coastal scrub, non-native grassland, and suitable substrates are present. CNDDB occurrence records from 2006 overlap the project site (CDFW 2025). However, this species prefers vernal pools and none were detected on the project site during the biological reconnaissance.

Scientific Name	Common Name	Status* (Federal/State/CRPR/ Santee Draft MSCP)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Arctostaphylos glandulosa ssp. *crassifolia*	Del Mar manzanita	FE/None/1B.1/None	Chaparral (maritime, sandy)/perennial evergreen shrub/June–Apr/0–1,200	Not expected to occur. Although the project site is within the species known elevation range, there is no suitable vegetation present.
Astragalus deanei	Dean's milk-vetch	None/None/1B.1/None	Chaparral, Cismontane woodland, Coastal scrub, Riparian forest/perennial herb/Feb–May/ 245–2,280	Low potential to occur. The project site is within the species known elevation range; riparian forest and coastal scrub are present. CNDDB occurrence records from an unknown date are 5 miles east from the project site (CDFW 2025).
Bloomeria clevelandii	San Diego goldenstar	None/None/1B.1/ Covered	Chaparral, Coastal scrub, Valley and foothill grassland, Vernal pools; Clay/perennial bulbiferous herb/Apr–May/165–1,525	Not expected to occur. The project site is within the species known elevation range; although non-native grassland and coastal scrub as well as clay soils are present, there are no vernal pools to support this species.
Brodiaea orcuttii	Orcutt's brodiaea	None/None/1B.1/None	Chaparral, Cismontane woodland, Closed-cone coniferous forest, Meadows and seeps, Valley and foothill grassland, Vernal pools; Clay, Mesic/perennial bulbiferous herb/May–July/100–5,550	Low potential to occur. to occur. The project site is within the species known elevation range. However, non-native grassland on site lacks clay soils or mesic habitat. Nearest occurrence record is from 1997, approximately 2 miles west of the project site (CCH 2025).
Ceanothus otayensis	Otay Mountain ceanothus	None/None/1B.2/None	Chaparral (gabbroic, metavolcanic)/perennial evergreen shrub/Jan–Apr/1,970–3,610	Not expected to occur. The project site is outside of the species' known elevation range and there is no suitable vegetation present.
Ceanothus verrucosus	wart-stemmed ceanothus	None/None/2B.2/None	Chaparral, Coastal scrub/perennial evergreen shrub/Dec–May/5–1,245	Low potential to occur. The project site is within the species known elevation range; coastal scrub is

Scientific Name	Common Name	Status* (Federal/State/CRPR/ Santee Draft MSCP)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
				present. Historic CNDDB occurrence records from 1897 are extirpated and located 4 miles from the project site (CDFW 2025).
Centromadia pungens ssp. *laevis*	smooth tarplant	None/None/1B.1/None	Chenopod scrub, Meadows and seeps, Playas, Riparian woodland, Valley and foothill grassland; Alkaline/annual herb/Apr–Sep/0–2,100	Moderate potential to occur. The project site is within the species known elevation range; riparian woodland and non-native grassland are present but the project site lacks alkaline soils. CNDDB occurrence records from 2008-2017 located 1 mile from the project site (CDFW 2025).
Chorizanthe polygonoides var. longispina	long-spined spineflower	None/None/1B.2/None	Chaparral, Coastal scrub, Meadows and seeps, Valley and foothill grassland, Vernal pools; Clay (often)/annual herb/Apr–July/ 100–5,020	Not expected to occur. The project site is within the species known elevation range; although non-native grassland and coastal scrub as well as clay soils are present, there are no vernal pools to support this species.
Clarkia delicata	delicate clarkia	None/None/1B.2/None	Chaparral, Cismontane woodland; Gabbroic (often)/annual herb/Apr–June/770–3,280	Not expected to occur. The project site is outside of the species' known elevation range and there is no suitable vegetation present.
Comarostaphylis diversifolia ssp. *diversifolia*	summer holly	None/None/1B.2/None	Chaparral, Cismontane woodland/perennial evergreen shrub/Apr–June/100–2,590	Not expected to occur. Although the project site is within the species known elevation range, no suitable vegetation is present.
Dudleya variegata	variegated dudleya	None/None/1B.2/ Covered	Chaparral, Cismontane woodland, Coastal scrub, Valley and foothill grassland, Vernal pools; Clay/perennial herb/Apr–June/10–1,905	Not expected to occur. The project site is within the species known elevation range; although non-native grassland and coastal scrub as well as clay soils are present,

Scientific Name	Common Name	Status* (Federal/State/CRPR/ Santee Draft MSCP)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
				there are no vernal pools to support this species.
Ericameria palmeri var. *palmeri*	Palmer's goldenbush	None/None/1B.1/None	Chaparral, Coastal scrub; Mesic/perennial evergreen shrub/(July)Sep–Nov/100–1,970	Low potential to occur. The project site is within the species known elevation range; coastal scrub and mesic areas are present. CNDDB occurrence record from 1997 located 2 miles from the project site (CDFW 2025).
Eryngium aristulatum var. *parishii*	San Diego button-celery	FE/SE/1B.1/Covered	Coastal scrub, Valley and foothill grassland, Vernal pools; Mesic/annual/perennial herb/Apr–June/65–2,035	Not expected to occur. The project site is within the species known elevation range; although non-native grassland and coastal scrub as well as clay soils are present, there are no vernal pools to support this species.
Ferocactus viridescens	San Diego barrel cactus	None/None/2B.1/ Covered	Chaparral, Coastal scrub, Valley and foothill grassland, Vernal pools/perennial stem/May–June/ 10–1,475	Not expected to occur. The project site is within the species known elevation range; although coastal scrub is present, there are no vernal pools to support this species.
Grindelia hallii	San Diego gumplant	None/None/1B.2/None	Chaparral, Lower montane coniferous forest, Meadows and seeps, Valley and foothill grassland/perennial herb/May–Oct/605–5,725	Not expected to occur. Although suitable habitat is present, the project site is outside of the species' known elevation range.
Isocoma menziesii var. *decumbens*	decumbent goldenbush	None/None/1B.2/None	Chaparral, Coastal scrub (often disturbed areas, sandy)/perennial shrub/Apr–Nov/35–820	Moderate potential to occur. The project site is within the species known elevation range; coastal scrub with sandy soils and disturbed areas are present. Multiple CNDDB occurrence records from 2005 and 2019 located 2 miles from the project site (CDFW 2025).

Scientific Name	Common Name	Status* (Federal/State/CRPR/ Santee Draft MSCP)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Iva hayesiana	San Diego marsh-elder	None/None/2B.2/None	Marshes and swamps, Playas/perennial herb/Apr–Oct/ 0–1,640	**Present**. Observed during the biological reconnaissance surveys within the freshwater marsh habitat on the project site.
Lepechinia cardiophylla	heart-leaved pitcher sage	None/None/1B.2/None	Chaparral, Cismontane woodland, Closed-cone coniferous forest/perennial shrub/Apr–July/1,705–4,495	Not expected to occur. The project site is outside of the species' known elevation range and there is no suitable vegetation present.
Monardella viminea	willowy monardella	FE/SE/1B.1/Covered	Chaparral, Coastal scrub, Riparian forest, Riparian scrub, Riparian woodland; Alluvial Terraces, Washes/perennial herb/June–Aug/165–740	Moderate potential to occur. The project site is within the species known elevation range and suitable modeled habitat occurs within the project site (City of Santee 2025); however, this perennial species was not observed during field surveys and the site does not contain suitable alluvial terraces. Closest CNDDB occurrence record from 2007 is located 1 mile from the project site (CDFW 2025).
Navarretia prostrata	prostrate vernal pool navarretia	None/None/1B.2/None	Coastal scrub, Meadows and seeps, Valley and foothill grassland (alkaline), Vernal pools; Mesic/annual herb/Apr–July/10–3,970	Not expected to occur. The project site is within the species known elevation range; although coastal scrub and mesic areas are present, there are no vernal pools to support this species.
Pogogyne abramsii	San Diego mesa mint	FE/SE/1B.1/Covered	Vernal pools/annual herb/Mar–July/295–655	Not expected to occur. Although the project site is within the species known elevation range, no suitable vegetation is present.
Pogogyne nudiuscula	Otay Mesa mint	FE/SE/1B.1/None	Vernal pools/annual herb/May–July/295–820	Not expected to occur. The project site is within the species known elevation range but there is no suitable vegetation present.

Scientific Name	Common Name	Status* (Federal/State/CRPR/ Santee Draft MSCP)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Pseudognaphalium leucocephalum	white rabbit-tobacco	None/None/2B.2/None	Chaparral, Cismontane woodland, Coastal scrub, Riparian woodland; Gravelly, Sandy/perennial herb/(July)Aug–Nov(Dec)/0–6,890	High potential to occur. The project site is within the species known elevation range; riparian woodland and sandy soils are present. CCH occurrence records from 2011 are located immediately outside of the southern project site boundary (CCH 2025).
Quercus dumosa	Nuttall's scrub oak	None/None/1B.1/None	Chaparral, Closed-cone coniferous forest, Coastal scrub; Clay, Loam, Sandy/perennial evergreen shrub/Feb–Apr(May–Aug)/50–1,310	High potential to occur. The project site is within the species known elevation range; coastal scrub and suitable soils present; may occur within coast live oak woodland on the project site. CNDDB occurrence records from 2009 overlap the project site (CDFW 2025).
Salvia munzii	Munz's sage	None/None/2B.2/None	Chaparral, Coastal scrub/perennial evergreen shrub/Feb–Apr/375–3,495	Low potential to occur. The project site is within the species known elevation range; limited coastal scrub is present. CNDDB occurrence records from 2016 located 2 miles from the project site (CDFW 2025).
Senecio aphanactis	chaparral ragwort	None/None/2B.2/None	Chaparral, Cismontane woodland, Coastal scrub; Alkaline (sometimes)/annual herb/Jan–Apr(May)/50–2,625	Low potential to occur. The project site is within the species known elevation range; coastal scrub is present but lacks alkaline substrate. Historic CNDDB occurrence record from 1937 located 2 miles from the project site (CDFW 2025).
Stemodia durantifolia	purple stemodia	None/None/2B.1/None	Sonoran desert scrub (often mesic, sandy)/perennial herb/(Jan)Apr–Dec/590–985	Low potential to occur. The project site is outside of the species' known elevation range. . However, it

Scientific Name	Common Name	Status* (Federal/State/CRPR/ Santee Draft MSCP)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
				is known to occur at Mission Trails near the project site along riparian habitats and washes. Nearby occurrence records from 1992 are approximately 3 miles west of the project site (CCH 2025).
Stylocline citroleum	oil neststraw	None/None/1B.1/None	Chenopod scrub, Coastal scrub, Valley and foothill grassland; Clay/annual herb/Mar–Apr/165–1,310	Moderate potential to occur. The project site is within the species known elevation range; coastal scrub and non-native grassland are present along with clay soils. Historic CNDDB occurrence records from 1883 are 5 miles from the project site and presumed extant (CDFW 2025).

***Status Legend:**
FE: Federally listed as endangered
FT: Federally listed as threatened
SE: State listed as endangered
ST: State listed as threatened
CRPR 1A: Plants presumed extirpated in California and either rare or extinct elsewhere
CRPR 1B: Plants rare, threatened, or endangered in California and elsewhere
CRPR 2A: Plants presumed extirpated in California but common elsewhere
CRPR 2B: Plants rare, threatened, or endangered in California but more common elsewhere
.1 Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)
.2 Moderately threatened in California (20–80% occurrences threatened / moderate degree and immediacy of threat)
.3 Not very threatened in California (<20% of occurrences threatened / low degree and immediacy of threat or no current threats known)
MSCP: Multiple Species Conservation Program

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Attachment D

Special-Status Wildlife with a Potential to Occur

Scientific Name	Common Name	Status* (Federal/State/Santee Draft MSCP)	Habitat	Potential to Occur
Amphibians				
Spea hammondi	western spadefoot	FPT/SSC, SC/Covered	Primarily grassland and vernal pools, but also in ephemeral wetlands that persist at least 3 weeks in chaparral, coastal scrub, valley–foothill woodlands, pastures, and other agriculture	Not expected to occur. Coastal sage scrub and non-native grassland present along the San Diego River in the project site. However, there is no known breeding habitat or potentially suitable breeding habitat within the project site (City of Santee 2025). Additionally, there are CNDDB occurrence records that overlap the project site; however, these occurrences are too generalized of a location to be considered within the project site (CDFW 2025).
Reptiles				
Actinemys pallida	southwestern pond turtle	FPT/SSC/None	Slow-moving permanent or intermittent streams, ponds, small lakes, and reservoirs with emergent basking sites; adjacent uplands used for nesting and during winter	Not expected to occur. Although suitable upland and breeding resources are present, this species is not known to occur in the portion of the San Diego River on the project site.
Anniella stebbinsi	southern California legless lizard	None/SSC/None	Coastal dunes, stabilized dunes, beaches, dry washes, valley–foothill, chaparral, and scrubs; pine, oak, and riparian woodlands; associated with sparse vegetation and moist sandy or loose, loamy soils	High potential to occur. Suitable habitats present (coastal scrub, wash, oak woodland, riparian woodland; moist sandy soils). CNDDB occurrence record from 2012 overlap the western portion of the project site (CDFW 2025).
Arizona elegans occidentalis	California glossy snake	None/SSC/None	Arid scrub, rocky washes, grasslands, chaparral, open areas with loose soil	High potential to occur. Suitable substrate present. Historic CNDDB occurrence records from 1973 overlap the project site (CDFW 2025).
Aspidoscelis hyperythra	orange-throated whiptail	None/WL/Covered	Low-elevation coastal scrub, chaparral, and valley–foothill hardwood	High potential to occur. Suitable coastal scrub habitat and hardwood present. CNDDB occurrence records from 1999

Scientific Name	Common Name	Status* (Federal/State/Santee Draft MSCP)	Habitat	Potential to Occur
				border the northern project site boundary (CDFW 2025).
Aspidoscelis tigris stejnegeri	San Diegan tiger whiptail	None/SSC/None	Hot and dry areas with sparse foliage, including chaparral, woodland, and riparian areas.	High potential to occur. Riparian woodland is present. CNDDB occurrence records from 2008 are located 4 miles from the project site (CDFW 2025).
Coleonyx variegatus abbotti	San Diego banded gecko	None/SSC/None	Rocky areas within coastal scrub and chaparral	Not expected to occur. No rocky areas present within the coastal scrub on the project site to support this species. The nearest CNDDB occurrence record is 3 miles from the project site, from 2017 (CDFW 2025).
Crotalus ruber	red diamondback rattlesnake	None/SSC/None	Coastal scrub, chaparral, oak and pine woodlands, rocky grasslands, cultivated areas, and desert flats	Moderate potential to occur. Coastal scrub and oak woodland present could provide suitable habitat for this species. CNDDB occurrence record from 1998 within 1 mile of the project site (CDFW 2025).
Phrynosoma blainvillii	coast horned lizard	None/SSC/Covered	Open areas of sandy soil in valleys, foothills, and semi-arid mountains including coastal scrub, chaparral, valley–foothill hardwood, conifer, riparian, pine–cypress, juniper, and annual grassland habitats	Moderate potential to occur. Coastal scrub, riparian woodland, and grassland with sandy soils present. Historic CNDDB occurrence records from 1937 overlap the project site; however, the project site is currently fairly isolated (CDFW 2025).
Salvadora hexalepis virgultea	coast patch-nosed snake	FPT/SSC/None	Brushy or shrubby vegetation; requires small mammal burrows for refuge and overwintering sites	Moderate potential to occur. Suitable brushy or shrubby vegetation present. A CNDDB occurrence record from 2004 is located 4 miles from the project site (CDFW 2025).
Thamnophis hammondii	two-striped gartersnake	None/SSC/None	Streams, creeks, pools, streams with rocky beds, ponds, lakes, vernal pools	High potential to occur. San Diego River on site provides suitable habitat. A CNDDB occurrence record from 1998 is within 1 mile of the project site (CDFW 2025).

Scientific Name	Common Name	Status* (Federal/State/Santee Draft MSCP)	Habitat	Potential to Occur
Birds				
Agelaius tricolor (nesting colony)	tricolored blackbird	BCC/SSC, ST/None	Nests near freshwater, emergent wetland with cattails or tules, but also in Himalayan blackberry; forages in grasslands, woodland, and agriculture	Not expected to occur. Suitable nesting habitat (emergent wetland, freshwater marsh dominated by cattails) is present. Historic CNDDB occurrence records from 1971 overlap the project site (CDFW 2025). However, based on 2021 protocol surveys for this species throughout San Diego County by AECOM, nesting colonies are only present in eastern San Diego County and were not present in the San Diego River (AECOM 2021a,b).
Ammodramus savannarum (nesting)	grasshopper sparrow	None/SSC/None	Nests and forages in moderately open grassland with tall forbs or scattered shrubs used for perches	Low potential to occur. The amount and distribution of non-native grassland on the project site is limited but could provide low-quality nesting and foraging habitat for this species. Nearest CNDDB occurrence record is 2 miles from the project site, from 2007 (CDFW 2025).
Aquila chrysaetos (nesting and wintering)	golden eagle	None/FP, WL/None	Nests and winters in hilly, open/semi-open areas, including shrublands, grasslands, pastures, riparian areas, mountainous canyon land, open desert rimrock terrain; nests in large trees and on cliffs in open areas and forages in open habitats	Not expected to nest and low potential to forage. Although limited nesting and foraging habitat is present, the project site is surrounded by development and lacks quality nesting resources in open/semi-open areas.
Athene cunicularia (burrow sites and some wintering sites)	burrowing owl	BCC/SSC, SC/Covered	Nests and forages in grassland, open scrub, and agriculture, particularly with ground squirrel burrows	Moderate potential to occur. Coastal scrub and grassland present. The nearest CNDDB occurrence record within 1 mile of the project site is from 1921 and extirpated; however there are occurrence

Scientific Name	Common Name	Status* (Federal/State/Santee Draft MSCP)	Habitat	Potential to Occur
				records from 2024 located two miles from the project site (CDFW 2025).
Buteo swainsoni (nesting)	Swainson's hawk	None/ST/None	Nests in open woodland and savanna, riparian, and in isolated large trees; forages in nearby grasslands and agricultural areas such as wheat and alfalfa fields and pasture	Not expected to occur. Although open woodland and riparian habitat is present, this species has been extirpated from southern California (CDFW 2016).
Campylorhynchus brunneicapillus sandiegensis (San Diego and Orange Counties only)	coastal cactus wren	None/SSC/Covered	Southern cactus scrub patches	Not expected to occur. No suitable vegetation present.
Coturnicops noveboracensis	yellow rail	BCC/SSC/None	Nesting requires wet marsh/sedge meadows or coastal marshes with wet soil and shallow, standing water	Moderate potential to occur. Suitable nesting habitat present (freshwater marsh, shallow standing water) along San Diego River in the project site. CNDDB occurrence records from 1998 overlap the project site (CDFW 2025).
Empidonax traillii extimus	southwestern willow flycatcher	FE/SE/None	Nests in dense riparian habitats along streams, reservoirs, or wetlands; uses variety of riparian and shrubland habitats during migration	Not expected to occur. Although suitable nesting and foraging habitat is present, this species is considered extirpated from the portion of the San Diego River within the project site according to USFWS.
Icteria virens (nesting)	yellow-breasted chat	None/SSC/None	Nests and forages in dense, relatively wide riparian woodlands and thickets of willows, vine tangles, and dense brush	High potential to occur. Suitable nesting and foraging habitat present; San Diego River supports relatively wide riparian thickets of willows and dense brush throughout the project site. CNDDB occurrence record from 1994 are located 4 miles from the project site (CDFW 2025).

Scientific Name	Common Name	Status* (Federal/State/Santee Draft MSCP)	Habitat	Potential to Occur
Polioptila californica californica	coastal California gnatcatcher	FT/SSC/Covered	Nests and forages in various sage scrub communities, often dominated by California sagebrush and buckwheat; generally avoids nesting in areas with a slope of greater than 40%; majority of nesting at less than 1,000 feet above mean sea level	Moderate potential to occur. Coastal sage scrub is present within uplands along the north and south project site boundaries. There are CNDDB occurrence records from 1999 border the north project site boundary (CDFW 2025). There is designated critical habitat for this species approximately 1 mile north and south of the project site (USFWS 2025).
Setophaga petechia (nesting)	yellow warbler	None/SSC/None	Nests and forages in riparian and oak woodlands, montane chaparral, open ponderosa pine, and mixed-conifer habitats	**Considered present**. Suitable nesting and foraging habitat present throughout the riparian areas along the San Diego River in the project site. CNDDB occurrence record from 1972 located two miles from the project site (CDFW 2025). Although not detected during the biological reconnaissance surveys, Dudek biologists have documented this species along the San Diego River within Santee while working on other projects.
Vireo bellii pusillus (nesting)	least Bell's vireo	FE/SE/Covered	Nests and forages in low, dense riparian thickets along water or along dry parts of intermittent streams; forages in riparian and adjacent shrubland late in nesting season	**Considered present**. Suitable nesting and foraging habitat present (riparian woodlands, mulefat scrub, willow scrub) along San Diego River. CNDDB occurrence records from 2012 overlap the project site (CDFW 2025). The western portion of the project site overlaps designated critical habitat for this species (USFWS 2025). Although not detected during the biological reconnaissance surveys, Dudek biologists have documented this species along the San Diego River within Santee while working on other projects.

Scientific Name	Common Name	Status* (Federal/State/Santee Draft MSCP)	Habitat	Potential to Occur
Botaurus exilis (nesting)	least bittern	None/SSC/None	Nests in freshwater and brackish marshes with dense, tall growth of aquatic and semi-aquatic vegetation	Moderate potential to occur. Suitable nesting habitat present. CNDDB occurrence record from 2007 located 2 miles from the project site (CDFW 2025).
Mammals				
Antrozous pallidus	pallid bat	None/SSC/None	Grasslands, shrublands, woodlands, forests; most common in open, dry habitats with rocky outcrops for roosting, but also roosts in man-made structures and trees	Moderate potential to occur. Suitable habitat (grassland, woodlands, riparian forest) is present although the site lacks rocky outcrops for roosting; there are CNDDB occurrence records from 1951 that overlap the project site (CDFW 2025).
Choeronycteris mexicana	Mexican long-tongued bat	None/SSC/None	Desert and montane riparian, desert succulent scrub, desert scrub, and pinyon–juniper woodland; roosts in caves, mines, and buildings	Not expected to occur. No roosting or foraging habitat present.
Corynorhinus townsendii	Townsend's big-eared bat	None/SSC/None	Mesic habitats characterized by coniferous and deciduous forests and riparian habitat, but also xeric areas; roosts in limestone caves and lava tubes, man-made structures, and tunnels	Moderate potential to occur. No roosting habitat present but may forage over San Diego River's riparian habitats throughout the project site. CNDDB occurrence record from 1991 located 5 miles from the project site (CDFW 2025).
Dasypterus xanthinus	western yellow bat	None/SSC/None	Valley–foothill riparian, desert riparian, desert wash, and palm oasis habitats; below 2,000 feet above mean sea level; roosts in riparian and palms	High potential to occur. Suitable roosting habitat (riparian) present. CNDDB occurrence records from 1979 are immediately east of the project site (CDFW 2025).
Eumops perotis californicus	western mastiff bat	None/SSC/None	Chaparral, coastal and desert scrub, coniferous and deciduous forest and woodland; roosts in crevices in rocky canyons and cliffs where the canyon or cliff is vertical or nearly vertical, trees, and tunnels	Moderate potential to occur. Costal scrub and woodlands present could provide roosting habitat. CNDDB occurrence records from 2003 located 4 miles from the project site (CDFW 2025).

Scientific Name	Common Name	Status* (Federal/State/Santee Draft MSCP)	Habitat	Potential to Occur
Neotoma lepida intermedia	San Diego desert woodrat	None/SSC/None	Coastal scrub, desert scrub, chaparral, cacti, rocky areas	Moderate potential to occur in costal scrub throughout the project site, although rocky areas are absent. CNDDB occurrence record from 1998 within 1 mile of the project site (CDFW 2025).
Nyctinomops femorosaccus	pocketed free-tailed bat	None/SSC/None	Pinyon–juniper woodlands, desert scrub, desert succulent shrub, desert riparian, desert wash, alkali desert scrub, Joshua tree, and palm oases; roosts in high cliffs or rock outcrops with drop-offs, caverns, and buildings	Moderate potential to occur. No roosting habitat present; however, CNDDB occurrence records from 1990 overlap the project site and there is riparian/wash habitat along the project site that can be seasonally arid. Multiple CNDDB occurrence records from 1983-2003 located 3 to 5 miles from the project site (CDFW 2025).
Nyctinomops macrotis	Big free-tailed bat	None/SSC/None	Rocky areas; roosts in caves, holes in trees, buildings, and crevices on cliffs and rocky outcrops; forages over water	High potential to occur. May forage over San Diego River in the project site. Not expected to roost as no suitable roosting habitat present. CNDDB occurrence records from 1989 overlap the project site (CDFW 2025).
Puma concolor (southern California Evolutionarily Significant Unit)	Mountain lion	None/SCE/None	Scrubs, chaparral, riparian, woodland, and forest; rests in rocky areas and on cliffs and ledges that provide cover; most abundant in riparian areas and brushy stages of most habitats throughout California, except deserts	Not expected to occur. The project site is relatively flat and surrounded by urban development, resulting in poor connectivity and this species typically avoids areas with human presence.
Taxidea taxus	American badger	None/SSC/None	Dry, open, treeless areas; grasslands, coastal scrub, agriculture, and pastures, especially with friable soils	Low potential to occur. While coastal scrub and grassland with friable soils are present, the project site is surrounded by development and habitat is marginal. CNDDB occurrence records from an unknown date are immediately east of the project site (CDFW 2025).

Scientific Name	Common Name	Status* (Federal/State/Santee Draft MSCP)	Habitat	Potential to Occur
Lasiurus frantzii	western red bat	None/SSC/None	Forest, woodland, riparian, mesquite bosque, and orchards, including fig, apricot, peach, pear, almond, walnut, and orange; roosts in tree canopy	Moderate potential to occur. Suitable roosting habitat present (riparian forest and woodland). A CNDDB occurrence record from 2003 is located 4 miles from the project site (CDFW 2025).
Invertebrates				
Bombus crotchii	Crotch's bumble bee	None/SCE/Covered	Open grassland and scrub communities supporting suitable floral resources.	Moderate potential to occur. Suitable habitat present along with floral resources for foraging. Nearest CNDDB occurrence record is 2 miles from the project site, from 2020 (CDFW 2025).
Branchinecta sandiegonensis	San Diego fairy shrimp	FE/None/Covered	Vernal pools, non-vegetated ephemeral pools	Not expected to occur. No suitable habitat present.
Danaus plexippus plexippus pop. 1	monarch - California overwintering population	FPT/None/None	Wind-protected tree groves with nectar sources and nearby water sources	Moderate potential to move through the site. However, the City of Santee does not contain any established overwintering area for this species (Xerces Society 2025). No species-specific mitigation would be required.
Euphydryas editha quino	quino checkerspot butterfly	FE/SCE/Covered	Annual forblands, grassland, open coastal scrub and chaparral; often soils with cryptogamic crusts and fine-textured clay; host plants include *Plantago erecta, P. patagonica*, and *Antirrhinum coulterianum,* among others	Not expected to occur. No suitable soil substrate containing host plants present.
Lycaena hermes	Hermes copper	FT/None/Covered	Mixed woodlands, chaparral, and coastal scrub	Not expected to occur. Limited suitable vegetation communities present. CNDDB occurrence records from 2005 and 2007 located 3 miles from the project site (CDFW 2025). There is designated critical habitat for this species approximately 1 mile north of the project site (USFWS

Scientific Name	Common Name	Status* (Federal/State/Santee Draft MSCP)	Habitat	Potential to Occur
				2025). This species requires spiny redberry (*Rhamnus crocea*) near buckwheat and no spiny redberry was detected during the biological reconnaissance surveys on the project site.
Streptocephalus woottoni	Riverside fairy shrimp	FE/None/Covered	Vernal pools, non-vegetated ephemeral pools	Not expected to occur. No suitable habitat present.

***Status Abbreviations:**
FE: Federally listed as endangered
FT: Federally listed as threatened
FPE: Federally proposed for listing as endangered
FPT: Federally proposed for listing as threatened
FC: Federal candidate species (former Category 1 candidates)
BCC: U.S. Fish and Wildlife Service Bird of Conservation Concern
SSC: California Species of Special Concern
FP: California Fully Protected Species
WL: California Watch List Species
SE: State listed as endangered
ST: State listed as threatened
SC: State candidate for listing as threatened or endangered
SCE: State candidate for listing as endangered
SCT: State candidate for listing as threatened
MSCP: Multiple Species Conservation Program (City of Santee Draft MSCP Subarea Plan).

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Appendix C

Built Environment Are of Potential (APE) memorandum

MEMORANDUM

To:	Dustin De Matteo, Hazard Mitigation Grant Program – Project Manager and Sandi Sawa, Director of Planning & Building/City Planner, City of Santee
From:	Nicole Frank, MSHP and Patricia Ambacher, MA, Dudek
Subject:	Recommended Cultural Area of Potential Effects for the San Diego River Fire Hazard Mitigation Plan Phase 1 Project
Date:	April 2, 2026
cc:	Keshia Montifolca, David Faith Erin Lucett, and Carey Fernandes, Dudek
Attachment(s):	Figure 1. Project Location Map; Figure 2. Recommended Area of Potential Effect

1 Introduction

This memorandum (memo) has been prepared by Dudek to provide a recommended Area of Potential Effects (APE) for cultural (archaeological and built environment) resources for the San Diego River Fire Hazard Mitigation Plan Phase 1 Project (project), which is subject to Section 106 of the National Historic Preservation Act (Section 106). This memo includes the following components: (1) project location and description; (2) background research, which includes an analysis of historic aerials to identify the historic-age (over 45 years of age or older) properties adjacent to the proposed APE and a review of previously recorded built environment resources included in the California Historical Resources Information System (CHRIS), the Built Environment Resource Directory (BERD), and the San Diego County Historic Property List; (3) a justification for the recommended APE for Cultural Resources; and (4) references cited.

1.1 Project Location

The project site is located within the San Diego River corridor in the City of Santee, in eastern San Diego County (County). The project site is approximately 300 acres-across 64 parcels (Figure 1. Project Location). Treatment areas extend from Forester Creek at the western boundary and the eastern city limit with Lakeside, encompassing Mast Park West, Mast Park Wetland Restoration Area, Mast Park East, Mission Creek, Walker Trails Open Space, and Walker Preserve.

1.2 Project Description

The proposed project is a fuel reduction project located within the San Diego River corridor in the City of Santee. Treatments may employ manual, mechanical, and targeted herbicide applications to address invasive species that elevate fire severity and threaten adjacent development and infrastructure. The fuel reduction activities include reducing non-native invasive species and dead vegetation and clearing debris across the wildland-urban interface (WUI) along the San Diego River. The sections of the project site, 0-50 feet from adjacent structures, will include 30% brush and vegetation removal, sections of the project site 50-100 feet from adjacent structures will include 50% removal. Individual trees and invasive plants will be 100% removed. The project is funded by the Federal Emergency Management Agency (FEMA) through the Hazard Mitigation Grant Program (HMGP-4610-917-009), with

matching funds from the San Diego River Conservancy (SDRC) through Grant Agreement Number SDRG-B21-17 (SDRC Grant). The objective of the project is to reduce flammable vegetation, to reduce the risk of wildfire.

2 Background Research and Literature Review

2.1 Background Research

As part of due diligence effort for this memo, the following background research was conducted by Dudek Architectural Historian, Nicole Frank, MSHP, who meets the Secretary of the Interior's Professional Qualifications Standards in architectural history and history.

Historical Aerials

Historic aerial photographs indicate that there are 78 historic-age (over 45 years of age or older) properties adjacent to the APE (NETR 2025).

Built Environment Resource Directory

The California Office of Historic Preservation (OHP) maintains the Built Environment Resource Directory (BERD), an inventory of built environment cultural resources that are processed through OHP's office. A November 10, 2025, search of the BERD for San Diego County showed that none of the properties within the recommended APE or the historic-age properties adjacent to the APE were listed in the BERD.

San Diego County Historic Property List

On November 13, 2025, the San Diego County's Historic Property List, which includes a list of the County's designated historic resources from 2002 to 2024 and qualified historic unreinforced masonry buildings, was reviewed None of the properties within the recommended APE or the historic-age properties adjacent to the APE were listed as County historic properties or unreinforced masonry buildings.

3 Recommended Area of Potential Effects for Cultural Resources

The establishment of an APE is part of the regulatory process to identify historic properties under Section 106. The APE is the study area delineated to assess the potential effects of the construction and operation of the Project for cultural resources. The APE encompasses the geographic area or areas within which the Project may directly or indirectly cause alterations in the character or use of historic properties if any such properties exist. The APE is influenced by the scale and nature of the project and may be different for different kinds of effects caused by the project (36 CFR § 800.16[d]). Project construction and implementation activities are considered significant if they would cause physical disturbance, demolition, destruction, relocation, or alteration of the resource or its immediate surroundings to the extent that the historic property would no longer be able to convey its significance. Current professional practice commonly groups activities that could cause such impacts into direct and indirect impact considerations. Direct impact considerations are commonly linked to physical project construction activities that

might result in direct disturbance of an archaeological or historic built environment resource. This includes damage or demolition, non-compatible building or structural modifications, construction-related ground borne vibration, and property acquisitions. Impact considerations commonly considered indirect are largely related to project implementation or impacts to properties adjacent to a project site once the project is built. For example, alterations to the setting of a historically significant property, or historic district or noise considerations, or visual effects.

The proposed project does not include construction disturbance, damage or demolition, non-compatible building or structural modifications, construction-related ground borne vibration, or property acquisitions. The area of direct physical effects is shown in the project site boundary in Figure 1, Project Location, and is the proposed study area for archaeological resources. The current proposed vertical APE will not extend beyond 5 feet below ground surface.

Delineation of a recommended APE for built environment resources considered the proposed project activities in conjunction with historic-era built resources that are 45 years of age or older (those built

or before 1980) that may sustain indirect impacts due to the construction or operation of the Project (Figure 2 Recommended Area of Potential Effect).[1] As noted above, there are no historic-age properties or known built environment resources located within the project site. The additional considerations used to justify the delineation of the recommended APE for built environment resources include the following:

- The proposed project construction and implementation activities do not include any physical disturbance, demolition, destruction, relocation, or alteration of any historic resources. Additionally, there is no potential for construction-related ground borne vibration. The types of fuel treatment include manual (chainsaws, weed eaters, etc.), mechanical (masticators, chippers), and chemical (focused stump treatments on invasive species). None of these methods of fuel treatment will physically alter any building, structure, or object. Rather, the proposed project is focused on thinning and removing non-native brush and vegetation. There is no potential for historic-era built environment resources to be directly affected based on the planned project activities.
- Buildings that are of historic age and adjacent to the project site include 78 residential, commercial, recreational, and industrial properties. Most of these properties were constructed circa 1960 (NETR 2025). None of the historic age adjacent properties are listed in or determined to be eligible for listing in the National Register of Historic Places (NRHP), the California Register of Historical Resources (CRHR), or included in a local register of historical resources. Therefore, none of the adjacent properties are known historical properties.
- None of the 78 adjacent historic age properties' primary elevations face toward the project site, rather their rear or side elevations face toward the San Diego River corridor. The corridor is currently densely vegetated. If any of the adjacent historic age properties were to be evaluated under NRHP or CRHR eligibility and

[1] While the 50-year threshold is generally used for listing resources in the National Register of Historic Places (NRHP) and the California Register of Historical resources (CRHR), the California Office of Historic Preservation's (OHP) *Instructions for Recording Historical Resources* recommends recording "any physical evidence of human activities over 45 years . . . for the purposes of inclusion in the OHP's filing system." It also allows for the "documentation of resources less than 45 years . . . if those resources have been formally evaluated, regardless of the outcome of the evaluation." Further, the guidance notes that the 45-year threshold recognizes that there is commonly a five-year lag between resource identification and the date that planning decisions are made, and thus it explicitly encourages the collection of data about resources that may become eligible for the NRHP or CRHR within that planning period. More restrictive criteria must be met before the resources included in OHP's filing system are listed, found eligible for listing, or otherwise determined to be important in connection with federal, state, and local legal statuses and registration programs (OHP 1995: 2).

integrity criteria, there is a low likelihood that the density of the vegetation along the rear or side of the property would be considered a character defining feature of its eligibility. The proposed project includes 30% brush and vegetation removal in sections of the project site 0-50 feet from structures and 50% removal in sections of the project site 50-100 feet from structures. The sense of open space and the viewshed of trees and the San Diego River would be retained. The proposed project would increase visibility from these properties to the San Diego River, which over time has become overgrown with vegetation.

- No noise or potential construction-related vibration effects are expected based on the planned project activities; as such, no geographic areas are under consideration for auditory and vibratory effects on historic properties.
- Since no reasonably foreseeable activities are associated with the undertaking that would occur later or be farther removed in the distance that could indirectly affect historic properties, the APE contains no geographic areas under consideration for indirect effects.

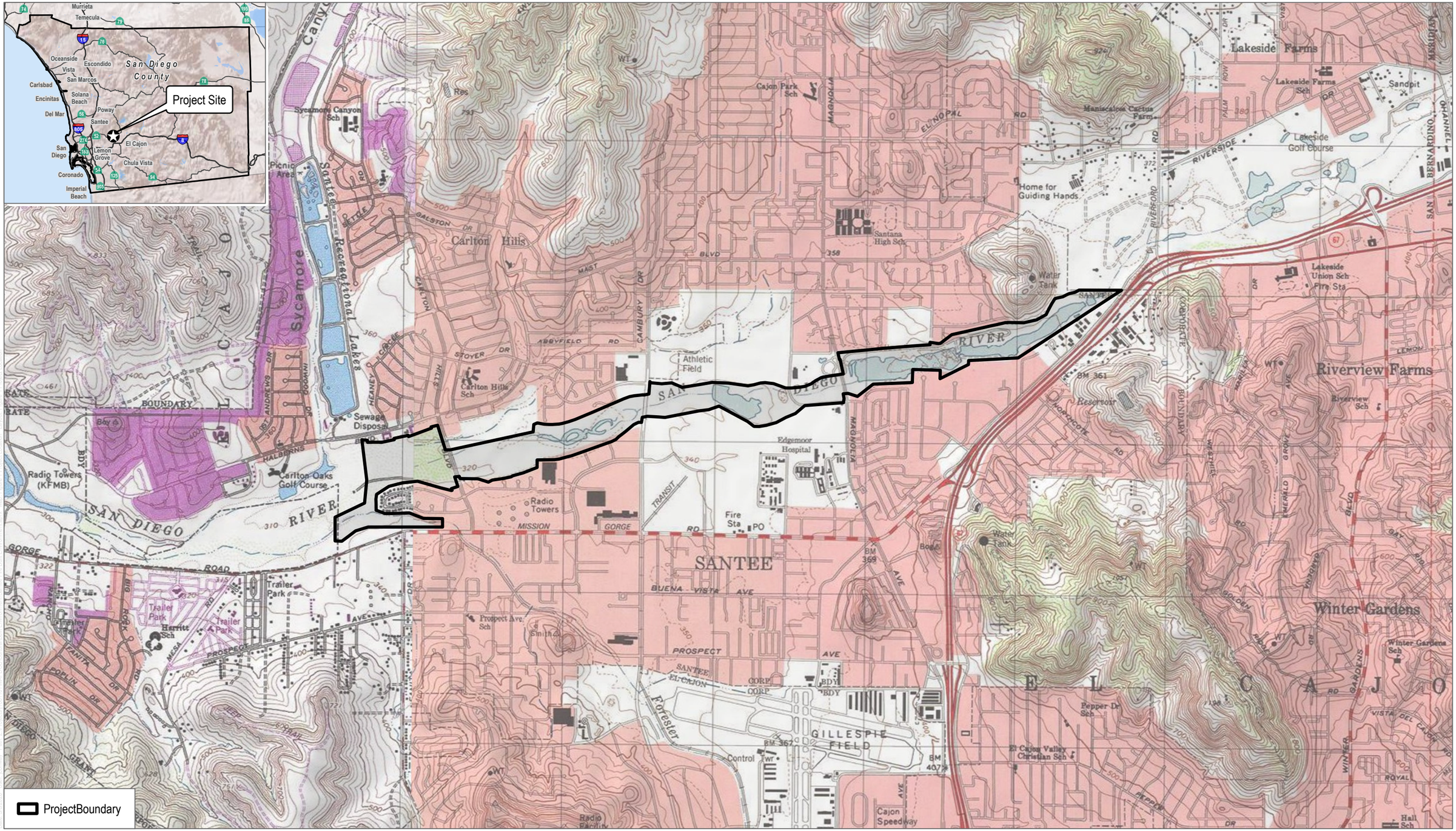
Considering these factors, the recommended APE is restricted to the proposed project site. Figure 2 Recommended Area of Potential Effects delineates and presents this APE.

In closing, this memorandum presents Dudek's cultural resources staff recommendation for delineating the APE for this project. Dudek understands that under Section 106, the APE is delineated by the Federal Lead Agency and agreed to by the State Historic Preservation Officer (SHPO). Dudek will proceed with work on the cultural resources reporting for this project upon written approval of the APE provided by FEMA.

References

NETR (National Environmental Title Research, LLC). 2025. Historic aerial photographs: 1953, 1964, 1966, 1968, 1971, 1978, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990, 1991, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2002, 2003, 2005, 2009, 2010, 2012, 2014, 2016, 2019, 2020, and 2022. Accessed November 10, 2025. https://www.historicaerials.com/viewer#.

OHP (Office of Historic Preservation). 1995. *Instructions for Recording Historical Resources*. March 1995. https://ohp.parks.ca.gov/pages/1054/files/manual95.pdf.



SOURCE: USGS 7.5-Minute Series La Mesa and El Cajon Quadrangles

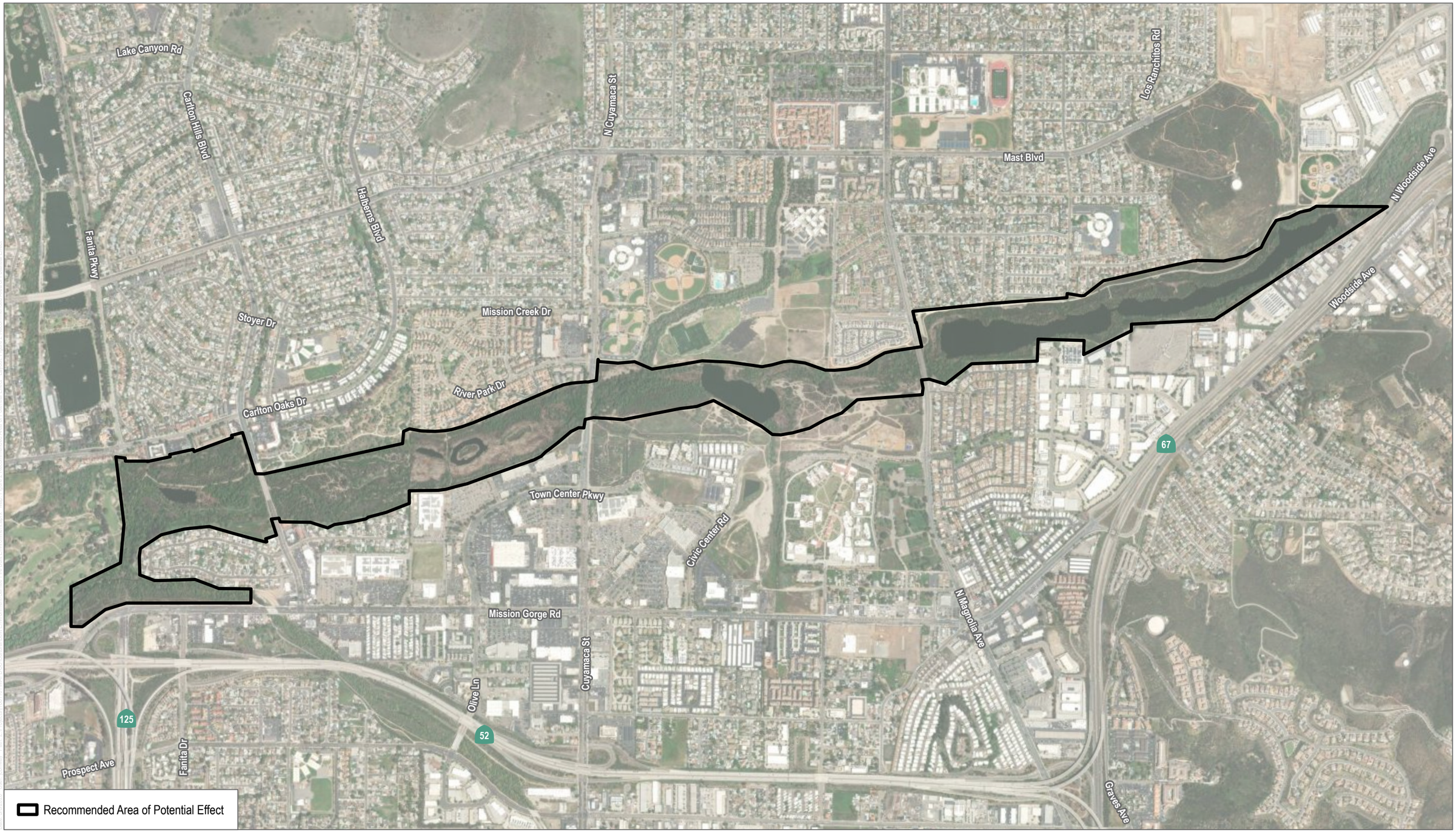
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0 1,000 2,000 Feet

FIGURE 1

Project Location

San Diego River Fire Hazard Mitigation Plan



SOURCE: Vantor 2025; Open Street Map 2025

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N

0 500 1,000 Feet

FIGURE 2

Recommended Area of Potential Effect

San Diego River Fire Hazard Mitigation Plan

Appendix D

Cultural Resource Assessment Report

Cultural Resource Assessment Report

San Diego River Fire Hazard Mitigation Program – Phase 1: Fuels Treatment Plan

City of Santee, San Diego County, California

JULY 2026

Prepared for:

CITY OF SANTEE
10601 Magnolia Avenue
Santee, California 92071

Prepared by:

David Faith, MA, RPA
Matthew DeCarlo, MA, RPA
Micah Hale, PhD, RPA

DUDEK

687 S. Coast Highway 101, Suite 110
Encinitas, California 92024

National Archaeological Database (NADB) Information

Authors:	David Faith, MA, RPA, Matthew DeCarlo, MA, RPA, and Micah J. Hale, PhD, RPA
Firm:	Dudek
Project Proponent:	City of Santee
Report Date:	July 2026
Report Title:	Cultural Resource Assessment Report for the San Diego River Fire Hazard Mitigation Plan – Phase 1, City of Santee, San Diego County, California.
Type of Study:	Cultural Resources Inventory and Evaluation
Resources:	CA-SDI-005050, CA-SDI-010148, CA-SDI-021860, SDRFM-DF-S-001, SDRFM-DF-S-002, SDRFM-DF-S-003, SDRFM-DF-I-001, SDRFM-DF-I-002, SDRFM-DF-I-003
USGS Quads:	El Cajon and La Mesa, Township 15 South, Range 1West, Sections 21, 22, 23, 27, 28, and 29.
Area of Potential Effect:	Approximately 300 acres
Permit Numbers:	N/A
Keywords:	Santee, San Diego River, Positive, intensive pedestrian survey; CA-SDI-005050, CA-SDI-010148, CA-SDI-021860, SDRFM-DF-S-001, SDRFM-DF-S-002, SDRFM-DF-S-003, SDRFM-DF-I-001, SDRFM-DF-I-002, SDRFM-DF-I-003, lithic scatter, historical foundations

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Executive Summary

Dudek was retained by the City of Santee (City) to conduct a cultural resources inventory in support of the proposed San Diego River Fire Hazard Mitigation Program - Phase 1: Fuels Treatment Plan (Project/Undertaking). The Project is a vegetative fuel reduction project located within the San Diego River corridor within the City's boundary. The Project area is located within Township 15 South, Range 1W, Sections 21, 22, 23, 27, 28, and 29 as El Cajon and La Mesa, CA 7.5-minute USGS Quadrangle (Figure 1, Project Location Map). The primary goals of this study are the identification of archaeological, built environment, or tribal cultural resources (cultural resources) identified within the Project boundary that could be affected by ground-disturbing activities.

The City is the lead agency for the Project and would assure compliance with the California Environmental Quality Act (CEQA) and City's regulations. The Project is funded by the Federal Emergency Management Agency (FEMA) through the Hazard Mitigation Grant Program (HMGP-4610-917-009), with matching funds from the San Diego River Conservancy (SDRC) through Grant Agreement Number SDRG-B21-17 (SDRC Grant). The California Governor's Office of Emergency Services is acting as the lead federal agency on behalf of FEMA to assure compliance with Section 106 of the National Historic Preservation Act (NHPA) and the National Environmental Policy Act (NEPA).

The Project area of potential effect (APE) includes all areas with potential to incur ground disturbance as a result of Project implementation. This includes all areas within the San Diego River corridor where vegetative fuel reduction activities would take place. The Project APE measures approximately 300 acres (Figure 2, Area of Potential Effects Map). The current proposed vertical APE would not extend beyond 5 feet below ground surface.

A records search conducted at the South Coastal Information Center (SCIC) indicates that 43 previous studies overlap portions of the Project APE (Confidential Appendix B). The records search identified three prehistoric resources within the Project APE: CA-SDI-005050, CA-SDI-010148, and CA-SDI-021860. These three sites include a lithic scatter, a bedrock milling site with associated artifact scatter, and a habitation site deposits including fire-affected rock, lithic and ceramic artifacts, and midden soil.

On December 1, 2025, Dudek requested a search of the Sacred Lands Files from the Native American Heritage Commission (NAHC). A response letter was received via email from the NAHC on December 10, 2025, stating resources are listed in the Sacred Lands File for this area, but did not provide details on what the resource(s) are or where they are located. Dudek sent outreach letters to 17 Native American groups and individuals on December 29, 2025. To date, two Tribal responses have been received.

Dudek archaeologists conducted an opportunistic and intensive-level pedestrian survey of the Project APE from December 8 to December 10, 2025, and on January 9, 2026. Red Tail Environmental Kumeyaay Native American monitor Justin Linton participated in the survey. Much of the Project APE was either covered in dense vegetation or standing water (the San Diego River). The survey team revisited known cultural resources CA-SDI-005050, CA-SDI-010148, and CA-SDI-021860, which intersect the APE. In addition, three new archaeological sites and three new isolates were identified within the Project APE including: SDRFM-DF-S-001, SDRFM-DF-S-002, SDRFM-DF-S-003, SDRFM-DF-I-001, SDRFM-DF-I-002, and SDRFM-DF-I-003. These resources consist of a historic linear rock feature and refuse concentration, two historic poured concrete pads, a prehistoric bedrock milling feature, a flaked stone core, a piece of debitage, and a biface fragment.

The current assessment evaluated CA-SDI-021860, SDRFM-DF-S-001, SDRFM-DF-I-001, SDRFM-DF-I-002, and SDRFM-DF-I-003 according federal criteria, CEQA, the National Register of Historic Places (NRHP), and the California Register of Historical Resources (CRHR), and were recommended not eligible for listing on the NRHP or the CRHR, are not independently significant in accordance with criteria identified in 36 CFR 60.4, and are not significant under CEQA. As such, no further archaeological review or avoidance measures are recommended.

The current assessment evaluated and recommended SDRFM-DF-S-003 not eligible for listing on the NRHP or CRHR, is not independently significant in accordance with criteria identified in 36 CFR 60.4, and is not significant under CEQA. Based on archival research and reports, it is likely that SDRFM-DF-S-003 is a milling feature that had been a transplant from another previously recorded site, due to the significant grading and development in the area. While this milling feature was likely moved to its current location, SDRFM-DF-S-003 may have some Native American cultural value. As such, Dudek recommends that damage to the milling feature itself be avoided during prescribed fuel reducing treatments.

CA-SDI-005050 has not been evaluated for listing on the NRHP or CRHR. Due to the surface scatter and features, and the potential for significant buried deposits, surficial prescribed fuel reducing treatments have the potential to impact or adversely affect this resource. Dudek recommends that this resource be treated as NRHP and CRHR eligible under criteria D/4, as formal evaluations have not been conducted, and is therefore treated as a historic property. It is recommended that the Project completely avoid the resource.

The NRHP and CRHR eligibility status of CA-SDI-010148 is inconclusive since previous testing within the current APE resulted in recommendations of no significance (Caltrans 1985, 1986) but testing in the western extension resulted in recommendations that the entire site boundary be subject to data recovery (Gallegos & Associates 1993). Further testing within the current Project APE would be required to determine the NRHP and CRHR eligibility status. Dudek recommends that this resource be treated as NRHP and CRHR eligible under criteria D/4, as formal evaluations have not been conducted, and is therefore treated as a historic property. It is recommended that the Project completely avoid the resource.

SDRFM-DF-S-002 has not been evaluated for listing on the NRHP or CRHR. Due to the historic period features, and the potential for significant buried deposits, surficial prescribed fuel reducing treatments have the potential to impact or adversely affect this resource. Dudek recommends that this resource be treated as NRHP and CRHR eligible under criteria D/4, as formal evaluations have not been conducted, and is therefore treated as a historic property. It is recommended that the Project completely avoid the resource.

The proposed mitigation measures for the project include: MM CR-1, place temporary work buffers around the following archaeological sites: CA-SDI-005050, CA-SDI-010148, SDRFM-DF-S-002, and SDRFM-DF-S-003; MM CR-2, implement archaeological monitoring during the proposed vegetation fuel management (which includes Tribal monitoring and an inadvertent cultural resources discovery plan); and MM CUL-3 requires that if human remains are discovered, all work in the vicinity of the find shall stop and the County Coroner and the City shall be notified immediately.

Based on the results and recommendations provided, this study finds that, with the proposed mitigation measures, the Project would have no impact on significant resources under CEQA and no adverse effect to historic properties under Section 106 of the NHPA.

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1 Introduction

Dudek was retained by the City of Santee (City) to conduct a cultural resources inventory in support of the proposed San Diego River Fire Hazard Mitigation Program - Phase 1: Fuel Treatment Plan (Project/Undertaking). The Project is a vegetative fuel reduction project located within the San Diego River corridor within the City's boundary. The primary goals of this study are the identification of archaeological, built environment, or tribal cultural resources (cultural resources) identified within the Project boundary that could be affected by ground-disturbing activities. The City is the lead agency for the Project and would assure compliance with the California Environmental Quality Act (CEQA) and City regulations. The Project is funded by the Federal Emergency Management Agency (FEMA) through the Hazard Mitigation Grant Program (HMGP-4610-917-009), with matching funds from the San Diego River Conservancy (SDRC) through Grant Agreement Number SDRG-B21-17 (SDRC Grant). The California Governor's Office of Emergency Services is acting as the lead federal agency on behalf of FEMA to assure compliance with Section 106 of the National Historic Preservation Act (NHPA) and the National Environmental Policy Act (NEPA).

1.1 Project Location

The approximately 300-acre Project APE is located within the San Diego River corridor within the City's boundaries. The Project area is located within Township 15 South, Range 1W, Sections 21, 22, 23, 27, 28, and 29 as El Cajon and La Mesa, CA 7.5-minute USGS Quadrangle (Figure 1, Project Location Map). Treatment areas extend from Forester Creek at the western project boundary to the City border with the unincorporated Lakeside community in the east, including the open space areas of Mast Park West, Mast Park Wetland Restoration Area, Mast Park East, Mission Creek, Walker Trails Open Space, and Walker Preserve. Vehicle access to the Project is via North Magnolia Avenue, the Lakeside Sports Park, and Mast Park. Multiple pedestrian access paths as well as residential and commercial developments border the Project.

1.2 Project Description

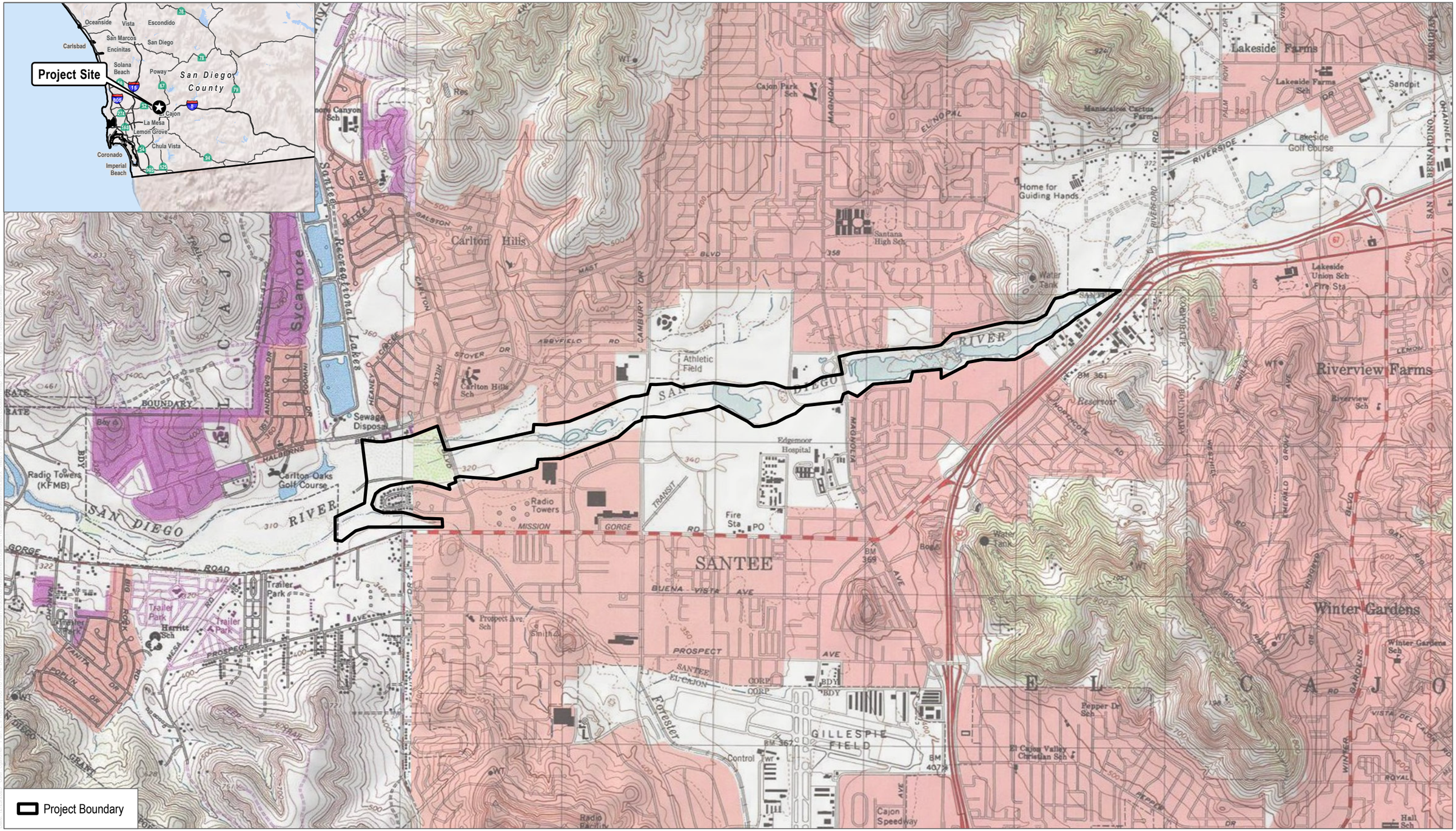
The proposed Project is a vegetative fuel reduction project located within the San Diego River corridor in the City of Santee. Treatments may employ manual (hand tools, chainsaws), mechanical (masticators, chippers), and targeted herbicide applications (applied to cut stumps of sprouting species) to address invasive species that elevate fire severity and threaten adjacent development and infrastructure. The fuel reduction activities include reducing non-native invasive species and dead vegetation and clearing debris across the wildland-urban interface (WUI) along the San Diego River. Zone 1 encompasses the 0 to 50-foot area immediately adjacent to structures, would include the thinning of shrubs to reduce horizontal continuity to a residual surface of approximately 30%. Zone 2 encompasses 50-100-foot areas, which lies beyond the immediate structure buffer, and the thinning of shrubs to reduce horizontal continuity to a residual surface coverage of approximately 50%. Trees with extensive dead or desiccated material and invasive plants would be 100% removed. Zone 3 encompasses the broader vegetated areas of the river corridor (outside Zones 1 and 2), including most riparian zones, floodplain terraces, and open space areas such as portions of Mast Park and Walker Preserve. Vegetation management in Zone 3 is focused on treatment or removal of non-native species, dead or dying vegetation, and debris, including accumulations deposited during storm events. Removal and other treatment of live and healthy native species would not occur within Zone 3. The objective of the project is to reduce flammable vegetation, to reduce the risk of wildfire.

1.3 Project Area of Potential Effects

The establishment of the Project area of potential effect (APE) is part of the regulatory process to identify historic properties under Section 106. The Project APE is the study area delineated to assess the potential effects of the construction and operation of the Project for cultural resources. The APE encompasses the geographic area or areas within which the proposed vegetative fuel reduction activities may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist. The APE for the Project includes all areas with potential to incur ground disturbance as a result of Project implementation. This includes all areas within the San Diego River corridor where fuel reduction activities would take place. The Project APE measures approximately 300 acres. The current proposed vertical APE would not extend beyond 5 feet below ground surface. The depth of ground disturbance is not based on zone and is instead based on a worst-case scenario where root systems would be pulled out of the ground.

1.4 Project Personnel

Matthew DeCarlo, MA, RPA served as project manager and Principal Investigator and co-authored the technical report. David Faith, MA, RPA, acted as field director and co-authored the technical report. Dudek archaeologists Makayla Murillo and Anna Mendelsohn participated in the field survey. Justin Linton from Red Tail Environmental acted as the Kumeyaay Native American Monitor and participated in the pedestrian survey. Resumes of personnel are provided in Appendix A.



SOURCE: USGS 7.5-Minute Series La Mesa and El Cajon Quadrangles
Township 15S Range 1W Sections 21, 22, 23, 27, 28, 29
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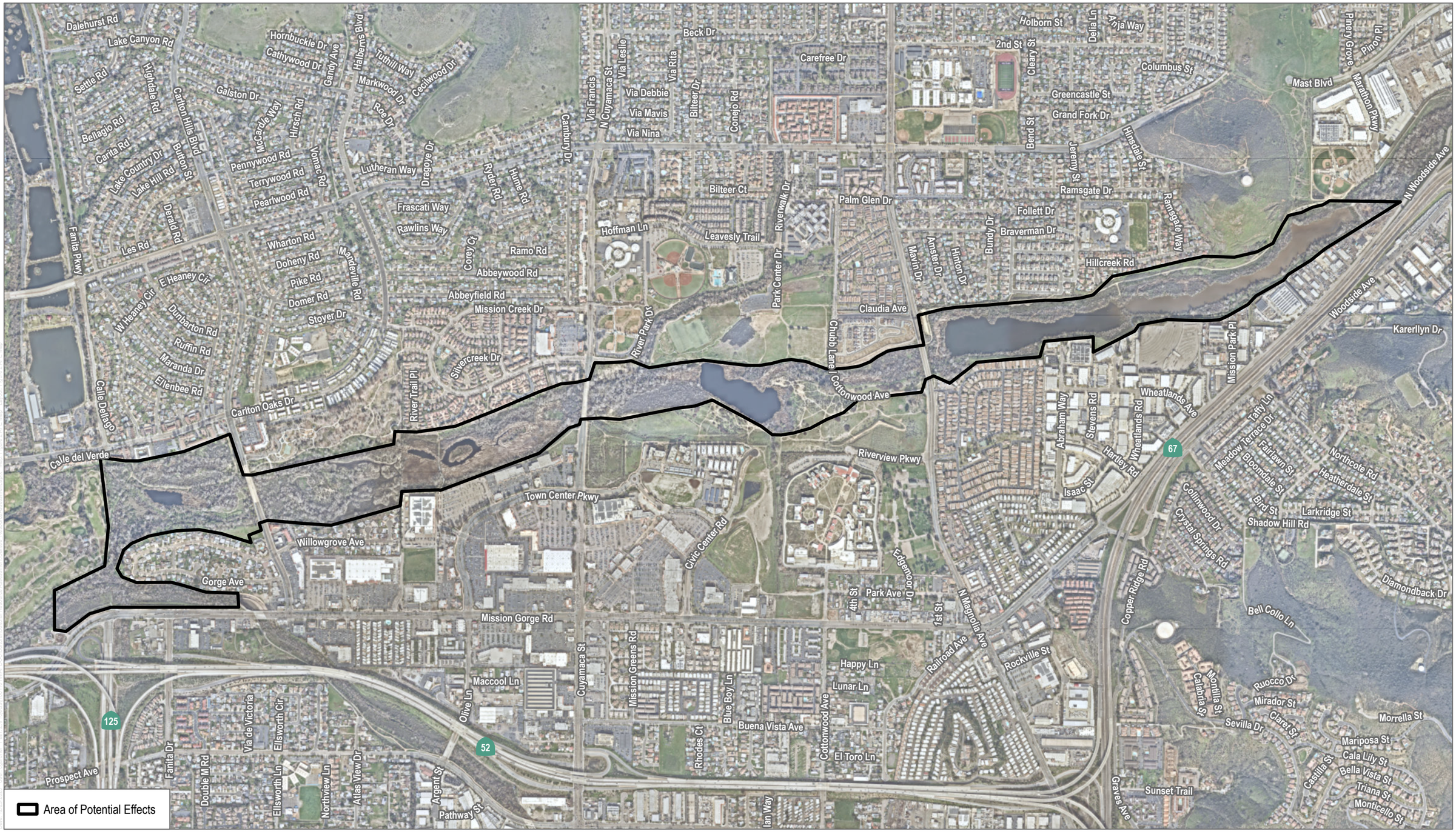
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FIGURE 1

Project Location Map

San Diego River Fire Hazard Mitigation Plan

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SOURCE: USGS 7.5-Minute Series

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0 150 300 Meters

0 1,000 2,000 Feet

FIGURE 2

Area of Potential Effects Map

San Diego River Fire Hazard Mitigation Plan

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2 Regulatory Setting

The treatment of cultural resources located within the Project APE is governed by federal, state, and local laws and regulations. As a whole, the laws and regulations seek to avoid impacts to cultural resources and affects to historic properties, and, when avoidance is not feasible, to minimize or mitigate those impacts and effects.

2.1 Federal

2.1.1 Section 106 of the National Historic Preservation Act

The Project requires compliance with Section 106 of the NHPA of 1966(54 USC 306108), as amended, and its implementing regulations (36 CFR 800) because the Project is partially federally-funded.

The NHPA established the NRHP and the President's Advisory Council on Historic Preservation (ACHP), and provides that states may establish State Historic Preservation Officers (SHPOs) to consult with federal agencies on undertakings that may affect historic properties. Most significantly for federal agencies responsible for managing cultural resources, Section 106 of the Act directs that "[t]he head of any Federal agency having direct or indirect jurisdiction over a proposed Federal or federally assisted undertaking in any State and the head of any Federal department or independent agency having authority to license any undertaking shall, prior to the approval of the expenditure of any Federal funds on the undertaking or prior to the issuance of any license, as the case may be, take into account the effect of the undertaking on any district, site, building, structure, or object that is included in or eligible for inclusion in the NRHP." Section 106 also affords the ACHP a reasonable opportunity to comment on the undertaking (54 USC 306108).

Title 36 Code of Federal Regulations, Part 800 (36 CFR 800)[1], implements Section 106 of the NHPA (ACHP 2004). It defines the steps necessary to identify historic properties (those cultural resources listed in or eligible for listing in the NRHP), including consultation with federally recognized Indian tribes to identify resources of concern to them; to determine whether or not they may be adversely affected by a proposed undertaking; and the process for avoiding, minimizing, or mitigating adverse effects. The content of 36 CFR 60.4 also defines criteria for determining eligibility for listing in the NRHP (NPS 2012). Cultural resources may be considered eligible for listing if they possess integrity of location, design, setting, materials, workmanship, feeling, and association. A resource may be considered historically significant and eligible for NRHP listing if it is found to meet one of the following criteria:

A. It is associated with events that have made a significant contribution to the broad patterns of local or regional history; or
B. It is associated with the lives of persons significant to our past; or
C. It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master, or possesses high artistic values, or that represents a significant and distinguishable entity whose components may lack individual distinction; or
D. It has yielded, or has the potential to yield, information important to the prehistory or history.

[1] The United States Army Corps of Engineers' Appendix C criteria for the "project review area" is subsumed within the APE defined here, see 33 C.F.R. Part 325, Appendix C, para.1.g. Notably, Appendix C is still in effect though it's been pending rescission for over a year.

2.2 State

2.2.1 The California Register of Historical Resources (Public Resources Code Section 5020 et seq.)

In California, the term "historical resource" includes but is not limited to "any object, building, structure, site, area, place, record, or manuscript which is historically or archaeologically significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California" (California Public Resources Code Section 5020.1(j)). In 1992, the California legislature established CRHR "to be used by state and local agencies, private groups, and citizens to identify the state's historical resources and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse change" (California Public Resources Code Section 5024.1(a)). A resource is eligible for listing in the CRHR if the State Historical Resources Commission determines that it is a significant resource and that it meets any of the following NRHP criteria per California Public Resources Code Section 5024.1(c)):

1. Associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.
2. Associated with the lives of persons important in our past.
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
4. Has yielded, or may be likely to yield, information important in prehistory or history.

Resources less than 50 years old are not considered for listing in the CRHR but may be considered if it can be demonstrated that sufficient time has passed to understand the historical importance of the resource (see 14 CCR 4852(d)(2)).

The CRHR protects cultural resources by requiring evaluations of the significance of prehistoric and historic resources. The criteria for the CRHR are nearly identical to those for the NRHP, and properties listed or formally designated as eligible for listing on the NRHP are automatically listed on the CRHR, as are the state landmarks and points of interest. The CRHR also includes properties designated under local ordinances or identified through local historical resource surveys. The State Historic Preservation Officer maintains the CRHR.

2.2.2 Native American Historic Cultural Act (California Public Resources Code Section 5097 et seq.)

The Native American Historic Resources Protection Act (Public Resources Code Section 5097, et seq.) addresses the disposition of Native American burials in archaeological sites and protects such remains from disturbance, vandalism, or inadvertent destruction; establishes procedures to be implemented if Native American human remains or associated burial items are discovered during construction of a Project; and establishes the NAHC to resolve disputes regarding the disposition of such remains. In addition, the Native American Historic Resource Protection Act makes it a misdemeanor punishable by up to 1 year in jail to deface or destroy a Native American historic or cultural site that is listed or may be eligible for listing in the CRHR.

2.2.3 California Native American Graves Protection and Repatriation Act

The California Native American Graves Protection and Repatriation Act (California Repatriation Act), enacted in 2001, requires all state agencies and museums that receive state funding and that have possession or control over collections of human remains or cultural items, as defined, to complete an inventory and summary of these remains and items on or before January 1, 2003, with certain exceptions. The California Repatriation Act also provides a process for the identification and repatriation of these items to the appropriate tribes.

2.2.4 California Environmental Quality Act Statues and Guidelines

As described further below, the following CEQA statutes and CEQA Guidelines are relevant to the analysis of archaeological and historic resources:

1. California Public Resources Code Section 21083.2(g): Defines "unique archaeological resource."
2. California Public Resources Code Section 21084.1 and CEQA Guidelines Section 15064.5(a): Defines historical resources. In addition, CEQA Guidelines Section 15064.5(b) defines the phrase "substantial adverse change in the significance of an historical resource". It also defines the circumstances when a Project would materially impair the significance of a historical resource.
3. California Public Resources Code Section 5097.98 and CEQA Guidelines Section 15064.5(e): These statutes set forth standards and steps to be employed following the accidental discovery of human remains in any location other than a dedicated ceremony.
4. California Public Resources Code Sections 21083.2(b)-(c) and CEQA Guidelines Section 15126.4: These statutes and regulations provide information regarding the mitigation framework for archaeological and historic resources, including options of preservation-in-place mitigation measures and identify preservation-in-place as the preferred manner of mitigating impacts to significant archaeological sites.

Under CEQA, a Project may have a significant effect on the environment if it may cause "a substantial adverse change in the significance of an historical resource" (California Public Resources Code, Section 21084.1; 14 CRR 15064.5(b)). An "historical resource" is any site listed or eligible for listing in the CRHR. The CRHR listing criteria are intended to examine whether the resource in question: (a) is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage; (b) is associated with the lives of persons important in our past; (c) embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or (d) has yielded, or may be likely to yield, information important in pre-history or history.

The term "historical resource" also includes any site described in a local register of historic resources or identified as significant in a historical resources survey (meeting the requirements of California Public Resources Code, Section 5024.1(q)).

CEQA also applies to "unique archaeological resources." California Public Resources Code, Section 21083.2(g), defines a "unique archaeological resource" as any archaeological artifact, object, or site about which it can be

clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

1. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
2. Has a special and particular quality such as being the oldest of its type or the best available example of its type.
3. Is directly associated with a scientifically recognized important prehistoric or historic event or person.

CEQA was amended in 2014 through Assembly Bill 52, which created a new category of "tribal cultural resources" that must be considered under CEQA, and applies to all projects that file a notice of preparation (NOP) or notice of negative declaration or mitigated negative declaration on or after July 1, 2015. AB 52 requires lead agencies to provide notice to and begin consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of a project if that tribe has requested, in writing, to be kept informed of projects by the lead agency prior to the determination whether a negative declaration, mitigated negative declaration, or environmental impact report would be prepared. If a tribe requests consultation within 30 days upon receipt of the notice, the lead agency must consult with the tribe. The bill also specifies mitigation measures that may be considered to avoid or minimize impacts on tribal cultural resources. Specifically, California Public Resources Code Section 21074 provides the following guidance

(a) "Tribal Cultural Resources are either of the following:
   (1) Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:
      (A) Included or determined to be eligible for inclusion in the California Register of Cultural Resources.
      (B) Included in a local register of cultural resources as defined in subdivision (k) of §5020.1.
   (2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of §5024.1. In applying the criteria set forth in subdivision (c) of §5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

(b) A cultural landscape that meets the criteria of subdivision (a) is a tribal cultural resource to the extent that the landscape is geographically defined in terms of the size and scope of the landscape.

(c) A historical resource described in Section 21084.1, a unique archaeological resource as defined in subdivision (g) of Section 21083.2, or a "nonunique archeological resource" as defined in subdivision (h) of Section 21083.2 may also be a tribal cultural resource if it conforms with the criteria of subdivision (a).

All historical resources and unique archaeological resources – as defined by statute – are presumed to be historically or culturally significant for purposes of CEQA (California Public Resources Code, Section 21084.1; 14 CCR 15064.5(a)). The lead agency is not precluded from determining that a resource is a historical resource even if it does not fall within this presumption (California Public Resources Code, Section 21084.1; 14 CCR 15064.5(a)). A site or resource that does not meet the definition of "historical resource" or "unique archaeological resource" is not considered significant under CEQA and need not be analyzed further (California Public Resources Code, Section 21083.2(a); 14 CCR 15064.5(c)(4)).

Under CEQA and significant cultural impact results from a "substantial adverse change in the significance of an historical resource [including a unique archaeological resource]" due to the "physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired" (14 CCR 15064.5(b)(2); California Public Resources Code Section 5020.1(q)).

In turn, the significance of a historical resource is materially impaired when a Project:

1. Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register; or
2. Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to Section 5020.1(k) of the Public Resources Code or its identification in an historical resources survey meeting the requirements of Section 5024.1(g) of the Public Resources Code, unless the public agency reviewing the effects of the Project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or
3. Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the California Register as determined by a lead agency for purposes of CEQA.

CEQA Guidelines Section PRC Section 21083.2(b)

Pursuant to these sections, CEQA first evaluates whether a Project site contains any "historical resources," then assesses whether that Project would cause an adverse effect to the significance of a historical resource.

When a Project significantly affects a unique archaeological resource, CEQA imposes special mitigation requirements. Specifically, "if it can be demonstrated that a Project will cause damage to a unique archaeological resource, the lead agency may require reasonable efforts to be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. Examples of that treatment, in no order of preference, may include, but are not limited to, any of the following:

A. Planning construction to avoid archaeological sites.
B. Deeding archaeological sites into permanent conservation easements.
C. Capping or covering archaeological sites with a layer of soil before building on the sites.
D. Planning parks, greenspace, or other open space to incorporate archaeological sites."

California Public Resources Code, Section 21083.2(b)(1)-(4).

If these "preservation in place" options are not feasible, mitigation may be accomplished through data recovery (California Public Resources Code, Section 21083.2(d); 14 CCR 15126.4(b)(3)(C)). California Public Resources Code, Section 21083.2(d) states that "excavation as mitigation shall be restricted to those parts of the unique archeological resource that would be damaged or destroyed by the Project. Excavation as mitigation shall not be required for a unique archeological resource if the lead agency determines that testing or studies already completed have adequately recovered the scientifically consequential information from and about the resource, if this determination is documented in the environmental impact report."

These same requirements are set forth in slightly greater detail in CEQA Guidelines Section 15126.4(b)(3), as follows:

A. Preservation in place is the preferred manner of mitigating impacts to archeological sites. Preservation in place maintains the relationship between artifacts and the archeological context. Preservation may also avoid conflict with religious or cultural values of groups associated with the site.
B. Preservation in place may be accomplished by, but is not limited to, the following:
    1. Planning construction to avoid archeological sites;
    2. Incorporation of sites within parks, greenspace, or other open space;
    3. Covering the archeological sites with a layer of chemically stable soil before building tennis courts, parking lots, or similar facilities on the site[; and]
    4. Deeding the site into a permanent conservation easement.
C. When data recovery through excavation is the only feasible mitigation, a data recovery plan, which makes provision for adequately recovering the scientifically consequential information from and about the historical resource, shall be prepared and adopted prior to any excavation being undertaken.

Note that, when conducting data recovery, "if an artifact must be removed during Project excavation or testing, curation may be an appropriate mitigation." (Ibid.) However, "data recovery shall not be required for an historical resource if the lead agency determines that testing or studies already completed have adequately recovered the scientifically consequential information from and about the archeological or historic resource, provided that determination is documented in the EIR and that the studies are deposited with the California Historical Resources Regional Information Center" (14 CCR 15126.4(b)(3)(D)).

2.2.5 California Health and Safety Code

CEQA Guidelines Section 15064.5 assigns special importance to human remains and specifies procedures to be used when Native American remains are discovered. As described below, these procedures are detailed in California Public Resources Code, Section 5097.98.

California law protects Native American burials, skeletal remains, and associated grave goods, regardless of their antiquity, and provides for the sensitive treatment and disposition of those remains. California Health and Safety Code Section 7050.5 requires that if human remains are discovered in any place other than a dedicated cemetery, no further disturbance or excavation of the site or nearby area reasonably suspected to contain human remains shall occur until the County coroner has examined the remains (Section 7050.5b). California Public Resources Code, Section 5097.98, also outlines the process to be followed in the event that remains are discovered. If the coroner determines or has reason to believe the remains are those of a Native American, the coroner must contact the Native American Heritage Commission (NAHC) within 24 hours (Section 7050.5c). The NAHC would notify the Most Likely Descendant (MLD). With the permission of the landowner, the MLD may inspect the site of discovery. The inspection must be completed within 48 hours of notification of the MLD by the NAHC. The MLD may recommend means of treating or disposing of, with appropriate dignity, the human remains and items associated with Native Americans.

2.3 City of Santee General Plan

Divided into nine elements, the Santee General Plan is a statement of intent by the City as to the future development of the community. This is accomplished through objectives and policies that serve as a long-term policy guide for physical, economic, and environmental growth. The Conservation Element of the Santee General Plan discusses water resources, land resources, archaeological and cultural resources, biological resources, and open space. Section 4.3 of the Conservation Element discusses archaeological, cultural, and historic resources known to be within the City. The goal of the Conservation Element is to conserve open space, natural, and cultural resources. The following objective and policies contained in the Conservation Element of the Santee General Plan are relevant to the analysis found in this section:

Objective 8.0: Preserve significant cultural resources.

Policy 8.1. The City shall require either the preservation of significant historic or prehistoric sites, or the professional retrieval of artifacts prior to the development of a site, consistent with the provisions of the California Environmental Quality Act. Preservation may include various measures including avoidance, preservation in place, incorporation into open space, or covering or capping. The type of preservation would depend upon the nature and significance of the archaeological resource and the practical requirements of the proposed land use.

Policy 8.2. The City should require curation of any recovered artifacts as a condition of any cultural resources mitigation program.

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3 Setting

3.1 Environmental and Geological Setting

The Project APE is located within an urbanized portion of the City in eastern San Diego County and encompasses upland, riparian, and wetland vegetation communities associated with the San Diego River. The western extent of the Project APE begins approximately 0.25 mile north of the intersection of State Routes 52 and 125. The immediate vicinity of the Project APE includes residential development, schools, and parks to the north, commercial development and public facilities (including Las Colinas Detention Facility) to the south, Carlton Oaks Country Club to the west, and State Route 67 to the east. The Project APE and surrounding suburbs are generally flat, with the San Diego River running east–west through the center between wetland, riparian, and disturbed vegetation. Elevations range from approximately 310 to 360 feet above mean sea level. Vegetation within the Project APE and surrounding vicinity is characterized by a mix of natural as well as non-native vegetation communities and land cover types.

3.2 Cultural Context

Available evidence indicates that continuous human occupation in the San Diego region spans the last 10,000 years. Various attempts to parse out variability in archaeological assemblages over this broad timeframe have led to the development of several cultural chronologies; some of these are based on geologic time, most are based on temporal trends in archaeological assemblages, and others are interpretive reconstructions. Each of these reconstructions describes essentially similar trends in assemblage composition in more or less detail. This research employs a common set of generalized terms used to describe chronological trends in assemblage composition: Paleoindian (pre-5500 BC), Archaic (8000 BC–AD 500), Late Prehistoric (AD 500–1750), and Ethnohistoric (post-AD 1750). It is important to note that Kumeyaay aboriginal lifeways did not cease within San Diego County and Baja California at European contact. Protohistoric refers to the chronological trend of continued Native American aboriginal lifeways at the cusp of the recorded historic period in the Americas.

3.2.1 Paleoindian (pre-5500 BC)

Evidence for Paleoindian occupation in coastal Southern California is tenuous, especially considering the fact that the oldest dated archaeological assemblages look nothing like the Paleoindian artifacts from the Great Basin. One of the earliest dated archaeological assemblages in coastal Southern California (excluding the Channel Islands) derives from SDI-4669/W-12, in La Jolla. A human burial from SDI-4669 was radiocarbon dated to 9,590–9,920 years before present (95.4% probability) (Hector 1984). The burial is part of a larger site complex that contained more than 29 human burials associated with an assemblage that fits the Archaic profile (i.e., large amounts of groundstone, battered cobbles, and expedient flake tools). In contrast, typical Paleoindian assemblages include large-stemmed projectile points, high proportions of formal lithic tools, bifacial lithic reduction strategies, and relatively small proportions of groundstone tools. Prime examples of this pattern are sites that were studied by Davis (1978) on China Lake Naval Air Weapons Station near Ridgecrest, California. These sites contained fluted and unfluted stemmed points and large numbers of formal flake tools (e.g., shaped scrapers, blades). Other typical Paleoindian sites include the Komodo site (MNO-679)—a multicomponent fluted point site, and MNO-680—a single component Great Basined Stemmed point site (Basgall et al. 2002). At MNO-679 and MNO-680, groundstone tools were rare while finely made projectile points were common.

Turning back to coastal Southern California, the fact that some of the earliest dated assemblages are dominated by processing tools runs counter to traditional notions of mobile hunter–gatherers traversing the landscape for highly valued prey. Evidence for the latter—that is, typical Paleoindian assemblages—may have been located along the coastal margin at one time, prior to glacial desiccation and a rapid rise in sea level during the early Holocene (pre-7500 BP) that submerged as much as 1.8 kilometer of the San Diego coastline. If this were true, however, it would also be expected that such sites would be located on older landforms near the current coastline. Some sites, such as SDI-210 along Agua Hedionda Lagoon, contained stemmed points similar in form to Silver Lake and Lake Mojave projectile points (pre-8000 BP) that are commonly found at sites in California's high desert (Basgall and Hall 1990). SDI-210 yielded one corrected radiocarbon date of 8520–9520 BP (Warren et al. 2004). However, sites of this nature are extremely rare and cannot be separated from large numbers of milling tools that intermingle with old projectile point forms.

Warren et al. (2004) claimed that a biface manufacturing tradition present at the Harris site complex (SDI-149) is representative of typical Paleoindian occupation in the San Diego region that possibly dates between 10,365 and 8200 BC (Warren et al. 2004, p. 26). Termed San Dieguito (Rogers 1945), assemblages at the Harris site are qualitatively distinct from most others in the San Diego region because the site has large numbers of finely made bifaces (including projectile points), formal flake tools, a biface reduction trajectory, and relatively small amounts of processing tools (Warren 1964, 1968). Despite the unique assemblage composition, the definition of San Dieguito as a separate cultural tradition is hotly debated. Gallegos (1987) suggested that the San Dieguito pattern is simply an inland manifestation of a broader economic pattern. Gallegos' interpretation of San Dieguito has been widely accepted in recent years, in part because of the difficulty in distinguishing San Dieguito components from other assemblage constituents. In other words, it is easier to ignore San Dieguito as a distinct socioeconomic pattern than it is to draw it out of mixed assemblages.

The large number of finished bifaces (i.e., projectile points and non-projectile blades), along with large numbers of formal flake tools at the Harris site complex, is very different than nearly all other assemblages throughout the San Diego region, regardless of age. Warren et al. (2004) made this point, tabulating basic assemblage constituents for key early Holocene sites. Producing finely made bifaces and formal flake tools implies that relatively large amounts of time were spent for tool manufacture. Such a strategy contrasts with the expedient flake-based tools and cobble-core reduction strategy that typifies non-San Dieguito Archaic sites. It can be inferred from the uniquely high degree of San Dieguito assemblage formality that the Harris site complex represents a distinct economic strategy from non-San Dieguito assemblages.

If San Dieguito truly represents a distinct socioeconomic strategy from the non-San Dieguito Archaic processing regime, its rarity implies that it was not only short-lived, but that it was not as economically successful as the Archaic strategy. Such a conclusion would fit with other trends in Southern California deserts, wherein hunting-related tools are replaced by processing tools during the early Holocene (Basgall and Hall 1990).

3.2.2 Archaic (8000 BC–AD 500)

The more than 1,500-year overlap between the presumed age of Paleoindian occupations and the Archaic period highlights the difficulty in defining a cultural chronology in the San Diego region. If San Dieguito is the only recognized Paleoindian component in the San Diego region, then the dominance of hunting tools implies that it derives from Great Basin adaptive strategies and is not necessarily a local adaptation. Warren et al. (2004) admitted as much, citing strong desert connections with San Dieguito. Thus, the Archaic pattern is the earliest local socioeconomic adaptation in the San Diego region (Hale 2001, 2009).

The Archaic pattern is relatively easy to define with assemblages that consist primarily of processing tools: millingstones, handstones, battered cobbles, heavy crude scrapers, incipient flake-based tools, and cobble-core reduction. These assemblages occur in all environments across the San Diego region, with little variability in tool composition. Low assemblage variability over time and space among Archaic sites has been equated with cultural conservatism (Byrd and Reddy 2002; Warren 1968; Warren et al. 2004). Despite enormous amounts of archaeological work at Archaic sites, little change in assemblage composition occurs until the bow and arrow is adopted at around AD 500, as well as ceramics at approximately the same time (Griset 1996; Hale 2009). Even then, assemblage formality remains low. After the bow is adopted, small arrow points appear in large quantities and already low amounts of formal flake tools are replaced by increasing amounts of expedient flake tools. Similarly, shaped millingstones and handstones decrease in proportion relative to expedient, unshaped groundstone tools (Hale 2009). Thus, the terminus of the Archaic period is equally as hard to define as its beginning because basic assemblage constituents and patterns of manufacturing investment remain stable, complimented only by the addition of the bow and ceramics.

3.2.3 Late Prehistoric (AD 500–1750)

The period of time following the Archaic and prior to Ethnohistoric times (AD 1750) is commonly referred to as the Late Prehistoric (Rogers 1945; Wallace 1955; Warren et al. 2004). However, several other subdivisions continue to be used to describe various shifts in assemblage composition, including the addition of ceramics and cremation practices. In northern San Diego County, the post-AD 1450 period is called the San Luis Rey Complex (True 1980), while the same period in southern San Diego County is called the Cuyamaca Complex and is thought to extend from AD 500 until Ethnohistoric times (Meighan 1959). Rogers (1929) also subdivided the last 1,000 years into the Yuman II and III cultures, based on the distribution of ceramics. Despite these regional complexes, each is defined by the addition of arrow points and ceramics, and the widespread use of bedrock mortars. Vagaries in the appearance of the bow and arrow and ceramics make the temporal resolution of the San Luis Rey and Cuyamaca complexes difficult. For this reason, the term Late Prehistoric is well suited to describe the last 1,500 years of prehistory in the San Diego region.

Temporal trends in socioeconomic adaptations during the Late Prehistoric period are poorly understood. This is partly due to the fact that the fundamental Late Prehistoric assemblage is very similar to the Archaic pattern but includes arrow points and large quantities of fine debitage from producing arrow points, ceramics, and cremations. The appearance of mortars and pestles is difficult to place in time because most mortars are on bedrock surfaces; bowl mortars are actually rare in the San Diego region. Some argue that the Ethnohistoric intensive acorn economy extends as far back as AD 500 (Bean and Shipek 1978). However, there is no substantial evidence that reliance on acorns, and the accompanying use of mortars and pestles, occurred prior to AD 1400. True (1980) argued that acorn processing and ceramic use in the northern San Diego region did not occur until the San Luis Rey pattern emerged after approximately AD 1450. For southern San Diego County, the picture is less clear. The Cuyamaca Complex is the southern counterpart to the San Luis Rey pattern, however, and is most recognizable after AD 1450 (Hector 1984). Similar to True (1980), Hale (2009) argued that an acorn economy did not appear in the southern San Diego region until just prior to Ethnohistoric times, and that when it did occur, a major shift in social organization followed.

3.2.4 Ethnohistoric (post-AD 1750)

As recognized by State Assembly Joint Resolution No. 60 (2001), the Kumeyaay Nation has occupied the southern California and Baja California region, including the City of San Diego's jurisdictional boundaries and the proposed project's APE, far into antiquity. The history of the Kumeyaay communities prior to the mid-1700s has largely been reconstructed through later mission-period and early ethnographic accounts. The first records of the Native American inhabitants of the San Diego region come predominantly from European merchants, missionaries, military personnel, and explorers. These brief, and generally peripheral, accounts were prepared with the intent of furthering respective colonial and economic aims and were combined with observations of the landscape. They were not intended to be unbiased accounts regarding the cultural structures and community practices of the newly encountered cultural groups. The establishment of the missions in the San Diego region brought more extensive documentation of Native American communities, though these groups did not become the focus of formal and in-depth ethnographic study until the early twentieth century (Boscana 1846; Fages 1937; Geiger and Meighan 1976; Harrington 1934; Laylander 2000). The principal intent of these researchers was to record the precontact, culturally specific practices, ideologies, and languages that had survived the destabilizing effects of missionization and colonialism. This research, often understood as "salvage ethnography," was driven by the understanding that traditional knowledge was being lost due to the impacts of modernization and cultural assimilation. Alfred Kroeber applied his "memory culture" approach (Lightfoot 2005, p. 32) by recording languages and oral histories within the San Diego region. Kroeber's 1925 assessment of the impacts of Spanish missionization on local Native American populations supported Kumeyaay traditional cultural continuity (Kroeber 1925, p. 711):

> San Diego was the first mission founded in upper California; but the geographical limits of its influence were the narrowest of any, and its effects on the natives comparatively light. There seem to be two reasons for this: first, the stubbornly resisting temper of the natives; and second, a failure of the rigorous concentration policy enforced elsewhere.

In some ways this interpretation led to the belief that many California Native American groups simply escaped the harmful effects of contact and colonization all together. This, of course, is untrue. Ethnographic research by Dubois, Kroeber, Harrington, Spier, and others during the early twentieth century seemed to indicate that traditional cultural practices and beliefs survived among local Native American communities. These accounts supported, and were supported by, previous governmental decisions, which made San Diego County the location of more federally recognized tribes than anywhere else in the United States: 18 tribes on 18 reservations that cover more than 116,000 acres (CSP 2009).

The traditional cultural boundaries between the Luiseño and Kumeyaay Native American tribal groups have been well defined by anthropologist Florence C. Shipek:

> In 1769, the Kumeyaay national territory started at the coast about 100 miles south of the Mexican border (below Santo Tomas), thence north to the coast at the drainage divide south of the San Luis Rey River including its tributaries. Using the U.S. Geological Survey topographic maps, the boundary with the Luiseño then follows that divide inland. The boundary continues on the divide separating Valley Center from Escondido and then up along Bear Ridge to the 2240 contour line and then north across the divide between Valley Center and Woods Valley up to the 1880-foot peak, then curving around east along the divide above Woods Valley. [1993, as summarized by the San Diego County Board of Supervisors 2007:6]

Based on ethnographic information, it is believed that at least 88 different languages were spoken from Baja California Sur to the southern Oregon state border at the time of Spanish contact (Johnson and Lorenz 2006, p. 34). The distribution of recorded Native American languages has been dispersed as a geographic mosaic across California through six primary language families (Golla 2007, p. 71). Ipai and Tipai, spoken respectively by the northern and southern Kumeyaay communities, are mutually intelligible. For this reason, these two are often treated as dialects of a larger Kumeyaay tribal group rather than as distinctive languages, though this has been debated (Luomala 1978; Laylander 2010).

Victor Golla has contended that one can interpret the amount of variability within specific language groups as being associated with the relative "time depth" of the speaking populations (Golla 2007, p. 80) A large amount of variation within the language of a group represents a greater time depth then a group's language with less internal diversity. One method that he has employed is by drawing comparisons with historically documented changes in Germanic and Romantic language groups. Golla has observed that the "absolute chronology of the internal diversification within a language family" can be correlated with archaeological dates (2007, p. 71). This type of interpretation is modeled on concepts of genetic drift and gene flows that are associated with migration and population isolation in the biological sciences.

Golla suggested that there are two language families associated with Native American groups who traditionally lived throughout the San Diego County region. The northern San Diego tribes have traditionally spoken Takic languages that may be assigned to the larger Uto–Aztecan family (Golla 2007, p. 74). These groups include the Luiseño, Cupeño, and Cahuilla. Golla has interpreted the amount of internal diversity within these language-speaking communities to reflect a time depth of approximately 2,000 years. Other researchers have contended that Takic may have diverged from Uto–Aztecan ca. 2600 BC–AD 1, which was later followed by the diversification within the Takic speaking San Diego tribes, occurring approximately 1500 BC–AD 1000 (Laylander 2010). The majority of Native American tribal groups in southern San Diego region have traditionally spoken Yuman languages, a subgroup of the Hokan Phylum. Golla has suggested that the time depth of Hokan is approximately 8,000 years (Golla 2007, p. 74). The Kumeyaay tribal communities share a common language group with the Cocopa, Quechan, Maricopa, Mojave, and others to east, and the Kiliwa to the south. The time depth for both the Ipai (north of the San Diego River, from Escondido to Lake Henshaw) and the Tipai (south of the San Diego River, the Laguna Mountains through Ensenada) is approximated to be 2,000 years at the most. Laylander contended that previous research indicates a divergence between Ipai and Tipai to have occurred approximately AD 600–1200 (Laylander 1985). Despite the distinct linguistic differences between the Takic-speaking tribes to the north, the Ipai-speaking communities in central San Diego, and the Tipai southern Kumeyaay, attempts to illustrate the distinctions between these groups based solely on cultural material alone have had only limited success (Pigniolo 2004; True 1966).

The Kumeyaay generally lived in smaller family subgroups that would inhabit two or more locations over the course of the year. While less common, there is sufficient evidence that there were also permanently occupied villages, and that some members may have remained at these locations throughout the year (Owen 1965; Shipek 1982, 1985; Spier 1923). The prehistoric village of *Nipawai/Nipaguay* was located at the bend in the San Diego River where *Kumeyaay* occupants could utilize the riverine resources and dam channels to redirect water to facilitate plant husbandry (Shipek 1993). As its epicenter is located only 0.5 miles east, there is an increased probability that cultural resources identified within the proposed Project APE would be associated with *Nipawai/Nipaguay.* Each autonomous triblet was internally socially stratified, commonly including higher status individuals such as a tribal head (*Kwaaypay*), shaman (*Kuseyaay)*, and general members with various responsibilities and skills (Shipek 1982). Higher-status individuals tended to have greater rights to land resources, and owned more goods, such as shell money and beads, decorative items, and clothing.

To some degree, titles were passed along family lines; however, tangible goods were generally ceremonially burned or destroyed following the deaths of their owners (Luomala 1978). Remains were cremated over a pyre and then relocated to a cremation ceramic vessel that was placed in a removed or hidden location. A broken metate was commonly placed at the location of the cremated remains, with the intent of providing aid and further use after death. Should any Native American human remains be found in the City of Santee's jurisdictional boundaries, including the proposed project's APE, the NAHC would designate a Most Likely Descendant from the Kumeyaay Nation. At maturity, tribal members often left to other bands in order to find a partner. The families formed networks of communication and exchange around such partnerships.

Areas or regions, identified by known physical landmarks, could be recognized as band-specific territories that may be violently defended against use by other members of the Kumeyaay. Other areas or resources, such as water sources and other locations that were rich in natural resources, were generally understood as communal land to be shared amongst all the Kumeyaay (Loumala 1978). The coastal Kumeyaay would have procured shellfish from three primary environments, including the sandy open coast, bay and lagoon, and rocky open coast (Luomala 1978). The availability of these marine resources changed with the rising sea levels, siltation of lagoon and bay environments, changing climatic conditions, and intensity of use by humans and animals (Gallegos and Kyle 1988; Pigniolo 2005; Warren and Pavesic 1963). Shellfish from sandy environments included *Donax*, *Saxidomus*, *Tivela*, and others. Rocky coast shellfish dietary contributions consisted of *Pseudochama*, *Megastraea*, *Saxidomus*, *Protothaca*, *Megathura*, and others. Bay environment in the distant vicinity of the Project APE would have provided *Argopecten*, *Chione*, *Ostrea*, *Neverita*, *Macoma*, *Tagelus*, and others. While marine resources were obviously consumed, terrestrial animals and other resources likely provided a large portion of sustenance. Game animals consisted of rabbits, hares (*Leporidae*), birds, ground squirrels, woodrats (*Neotoma*), deer, bears, mountain lions (*Puma concolor*), bobcats (*Lynx rufus)*, coyotes (*Canus latrans*), and others. In lesser numbers, reptiles and amphibians may have been consumed.

A number of local plants were used for food and medicine. These were exploited seasonally, and were both traded between regional groups and gathered as a single triblet moved between habitation areas. Some of the more common of these that may have been procured locally or as higher elevation varieties would have included buckwheat (*Eriogonum fasciculatum*), *Agave*, *Yucca*, lemonade berry (*Rhus integrifolia*), sugar brush (*Rhus ovata*), sage scrub (*Artemisia californica*), yerba santa (*Eriodictyon*), sage (*Salvia*), *Ephedra*, prickly pear (*Opuntia*), mulefat (*Baccharis salicifolia*), chamise (*Adenostoma fasciculatum*), elderberry (*Sambucus nigra*), oak (*Quercus*), willow (Salix), and *Juncus* grass among many others (Wilken 2012).

The Kumeyaay territory expanse over several distinct ecological zones and intra-tribal trade allowed the dispersal of goods and information. The Kumeyaay usually trade between bands more often than they traded with unrelated groups outside of their territory, however, larger trail systems crossed their land from the Lower Colorado River to the Southern Californian coast (Luomala 1978). The coastal Kumeyaay exchanged a number of local goods, such as seafood, coastal plants, and various types of shell for items including acorns, agave, mesquite beans, gourds, and other more interior plants of use (Luomala 1978). Trade routes were often along trails between villages, along waterways such as the San Diego River, or, in desert terrain, between springs and water catchments (Heizer 1978). Spaniards marveled at how quickly news and goods travelled between the Colorado River and the coast along the Kumeyaay trail system (Heizer 1978). The routes of the Kumeyaay trail system were followed by wagon routes and later became major thoroughfares (Davis 1961). Interstate 8 is today aptly named the "Kumeyaay Highway" as it follows the likely path of the prehistoric trail connecting coastal and inland Kumeyaay. The proposed Project APE is located along the Kumeyaay Highway and the San Diego River between the prehistoric villages of *Kosoi/Kosay/Kosaii/Cosoy/Kosa'aay* and *Nipawai/Nipaguay*, the location of the now standing Old Town Presidio (approximately 12 miles southwest) and the Mission San Diego de Alcalá (approximately 7 miles southwest), respectively (Kroeber 1925).

3.2.5 The Historic Period (post-AD 1542)

European activity in the region began as early as AD 1542, when Juan Rodríguez Cabrillo landed in San Diego Bay. Sebastián Vizcaíno returned in 1602, and it is possible that there were subsequent contacts that went unrecorded. These brief encounters made the local native people aware of the existence of other cultures that were technologically more complex than their own. Epidemic diseases may also have been introduced into the region at an early date, either by direct contacts with the infrequent European visitors or through waves of diffusion emanating from native peoples farther to the east or south (Preston 2002). It is possible, but as yet unproven, that the precipitous demographic decline of native peoples had already begun prior to the arrival of Gaspar de Portolá and Junípero Serra in 1769.

Spanish colonial settlement was initiated in 1769, when multiple expeditions arrived in San Diego by land and sea, and then continued northward through the coastal plain toward Monterey. A military presidio and a mission were soon firmly established at San Diego, despite violent resistance to them from a coalition of local Kumeyaay native communities in 1776. In 1773, the Spanish missionaries reestablished the Mission of San Diego de Alcalá up the San Diego River to its current location in Mission Valley in order to be closer to a more reliable water source (Hill 2002). The Mission of San Diego de Alcalá was built at the location of the ethnohistoric Kumeyaay village of *Nipawai/Nipaguay,* located a half-mile west of the proposed Project APE. The missionaries relied heavily on Kumeyaay labor and resources extracted from Nipawai/Nipaguay. Private ranchos subsequently established by Spanish and Mexican soldiers, as well as other non-natives, appropriated much of the remaining coastal or near-coastal locations (Pourade 1960–1967).

Mexico's separation from the Spanish empire in 1821 and the secularization of the California missions in the 1830s caused further disruptions to native populations in western San Diego County. Some former mission neophytes were absorbed into the work forces on the ranchos, while others drifted toward the urban centers at San Diego and Los Angeles or moved to the eastern portions of the county where they were able to join still largely autonomous native communities. United States conquest and annexation, together with the gold rush in Northern California, brought many additional outsiders into the region. Development during the following decades was fitful, undergoing cycles of boom and bust. With rising populations in the nineteenth century throughout the Southern California region, there were increased demands for important commodities such as salt.

The American Period began in 1846 when United States military forces occupied San Diego and this period continues today. When United States military forces occupied San Diego in July 1846, the town's residents split on their course of action. Many of the town's leaders sided with the Americans, while other prominent families opposed the United States invasion. In December 1846, a group of Californios under Andres Pico engaged United States Army forces under General Stephen Kearney at the Battle of San Pasqual and inflicted many casualties. However, the Californio resistance was defeated in two small battles near Los Angeles and effectively ended by January 1847. The Americans assumed formal control with the Treaty of Guadalupe-Hidalgo in 1848 and introduced Anglo culture and society, American political institutions and especially American entrepreneurial commerce. In 1850, the Americanization of San Diego began to develop rapidly.

On February 18, 1850, the California State Legislature formally organized San Diego County. The first elections were held at San Diego and La Playa on April 1, 1850, for county officers. San Diego grew slowly during the next decade. San Diegans attempted to develop the town's interests through a transcontinental railroad plan and the development of a new town closer to the bay. The failure of these plans, added to a severe drought that crippled

ranching and the onset of the Civil War, left San Diego as a remote frontier town. The troubles led to an actual drop in the town's population from 650 in 1850 to 539 in 1860. Not until land speculator and developer Alonzo Horton arrived in 1867 did San Diego begin to develop fully into an active American town.

Alonzo Horton's development of a New San Diego (modern downtown) in 1867 began to swing the community focus away from Old Town and began the urbanization of San Diego. Expansion of trade brought an increase in the availability of building materials. Wood buildings gradually replaced adobe structures. Development spread from downtown based on various factors, including the availability of potable water and transportation corridors. During the Victorian Era of the late 1800s and early 1900s, the areas of Golden Hill, Uptown, Banker's Hill, and Sherman Heights were developed.

San Diego State University was established in 1897 as a Normal school located on Normal Street. The institution moved to its current site in the college area in 1931. Development of the state college area began then and the development of the Navajo community was outgrowth from the college area and from the west. There was farming and ranching in Mission Valley until the middle portion of the twentieth century, when the uses were converted to commercial and residential. There were dairy farms and chicken ranches adjacent to the San Diego River where now there are motels, restaurants, office complexes and regional shopping malls. There was little development north of the San Diego River until Linda Vista was developed as military housing in the 1940s. The federal government improved public facilities and extended water and sewer pipelines to the area. From Linda Vista, development spread north of Mission Valley to the Clairemont Mesa and Kearny Mesa areas. Development in these communities was mixed use and residential on moderate size lots.

3.2.6 Historical Overview of the City of Santee

The city of Santee was established in the eastern region of San Diego County. The area was called several different names before it became known as Santee in 1893 (Santee Historical Society 2023). Initially, the land was inhabited by bands of Kumeyaay tribe of Native Americans who lived on the banks of the San Diego River in the village of Sinyeweche the present-day area of Santee (Minan 2004: p. 1143). The Kumeyaay people dominated the land until the arrival of the Spanish in 1779. Under the direction of Father Junipero Serra, the Kumeyaay people were made to construct the dam, today known as the Old Mission Dam, for the nearby Mission de Alcala. During this period, the land was divided among the Spanish soldiers as payment for their services, and the Native Americans were gathered to live at the Mission (Santee Historical Society 2023). The Mission system was disbanded by the Mexican government in 1822, and in 1840s, American settlers came to California (Smythe 1908: 282).

George A. Cowles migrated to California from Florida in 1870 after contracting malaria and purchased 4,000 acres of land in the Santee area in 1877 to develop vineyards as well as plant pomegranate and magnolia trees (Rossi 2016). At this time, the Cuyamaca Railroad ran through the area and the local station became known as Cowles Station due its proximity to Cowles vineyard and orchards. Thus, the surrounding town was referred to as Cowleston (Santee Historical Society 2023).

After Cowles' death in 1887, Jennie Cowles (Cowles' wife) married realtor and surveyor, Milton Santee, and in 1891, Jennie Cowles Santee was permitted to the post office under her husband's name. By 1893, the town name was changed to Santee to coincide with the post office. Likewise, the Cowles School, established in 1891, and the Cowles School District changed their names to Santee as well (Santee Historical Society 2023).

In 1885, Hosmer P. McKoon purchased 9,543 acres of land in the Santee area for his ranch, Fanita Ranch, that he named after his wife, Fannie. However, over the next few years McKoon sold segments of the ranch to new arrivals, including 7,000 acres to the Scripps family in 1898. The Scripps used the ranch to raise cattle and built a country resort for the family (Santee Historical Society 2023). Like much of the rest of San Diego County during this period, this city's economy was based in agriculture and ranching. Farms, such as the Edgemoor Stock Farm established in 1908, drove the local economy and contributedto the city's rural identity (Rossi 2016). The opening of the Panama Canal in 1914 resulted in an increase in shipping ports in San Diego County that led more growth in the surrounding areas. However, there was little development in Santee throughout the early nineteenth century until the 1940s (Santee Historical Society 2023; Caltrans 2011: p 9-11).

The United States' entry to World War 11 in 1941 led to an increase in military activity on the West Coast that brought new development to Santee. The federal government used 2,300 acres of the Fanita Ranch as military training grounds, and the Marine Corps Base, Camp Pendleton, was established north of Santee (Santee Historical Society 2023). The wartime demand for manufacturing transformed San Diego County's industry and it became home to various aircraft and ship manufacturing as well as military training. By the mid-1940s, California's aircraft industry was concentrated in Southern California where more than twice as many aircrafts were constructed as any of the states in the country (Caltrans 2011: p 9-11).

During the mid-twenty-first century Santee's economy increased and the city became host to various industries. After the war, Santee's agricultural industry had significantly decreased, and it began to suburbanize. Residential development in the area began as a response to the need for military and worker housing in the area during World War II, and population rapidly increased. In 1967, the Las Colinas Detention Facility opened as a juvenile facility, and in 1979 was converted to an adult women's institution that serves as the primary facility for women prisoners in San Diego County. The establishment of the detention center introduced an onslaught of employment opportunities in the local area and enticed further population growth (SDCSD 2023). Such rapid growth created concern about the character of the community, so the residents of Santee created the San Diego County Santee Citizen's Planning Committee. The committee was officially recognized by the San Diego County Board of Supervisors in December 1968, and it has continued to serve as a local land-use and planning advisory board to the county planning commission and the Board of Supervisors (Santee Historical Society 2023). In 1974, the Committee secured approval of their Santee Community Plan, which acted as the area's General Plan until the Santee General Plan was adopted in 1984. In 1980, the citizens of Santee voted to incorporate in order to gain local control over development of their city and creating a General Plan was their first goal (City of Santee 2020: p 1).

The rapid population increase resulted in a need for more recreation and entertainment services in Santee. In 1974, two regional parks were established in the city, Mission Trails Regional Park and Santee Lakes Regional Park. Additionally, more commercial development and entertainment venues followed (City Town Info 2023). During the late twenty-first century, much of the economy in Santee has been focused on hospitality and entertainment, as well as health care assistance, retail trade, and educational services (Data USA 2023). Since the 1980s, the City has continued to grow, reaching a population of about 54,000 people in 2020. Additionally, it has embraced "principles of environmental stewardship by protecting and enhancing the San Diego River in a manner that is now the model for the rest of the County," expanded its park system, and boats major commercial centers (City of Santee 2020: p. 2; Santee Historical Society 2023).

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4 Methods

4.1 Records Search Methods

On October 8, 2025, Dudek conducted an in-person records search of the California Historical Resources Information System (CHRIS) at the South Coastal Information Center (SCIC), located on the campus of San Diego State University. These searches included review of mapped prehistoric, historical, and built-environment resources; Department of Parks and Recreation (DPR) site records; technical reports; archival resources; and ethnographic references. Additional consulted sources included historical maps of the Project APE, the NRHP, the CRHR, the California Historic Property Data File, and the lists of California State Historical Landmarks, California Points of Historical Interest, and the Archaeological Determinations of Eligibility. Results from the records search are provided in Confidential Appendix B.

4.2 Native American Heritage Commission Sacred Lands File Search

On December 1, 2025, Dudek requested a search of the Sacred Lands Files from the NAHC. A response letter was received via email from the NAHC on December 10, 2025, stating resources are listed in the Sacred Lands File for this area, but did not provide details on what the resource(s) are or where they are located. Dudek sent outreach letters to 17 Native American groups and individuals on December 29, 2025. To date, Dudek has received two Tribal responses related to the project. On January 30, 2026, Mr. Jason Santos from the Manzanita Band of Kumeyaay Nation responded to the outreach letter by stating that while the Project is not within the boundaries recognized by the Manzanita Indian Reservation, the Project does lie within the territory boundaries that Manzanita considers part of its Traditional Use Area. Therefore, the Manzanita Band requests to be kept informed as the Project progresses. Mr. Santos also recommended archaeological and Tribal cultural monitoring for all ground disturbing activities, given the Project's vicinity to cultural resources. The Manzanita Band wishes to also be made aware of any Project boundary changes, and the Tribe offers cultural monitoring, should the need arise. On February 20, 2026, Mr. Jason Levigne of San Pasqual Band of Mission Indians also responded to the outreach sent by Dudek. Mr. Levigne asserted that the San Pasqual Tribe does not have comments on the Project at this time. However, the San Pasqual Tribe reserves the right to provide future comments should additional information become available or the circumstances of the Project change. Documentation of correspondence with Native American groups and individuals is provided in Appendix C.

4.3 Cultural Resources Pedestrian Survey

Dudek archaeologists conducted an opportunistic and intensive-level pedestrian survey of the Project APE from December 8 to December 10, 2025, and on January 9, 2026 (see Figure 2). Red Tail Environmental Kumeyaay Native American monitor Justin Linton participated in the survey. Densely vegetated areas and large bodies of water were not subject to pedestrian survey as these areas present a safety concern for the survey team and cultural resources are unlikely to be observable in these conditions. All survey work was conducted employing standard archaeological procedures and techniques consistent with the Secretary of the Interior Standards for a cultural resources inventory (NPS 2018). Fifteen-meter interval survey transects were conducted trending west to east where possible for the Project APE. The ground surface was examined for prehistoric artifacts (e.g., flaked stone

tools, tool-making debris, stone milling tools, ceramics, fire-affected rock), soil discoloration that might indicate the presence of a cultural midden, soil depressions, features indicative of the current or former presence of structures or buildings (e.g., standing exterior walls, post holes, foundations), and historic artifacts (e.g., metal, glass, ceramics, building materials). Ground disturbances such as burrows and cut banks were also visually inspected for exposed subsurface materials.

Approximately 70 percent of the APE consisted of an opportunistic survey due to dense vegetation or standing water (the San Diego River) and approximately 30 percent of the APE consisted of an intensive-level pedestrian survey. Areas for intensive-level pedestrian survey included the sections within the Project APE with sparse vegetation or the walking paths that intersect it. The perimeter of the Project APE was more open than the center/inner sections, and the former sections of the Project APE were where the intensive-level pedestrian surveys were conducted. Ground visibility was very poor (less than 10%) due to the dense vegetation consisting of Chamis shrub, Palm trees, Pepper trees, Oak trees, Cattails, cacti, Willow scrub, and various medium-sized and tall grasses.

A minimum density of three or more artifacts in a 25-meter squared (m^2) (82 ft^2) area constituted an archaeological site, as well as the presence of any feature (i.e., hearth). Any separation of 50 m (164 ft.) or more between artifacts was considered justification for delineation of a site boundary. A temporary site number was assigned to all newly identified archaeological resources that met the definition of an archaeological site. Isolated finds consisting of fewer than three artifacts within a 25-m^2 area were recorded separately from sites, including the use of a different numbering scheme. Based on experience in the region and the results of the CHRIS records search, the anticipated site type within the Project APE consisted of prehistoric artifact scatters and features. All prehistoric and historic sites and isolates identified during this inventory within the Project APE were updated or newly recorded on DPR forms, using the Instructions for Recording Historical Resources (Office of Historic Preservation 1995). DPR forms are included in Confidential Appendix E.

All fieldwork was documented using field notes and iPad technology with close-scale field maps and aerial photographs. Location-specific photographs were taken using an Apple 3rd Generation iPad equipped with 8 mega-pixel (MP) resolution and georeferenced PDF maps of the Project APE. Accuracy of this device ranged between 3 and 10 meters. All field notes, photographs, and records related to the current study are on file at Dudek's archaeological laboratory in Carlsbad, California office.

5 Results

5.1 Records Search Results

5.1.1 Previously Conducted Cultural Resource Studies

The SCIC records indicate that between 1973 and 2021, 185 previous cultural resources technical investigations have been conducted within 1.0-mile of the Project APE (Confidential Appendix B). Of these 185 studies, 43 previous studies overlap portions of the Project APE. Table 1 summarizes the 43 studies within the APE; 14 of the relevant cultural studies (those that contain information pertaining to the previously recorded cultural sites within the Project APE) that intersect the APE are briefly summarized below Table 1. The SCIC records search results are also provided in Confidential Appendix B.

Table 1. Previously Conducted Technical Studies Within the APE

Report Number (RI-)	Authors	Date	Title
SD-00866	SAN DIEGO COUNTY ENGINEERING DEPARTMENT	1973	AN ARCHAEOLOGICAL SURVEY OF THE UPPER SAN DIEGO RIVER MOSQUITO ABATEMENT AND WATER POLLUTION CONTROL PROJECT PHASE I
SD-00618	COUNTY ENGINEER DEPT.	1973	THE ARCHAEOLOGY OF CUYAMACA STREET EXTENSION
SD-00546	SUE ANN CUPPLES	1975	AN ARCHAEOLOGICAL SURVEY OF THE SAN DIEGO RIVER VALLEY
SD-00137	TOUPS CORPORATION	1977	RESULTS OF AN ARCHAEOLOGICAL FIELD RECONNAISSANCE OF SANTEE GREENS, SANTEE, CALIFORNIA.
SD-07568	RECON	1978	DRAFT EIR FOR DEER PARK
SD-08505	RECON	1978	AN ARCHAEOLOGICAL SURVEY OF THE DEERPARK PROPERTY
SD-01276	MSA, INC.	1979	HILLCREEK LOT SPLIT ARCHAEOLOGICAL SURVEY AND REPORT.
SD-01269	SAN DIEGO STATE UNIVERSITY FOUNDATION	1979	A CULTURAL SURVEY OF PORTIONS OF THE LAS CHOLLAS, SOUTH LAS CHOLLAS, LOS COCHES FORESTER, AND LOMA ALTA STREAM BASINS IN SAN DIEGO COUNTY, CALIFORNIA.
SD-04981	RECON	1980	ENVIRONMENTAL IMPACT ANALYSIS FOR THE SANTEE REGIONAL SHOPPING CENTER
SD-02196	—	1980	DRAFT ENVIRONMENTAL IMPACT REPORT PROPOSED REMOVAL OF SAND UPPER SAN DIEGO RIVER SAN DIEGO COUNTY P79-112 RP79-16 EAD LOG#79-14-261
SD-01909	RECON	1981	INVESTIGATIONS CONDUCTED AT ARCHAEOLOGICAL SITE SDM-W-2409 (SDI-7603) SANTEE, CALIFORNIA
SD-00341	ARCHAEOLOGICAL CONSULTING AND TECHNOLOGY	1981	ARCHAEOLOGICAL MITIGATION REPORT FOR SANTEE GREENS SDI-5669

Table 1. Previously Conducted Technical Studies Within the APE

Report Number (RI-)	Authors	Date	Title
SD-00779	CALTRANS	1985	ARCHAEOLOGICAL TEST EXCAVATION AT SITES CA-SDI-5655, 5658, 9239, 9240, 9246, 9247, 9913 IN SHEPHERD CANYON, SAN DIEGO, CALIFORNIA 11-SD-52 P.M. 7.3/17.2 11222-047050
SD-00780	CALTRANS	1985	FIRST ADDENDUM ARCHAEOLOGICAL SURVEY REPORT FOR PROPOSED STATE ROUTE 52 SANTO ROAD TO STATE ROUTE 67 (PORTION) 11-SD-52 P.M. 7.3/17.2 11222-047050
SD-05043	JOYCE CORUM	1985	FIRST ADDENDUM ARCHAEOLOGICAL SURVEY REPORT FOR PROPOSED STATE ROUTE 52 SANTO ROAD TO STATE ROUTE 67 (PORTION) 11-SD-52 P.M. 7.3/17.2 11222-047050
SD-04934	CALTRANS	1986	EXTENDED PHASE I AND PHASE II ARCHAEOLOGICAL TEST EXCAVATIONS AT SITES CA-SDI-205, 5053, 8594, 9242, 10148, SANTEE, CA 11-SD-52 P.M. 7.3/17.2
SD-04692	CALTRANS	1986	FIRST SUPPLEMENTAL HISTORIC PROPERTY SURVEY 11-SD-52 P.M. 7.3/17.2
SD-00771	CALTRANS	1986	EXTENDED PHASE I AND PHASE II ARCHAEOLOGICAL TEST EXCAVATIONS AT SITES CA-SDI-205, 5053, 8594, 9242, AND 10,148 SANTEE, CALIFORNIA 11-SD-52 P.M. 7.3/17.2 11222-047050
SD-01829	CALTRANS	1989	THIRD ADDENDUM ARCHAEOLOGICAL SURVEY FOR PROPOSED STATE ROUTE 52, 11-SD-52 P.M. 7.3/17.2, 11222-047050
SD-02062	CALTRANS	1989	DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE PROPOSED LAKESIDE FLOW EQUALIZATION FACILITY (SCH #88101909) (COUNTY LOG #89-14-14) (MAJOR USE PERMIT #P66-016WI)
SD-04181	CITY OF SAN DIEGO	1990	CLEAN WATER PROGRAM FOR GREATER SAN DIEGO SANTEE BASIN WATER RECLAMATION PROJECT DRAFT ENVIRONMENTAL REPORT
SD-02916	PEAK & ASSOCIATES, INC.	1990	CULTURAL RESOURCES ASSESSMENT OF AT&T'S PROPOSED SAN BERNARDINO TO SAN DIEGO FIBER OPTIC CABLE, SAN BERNARDINO, RIVERSIDE AND SAN DIEGO COUNTIES, CALIFORNIA
SD-02632	ERCE	1991	A CULTURAL RESOURCES TESTING, EVALUATION, AND PROPOSED DATA RECOVERY PROGRAM FOR THE EAST MISSION GORGE PUMP STATION AND FORCE MAIN PROJECT
SD-02633	ERCE	1991	CULTURAL RESOURCES TESTING, EVALUATION, AND PROPOSED DATA RECOVERY PROGRAM FOR THE EAST MISSION GORGE PUMP STATION AND FORCE MAIN PROJECT
SD-02583	GALLEGOS & ASSOCIATES	1993	CULTURAL RESOURCE MONITORING SEWER FOR EAST MISSION GORGE INTERCEPTOR SEWER SYSTEM FORCE MAIN CONSTRUCTION PROJECT DEP #880089

Table 1. Previously Conducted Technical Studies Within the APE

Report Number (RI-)	Authors	Date	Title
SD-02761	GALLEGOS & ASSOCIATES	1993	DATA RECOVERY PROGRAM FOR A PREHISTORIC SITE CA-SDI-110148, EAST MISSION GORGE PUMP STATION AND FORCE MAIN, SAN DIEGO, CALIFORNIA.
SD-08307	BRIAN F. SMITH & ASSOCIATES	2000	AN ARCHAEOLOGICAL ASSESSMENT FOR THE EDGEMOOR PROJECT
SD-05138	TIERRA ENVIRONMENTAL	2001	HISTORIC PROPERTY SURVEY REPORT FOR THE FORESTER CREEK PROJECT SANTEE CALIFORNIA
SD-09964	RECON	2004	CULTURAL RESOURCES SURVEY REPORT FOR THE RYAN CORPORATE OFFICE PARK MASTER PLAN SANTEE, CALIFORNIA
SD-12319	RECON	2005	SANTEE TOWN CENTER SPECIFIC PLAN AMENDMENT, APPENDIXES TO THE DRAFT MASTER ENVIRONMENTAL IMPACT REPORT
SD-11128	KYLE CONSULTING	2006	CULTURAL RESOURCE SURVEY FOR THE SAN DIEGO RIVER RESTORATION PROJECT EDGEMOOR PROPERTY CITY OF SANTEE, CALIFORNIA
SD-11189	BRIAN F. SMITH & ASSOCIATES	2007	RESULTS OF ARCHAEOLOGICAL MONITORING AT TOWN CENTER COMMUNITY PARK MASS GRADING, SANTEE, CALIFORNIA (CIP 2004-31) (NEGATIVE ARCHAEOLOGICAL MONITORING REPORT)
SD-11190	BRIAN F. SMITH & ASSOCIATES	2007	PALEONTOLOGICAL MONITORING REPORT, TOWN CENTER COMMUNITY PARK MASS GRADING PROJECT, CITY OF SANTEE, SAN DIEGO COUNTY, CALIFORNIA (CIP2004-31)
SD-12455	ASM AFFILIATES	2009	CULTURAL RESOURCES SURVEY FOR THE SAN DIEGO RIVER WATERSHED INVASIVE NON-NATIVE PLANT CONTROL AND HABITAT RESTORATION PROGRAM AT THE CARLTON OAKS GOLF COURSE, SANTEE, CALIFORNIA
SD-12612	AFFINIS	2010	ARCHAEOLOGICAL SURVEY REPORT: BIOLOGICAL MITIGATION PARCEL FOR THE SR 163/FRIARS ROAD INTERCHANGE IMPROVEMENTS PROJECT SAN DIEGO COUNTY, CALIFORNIA
SD-12635	CALTRANS	2010	HISTORIC PROPERTY SURVEY REPORT FOR THE STATE ROUTE 163 AND FRIARS ROAD INTERCHANGE
SD-13226	U.S. ARMY CORPS OF ENGINEERS	2011	MAST PARK HABITAT RESTORATION PROJECT, CITY OF SANTEE, SAN DIEGO COUNTY, CALIFORNIA
SD-14043	ASM AFFILIATES	2011	CULTURAL RESOURCES STUDY FOR THE SANTEE WALMART EXPANSION PROJECT, CITY OF SANTEE, SAN DIEGO COUNTY, CALIFORNIA
SD-16147	ROBBINS-WADE, MARY	2011	ARCHAEOLOGICAL RESOURCES INVENTORY, MAST PARK WETLAND HABITAT RESTORATION PROJECT, SANTEE, SAN DIEGO COUNTY, CALIFORNIA
SD-16089	DOKKEN ENGINEERING	2014	EVIDENCE OF COMPLIANCE WITH SECTION 106 OF NATIONAL HISTORIC PRESERVATION ACT OF 1966 WALKER

Table 1. Previously Conducted Technical Studies Within the APE

Report Number (RI-)	Authors	Date	Title
			PRESERVE TRAIL, CITY OF SANTEE, PROJECT NUMBER RT-37-026
SD-15518	BRIAN F. SMITH & ASSOCIATES	2015	CULTURAL RESOURCES MONITORING REPORT FOR THE SAN DIEGO TRAIL - WALKER PRESERVE PROJECT, CIP 2011-35, SANTEE, SAN DIEGO COUNTY, CALIFORNIA
SD-17135	PANGIS	2015	ARCHAEOLOGICAL SURVEY FOR POLE BRUSHING PROJECT, VARIOUS LOCATIONS, SAN DIEGO COUNTY, CALIFORNIA (SDG&E ETS# 29109, PANGIS PROJECT# 1401.07)
SD-19383	ASM AFFILIATES	2021	UPDATE TO THE REVISED PRELIMINARY CULTURAL RESOURCES STUDY TO SUPPORT THE PADRE DAM MUNICIPAL WATER DISTRICT MASTER PLAN UPDATE PEIR, SAN DIEGO COUNTY, CALIFORNIA

SD-01276

Hillcreek Lot Split Archaeological Survey and Report was authored by Richard Keith Olmo of MSA, Inc. in 1979 (Olmo 1979). Olmo described the pedestrian survey of the property, which was located on the El Cajon quadrangle and slightly intersects the current Project APE. The report details site W-689, recorded by Sue Ann Cupples in 1975, which fell within the survey area. Olmo noted that W-689 contained midden soil, bedrock milling features, groundstone artifacts, and debitage. Olmo also recommended future testing of the site, should development occur. Available maps do not document the location of W-689, so it is unclear whether this resource was located within the current Project APE.

SD-15518

Cultural Resources Monitoring Report for the San Diego Trail - Walker Preserve Project, CIP 2011-35, Santee, San Diego County, California, was authored by Brian F. Smith & Associates in 2015. The report (Brian F. Smith & Associates 2015) details the cultural monitoring program for the 1.30-mile-long San Diego Trail—Walker Preserve Project. SD-15518 describes an archaeological site within the study area: W-689. W-689 is a prehistoric milling site containing approximately 10 milling features, along with debitage, hand stone, and groundstone artifacts. The report also details six groundstone artifacts collected as a result of the monitoring program. A portion of the 2015 study (Brian F. Smith & Associates 2015) area intersects the current Project APE. However, available maps do not document the location of W-689 so it is unclear whether this resources was located within the current Project APE.

SD-00780/ SD-05043

First Addendum Archaeological Survey Report for Proposed State Route 52 Santo Road to State Route 67 (Portion) 11-SD-52 P.M. 7.3/17.2 11222-047050 was authored by Joyce Corum of Caltrans (Caltrans 1985). Corum detailed several archaeological sites inside of the 1985 survey area, including site CA-SDI-010148, which is within the current Project APE. CA-SDI-010148 was initially recorded in 1984 as a light lithic and ceramic scatter. The site has since undergone Phase II testing and data recovery, and it yielded a total of nearly 4,000 artifacts during the Phase

II testing. A western site extension portion of CA-SDI-010148 subsequently underwent data recovery at a later time, and several hearths and groundstone artifacts were recovered, Corum described impacts to the site, including flooding, terracing for agricultural use, and trenching.

SD-01269

A Cultural Survey of Portions of the Las Chollas, South Las Chollas, Los Coches Forester, and Loma Alta Stream Basins in San Diego County, California, was authored by Roy E. Pettus in 1979. Pettus (1979) listed a host of archaeological sites, including one within the current Project APE: CA-SDI-005050. Pettus described CA-SDI-005050 as a late prehistoric habitation site containing midden soil, bedrock milling features, faunal remains, lithic artifacts, and ceramic artifacts. Pettus also described the site as partially existing within several residential properties. Pettus recommended avoidance of the resource, as well as a future testing program.

SD-04934/SD-00771

Extended Phase I and Phase II Archaeological Test Excavations at Sites CA-SDI-205, 5053, 8594, 9242, 10148, Santee, CA 11-SD-52 P.M. 7.3/17.2., was authored by Joyce Corum in 1986 (Caltrans 1986). Corum detailed the extended Phase I and II testing of several archaeological sites, including one site within the Project area: CA-SDI-010148 (mentioned above in SD-00770/SD-05043). Corum included details of the testing conducted in 1985 and stated that the artifact recovery at site CA-SDI-010148 yielded nearly 1,400 artifacts (Caltrans 1986). The site was heavily disturbed by human activity and krotovina. Further, Corum stated that the site had low research potential due to the lack of datable artifacts and site disturbances.

SD-04692

First Supplemental Historic Property Survey 11-SD-52 P.M. 7.3/17.2 was authored by Joyce Corum (Caltrans 1986b)*, and* is essentially an extension of report SD-04934 (described above). Site CA-SDI-010148, which is within the Project APE, is detailed in this report by Corum, and it includes the same testing details as in report SD-04934.

SD-01829

*Third Addendum Archaeological Survey for Proposed State Route 52, 11-SD-52 P.M. 7.3/17.2, 11222-047050, (*Caltrans 1989*)* was authored by Jocye Corum of Caltrans in 1989. SD-01829 is a further iteration of reports SD-00780/ SD-05043 (both detailed above). Site CA-SDI-010148, which is within the current Project APE, is mentioned in report SD-01829. Corum briefly described the Phase II testing at site CA-SDI-010148, including the author's assertion that the site was not eligible for listing in the NRHP.

SD-04181

Clean Water Program for Greater San Diego Santee Basin Water Reclamation Project Draft Environmental Report (City of San Diego 1990), was published in 1990 by personnel from the City of San Diego. There were several archaeological sites mentioned and surveyed in this report, including one within the project area: CA-SDI-010148. The report not only details the previous findings for site CA-SDI-010148, but it also stated that the survey indicated that the site extended 170 m to the west and four concentrations of fire-affected rocks and tools were recorded. SD-014181 recommended that in order for site significance to be determined, testing in the area(s) not already tested by Caltrans should occur.

SD-02632/SD-02633

A Cultural Resources Testing, Evaluation, And Proposed Data Recovery Program For The East Mission Gorge Pump Station was authored Carrico et al (1991) from ERC Environmental and Energy Service Company in 1991. The report includes descriptions of testing at several archaeological sites for the study, including one site within the current Project APE: CA-SDI-010148. Testing and surface collecting at CA-SDI-010148 yielded about 750 artifacts, with the bulk of the artifacts (>90%) consisting of debitage. The report states that CA-SDI-010148 was not recommended as not being an important resource under the CEQA criteria; the report agreed with earlier evaluation findings at CA-SDI-010148, which were conducted by Caltrans. Report SD-02633, *Cultural Resources Testing, Evaluation, And Proposed Data Recovery Program For The East Mission Gorge Pump Station And Force Main Project - Appendix B,* contains the confidential records for SD-02632.

SD-02761

Data Recovery Program For A Prehistoric Site CA-SDI-110148, East Mission Gorge Pump Station And Force Main, San Diego, California was prepared by Gallegos & Associates in 1993. The report (Gallegos & Associates 1993) contains the results of archaeological monitoring and subsequent data recovery of a portion of site CA-SDI-010148, which is within the Project APE. Due to the findings during the archaeological monitoring, Gallegos & Associates stated that the City of San Diego determined the portion of the site that was impacted was changed from not important/not significant to important/significant, and thus, data recovery was implemented. The report details a large amount of prehistoric artifacts recovered during the data recovery program, and Gallegos & Associates asserted that the data recovery program sufficed to mitigate the impacts to the portion of CA-SDI-010148 in focus.

SD-12455

Cultural Resources Survey For The San Diego River Watershed Invasive Non-Native Plant Control And Habitat Restoration Program At The Carlton Oaks Golf Course, Santee, California was authored by Jill Gardner and Brian Williams of ASM Affiliates in 2009. Gardner and Williams (ASM Affiliates 2009) detailed pedestrian surveys of a number of archaeological sites, including one within the Project APE: CA-SDI-010148. No cultural resources were recorded during the survey; Gardner and Williams suggested that modern disturbances may have impacted the site.

5.1.2 Previously Recorded Cultural Resources

The SCIC records indicate that 79 cultural resources have been recorded within 1.0-mile of the Project APE (Confidential Appendix B). Of these 79 cultural resources, three resources were identified within the Project APE: CA-SDI-005050, CA-SDI-010148, and CA-SDI-021860 (Confidential Appendix D). These three sites include a bedrock milling site with associated artifact scatter (CA-SDI-005050), a habitation site deposit including fire-affected rock, lithic and ceramic artifacts, and midden soil (CA-SDI-010148), and a lithic scatter (CA-SDI-021860). Table 2 summarizes all 79 resources followed by a brief summary of the three prehistoric sites that were recorded within the APE. The SCIC records search results are also provided in Confidential Appendix B.

Table 2. Previously Recorded Cultural Resources Within 1.0-Mile of the Project APE

Primary No.	Trinomial	Age	Year Recorded	Description	Eligibility Status
Resources within APE					
P-37-005050	CA-SDI-005050	Prehistoric	1979	Lithics, groundstone, ceramic, burned faunal bone, midden, bedrock milling	Not evaluated
P-37-010148	CA-SDI-010148	Prehistoric	1984	Lithics, ceramics, groundstone artifacts, faunal remains, fire-affected rock	Tested, determined not eligible
P-37-035815	CA-SDI-021860	Prehistoric	2015	Lithic scatter	Not evaluated
Resources within 1-Mile Buffer					
P-37-005051	CA-SDI-005051	Prehistoric	1967	Bedrock milling, lithics	Not evaluated
P-37-005669	CA-SDI-005669	Prehistoric	1967	Hearths, possible cremation, habitation debris, lithic, groundstones, ceramic, shell	Not evaluated
P-37-005985	CA-SDI-005985	Prehistoric	1968	Lithics	Not evaluated
P-37-026563	—	Prehistoric	1969	Lithics, bedrock milling	Not evaluated
P-37-005148	CA-SDI-005148	Prehistoric	1975	Bedrock milling, lithics	Not evaluated
P-37-004353	CA-SDI-004353	Prehistoric	1975	Bedrock milling, ground stones, rock shelter, lithics, ceramics, charcoal, burials	Not evaluated
P-37-005827	CA-SDI-005827	Prehistoric	1977	Bedrock milling	Not evaluated
P-37-004931	CA-SDI-004931	Prehistoric	1979	Bedrock milling, lithic, shell, ceramic, rock art, hearth, charcoal, habitation debris, burials	Not evaluated
P-37-006936	CA-SDI-006936	Prehistoric	1979	Lithics	Not evaluated
P-37-007603	CA-SDI-007603	Prehistoric	1979	Lithics	Evaluated, not eligible
P-37-005052	CA-SDI-005052	Prehistoric	1979	Bedrock milling, lithics, groundstones	Not evaluated
P-37-009248	CA-SDI-009248	Historic	1982	Historic debris	Not evaluated
P-37-008594	CA-SDI-008594	Multicomponent	1985	Bedrock milling, lithics, faunal bone,	Not evaluated

Table 2. Previously Recorded Cultural Resources Within 1.0-Mile of the Project APE

Primary No.	Trinomial	Age	Year Recorded	Description	Eligibility Status
				midden, ceramic; Historic debris	
P-37-010451	CA-SDI-010451	Prehistoric	1985	Bedrock milling, lithics, faunal bone	Not evaluated
P-37-014840	—	Prehistoric	1985	Lithic scatter	Not evaluated
P-37-014841	—	Prehistoric	1985	Lithic scatter	Not evaluated
P-37-005535	CA-SDI-005535	Multicomponent	1986	Bedrock milling, lithics, habitation debris	Not evaluated
P-37-009242	CA-SDI-009242	Prehistoric	1986	Lithic, habitation debris, faunal remains, shell	Not evaluated
P-37-011542	CA-SDI-011542	Historic	1989	Historic refuse, foundation	Not evaluated
P-37-011543	CA-SDI-011543	Prehistoric	1989	Lithic Scatter	Not evaluated
P-37-014909	—	Prehistoric	1989	Isolate: Lithic	Not significant
P-37-004354	CA-SDI-04354	Prehistoric	1996	Bedrock milling, lithic, shell, ceramic, rock art, hearth, charcoal, habitation debris, burials	Not evaluated
P-37-010054	CA-SDI-010054	Prehistoric	1996	Lithic, rock art, bedrock milling,	Not evaluated
P-37-019056	CA-SDI-01585	Historic	2000	Historic refuse, foundations, wells/ cisterns	Not evaluated
P-37-019057	—	Prehistoric	2000	Isolate: Lithic	Not significant
P-37-029009	—	Historic	2000	Building	Not significant
P-37-027130	CA-SDI-017745	Prehistoric	2001	Bedrock milling, lithics, habitation debris, shell	Not evaluated
P-37-027134	CA-SDI-017749	Prehistoric	2001	Bedrock milling, lithic, ceramic	Not evaluated
P-37-027135	CA-SDI-017750	Multicomponent	2001	Lithic, shell; Historic refuse	Not evaluated
P-37-027136	CA-SDI-017751	Historic	2001	Historic refuse	Not evaluated
P-37-027138	CA-SDI-017753	Prehistoric	2001	Rock art	Not evaluated
P-37-027140	CA-SDI-017755	Prehistoric	2001	Rock art	Not evaluated
P-37-027141	—	Prehistoric	2001	Isolate: Lithic	Not significant
P-37-027142	—	Prehistoric	2001	Isolate: Lithic	Not significant
P-37-029011	—	Historic	2001	Building	Not significant
P-37-025303	—	Prehistoric	2001	Isolate: Lithic	Not significant
P-37-025460	CA-SDI-016904	Prehistoric	2003	Lithic scatter	Not significant

Table 2. Previously Recorded Cultural Resources Within 1.0-Mile of the Project APE

Primary No.	Trinomial	Age	Year Recorded	Description	Eligibility Status
P-37-028990	—	Historic	2003	Building	Not evaluated
P-37-028466	—	Prehistoric	2004	Isolate: Lithic	Not significant
P-37-028672	—	Historic	2007	Building	Recommended not eligible
P-37-006937	CA-SDI-006937	Prehistoric	2007	Lithics, groundstone, ceramic, burnt faunal bone, midden, bedrock milling, burial, rock art, hearth, shell	Significant under the criteria listed in CEQA.
P-37-000204	CA-SDI-000204	Prehistoric	2009	Bedrock milling, groundstones, shell	Not evaluated
P-37-000205	CA-SDI-000205	Prehistoric	2009	Bedrock milling, lithics, shell	No evaluated
P-37-009245	CA-SDI-009245	Prehistoric	2009	Lithic, groundstones, faunal bone, habitation debris,	No evaluated
P-37-009243	CA-SDI-009243	Prehistoric	2009	Bedrock milling, lithics, groundstones, shell, hearths/pits, faunal bone, and burials,	Not evaluated
P-37-030482	CA-SDI-019370	Prehistoric	2009	Habitation debris	Not evaluated
P-37-030866	CA-SDI-019604	Prehistoric	2009	Bedrock milling	Not evaluated
P-37-032655	CA-SDI-020693	Historic	2012	Historic refuse	Not evaluated
P-37-034299	—	Prehistoric	2014	Isolate	Not significant
P-37-032878	CA-SDI-020778	Multicomponent	2015	Groundstones, possible human remains, habitation debris, shell; Historic reuse	Not evaluated
P-37-005049	CA-SDI-005049	Prehistoric	2015	Bedrock milling, lithics, ceramic, midden	Not evaluated
P-37-036592	CA-SDI-022115	Historic	2017	Cistern	Not evaluated
P-37-040048	—	Prehistoric	2017	Lithic scatter	Not evaluated
P-37-040049	—	Prehistoric	2017	Lithic (isolate)	Not eligible
P-37-040050	—	Prehistoric	2017	Lithic (isolate)	Not eligible
P-37-037786	CA-SDI-022504	Historic	2018	Trash scatter, Road, Dam, Quarry, Fence	Not eligible
P-37-038713	CA-SDI-022799	Prehistoric	2019	Bedrock milling	Not eligible
P-37-038714	CA-SDI-022800	Prehistoric	2019	Bedrock milling, ceramic scatter, lithic scatter	Not eligible

Table 2. Previously Recorded Cultural Resources Within 1.0-Mile of the Project APE

Primary No.	Trinomial	Age	Year Recorded	Description	Eligibility Status
P-37-038839	—	Historic	2020	Lake	Not evaluated
P-37-039039	—	Historic	2020	Glass-Isolate	Not significant
P-37-039224	CA-SDI-022989	Prehistoric	2020	Bedrock milling, lithic	Not evaluated
P-37-039225	CA-SDI-022990	Prehistoric	2020	Bedrock milling	Not evaluated
P-37-039226	CA-SDI-022991	Prehistoric	2020	Bedrock milling	Not evaluated
P-37-039227	CA-SDI-022992	Prehistoric	2020	Bedrock milling	Not evaluated
P-37-039228	CA-SDI-022993	Prehistoric	2020	Bedrock milling	Not evaluated
P-37-039229	CA-SDI-022994	Prehistoric	2020	Bedrock milling	Not evaluated
P-37-039236	—	Prehistoric	2020	Lithics (isolate)	Not eligible
P-37-039237	—	Prehistoric	2020	Lithic (isolate)	Not eligible
P-37-040640	—	Historic	2020	Single Family Property	Recommended not eligible
P-37-040800	—	Historic	2023	Refuse (isolate)	Not eligible
P-37-010052	CA-SDI-010052	Prehistoric	No Date	Bedrock milling, lithics, ceramics	Not evaluated
P-37-010053	CA-SDI-010053	Prehistoric	No Date	Bedrock milling, lithics	Not evaluated
P-37-034298	—	Historic	No Date	Building	Not evaluated
P-37-000140	CA-SDI-000140	No Info.	No Date	No Info.	No Info.
P-37-000141	CA-SDI-000141	No Info.	No Date	No Info.	No Info.

CA-SDI-005050 (P-37-005050)

CA-SDI-005050 was recorded by Roy Pettus in 1979 (Pettus 1979b). CA-SDI-005050 was recorded as a prehistoric site with midden soil, numerous milling features, about 20 milling implements and 10 pieces of debitage, and a small number of ceramic artifacts. One flaked stone tool and fire-affected rocks were also noted. Pettus noted that the site was situated between a canal and the backyards of some nearby houses. Pettus recommended an archaeological testing program to determine the presence of subsurface deposits and resource significance.

CA-SDI-010148 (P-37-010148)

CA-SDI-010148 is a prehistoric site that was originally recorded by Westec Services, Inc. in 1984 (Westec Services 1984) as a light lithic and ceramic scatter. Caltrans (1985) excavated three archaeological test trenches, one of which was positive for subsurface deposits. Caltrans (1986) subsequently conducted Phase II testing and excavated nine 1 × 1 meter test units and three shovel test pits. These excavations were located within the current Project APE. Nearly 1,400 artifacts (mostly lithics) and nearly 2,500 faunal bone, charcoal, and fire-affected rocks were recovered during the Phase II testing. Caltrans (1986) deemed CA-SDI-010148 not eligible for the NRHP due to previous agricultural disturbance, low frequency and variety of cultural artifacts, and scarcity of datable remains. However, during the construction monitoring of an adjacent water facility, Gallegos & Associates (1993) identified six prehistoric fire hearths, numerous handstones, and five complete metates in a previously unrecorded western

extension of P CA-SDI-010148. Following data recovery of this western extension, Gallegos & Associates and the City of San Diego considered the western extension significant under CEQA and City of San Diego regulations. The eastern portion of CA-SDI-010148, the portion located within the City of Santee's jurisdiction and the current Project APE, was not tested by Gallegos & Associates. CA-SDI-010148 was revisited by ASM Affiliates in 2009, and no artifacts were observed on the surface.

CA-SDI-021860 (P-37-035815)

CA-SDI-021860 was recorded by HELIX Environmental as a light lithic scatter in 2015 (HELIX Environmental Planning 2015). The site was recorded as a result of grading within the San Diego River floodplain, for the Mast Park Wetland Habitat Restoration project. The grading expanded over 15 acres and went to a depth of 6.0 ft below the ground surface. Following grading, HELIX investigated the spoils piles and identified 17 artifacts including lithic artifacts, debitage, groundstone, and one ceramic body sherd. Two unidentified faunal bones, shell, and fire-affected rock were also noted. Modern trash was noted as being prevalent throughout the project site. All artifacts were recovered out of context from spoils piles, therefore, the site boundary for CA-SDI-021860 is based on the extent of grading for the wetland restoration project. Additionally, the alluvial setting of the site (active river floodplain) means that it is likely some of the cultural material has washed downstream from other areas. A Late Prehistoric village site was recorded a short distance upstream from the site, and buried resources have been identified during monitoring at other projects upstream, for example CA-SDI-20693 at San Diego Women's Detention Facility and CA-SDI-19370 at the proposed Liberty High School. HELIX Environmental noted that the scattered artifacts identified at CA-SDI-021860 could be the result of cultural material washing downstream or could represent a single cohesive site (or a combination of both); however, the area has been too disturbed by previous events and grading for the wetland restoration project that they couldn't make a conclusive determination (HELIX Environmental Planning 2015).

5.2 Map and Historic Aerial Photography Research

Additional archival research for this Project included review of historic topographic and aerial maps. Table 3 provides information on the historic topographic maps reviewed for the Project APE (NETR 2025). Additionally, Table 4 provides information on the aerial photographs reviewed (NETR 2025).

Table 3. Historic Topographic Map Review

Historic Topographic Map Year(s) Available	Description
1893, 1897, 1901, 1903, 1909, 1913, 1916, 1930, 1940, 1941	To the extent that the topographic maps are available, the maps show the San Diego River within the Project APE. No discernible large structures are visible.
1942	Fanita Ranch appears on this topographic map, and it is situated in the southwestern section of the Project APE.
1947	A number of structures associated with the title "Edgemoore County Farms" are situated very close to the Project APE, adjacent to North Magnolia Avenue.
1955	No major visible changes within the Project APE are noted.
1956	A sand pit near the San Diego River and several small structures are visible near Cuyamaca Street.
1959, 1964	No major visible changes within the Project APE are noted.

Table 3. Historic Topographic Map Review

Historic Topographic Map Year(s) Available	Description
1969	Several sand pits are now mapped near the San Diego River, within or very nearby the Project APE.
1975, 1976, 1978, 1986	To the extent that topographic maps are available, no major visible changes within the Project APE are noted.
2001	An athletic field is mapped just north of the Project APE, near present-day River Park Drive.
2012, 2015	The number of named, mapped in streets adjacent to the Project APE, on both sides of the San Diego River, greatly increase in this topographic map.
2018, 2021	"The Walker Preserve Trail" appears on these topographic maps, which is east of present-day North Magnolia Avenue and inside the Project APE.

Table 4. Aerial Photograph Review

Aerial Photograph Year Available	Description
1953	The aerial photographs show no major structures within the Project APE, but there are several roads mainly trending north–south through it.
1964	There is development within the Project APE north of present-day Chubb Lane, and agricultural development near there is also apparent.
1966	Residential development on the north and south sides of the Project APE are visible.
1968	Agricultural development is visible to the east of the Project APE.
1971	The San Diego River appears to be damned up within a portion of the Project APE.
1978, 1980, 1981, 1982, 1983, 1985, 1986, 1987, 1988,	More residential and commercial development is noticeable on both the north and south side of the Project APE (north and south of the San Diego River).
1989	Development at the Carlton Oaks Golf Course just west of the Project APE is apparent.
1990, 1991, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2002, 2003	No significant changes inside the Project APE are visible.
2005, 2009	Development just northeast of the Project APE (at present-day Lakeside Sports Park) is patent. There are also several hiking trails in the northeast section of the Project APE visible.
2010, 2012, 2014, 2016, 2019, 2020, 2022	No significant changes inside the Project APE are visible.

5.3 Native American Heritage Commission Sacred Lands File Search and Native American Outreach

On December 1, 2025, Dudek requested a search of the Sacred Lands Files from the NAHC. A response letter was received via email from the NAHC on December 10, 2025, stating resources are listed in the Sacred Lands File for this area, but did not provide details on what the resource(s) are or where they are located. Dudek sent outreach letters to 17 Native American groups and individuals on December 29, 2025. To date, two responses have been received. On January 30, 2026, Jason Santos, the Deputy Tribal Historic Preservation Officer from the Manzanita Band of Kumeyaay Nation, responded by stating that the Project APE is not within the boundaries recognized by the Manzanita Indian Reservation. However, Mr. Santos stated that the Project APE is within the boundaries that Manzanita considers its Traditional Use Area. The Manzanita Band, therefore, has requested to be kept informed as the Project progresses. Mr. Santos also recommended archaeological and Tribal cultural monitoring for all ground disturbing activities near known archaeological sites. Further, on February 20, 2026, Mr. Jason Lavigne, the Tribal Historic Preservation Officer from the San Pasqual Tribe of Mission Indians, responded by stating that the San Pasqual Tribe does not have any comments on the proposed Project. Mr. Lavigne also added that San Pasqual reserves the right to provide further comments if additional information on the Project becomes available, or if the circumstances change. Documentation of correspondence with Native American groups and individuals is provided in Appendix C.

5.4 Cultural Resources Survey

Dudek archaeologists conducted an opportunistic (approximately 70 percent) and intensive-level pedestrian survey (approximately 30 percent) of the Project APE from December 8 to December 10, 2025, and on January 9, 2026 (see Figure 2). Much of the Project APE was either covered in dense vegetation or standing water (the San Diego River) and thus was not subjected to an intensive-level pedestrian survey. Areas for intensive-level pedestrian survey included the sections within the Project APE with sparse vegetation or the walking paths that intersect it. Exhibits 1-3 below provide an overview of the general visibility within the Project APE. In general, the perimeter of the Project APE was more open than the center/inner sections, and the former sections of the Project APE were where the intensive-level pedestrian surveys were conducted. Disturbances within the Project APE included a moderate amount of modern debris, evidence of homeless encampments, numerous walking paths, riprap, concrete irrigation channels, evidence of grading, and erosion from the San Diego River. Thick vegetation covered much of the Project APE, with the primary vegetation consisting of the Chamis shrub, Palm trees, Pepper trees, Oak trees, Cattails, cacti, Willow scrub, and various medium-sized and tall grasses. In general, visibility was very poor due to the dense vegetation (less than 10% visibility). The pedestrian survey revisited three previously identified resources (CA-SDI-005050, CA-SDI-010148, and CA-SDI-021860) and identified three new archaeological sites (SDRFM-DF-S-001, SDRFM-DF-S-002, and SDRFM-DF-S-003), and three new isolates (SDRFM-DF-I-001, SDRFM-DF-I-002, and SDRFM-DF-I-003) within the Project APE (Confidential Appendix D).

Exhibit 1. View of Western Project APE; View West



Exhibit 2. View of the Central Component of the Project APE; View West



Exhibit 3. View of the Eastern Component of the Project APE; View East



5.4.1 Previously Identified Cultural Resources

CA-SDI-005050 (P-37-005050)

CA-SDI-005050 was recorded by Roy Pettus in 1979 as a prehistoric site situated between a canal and the backyards of houses and containing midden soil, numerous milling features, about 20 milling implements and 10 pieces of debitage, and a small number of ceramic artifacts. Approximately half of the site boundary falls within the Project APE, while the other half is located within fenced residential backyards. Dudek revisited the public portion of the site (Exhibit 4). Site components including bedrock milling features and prehistoric lithic tools, diagnostic artifacts within the Project APE were recorded (Exhibit 5). Additionally, 17 pieces of debitage (quartzite and volcanic) and three ceramic body sherds were recorded within CA-SDI-005050. Table 5 provides an overview of the site's milling features recorded by Dudek. Further, Table 6 provides information on the artifacts within the site.

Table 5. Milling Elements Within CA-SDI-005050

Field ID Name	Milling Element Type	Measurements	Description
BRM-01	Saucer mortar	16.5 cm N/S x 10.0 cm E/W x 2.5 cm deep	On a low-lying granitic boulder feature measuring 120.0 cm N/S x 160.0 cm E/W
BRM-02	Saucer mortar	22.0 cm N/S x 12.0 cm E/W x 3.0 cm deep	On a low-lying granitic boulder feature measuring 50.0 cm N/S x 50.0 cm E/W
BRM-03	Saucer mortar	16.0 cm N/S x 14.0 cm E/W x 2.0 cm deep	Both BRM #3 & 4 on the same low-lying granitic boulder feature measuring 90.0 cm N/S x 120.0 cm E/W
BRM-04	Saucer mortar	18.0 cm N/S x 10.0 cm E/W x 2.0 cm deep	
BRM-05	Saucer mortar	13.0 cm N/S x 8.0 cm E/W x 1.5 cm deep	On a low-lying granitic boulder feature measuring 60.0 cm NE/SW x 30.0 cm NW/SE
BRM-06	Saucer mortar	20.0 cm N/S x 13.0 cm E/W x 2.0 cm deep	BRM-06, MS-02, and MS-03 on the same granitic boulder feature (partially cut off by the metal fence for the housing to the south) that measures 180.0 cm N/S x 220.0 cm E/W
MS-02	Milling Slick	28.0 cm N/S x 18.0 cm E/W	—
MS-03	Milling Slick	30.0 cm N/S x 20.0 cm E/W	
MS-01	Milling Slick	26.0 cm N/S x 33.0 cm E/W	On a granitic boulder feature measuring 110.0 cm N/S x 120.0 cm E/W

Table 6. Recorded Artifacts Within CA-SDI-005050

Field ID	Tool Description	Measurements
A-01	1 Unifacial Granitic Handstone	12.0 cm L x 7.0 cm W x 5.0 cm Th
A-02	1 Unifacial Granitic Handstone	13.0 cm L x 10.0 cm W x 5.0 cm Th
A-03	1 Ceramic Brownware Rim Sherd	3.0 cm L x 2.0 cm W x 0.5 cm Th
A-04	1 Quartzite Flaked Stone Tool with Battering	6.5 cm L x 5.0 cm W x 2.5 cm Th
A-05	1 Metavolcanic Handstone Fragment	9.0 cm L x 5.0 cm W x 5.0 cm Th

Dudek did not record any midden soil within the site. All the artifacts recorded were left in situ. In addition, it was evident during the site revisit that some milling features are present within the backyard of private residential property and not located within the Project APE. Dudek did not record the site elements within private property. It appears the site has been disturbed to some extent by grading, with possible grading within the milling features and among the artifacts. Several boulders appear to have been pushed from the south to the north and downslope. There is also a moderate amount of modern debris within the site. Thick vegetation was ubiquitous throughout much of the site, including cacti growth around the milling features. There is also an east–west trending metal fence at the northern end of the site.

Exhibit 4. CA-SDI-005050 Site Overview; View West/Southwest



Exhibit 5. Overview of BRM-06/MS-02/MS-03 (All Three Milling Spots Have Flags Atop Them) at CA-SDI-005050; View Southwest



CA-SDI-010148 (P-37-010148)

CA-SDI-010148 is a prehistoric lithic and ceramic scatter previously archaeologically tested within the current Project APE and recommended not eligible for listing on the NRHP (Caltrans 1986). The western extension of the resource containing hearth features and artifact deposits is located outside of the current Project APE and was tested in 1993 and recommended significant under CEQA and City of San Diego regulations (Gallegos & Associates 1993).

About 75% of the site boundary falls within the current Project APE. Dudek revisited the portion of the site that falls within the Project APE. The vegetation growth within the site was very dense, and the visibility was less than 10%. Dudek recorded two pieces of debitage on the surface: a tan quartzite primary flake and a tan quartzite interior flake (Exhibit 6). Both flakes were recorded with GPS points, photographed, and left *in situ*.

Exhibit 6. Quartzite Primary Flake Recorded Inside Recorded Boundary of CA-SDI-010148



CA-SDI-021860 (P-37-035815)

CA-SDI-021860 was recorded by HELIX Environmental as a light lithic scatter identified following 15 acres of wetlands restoration grading. HELIX Environmental identified 17 prehistoric artifacts within the grading tailings. Dudek revisited CA-SDI-021860 and no cultural resources were observed. Some of the recorded site boundary was covered by the San Diego River, and therefore impassable. Much of the site was covered in dense vegetation, and the visibility was generally very poor (Exhibit 7). There were a few pedestrian trails throughout the site and modern debris strewn about.

Exhibit 7. CA-SDI-021860 Overview; View West



5.4.2 Newly Identified Cultural Resources in the Project APE

SDRFM-DF-S-001

Dudek recorded SDRFM-DF-S-001 as a historic period linear rock feature with a small historic period refuse concentration. The main component of the site is the linear rock feature (F-01), which measures approximately 685.0 ft (E/W) x 7.5 ft (N/S) x 3.0-4.0 ft height. F-01 is comprised of two rows of numerous softball-to-basketball-sized rock cobbles (with sporadic chucks of concrete as well), situated in an east–west fashion, with a gap between the two rows. The rocks associated with F-01 are enclosed in rusty chicken coop wires. F-01 is also just 12.0 ft north of Chubb Lane, a paved road. One small concentration of historic debris (C-01) is situated in the western half of F-01, primarily containing glass fragments. Additionally, one point-provenienced artifact (A-01), a colorless glass bottle base, was recorded within C-01.

The linear rock feature F-01 is present on historic aerial photographs from as early as 1953 (NETR 2025). In addition, to the east of North Magnolia Avenue, the area appears to have been used for agricultural purposes in the mid-20th century.

SDRFM-DF-S-002

Dudek recorded SDRFM-DF-S-002 as a historic period site consisting of two features: Feature 1 (F-01) is a poured rectangular foundation pad that measures approximately 45.0 ft N/S x 20.0 ft E/W x 1.0 in height; and Feature 2 (F-02) is a rectangular concrete footing that measures 9.0 ft N/S x 16.0 ft E/W, and each footing section is about 8.0 in tall and 8.0 in wide. F-02 is situated about 75.0 ft northeast of F-01. No historic artifacts or features were identified within or around either F-01 or F-02. F-01 had white graffiti covering a portion of the concrete slab. Historic aerial photographs from the early 1960s display outlines of the foundations (NETR 2025).

SDRFM-DF-S-003

Dudek recorded SDRFM-DF-S-003 as a prehistoric site consisting of one bedrock milling element on a granitic boulder. The milling element is a circular mortar on top of a granitic boulder feature. The mortar measures 19.0 cm N/S x 19.0 cm E/W x 7.0 cm depth. No artifacts were recorded adjacent to the site. No other milling elements were recorded as well. The north side of the granitic boulder has white markings on it, which suggest that graffiti was once present on the boulder and then removed. There was no obvious soil accumulation along the bottom of the boulder, at the ground surface level, which may suggest SDRFM-DF-S-003 was moved to this location. Although there were no obvious markings on the base of the boulder, it is situated near development. A review of several historic aerial photographs from the mid-20th century (years 1953, 1964, 1966, 1968, 1971), strongly suggests that the area within the immediate vicinity of the site has undergone significant grading and development (NETR 2025). Given the location of the milling feature and its visibility, it may have been moved from elsewhere. Reviewing reports SD-15518 and SD-01276 indicate the presence of a previously recorded site, W-689, in the vicinity of SDRFM-DF-S-003. W-689 was recorded in 1975 by S. Cupples, which consisted of a prehistoric milling site with a number of different milling features, plus debitage, handstones, and groundstone artifacts. The location of site W-689 is described as being within the vicinity of SDRFM-DF-S-003, but the mapping is not clear as to whether it intersects the Project APE. As such, it is plausible that a milling feature from W-689 was moved to the current location recorded as SDRFM-DF-S-003, and thus not *in situ*.

SDRFM-DF-I-001

Dudek recorded SDRFM-DF-I-001 as a prehistoric isolate consisting of one unidirectional quartzite core that measures 15.0 x 9.5 x 5.0 cm. SDRFM-DF-I-001 was left *in situ*.

SDRFM-DF-I-002

Dudek recorded SDRFM-DF-I-002 as a prehistoric isolate consisting of one brown metavolcanic interior flake. The isolate was left *in situ*.

SDRFM-DF-I-003

Dudek recorded SDRFM-DF-I-003 as a prehistoric isolate consisting of one brown metavolcanic mid-stage biface fragment that measures 4.0 x 3.5 x 1.0 cm. SDFRM-DF-I-003 was left *in situ*.

6 Findings and Recommendations

6.1 Resource Evaluation

The current study identified nine cultural resources within the Project APE: CA-SDI-005050, CA-SDI-010148, CA-SDI-021860, SDRFM-DF-S-001, SDRFM-DF-S-002, SDRFM-DF-S-003, SDRFM-DF-I-001, SDRFM-DF-I-002, and SDRFM-DF-I-003 (Confidential Appendix D). SDRFM-DF-I-001, SDRFM-DF-I-002, and SDRFM-DF-I-003 are isolates and, because of their limited data potential, are not considered significant cultural resources or historic properties. The remaining resources could potentially be impacted by project activities so archival research and field analysis were conducted to evaluate the NRHP or CRHR eligibility of the potentially impacted resources: CA-SDI-005050, CA-SDI-010148, CA-SDI-021860, SDRFM-DF-S-001, SDRFM-DF-S-002, and SDRFM-DF-S-003

CA-SDI-005050 (P-37-005050)

CA-SDI-005050 was originally recorded by Pettus in 1979 as a prehistoric site with midden soil, numerous milling features, a handful of debitage, milling artifacts, and ceramics. The site has not been previously evaluated for significance. Dudek revisited the site and recorded nearly 10 milling features, several artifacts, debitage, and ceramic sherds on the ground surface.

Dudek recommends the avoidance of CA-SDI-005050. If avoidance is not feasible, Dudek recommends archaeological testing to determine if the resource is eligible for the NRHP or CRHR. See Section 6.2 for effects analysis and recommendations for avoidance of CA-SDI-005050.

CA-SDI-010148 (P-37-010148)

CA-SDI-010148 is a prehistoric lithic and ceramic scatter. Caltrans (1985; 1986) conducted archaeological testing of the site and identified nearly 1,400 artifacts (mostly lithics) and nearly 2,500 faunal bone, charcoal, and fire-affected rocks were recovered during Phase II testing. Caltrans (1986) deemed CA-SDI-010148 not eligible for the NRHP due to previous agricultural disturbance, low frequency and variety of cultural artifacts, and scarcity of datable remains. However, during the construction monitoring of an adjacent water facility, Gallegos & Associates (1993) identified a previously unrecorded western extension of CA-SDI-0010148. Following data recovery of this western extension, Gallegos & Associates (1993) and the City of San Diego considered the western extension significant under CEQA and City of San Diego regulations. The eastern portion of CA-SDI-010148, the portion located within the City of Santee's jurisdiction and the current Project APE, was not tested by Gallegos & Associates. Gallegos & Associates (1993) recommended that a similar data recovery plan should be implemented should anyone propose the development of the eastern portion of CA-SDI-010148, i.e., the portion of the site located within the current Project APE.

Due to the conflicting recommendations of significance for CA-SDI-010148, it is difficult to determine the significance of the site based on the existing data. Because Gallegos & Associates (1993) identified multiple intact hearth features adjacent to the current Project APE, it is likely that the "fire-affected rock" identified by Caltrans (1985; 1986) within the current Project APE may indicate the presence of other hearth features. However, Gallegos & Associates did not conduct any testing within the current Project APE making their recommendation for data recovery within the current Project APE seem overzealous.

Dudek recommends the avoidance of CA-SDI-010148. If avoidance is not feasible, Dudek recommends archaeological testing to determine if the resource is eligible for the NRHP or CRHR. See Section 6.2 for effects analysis and recommendations for avoidance of CA-SDI-010148.

CA-SDI-021860 (P-37-035815)

CA-SDI-021860 was recorded by HELIX Environmental as a result of grading and habitat improvements in 2015, and a low quantity of prehistoric lithic artifacts were recovered. The grading expanded over 15 acres and went to a depth of 6 ft below the ground surface. Following grading, HELIX Environmental investigated the spoils piles and identified 17 artifacts including lithic artifacts, debitage, groundstone, and one ceramic body sherd. Two unidentified faunal bones, shell, and fire-affected rock were also noted. Modern trash was noted as being prevalent throughout the project site. All artifacts were recovered out of context from spoils piles, therefore, the site boundary for CA-SDI-021860 is based on the extent of grading for the wetland restoration project.

Additionally, the alluvial setting of the site (active river floodplain) means that it is likely some of the cultural material has washed downstream from other areas. A Late Prehistoric village site was recorded a short distance upstream from the site, and buried resources have been identified during monitoring at other projects upstream, for example CA-SDI-20693 at San Diego Women's Detention Facility and CA-SDI-19370 at the proposed Liberty High School. HELIX Environmental noted that the scattered artifacts identified at CA-SDI-021860 could be the result of cultural material washing downstream or could represent a single cohesive site (or a combination of both), however, the area has been too disturbed by previous events and grading for the wetland restoration project that they couldn't make a conclusive determination (HELIX Environmental Planning 2015).

In essence, the collection of the artifacts in 2015 served as the site testing, and it is unlikely to contain further subsurface components as the site has been graded over 15 acres and to a depth of 6.0 ft.

Dudek revisited the site in 2025 and did not record any cultural materials within the stie boundaries.

There is no evidence to suggest that CA-SDI-021860 is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States (Criterion 1/A); the site is not associated with the lives of persons important to local, California, or national history (Criterion 2/B); and the site does not embody the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master, or possesses high artistic values (Criterion 3/C). There were no observed buried deposits associated within CA-SDI-021860. Rather, only 17 artifacts and small quantities of bone and shell were identified out of context within spoils piles of graded soils. This limited assemblage spanning over 15 acres of graded soils is extremely sparse. Also, the soils within these 15 acres were graded to depths of 6 feet, which would have destroyed any cultural deposits that may have been present. Therefore, the site is unlikely to contain an archaeological deposit that can be excavated and therefore does not contain any data potential that could provide information regarding the history of the area (Criterion 4/D). Therefore, the site is recommended as not eligible for listing in the CRHR and not significant under CEQA. Likewise, the resource is recommended as not eligible for listing in the NRHP.

SDRFM-DF-S-001

SDRFM-DF-S-001 consists of a historic period linear rock feature with a small historic period refuse concentration. SDRFM-DF-S-001 represents the remnants of a mid-20th century irrigation feature, which appears to have been larger and more expansive as shown on historic aerial photographs available from as early as 1964 (NETR 2025). As such,

the larger context of the irrigation feature is lost and the integrity is poor. Further, there is no evidence to suggest that SDRFM-DF-S-001 is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States (Criterion 1/A); the site is not associated with the lives of persons important to local, California, or national history (Criterion 2/B); and irrigation features of this type and construction are ubiquitous throughout Southern California and does not embody the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master, or possesses high artistic values (Criterion 3/C). There is no contextual information associated with the historic period refuse concentration that associate the feature or concentration to a particular individual or group. Nor does the site identify ethnicity, sex, socioeconomic status, or other characteristics of the person(s) who utilized the site. The refuse concentration also does not appear to have a subsurface component. Therefore, the site is unlikely to contain an archaeological deposit that can be excavated nor does it contain any data potential that could provide information regarding the history of the area (Criterion 4/D). Therefore, the site is recommended as not eligible for listing in the CRHR and not significant under CEQA. Likewise, the resource is recommended as not eligible for listing in the NRHP.

SDRFM-DF-S-002

SDRFM-DF-002 consists of two poured concrete features, and the site appears in the earliest historic aerial photographs from the 1960s. It likely represents remnants of structural foundations from the mid-20th century. Further, there were no artifacts recorded to link the site to a certain date or activity. The site contains two concrete pads, which are not unique features; the site also most likely does not contain a subsurface component. Dudek recommends the avoidance of SDRFM-DF-002. If avoidance is not feasible, Dudek recommends archaeological testing to determine if the resource is eligible for the NRHP or CRHR. See Section 6.2 for effects analysis and recommendations for avoidance of SDRFM-DF-002.

SDRFM-DF-S-003

SDRFM-DF-S-003 represents a single prehistoric bedrock milling feature. The site was recorded in a section of the Project APE visible to most pedestrians. Importantly, the site would have been difficult for previous recorders to miss. No soil buildup or noteworthy erosion was recorded at the base of the boulder. Further, although some of the images are of poor quality, a review of several historic aerial photographs from the mid-20th century (years 1953, 1964, 1966, 1968, 1971), strongly suggests that the area within them immediate vicinity of the site has undergone significant grading and development (NETR 2025). Given the location of the milling feature and its visibility, it may have been moved from elsewhere. Furthermore, there is some evidence from the records search that may suggest SDRFM-DF-S-003 being a transplant from a previously recorded site. Reports SD-15518 and SD-01276 both indicate the presence of a previously recorded site in the vicinity of SDRFM-DF-S-003. Recorded in 1975 by Sue Anne Cupples, archaeological site W-689 consisted of a prehistoric milling site with a number of different milling features, plus debitage, handstones, and groundstone artifacts. The location of site W-689 is described as being within the vicinity of SDRFM-DF-S-003, but the mapping is not clear as to whether it intersects the Project APE. As such, it is plausible that a milling feature from W-689 was moved to the current location recorded as SDRFM-DF-S-003, and thus not *in situ*.

There is no evidence to suggest that SDRFM-DF-S-003 is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States (Criterion 1/A); the site is not associated with the lives of persons important to local, California, or national history (Criterion 2/B); and the site does not embody the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master, or possesses high artistic values (Criterion 3/C). There

were no artifacts associated with the site, and, because it appears that the milling feature was relocated from somewhere else, buried deposits within the vicinity of SDRFM-DF-S-003 are unlikely. Therefore, the site is unlikely to contain an archaeological deposit that can be excavated and therefore does not contain any data potential that could provide information regarding the history of the area (Criterion 4/D). Therefore, the site is recommended as not eligible for listing in the CRHR and not significant under CEQA. Likewise, the resource is recommended as not eligible for listing in the NRHP. However, it is possible that SDRFM-DF-S-003 may contain some Native American cultural value. Dudek recommends the avoidance of SDRFM-DF-S-003. See Section 6.2 for effects analysis and recommendations for avoidance of SDRFM-DF-S-003.

6.2 Effects Analysis and Recommendations

The records search and pedestrian survey identified nine cultural resources within the Project APE: CA-SDI-005050, CA-SDI-010148, CA-SDI-021860, SDRFM-DF-S-001, SDRFM-DF-S-002, SDRFM-DF-S-003, SDRFM-DF-I-001, SDRFM-DF-I-002, and SDRFM-DF-I-003 (Confidential Appendix D). The current assessment evaluated CA-SDI-021860, SDRFM-DF-S-001, SDRFM-DF-I-001, SDRFM-DF-I-002, and SDRFM-DF-I-003 and recommends these resources not eligible for listing on the NRHP or CRHR. As such, no further archaeological review or avoidance measures are recommended. Likewise, the current assessment evaluated and recommends SDRFM-DF-S-003 not eligible for listing on the NRHP or CRHR. However, though it is not a historic property or significant under CEQA, the relocated milling feature SDRFM-DF-S-003 may have some Native American cultural value. As such, Dudek recommends that damage to the milling feature itself be avoided during prescribed fuel reducing treatments.

CA-SDI-005050 consists of a surface scatter of prehistoric artifacts and bedrock milling features. No archaeological testing has been previously conducted to determine if buried deposits are present nor has this resource been evaluated for listing on the NRHP or CRHR. Due to the surface scatter and features present, and the potential for significant buried deposits, even surficial prescribed fuel reducing treatments have the potential to impact or adversely affect this resource. Dudek recommends that this resource be treated as NRHP and CRHR eligible under criteria D/4, as formal evaluations have not been conducted, and is therefore treated as a historic property. It is recommended that the Project completely avoid the resource.

CA-SDI-010148 consists of a prehistoric deposit containing primarily lithic artifacts, faunal bone, charcoal, and fire-affected rock within the current Project APE, while a western extension of the resource contains intact hearth features. The resource's NRHP and CRHR eligibility status is inconclusive since previous testing within the current APE resulted in recommendations of no significance (Caltrans 1985, 1986), but testing in the western extension resulted in recommendations that the entire site boundary be subject to data recovery (Gallegos & Associates 1993). Further testing within the current Project APE would be required to determine the NRHP and CRHR eligibility status. Dudek recommends that this resource be treated as NRHP and CRHR eligible under criteria D/4, as formal evaluations have not been conducted, and is therefore treated as a historic property. While both studies agree that the surface of CA-SDI-010148 was extensively disturbed by years of farming activity, river flooding events, and bioturbation, it is likely that if intact NRHP or CRHR significant cultural deposits are present, they are located below the plow depth of previous agricultural activities, likely deeper than 18 inches. This is supported by the current and previous surveys (ASM Affiliates 2009), which noted no intact cultural scatters or features on the surface. To avoid potentially significant deposits located deeper than 18 inches, Dudek recommends the avoidance of potentially significant deposits at CA-SDI-010148 by limiting prescribed fuel reduction treatments to only those activities that require no excavation. These activities may include cutting of vegetation with hand tools, removal of trees at ground level and leaving the stumps in place, distribution of herbicide, or similar activities requiring no ground disturbance.

Mechanized excavations have the potential to impact potentially significant deposits below the previously disturbed agricultural soils and are not permitted within CA-SDI-010148.

Due to the presence of known cultural resources within the Project APE and the increased likelihood of encountering cultural resources near waterways, Dudek recommends full-time archaeological monitoring during ground disturbing activities. Dudek also recommends the presence of a Kumeyaay Native American monitor during initial ground disturbing activities.

Table 7 provides a summary of each previously recorded resource and each newly recorded resource identified during the current survey. Table 7 includes management recommendations for each resource per the findings of this study.

Table 7. Cultural Resources Management Recommendations

Primary Number Temporary ID	Trinomial	NRHP/CRHR Status	Description	Effect	Recommendations/ Mitigation Measures
P-37-010148	CA-SDI-010148	Dudek recommends further testing to determine eligibility	Lithic scatter	Intersects APE; potential effects	Avoidance of potentially significant buried deposits below 18 inches. No excavation permitted. Only vegetation cutting permitted. Cultural resources monitoring required.
P-37-005050	CA-SDI-005050	Unevaluated	Bedrock milling; lithic and ceramic scatter	Intersects APE; potential effects	Potential adverse effects. Complete avoidance of resource. Cultural resources monitoring required.
P-37-035815	CA-SDI-021860	6Z (Found ineligible through survey evaluation)	Lithic scatter	Intersects APE; no effect	No adverse effects. No mitigation is required.
SDRFM-DF-S-001	—	6Z (Found ineligible through survey evaluation)	Linear rock feature	Intersects APE; no effect	No adverse effects. No mitigation is required.
SDRFM-DF-S-002	—	Dudek recommends further testing to determine eligibility	Historic foundations	Intersects APE; potential effect	Potential adverse effects. Complete avoidance of resource recommended. Cultural resources monitoring required.
SDRFM-DF-S-003	—	6Z (Found ineligible through	Bedrock milling	Intersects APE;	Potential tribal cultural value. Avoidance of impacts

Table 7. Cultural Resources Management Recommendations

Primary Number Temporary ID	Trinomial	NRHP/CRHR Status	Description	Effect	Recommendations/ Mitigation Measures
		survey evaluation)		potential effects	to bedrock feature. Cultural resource monitoring required.
SDRFM-DF-I-001	—	6Z (Found ineligible through survey evaluation)	Lithic core	Intersects APE; no effect	No adverse effects. No mitigation is required.
SDRFM-DF-I-002	—	6Z (Found ineligible through survey evaluation)	Lithic flake	Intersects APE; no effect	No adverse effects. No mitigation is required.
SDRFM-DF-I-003	—	6Z (Found ineligible through survey evaluation)	Lithic biface fragment	Intersects APE; no effect	No adverse effects. No mitigation is required.

Based on the results and recommendations provided, this study finds that, with the proposed mitigation measures, the Project would have no impact on significant resources under CEQA and no adverse effect to historic properties under Section 106 of the NHPA.

6.3 Mitigation Measures

Dudek recommends the following mitigation measures to prevent the inadvertent disturbance to cultural resources during Project implementation.

MM CR-1 Resource Avoidance. Measures shall be taken to prevent inadvertent disturbance of archaeological resource sites CA-SDI-005050, CA-SDI-010148, SDRFM-DF-S-002, and SDFRM-DF-S-003. Prior to the commencement of any ground disturbing activities within 100 feet of the resource boundaries of CA-SDI-005050, CA-SDI-010148, SDRFM-DF-S-002, and SDRFM-DF-S-003, temporary work buffers shall be placed to protect the sites from inadvertent disturbances associated with project implementation. Following Project implementation within the vicinity of CA-SDI-005050, CA-SDI-010148, SDRFM-DF-S-002, and SDRFM-DF-S-003, the temporary work buffers shall be removed. Temporary work buffers may include exclusionary fencing, flagging, and/or Environmentally Sensitive Area (ESA) signage. An archaeological monitor shall guide the placement and erection of the temporary work buffers to assure archaeological sites CA-SDI-005050, CA-SDI-010148, SDRFM-DF-S-002, and SDRFM-DF-S-003 are properly protected.

Temporary work buffers shall remain in place for the duration of Project activities occurring in the vicinity of the resource. Following completion of work within each protected area, buffers shall be removed. The archaeological monitor shall confirm that removal occurs only after all potential disturbance risks have ended.

Under no circumstances shall Project personnel, equipment, or materials enter the established buffer zones. If construction staff, monitors, or City representatives observe potential encroachment or damage, ground-disturbing activities shall be immediately redirected or halted until appropriate corrective action is taken.

MM CR-2 Cultural Resources Monitoring. To mitigate for potential impacts to previously unknown, buried cultural resources within the Project APE and to prevent impacts to known archaeological resources, an archaeological monitoring program shall be implemented pursuant to the City of Santee (City) regulations, the California Environmental Quality Act (CEQA), and Section 106 of the National Historic Preservation Act and shall include the following requirements:

- Pre-Construction
- The applicant shall contract a Secretary of Interior qualified Lead Archaeologist to oversee the cultural monitoring program. The Lead Archaeologist shall contract with a Kumeyaay monitor to conduct Native American monitoring for the Project.
  - Pre-construction meeting to be attended by the Lead Archaeologist and Kumeyaay Native American monitor(s) to explain the monitoring requirements.
- Construction
  - Monitoring. Both the archaeological and Kumeyaay Native American monitor(s) are to be on site during initial ground disturbing activities. The frequency and location of monitoring of native soils will be determined by the Lead Archaeologist in consultation with the Kumeyaay Native American monitor(s).
  - If cultural resources are identified:
    - Both the archaeological and Kumeyaay Native American monitor(s) have the authority to divert or temporarily halt ground disturbance operations in the area of the discovery.
    - The archaeological monitor shall contact the Lead Archaeologist.
    - The Lead Archaeologist shall contact the City.
    - The Lead Archaeologist in consultation with the City and Kumeyaay Native American monitor(s) shall determine the significance of discovered resources.
    - Construction activities will be allowed to resume after the City has concurred with the significance evaluation.
    - Isolates and non-significant deposits shall be minimally documented in the field. Should the isolates and non-significant deposits not be collected by the archaeological monitor, the Kumeyaay Native American monitor(s) may collect the cultural material for transfer to a Tribal curation facility or repatriation program.
    - If cultural resources are determined to be potentially significant, avoidance measures will be developed by the Lead Archaeologist in consultation with the Kumeyaay Native American monitor(s) and approved by the City. If avoidance is not feasible, a research design and data recovery plan shall be prepared by the Lead Archaeologist in consultation with the Kumeyaay Native American monitor(s) and approved by the City. The preferred option is avoidance.
  - If human remains are identified

- Upon the identification of possible human remains, no further disturbance shall occur in the area of the find until procedures stipulated in Public Resources Code §5097.98, CEQA §15064.5 and Health & Safety Code §7050.5 are completed.

- Upon completion of project ground disturbance, a final report shall be prepared substantiating that earth-disturbing activities are completed and whether cultural resources were encountered. A copy of the final report shall be submitted to the South Coastal Information Center and any culturally affiliated tribe who requests a copy.

MM CUL-3 Unanticipated Discovery of Human Remains. In order to mitigate impacts to human remains to a level that is less than significant, procedures for proper treatment of unanticipated discoveries must comply with the California Environmental Quality Act (CEQA) Guidelines. In the event of discovery of unanticipated human remains, personnel shall comply with Public Resources Code Section 5097.98, CEQA Section 15064.5, and Health and Safety Code Section 7050.5 during earth-disturbing activities:

If any human remains are discovered, the construction personnel or the appropriate representative shall contact the County Coroner and the City. Upon identification of human remains, no further disturbance shall occur in the area of the find until the County Coroner has made the necessary findings as to origin. If the remains are determined to be of Native American origin, the Most Likely Descendant, as identified by the Native American Heritage Commission, shall be contacted by the property owner or their representative in order to determine proper treatment and disposition of the remains. The immediate vicinity where the Native American human remains are located is not to be damaged or disturbed by further development activity until consultation with the Most Likely Descendant regarding their recommendations as required by California Public Resources Code Section 5097.98 has been conducted. California Public Resources Code Section 5097.98, CEQA Section 15064.5 and Health & Safety Code Section 7050.5 shall be followed.

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Appendix A
Project Personnel

APPENDIX A

Project Personnel

Micah Hale, PhD, RPA

SENIOR ARCHAEOLOGIST



Education

University of California, Davis
PhD, Anthropology, 2009
BS, Anthropology, 1996
California State University, Sacramento
MA, Anthropology, 2001

Certifications

Register of Professional Archaeologists (RPA)

Professional Affiliations

Antelope Valley Archaeological Society
San Diego Archaeological Society
Society for American Archaeology
Society for California Archaeology

Micah Hale is Dudek's cultural resources practice manager and lead principal investigator, with technical expertise as a lithic and groundstone analyst, invertebrate analyst, and in ground penetrating radar. Over the course of his 23-year career, Dr. Hale has served as a principal investigator in the public and private sector for all levels of archaeological investigation, as a public outreach coordinator and as an assistant professor at the University of California (UC), Davis. As Dudek's cultural resources practice manager, he currently functions as a principal investigator in project oversight including proposals, research designs, fieldwork, artifact analysis, and report authorship.

Dr. Hale's experience is both academic and professional spanning California, Arizona, Nevada, and Oregon, including work for Naval Facilities Engineering Command (NAVFAC) Southwest, California Department of Transportation (Caltrans), Western Area Power Administration, Bureau of Land Management (BLM), U.S. Army Corps of Engineers (ACOE), U.S. Fish and Wildlife Service (USFWS), California State Parks, various city and county agencies, and directly for Native American groups.

Dr. Hale has supervised numerous large-scale surveys, test excavations, data recovery programs, and geoarchaeological investigations, served as a third-party review consultant, and an expert witness in legal proceedings. He has authored research designs, management and treatment plans, proposals, preliminary and final reports, and technical analyses. Dr. Hale has integrated his personal research interests into projects and participated in professional symposia at local and national venues, including the Society for American Archaeology and the Society for California Archaeology. Additionally, he has conducted academic research in the Polar Arctic, Greenland. Dr. Hale's current focus is on hunter-gatherer archaeology of California and the Great Basin, applying theoretical premises of cultural evolution and human behavioral ecology.

Dr. Hale currently assists in the preparation of technical descriptions and analyses for environmental impact statements and reports at the state and federal levels for Dudek projects. Examples of completed environmental sections include those prepared for the Yokohl Ranch, Rio Mesa Solar, Soitec Rugged and Tierra Del Sol Solar, San Diego Gas and Electric's (SDG&E) Wood to Steel project, and various others.

Project Experience

Development

Phase II Archaeological Data Recovery for the Newland Homes Sierra Project, San Diego County, California. As project manager and principal investigator, supervising data recovery investigations at two significant prehistoric archaeological sites and historic archival research of a homestead in support of the Newland Sierra Environmental Impact Report (EIR). (2013–Present)

Phase I Archaeological Inventory and Phase II Archaeological Evaluation for the Yokohl Ranch Project, Tulare County, California. As project manager and principal investigator, supervised completion of 12,000 acre survey and archaeological evaluation of 85 prehistoric and historical archaeological sites in support of the Yokohl Ranch EIR. (2012–2013)

Phase I Inventory and Phase II Cultural Resources Evaluation for the Star Ranch Project, RBF Consulting, San Diego County, California. As project manager and principal investigator, supervised CEQA inventory and evaluation for private development. (2011)

Phase II Archaeological Evaluation of Two Prehistoric Sites, Torrey Pines Glider Port, San Diego County, California. As project manager and principal investigator, supervised CEQA evaluation of two prehistoric archaeological sites for the Torrey Pines City Park General Development Plan. (2012)

Data Recovery of One Prehistoric Site for the Rhodes Property, Sea Breeze Properties, San Diego County, California. As project manager and principal investigator, supervised CEQA compliant data recovery of a large prehistoric site for a residential development.

Archaeological Survey of the Paramount Mine Exploratory Drilling Project, Essex Environmental, Mono County, Nevada. As principal investigator and field director, conducted archaeological survey for mining exploration and prepared the technical report. (2006)

Phase I Inventory of 1,544 Acres and Phase II Evaluation of Archaeological Sites along the Western and Northwestern Boundaries, Edwards Air Force Base, Kern County, California. As field director, supervised a Phase I inventory of 1,544 acres. Recorded 30 new archaeological sites, more than a dozen "sub-modern" refuse dumps, and a variety of isolate finds. Notable sites include several early Holocene lithic scatters (Lake Mojave-, Silver Lake-, and Pinto-age deposits), a rhyolite lithic quarry, and a complex of historic dumps associated with homesteading activities around Lone Butte. (2005)

Archaeological Survey of the La Mesa Meadows Residential Development Project, Helix Environmental, San Diego County, California. As principal investigator, conducted a survey of a proposed residential development in San Diego County. (2005)

Pankey Ranch Testing, Pardee Homes, Northern San Diego County, California. As field director, supervised excavation of shovel test pits to delineate the boundaries of site CA-SDI-682, the prehistoric village of Tom-Kav. Managed field personnel, conducted excavation, and wrote portions of technical report. (2004)

Oceanside Hilton EIR, Dudek Associates, Oceanside, San Diego County, California. As principal investigator and field director, conducted a survey of the proposed Hilton Hotel at the eastern end of Buena Vista Lagoon in Carlsbad and prepared portions of technical report for an EIR. (2004)

Data Recovery of Locus O, Star Canyon Development, Agua Caliente Band of Cahuilla Indians, Palm Springs, Riverside County, California. As field director, supervised field crews for data recovery mitigation of an archaeological deposit and human remains near Tahquitz Canyon. Coordinated with Native American representatives and prepared portions of the technical report. (2004)

Linda Vista Survey, City of San Marcos Planning Department, San Diego County, California. As field director, conducted a Phase I cultural resource inventory of the proposed road realignment in San Marcos. Prepared technical reports and made recommendations for additional work to be done within the project area. (2003)

Archaeological Monitoring for Williams Communications Fiber-Optic Line, Jones and Stokes Associates, San Luis Obispo and Bakersfield, Kern and San Luis Obispo Counties, California. As resource monitor/Native American coordinator, conducted archaeological monitoring for a fiber-optic cable installation project that spanned 180 miles from San Luis Obispo to Bakersfield. Identified and protected archaeological resources in the project area in compliance with state and federal regulations. Managed Native American monitors and coordinated daily work with construction and environmental staff to facilitate project completion. (2001)

Subsurface Survey of a Proposed Bicycle Path Along the Columbia River Slough in Northwest Portland, City of Portland, Multnomah County, Oregon. As field archaeologist, conducted auger testing in a variable north-to-south transect at 30-meter intervals, and unit mapping. (2000)

Phase II Test Excavations, AT&T, Portland, Multnomah County, Oregon, and Vancouver, Clark County, Washington. This project determined the presence and condition of any cultural resources in the project areas that were situated on the northern and southern sides of the Columbia River in Washington and Oregon. (1999)

AT&T Cable Removal Project, Jones and Stokes Associates, Taft to Los Angeles, Kern and Los Angeles Counties, California. As field archaeologist, conducted a survey to determine archaeological impact by the removal of a lead-lined subsurface cable. (1998)

Education

Data Recovery for the Palomar North and Meadowood Projects, Palomar College, San Diego County, California. As principal investigator, supervised Section 106 and CEQA-compliant data recovery of the ethnohistoric village of Tom-Kav. Expert witness for litigation of archaeological work for the client. (2012)

Data Recovery Excavations in Advance of Geotechnical Coring at W-12, University of California San Diego (UCSD), San Diego County, California. As project manager and principal investigator, supervised data recovery excavations in a midden dated as early as 9,600 years before present. (2009)

Archaeological Test Excavations at Selected Sites on Vandenberg Air Force Base, University of California, Davis, Lompoc, Santa Barbara County, California. As principal investigator and field director, supervised and instructed 21 students for the 2008 UC Davis Field School. (2008)

Archaeological Survey and Excavations in the Polar Arctic, University of California Davis, Northwest Greenland. As researcher, conducted a project for the National Science Foundation, National Geographic, and the Inglefieldland Polar Archaeology Expedition; UC Davis. (2006)

Energy

Phase II Evaluation of 19 Archaeological Sites for Soitec's Tierra Del Sol Solar Project, San Diego County, California. As principal investigator, oversaw and implemented significance evaluations, including fieldwork and documentation, under CEQA and San Diego County guidelines within the development footprint. (2012–2013)

Phase II Evaluation of 42 Archaeological Sites for Soitec's Rugged Solar Project, San Diego County, California. As principal investigator, oversaw and implemented significance evaluations, including fieldwork and documentation, under CEQA and San Diego County guidelines within the development footprint. (2012-2013)

Class III Cultural Resources Inventory for the Level 3 Fiber Optic Installation Project, Fort Irwin Army Reserve and BLM, San Bernardino County, California. As Project manager and co-principal investigator, oversaw and implemented cultural resource inventory of fiber optic corridor and recordation and evaluation of contributing elements to the NRHP-eligible LADWP transmission line corridor. (2012–2013)

Third-Party Compliance Monitoring for the Ocotillo Wind Energy Farm, Ocotillo, Imperial County, California. As principal investigator, oversaw and implemented compliance assistance to the BLM to ensure adherence to mitigation measures and proper treatment of cultural resources. (2012–2013)

Third-Party Compliance Monitoring for the Tule Wind Project, San Diego County, California. As principal investigator, oversaw and implemented compliance assistance to the Bureau of Land Management to ensure adherence to mitigation measures and proper treatment of cultural resources. (2012–2013)

Third-Party Compliance Monitoring for the East County Substation Project, San Diego County, California. As principal investigator, oversaw and implemented compliance assistance to the BLM and California Public Utilities Commission (CPUC) to ensure adherence to mitigation measures and proper treatment of cultural resources. (2012–2013)

Third-Party Compliance Monitoring for the Rio Mesa Solar Project, Riverside County, California. As principal investigator, oversaw and implemented compliance assistance to the BLM to ensure adherence to mitigation measures and proper treatment of cultural resources. (2012–2013)

Class III Cultural Resources Inventory for Soitec's Fort Irwin Solar Project, San Bernardino County, California. As project manager and co-principal investigator, oversaw and implemented cultural resources inventory. (2013)

Phase II Archaeological Testing of One Historic Site for the Cool Valley Solar Project, RBF Consulting, San Diego County, California. As project manager, supervised implementation of archaeological testing of a historic airfield near Campo. (2012)

Phase II Archaeological Testing of Four Prehistoric Sites for the Gildred Solar Project, RBF Consulting, San Diego County, California. As project manager, supervised implementation of archaeological testing of four small prehistoric sites along the ancient Lake Cahuilla shoreline. (2012)

Phase II Archaeological Testing of One Prehistoric Site for the Borrego A and B Solar Projects, RBF Consulting, San Diego County, California. As project manager, supervised implementation of archaeological testing of a large prehistoric habitation site in the Imperial Valley. (2012)

Phase I Cultural Resources Inventories for the Sol Orchard and Sol Focus Solar Projects, RBF Consulting, San Diego County, California. As project manager, supervised implementation of Phase I CEQA inventories for more than 22 solar projects. (2012)

Class II Survey of 4,700 Acres for the Silurian Wind Project, Iberdrola Renewables, San Bernardino County, California. As project manager and principal investigator, supervised Section 106 inventory of proposed renewable energy project. (2011)

Class III and Class II Cultural Resources Inventory for the Tule Wind Alternative Energy Project, HDR Engineering for Iberdrola Renewables, San Diego County, California. Serve as project manager and principal investigator. Supervised inventory of 6,000 acres and recordation of nearly 200 archaeological sites, and assisted the BLM in preparation of a programmatic agreement between Iberdrola and the California State Historic Preservation Office (SHPO). (2010)

Monitoring of the Installation of Meteorological (MET) Towers for the Tule Wind Project, HDR Engineering, San Diego County, California. As project manager and principal investigator, supervised archaeological and Native American monitors during MET tower installation in the Tule Wind project area. (2010)

Jamul Substation 6, SDG&E, Jamul, San Diego County, California. As field director, conducted an intensive pedestrian survey of 18 acres in Jamul for a proposed substation construction project. Identified and recorded two archaeological sites within the project area. Prepared the technical report. Coordinated with paleontology subconsultant and incorporated paleontology report into ASM's archaeology technical report. (2004)

Path 15 Transmission Line Corridor, Steigers Corporation, San Joaquin Valley, Fresno and Merced Counties, California. Served as field director. Supervised survey of over 87 miles of 400-foot transmission line corridor and over 46 miles of access roads in Merced and Fresno Counties. Supervised field crew, documented sites, coordinated with Native American representatives, coordinated access to survey areas, and prepared portions of technical report. (2004)

Carmel Valley Substation Survey, SDG&E, Carmel Valley, San Diego County, California. As field director, conducted a Phase I cultural resource inventory of a proposed power substation. (2003)

Federal

Ground-Penetrating Radar Survey and Class III Inventory for the Friendship Circle Project, Department of Homeland Security, Gulf South Research Corporation, San Diego County, California. As project manager and principal investigator, supervised and implemented a ground-penetrating radar survey and surface survey for the Friendship Circle project at Border Fields State Park, San Diego.

Healthcare

Kaiser Permanente Murrieta Valley Medical Center Preliminary Environmental Impact Report (PEIR), City of Murrieta, California. Acted as Principal Investigator on the Kaiser Murrieta project, overseeing a Phase I cultural resources inventory and Phase II archaeological significance evaluation of one prehistoric resource. Assisted the City with Tribal communication and analysis of potential impacts to a viewshed considered sensitive by local Native Americans. All studies were completed to comply with CEQA guidelines in support of an EIR.

Military

Phase II Evaluation of 31 High Complexity Sites on Edwards Air Force Base, CH2MHill/JT3, Kern and Los Angeles Counties, California. As project manager, oversaw Section 106 test excavations at 31 prehistoric archaeological sites. (2010)

Phase II Evaluation of 85 Archaeological Sites on Edwards Air Force Base, CH2MHill/JT3, Kern and Los Angeles Counties, California. As project manager and principal investigator, supervised Section 106 test excavations at 42 prehistoric and 43 historic archaeological sites. (2010)

Western Acquisition Survey, Marine Corps Air Ground Combat Center (MCAGCC) Twentynine Palms, San Bernardino County, California. As principal investigator, managed the survey of 10,000 acres on land administered by the BLM in Johnson Valley, west of the base. Duties included project management, coordination with BLM Barstow field office and MCAGCC 29 Palms personnel, coordinating and supervising field crews, as well as document preparation. (2010)

Management Plan for the Coso Rock Art National Historic Landmark (NHL), Naval Air Weapons Station (NAWS) China Lake, Inyo County, California. As project manager, supervised and co-authored a management plan for the Coso Rock Art NHL, including arranging and implementing stakeholder meetings and field testing the implementation plan. (2010)

Section 110 Intensive Archaeological Survey of the Cole Flat Training Area, NAWS China Lake, Inyo County, California. As project manager and principal investigator, supervised the survey of 5,400 acres near the Coso Rock Art NHL. (2009)

Phase I Survey of Selected Parcels in Five Training Areas, MCAGCC Twentynine Palms, San Bernardino County, California. As project manager and principal investigator, supervised survey of 4,500 acres in the Blacktop, Lava, Lavic Lake, Sunshine Peak, and Quackenbush training areas. (2009)

Phase I Survey of Aerial Maneuver Zones for the 53 Aerial Maneuver Zone (AMZ) Project, MCAGCC Twentynine Palms, California. As project manager and principal investigator, supervised survey of 72 AMZ's. (2009) Client Reference: Leslie Glover, MCAGCC 29 Palms, 760.830.5369.

Cultural Resources Inventory and Evaluation for the Skaggs Island Defense Base Closure and Realignment Commission (BRAC) Disposal Archaeological Survey, Naval Communications Station, Sonoma County, California. As principal investigator, supervised survey of installation and recordation and evaluation of historic civilian and military resources. (2011–2012)

Phase I Survey of 8,100 Acres on Edwards Air Force Base, ACOE, Kern County, California. As principal investigator, supervised survey of 8,100 acres on Edward Air Force Base. (2008–2009)

Phase I and II Survey of 2,500 Acres and Evaluation of 50 Sites on Edwards Air Force Base, ACOE, Kern County, California. As principal investigator, supervised survey of 2,500 acres and evaluation of 50 sites on Edward Air Force Base. (2008)

Cultural Resources Inventory and Evaluation for the Concord Inland BRAC Disposal Archaeological Survey, Naval Weapons Station, Seal Beach, Detachment Concord, Contra Costa County, California. As principal investigator, supervised survey of 5,200 acres and recordation and evaluation of historic civilian and military resources, and prehistoric archaeological sites.

Archaeological Evaluation of Eight Prehistoric Sites in the Emerson and Quackenbush Training Areas, ACOE, MCAGCC Twentynine Palms, San Bernardino County, California. As field director, supervised excavation of eight prehistoric sites on the Marine Corps base in Twentynine Palms, California. (2005)

Archaeological Evaluation of 22 Sites on Edwards Air Force Base, ACOE, San Bernardino County, California. As field director, supervised the National Register evaluation of 22 sites at Edwards Air Force Base. (2005)

Naval Base Point Loma Site Recordation, NAVFAC Southwest (SW), Point Loma, San Diego County, California. As principal investigator and field director, supervised relocation of 33 sites located on Naval Base Point Loma. Reviewed site documentation and re-recorded sites that were improperly documented by past surveys. (2004)

Archaeological Testing of 23 Sites in the Las Pulgas Corridor, Marine Corps Base (MCB) Camp Pendleton Environmental Security, MCB Camp Pendleton, San Diego County, California. As field director, supervised field crews for Phase II testing and mechanical coring of 23 sites on Camp Pendleton. Coordinated with coring contractor and base personnel. Documented sites in the field. Supervised field crews and prepared portions of technical report. (2004)

Rose-Arizone, Clay, and Photo Drainage, and Road Improvement Surveys, NAVFAC SW, San Clemente Island, Los Angeles County, California. As field director, supervised archaeological surveys and the placement of protective signing on 750 sites. Coordinated access to the island and supervised one crew member. (2004)

Remote Sensing, NAVFAC SW, Naval Auxiliary Landing Field (NALF) San Clemente Island, Los Angeles County, California. As GPS specialist, conducted data collection and image rectification for a remote sensing project in the detection of archaeological sites on the base. Supervised one crew member. (2004)

MCB Camp Pendleton Burn Survey, MCB Camp Pendleton Environmental Security, MCB Camp Pendleton, San Diego County, California. As field director, supervised an archaeological survey of 1,500 acres in the De Luz and Case Springs areas of Camp Pendleton. Managed field crews, documented archaeological sites, prepared site forms and portions of technical report. (2002)

Survey of Yuma Stormwater Basin, NAVFAC SW, Marine Corps Air Station (MCAS) Yuma, Yuma County, Arizona. As field director, supervised survey of stormwater basin along the Marine Corps airfield at MCAS Yuma. Managed field crew and prepared technical report. Client (2002)

Archaeological Coring of the Red Beach Site (SDI-811), MCB Camp Pendleton Environmental Security, MCB Camp Pendleton, San Diego County, California. As field director, supervised first phase of a geologic coring project for a shell midden site along the coast of MCB Camp Pendleton, San Diego County. Coordinated with coring contractor and base personnel. Managed field monitors and field crew. (2002)

Archaeological Testing and Survey of the Lemon Tank Area, NAVFAC SW, NALF San Clemente Island, Los Angeles County, California. Conducted excavations, survey, and site recording. (2002)

Evaluation of Nine Prehistoric Sites, Edwards Air Force Base, San Bernardino County, California. As field archaeologist, evaluated nine sites through excavation to determine overall sensitivity and value of the archaeological remains that characterize the region. (1999)

Evaluation of Four Prehistoric Sites, Jones and Stokes Associates, Camp Roberts National Guard, San Luis Obispo County, California. As field technician, conducted excavation in order to determine the boundaries of the site for further mitigation. (1998)

Archaeological Survey and Excavation, ACOE, MCAGCC Twentynine Palms, San Bernardino County, California. As field archaeologist, participated in nine field rotations averaging 10 days each. Conducted survey of portions of the Marine Corps base to determine the distribution of cultural materials, and subsequently excavate sites based on priority. This area is characterized as high desert with the typically associated flora and fauna and archaeological sites that range in age from Early to Late Holocene. (1998)

Resource Management

South Sacramento Habitat Conservation Plan (HCP) EIR, County of Sacramento, California. Led the cultural resources effort on the South Sacramento HCP Project, including development of a long-term plan for analyzing cultural resources constraints and assisting multiple agencies in their tribal outreach obligations.

Archaeological Survey of the Silver Lake Recreation Area, El Dorado Irrigation District, California. As principal investigator and field director, supervised an archaeological survey of the Silver Lake Recreation area. (2006)

Archaeological Data Recovery Excavations at Border Fields State Park, California State Parks, Imperial Beach, San Diego County, California. As field director, supervised excavation of prehistoric sites located within the APE of a fence along the U.S.–Mexico Border in San Diego County. Prepared technical report. (2005)

Archaeological Salvage Excavations of Two Ollas in Hellhole Canyon, BLM, San Diego County, California. As principal investigator, relocated a cache of prehistoric ceramic artifacts uncovered during wildfires in San Diego County. Documented cache and collected artifacts for subsequent reconstruction in the ASM laboratory. Prepared technical report detailing project. (2005)

Archaeological Data Recovery Excavations at CA-SDI-16691, Jackson Pendo Development Company, Escondido, San Diego County, California. As principal investigator, supervised data recovery excavation at a Late Prehistoric site in Escondido, California. (2005)

El Cuervo Wetlands Mitigation, City of San Diego Land Development Review Department and Mitigation Monitoring Coordination, Carmel Valley, San Diego County, California. As co-principal investigator, supervised an archaeological monitoring project in central San Diego County, conducted test excavation of one site identified during monitoring. The site was evaluated as not significant. Prepared portions of technical report and supervised on-site monitor. (2004)

Milk Vetch Emergency, Imperial Irrigation District (IID), Imperial County, California. As archaeological monitor, conducted emergency monitoring along transmission line corridor in Imperial County. Coordinated with IID and construction personnel. Prepared technical report. (2002)

Burial Salvage Excavations at the Sucking Carp Site (CA-MER-295), Great Valley Grassland State Park, California Department of Parks and Recreation, Los Banos, Merced County, California. As field supervisor, directed excavations at CA-MER-295 in the central San Joaquin Valley in order to salvage cultural remains (including burials) from further destruction by the San Joaquin River. (1999)

Transportation

Ortega Highway Monitoring, City of San Juan Capistrano, Orange County, California. As project manager, supervised Dudek's principal investigator to coordinate archaeological, tribal, and paleontological mitigation monitoring associated with the construction of water conveyance facilities and road repairs. (2013)

Archaeological Testing and Ground Penetrating Radar Study of the Forester Creek Biological Mitigation Area, Caltrans District 11, Santee, San Diego County, California. As principal investigator and field director, supervised archaeological testing of a private parcel. (2005)

Rail Bridge (at mile marker 230.6) Replacement, North County Transit District, Agua Hedionda, Carlsbad, San Diego County, California. As principal investigator and field director, managed an archaeological survey of an APE associated with the replacement of and historic railroad bridge. Recorded archaeological sites within APE and prepared portions of technical report. (2004)

Little Lake Phase II Testing, Caltrans District 5, Little Lake, Inyo County, California. As field director, supervised Phase II testing of four sites including the ethnohistoric village of Pagunda near the town of Little Lake. Supervised field crews, coordinated fieldwork with Caltrans and subconsultants, and prepared portions of technical report. (2004)

Extended Phase I Testing, Caltrans District 05, Little Lake, Inyo County, California. As field director, supervised fieldwork for extended Phase I testing of one prehistoric site along U.S. Route 395 (US 395) in Inyo County. Prepared portions of technical report. (2003)

Cartago and Olancha Four-Lane Project Test Excavations, Caltrans District 05, Inyo County, California. Serve as field director. Supervised test excavations of 15 sites for the proposed widening of US 395 near Cartago and Olancha. Supervised all fieldwork and managed a team of 12 field archaeologists. Coordinated selected specialized studies, conducted ground stone analysis, and prepared large portions of the resulting 800-plus-page report. (2002)

Survey of Amtrak Second Mainline Right-of-Way, North County Transit District, Oceanside, San Diego County, California. As co-field director, managed an archaeological survey of 6.2 miles of North County Transportation District railroad right-of-way near San Onofre, California. (2002)

State Route 905 (SR 905) Survey, Caltrans District 11, San Diego County, California. Served as co-field director. Cconducted survey and recorded sites along the SR 905 right-of-way in southern San Diego County. Documented three prehistoric sites within the proposed right-of-way. Created site maps and prepared site forms. (2002)

Evaluation of 11 Sites along US 395, Caltrans District 05, Blackrock, Inyo County, California. As crew chief, managed 6–18 personnel, prepared paperwork and report. Made decisions surrounding site excavations in Owens Valley. Project included Phase II test excavation of numerous sites ranging in age from early to late Holocene. (2002)

Phase I Survey, Caltrans District 10, Stockton, San Joaquin County, California. As field archaeologist, conducted various survey and excavation projects for Caltrans throughout central California. Conducted survey and excavation, operated as a graduate student assistant to the District 10 archaeologist dealing with compliance issues, prepared site mapping and technical reports including Archaeological Survey Reports (ASR), Historic Properties Survey Reports (HPSR), and Negative Declarations. (1997)

Phase I Survey/TEA, Caltrans, Inyo and Mono Counties, California. As field archaeologist, conducted survey of most major highways in Mono and Inyo Counties, California. Documented the distribution of all cultural material within the Caltrans right-of-way in order to determine impacts by road widening. (1996–1997)

Tribal

Section 106 Mitigation Development and Tribal Consultation Assistance, BLM, San Diego County, California. As project manager, assisted the BLM in development of Historic Properties Treatment Plan, Tribal Participation Plan, and other mitigation measures for the Tule Wind project, McCain Valley California. (2011–2012)

Mitigative Screening, Agua Caliente Band of Cahuilla Indians, Palm Springs, Riverside County, California. As field director, supervised archaeological mitigation of an impacted burial site on the Agua Caliente Reservation. Prepared mapping of the project, coordinated field efforts with Tribal representatives, oversaw monitoring of the project, and prepared portions of the technical report. (2003)

Water/Wastewater

San Clemente Water Recycling Monitoring, City of San Clemente, Orange County, California. As project manager, supervised Dudek's principal investigator to coordinate archaeological, tribal, and paleontological mitigation monitoring associated with the construction of a new water conveyance pipeline. Duties include preparation of a discovery and treatment plan. (2013)

Poseidon Resources Desalination Plant and Pipeline Monitoring, City of Carlsbad, San Diego County, California. As project manager, supervised Dudek's principal investigator to coordinate archaeological, tribal, and paleontological mitigation monitoring associated with the construction of the desalination plant and a new water conveyance pipeline. Duties include preparation of a discovery and treatment plan and evaluation of archaeological discoveries. (2013)

Lee Lake Cultural Resources Inventory, Lee Lake Water District, Riverside County, California.. As project manager, supervised Dudek's principal investigator to coordinate and implement cultural resources inventory for the construction of a new pipeline and water storage facility. (2013)

Poseidon Resources Desalination Plant and Pipeline Wetland Mitigation Archaeological Evaluation, City of San Diego, San Diego County, California. As project manager and principal investigator, developed methods and strategies to evaluate archaeological deposits most likely related to the 1782 ethnohistoric Kumeyaay village of La Punta located within the wetland mitigation area. Project included geotechnical coring and backhoe exploration to locate and evaluate buried archaeological deposits Duties included assistance provided to the USFWS for NAGPRA consultation and implementation. (2013)

Cultural Resources Monitoring for the City of Napa Levee Improvement Project, ACOE, Sacramento District, Sacramento, California. As principal investigator, supervised archaeological monitoring requiring HAZWOPER certified archaeologists to treat historical archaeological discoveries for a levee and stormwater improvement project. (2010–2011)

Data Recovery Excavations at the Ridge Hill Facilities Site (SDI-18472), Padre Dam Municipal Water District (PDMWD), San Diego County, California. As principal investigator, supervised data recovery of a complex late prehistoric habitation site. (2009)

San Clemente Canyon Survey, City of San Diego Metropolitan Wastewater Department, City of San Diego, San Diego County, California. As principal investigator and field director, supervised and conducted an intensive pedestrian survey of proposed access road maintenance for the San Clemente Canyon sewer line. Two cultural resources were identified. Conducted site documentation, prepared sites forms and technical report. Managed survey crew member. (2004)

Lake Murray Survey, City of San Diego Metropolitan Wastewater Department, La Mesa, San Diego County, California. As field director, conducted survey of proposed trunk sewer replacement in La Mesa. Prepared portions of the technical report. (2003)

Phase II Testing, IID, Imperial County, California. As field director, supervised Phase II testing of eight sites in the Colorado Desert. Managed field crews, conducted test excavations, and prepared site documentation and portions of the technical report. (2003)

Carmel Valley Archaeological Monitoring, City of San Diego Metropolitan Wastewater Department, Carmel Valley, San Diego County, California. As field monitor for pre-trenching for placement of sewer line, conducted monitoring and wrote portions of technical report. (2002)

Relevant Previous Experience

Teaching

- 2008: Assistant Professor, Archaeology, UC Davis
- 2008: Instructor/Principal Investigator, 2008 UC Davis Archaeology Field School, Vandenberg Air Force Base, California.
- 2005–2008: Level III Teaching Assistant, UC Davis; taught discussion sections/ lectures for Human Evolution, Archaeology, and Human Ecology

- 1998–1999: Acted as Public Education Coordinator for the Museum of Anthropology at UC Davis; included instructing a course teaching archaeology students how to inform the public about the value of anthropology through in-class presentations, exhibits, and the building of 'teaching trunks' for people in grades 1–12 of primary and secondary education
- 1997–1998: Substitute teacher with an Emergency Credential in the Woodland and Davis Joint Unified School Districts for grades K–12, all subjects excluding foreign languages
- 1997–Present: Regularly perform presentations about the value of archaeology in classrooms at the level of the grades 1–12
- 1996: Teaching assistant at the UC Davis archaeological field school; job duties included student management and instruction in the methods of excavation and survey.

Specialized Training

- 2012 – Accounting and Finance for Non-Financial Managers, UCSD Rady School of Business Management
- 2010 – ESOP Planning and Management, UCSD Rady School of Business Management
- 2004 – Ground Penetrating Radar Field Methods and Interpretation Certificate
- 2002, 2010 – GPS Field Methods Training, ASC Scientific

Publications

Hale, Micah J. 2012. “Malcolm Rogers’ Archaeology in Coastal San Diego.” Book chapter in preparation; edited by Don Laylander.

Hale, Micah J. 2011. “Modeling Socioeconomic Discontinuity in Southern Alta California.” In, California Archaeology 2:2: December 2010, pp. 203–250.

Hale, Micah J. 2010. “A Comment on Hildebrandt et al. (2009) Shellfish Transport, Caloric Return Rates, and Prehistoric Feasting.” In California Archaeology 3:111–113.

Hale, Micah J. 2009. Santa Barbara and San Diego: Contrasting Adaptive Strategies in Southern California. PhD dissertation; University of California, Davis.

Hale, Micah J. n.d. Preserving Cultural Heritage Through Public Outreach: A Curriculum for Jr. High and High School.

Hale, Micah J. 2005. Processing Economies, Coastal Settlement, and Intensification in Northern San Diego County. In Proceedings of the Society for California Archaeology, Volume 18.

Hale, Micah J. 2001. Technological and Social Organization of the Millingstone Horizon in Southern California. Master’s thesis; California State University, Sacramento.

Hale, Micah J. 2000. Consumer Anthropology: Theory and Method of Recognizing and Interpreting Consumption Patterns for Product Development and Marketing Strategies. Developed for Richard Knight, Director of Intelligent Products, Addidas, USA.

Hale, Micah J., Richard McElreath, and Robert Bettinger. 2012. (in prep.) Modeling Time Minimizing and Energy Maximizing Adaptive Strategies.

Hale, Micah J., and Peter Richerson. 2012. (in prep.) Investigating the Rate-Limiting Factors of Cultural Evolution: Archaeological Evidence from Southern California.

Hale, Micah J., and Bruce Winterhalder. 2012. (in prep.) Discontinuous Sociocultural Evolution

Selected Technical Reports

Hale, Micah J. 2010. "Limited Archaeological Excavations at SDI-4669 (SDM-W-12A)." In Advance of Geotechnical Coring, University House Rehabilitation Project, University of California at San Diego, La Jolla, California. Submitted to Ione Stiegler Architecture, La Jolla, California. Report on file at South Coastal Information Center, SDSU.

Hale, Micah J. 2010. Results of Archaeological Monitoring for Meteorological Masts in McCain Valley, San Diego County, California. Prepared for HDR Engineering Inc.

Hale, Micah J. 2007. Archaeological Survey of the Silver Lake Recreation Area, El Dorado Irrigation District, El Dorado County, California. Prepared for Trish Fernandez, El Dorado Irrigation District, El Dorado County, California.

Hale, Micah J. 2005. "Ground Stone Analysis." In From the Coast to the Inland: Prehistoric Settlement Systems Along the Las Pulgas Corridor, Camp Pendleton, California, by Micah J. Hale and Mark S. Becker. Report submitted to Southwest Division of Naval Facilities.

Hale, Micah J. 2005. Cultural Resources Inventory for the Proposed San Diego Model Schools Development Project. ASM Affiliates Inc., Carlsbad, California. Prepared for the City of San Diego, California.

Hale, Micah J. 2004. Cultural Resources Inventory for the Replacement of Bridge 230.6 over Agua Hedionda Lagoon, San Diego County, California. Submitted to North County Transit District, San Diego County, California.

Hale, Micah J. 2004. Cultural Resources Inventory for the Gawle Property, San Diego County, California. Submitted to Helix Environmental for the City of San Diego.

Hale, Micah J. 2004. Cultural Resources Inventory for the Hines Nursery, San Diego County, California. Submitted to Hines Nurseries, Rainbow Valley, California.

Hale, Micah J. 2004. Cultural Resources Inventory for the San Clemente Canyon Trunk Sewer Maintenance and Access Routes, San Diego County, California. Submitted to Metropolitan Wastewater Department, City of San Diego, California.

Hale, Micah J. 2004. Cultural Resources Inventory for the Montezuma Trunk Sewer Replacement, San Diego County, California. Submitted to Metropolitan Wastewater Department, City of San Diego, California.

Hale, Micah J. 2004. Cultural Resources Inventory for the Oceanside Hotel EIR, San Diego County, California. Submitted to Dudek for the City of Oceanside, California.

Hale, Micah J. 2004. Historic Resources Mitigation Monitoring of the El Cuervo Norte Project, San Diego County, California. Submitted to the City of San Diego.

Hale, Micah J. 2004. Emergency Test Excavations of an Exposed Olla, Riverside County, California. Submitted to BLM, Riverside County, California.

Hale, Micah J. 2004. Cultural Resources Monitoring for Geotechnical Coring Related to the All-American Canal Lining Project, Imperial County, California. Submitted to Imperial Irrigation District, Imperial County, California.

Hale, Micah J. 2004. Cultural Resources Monitoring of Geotechnical Coring Related to the Coachella Canal Lining Project, Riverside County, California. Submitted to Imperial Irrigation District, Riverside County, California.

Hale, Micah J. 2004. "Ground and Battered Stone Analysis." In Data Recovery Investigations at the Eucalyptus Site, CA-SDI-6954, San Diego County, California. Prepared by Don Laylander, ASM Affiliates Inc., Carlsbad, California. Submitted to EDAW Inc.

Hale, Micah J. 2003. Cultural Resources Inventory for the Linda Vista Drive Re-Alignment Alternatives, City of San Marcos, California. Submitted to Nolte for the City of San Marcos.

Hale, Micah J. 2003. Cultural Resources Inventory for the Lake Murray Trunk Sewer Replacement, San Diego County, California. Submitted to the Metropolitan Wastewater Department, City of San Diego, California.

Hale, Micah J. 2000. Cultural Resource Monitoring Report. Jones and Stokes Associates Inc. Prepared for AT&T Corp., Atlanta, Georgia, for the AT&T cable removal project from Lucin, Utah, to Red Bluff, California.

Hale, Micah J. 2000. "Ground and Battered Stone Analysis." In Report on Excavations at Four Locations in the Lead Mountain Vicinity of the Twentynine Palms Marine Base, edited by Mark Basgall. Sacramento Archaeological Research Center.

Hale, Micah J. 2000. "Ground and Battered Stone Analysis." In Report on Excavations at CA-MER-295, edited by Mark Basgall and R. Bethard. Sacramento Archaeological Research Center.

Hale, Micah J. 2000. "Invertebrate Analysis." In Report on Excavations at CA-MER-295, edited by Mark Basgall and Mark Giambastiani. Sacramento Archaeological Research Center.

Hale, Micah J. 2000. "Site Reports for Sites SBR-9415 and SBR-9420." In Report on Excavations at Lead Mountain in Twentynine Palms Marine Corps Air Ground Combat Training Center, edited by Mark Basgall. Sacramento Archaeological Research Center.

Hale, Micah J. 1999. "Ground and Battered Stone Analysis." In Muddle in the Middle: Phase II Excavations of Five Sites in Kern County, California, edited by Mark Basgall. Prepared for V. Levulett, Environmental Management, Caltrans District 5, San Luis Obispo. Sacramento Archaeological Research Center.

Hale, Micah J., and Brad Comeau. 2009. Data Recovery Excavations at CA-SDI-18472 for the Proposed Padre Dam Municipal Water District Secondary Connection Project (Ridge Hill Facilities) Johnstown, San Diego County, California. Prepared for Mr. Albert Lau, Engineering Manager, Padre Dam Municipal Water District.

Hale, Micah, Brad Comeau, and Chad Willis. 2010. Class II and Class III Cultural Resources Inventory Report for the Tule Wind Project, McCain Valley, San Diego County, California. Prepared for HDR Engineering Inc. Report on file at the South Coastal Information Center, SDSU.

Hale, Micah J., and John R. Cook. 2005. Results of Ground Penetrating Radar Investigations at CA-SDI-10148 in the Forester Creek Biological Mitigation Site, San Diego County, California. With contributions by Jeffrey S. Patterson. Prepared for Chris White, Caltrans District 11.

Hale, Micah J., and Mark S. Becker. 2006. From the Coast to the Inland: Prehistoric Settlement Systems Along the Las Pulgas Corridor, Camp Pendleton, California. ASM Affiliates, Carlsbad, California. Submitted to Southwest Division of Naval Facilities.

Hale, Micah J., and Mark A. Giambastiani. 2010. A Cultural Resources Inventory for Sample Surveys in Selected Training Areas, Marine Corps Air Ground Combat Center (MCAGCC), Twentynine Palms, San Bernardino County, California. Prepared for Marine Air Ground Task Force Training Command, Natural Resources and Environmental Affairs, Twentynine Palms, California.

Hale, Micah, and Mark Giambastiani. 2010. Archaeological Resources Survey Report Aerial Maneuver Zone (AMZ) Project at the Marine Air Ground Task Force Training Command, Marine Corps Air Ground Combat Center, Twentynine Palms, California, San Bernardino County, California. Prepared for Marine Air Ground Task Force Training Command, Natural Resources and Environmental Affairs, Twentynine Palms, California.

Hale, Micah, and Mark Giambastiani. 2010. An Archaeological Survey of 3,650 Acres at Cole Flat, Naval Air Weapons Station (NAWS), China Lake, California. Prepared for Mike Baskerville, Base Archaeologist, NAWS China Lake, California.

Hale, Micah J., Mark Giambastiani, Michael Richards, and David Iversen. 2009. Phase II Cultural Resource Evaluations at 51 Archaeological Sites in Management Regions 1A, 1B, 2B, 2C, and 3E, Bissell Hills and Paiute Ponds, Edwards Air Force Base, Kern and Los Angeles Counties, California. Prepared for U.S. Army Corps of Engineers under contract numbers W91238-07-F-0051 and W91238-07-F-0052.

Basgall, Mark, Lynn Johnson, and Micah Hale. 2002. An Evaluation of Four Archaeological Sites in the Lead Mountain Training Area, Marine Air Ground Task Force Training Command, Marine Corps Air Ground Combat Center, Twentynine Palms, California. Prepared for United States Marine Corps Air Ground Combat Center, Twentynine Palms, California. Prepared by Archaeological Research Center, Institute of Archaeology and Cultural Studies, Department of Anthropology, California State University, Sacramento.

Becker, Mark S., and Micah J. Hale. 2004. "Flaked Stone and Ground Stone Artifact Analysis." In Phase II Archaeological Testing and Evaluation of CA-INY-3647, CA-INY-3650/H, CA-INY-3826, and P-14-7356, Little Lake Rehabilitation, U.S. 395, Inyo County, California, edited by Brian Byrd and Seetha Reddy, ASM Affiliates. Prepared for Caltrans District 6, Fresno.

Byrd, Brian F., and Micah J. Hale. 2005. Testing and Evaluation of CA-SDI-13,930 on Camp Pendleton Marine Corps Base, San Diego County, California: A Paleoenvironmental Approach. ASM Affiliates, Carlsbad, California. Prepared for Southwest Division Naval Facilities Engineering Command.

Byrd, Brian F., and Micah J. Hale. 2004. Final Report on the Rose-Arizone Site Survey and Documentation, San Clemente Island. Prepared for Dr. Andrew Yatsko, NAVFAC SW, South Bay Area Focus Team.

Byrd, Brian F., and Micah J. Hale. 2004. Final Report on the San Clemente Island Protective Signing and Maintenance Project. Prepared for Dr. Andrew Yatsko, NAVFAC SW, South Bay Area Focus Team.

Byrd, Brian F., and Micah J. Hale. 2004. Final Report on the San Clemente Island Road Improvement Survey. Prepared for Dr. Andrew Yatsko, NAVFAC SW, South Bay Area Focus Team.

Byrd, Brian F., Micah J. Hale, and Sinéad Ní Ghabhláin. 2004. "Archaeological Testing at INY-3647." In Phase II Archaeological Testing and Evaluation of CA-INY-3647, CA-INY-3650/H, CA-INY-3826, and P-14-7356, Little Lake Rehabilitation, U.S. 395, Inyo County, California, edited by Brian Byrd and Seetha Reddy, ASM Affiliates. Prepared for Caltrans District 6, Fresno.

Byrd, Brian F., Micah J. Hale, and Sinéad Ní Ghabhláin. 2004. "Archaeological Testing at INY-3650/H." In Phase II Archaeological Testing and Evaluation of CA-INY-3647, CA-INY-3650/H, CA-INY-3826, and P-14-7356, Little Lake Rehabilitation, U.S. 395, Inyo County, California, edited by Brian Byrd and Seetha Reddy, ASM Affiliates. Prepared for Caltrans District 6, Fresno.

Byrd, Brian F., Micah J. Hale, and Sinéad Ní Ghabhláin. 2004. Archaeological Testing at INY-3826. In Phase II Archaeological Testing and Evaluation of CA-INY-3647, CA-INY-3650/H, CA-INY-3826, and P-14-7356, Little Lake Rehabilitation, U.S. 395, Inyo County, California, edited by Brian Byrd and Seetha Reddy, ASM Affiliates. Prepared for Caltrans District 6, Fresno.

Byrd, Brian F., and Micah J. Hale. 2003. Final Report on Extended Phase I Excavation at CA-INY-2207/2758, Little Lake Rehab Project, Inyo County, California. ASM Affiliates, Encinitas. Prepared for Lynn Faraone, Chief, Central California Cultural Resource Branch, California Department of Transportation.

Byrd, Brian F., and Micah J. Hale. 2002. Phase II Investigations of 15 Prehistoric Sites for the Cartago-Olancha Four-Lane Project, U.S. 395, Owens Valley, California. ASM Affiliates Inc. Prepared for Caltrans District 6, Fresno.

Byrd, Brian F., and Micah J. Hale. 2001. Research Design for Phase II Investigations of 14 Prehistoric Sites for the Cartago-Olancha Four-Lane Project, U.S. 395, Owens Valley, California. ASM Affiliates Inc. Prepared for Caltrans District 6, Fresno.

Cook, John R., Collin O'Neill, and Micah J. Hale. 2001. Archaeological Survey for the Amtrak Second Main Line, San Onofre Segment, MP 210.1 to 214.7, San Diego County. ASM Affiliates Inc. Draft report prepared for North County Transit District.

Giambastiani, M., M. Hale, M. Richards, and S. Shelley. 2008. Draft Report Phase II Cultural Resource Evaluations at 47 Archaeological Sites on the East and Northeast Shores of Rogers Lake, Management Region 3, Edwards Air Force Base, Kern and Los Angeles Counties, California. Report submitted to Edward Air Force Base, Base Historic Preservation Officer.

Giambastiani, G., M. Hale, S. Ni Ghabhláin, and D. Iversen. 2006. Phase II Cultural Resource Evaluation of 21 Archaeological Sites along the Western and Northwestern Boundary Fence, Edwards AFB, Kern and Los Angeles Counties, California. Submitted to Earth Tech Inc., Colton, California.

Hector, Susan, Micah J. Hale, and Catherine Wright. 2003. Cultural Resource Inventory of the Path 15 Los Banos-Gates Transmission Line Construction Project, Merced and Fresno Counties, California. Contract No. 03-186-01-01-ASM. Prepared for Steigers Corporation, Littleton, Colorado.

Laylander, Don, and Micah J. Hale. 2004. Data Recovery Excavations at Locus O, CA-RIV-45. ASM Affiliates Inc., Carlsbad, California. Submitted to Agua Caliente Band of Cahuilla Indians.

Reddy, Seetha N., and Micah J. Hale. 2003. Archaeological Survey of Portions of the De Luz Housing Area, O'Neill Lake, and the Case Spring Highlands, Marine Corps Base Camp Pendleton, California. ASM Affiliates, Encinitas, California. Prepared for NAVFAC SW, San Diego, California.

Whitley, David, and Micah Hale. 2010. Management Plan for the Coso Rock Art District National Historic Landmark. Prepared for NAVFAC SW, San Diego County, California.

Editorial Review

Hale, Micah J. 2011. Editorial Reviewer, *Journal of California Archaeology*, Left Coast Press, California.

Hale, Micah J. 2011. Editorial reviewer, *Journal of California and Great Basin Anthropology*, Malki Museum Press, California.

Hale, Micah J. 2010. Editorial reviewer, *Pacific Coast Archaeology Society*, California.

Presentations

Hale, Micah J. 2012. *The Data Matter: Contributions of the Sacramento State Archaeological Research Center*. Presented at the 2012 Society for California Archaeology Meetings, San Diego, California.

Hale, Micah J. 2012. *Andy Yatsko, the Human Transit: Celebrating His Lifetime Contributions*. Presented at the 2012 Society for California Archaeology Meetings, San Diego, California.

Hale, Micah J. 2012. *Malcolm Rogers' Work Along the San Diego Coast*. Presented at the 2012 Society for California Archaeology Meetings, San Diego, California.

Hale, Micah J. 2011. *Tracing the Origins of Processing Economies in the Far West: A View from Coastal Southern California*. Presented at the Yucca Valley Archaeopalooza Conference, 29 Palms, California.

Hale, Micah J. 2011. *Adaptive Divergence Among Southern California Hunter Gatherers*. Presented at the 2011 Society for California Archaeology Meetings, Rohnert Park, California.

Hale, Micah J. 2011. *A 10,000 Year Old Habitation at the University House, La Jolla: Implications for Trans-Holocene Socioeconomic Stability in San Diego*. Presented at the 2011 Society for American Archaeology Meetings, Sacramento, California.

Hale, Micah J. 2010. *Using the Ideal Free Distribution to Model Socioeconomic Discontinuity Among Hunter-Gatherers*. Paper presented at the 2009 Society for American Archaeology Meetings, St. Louis, Missouri. Micah Hale, Symposium Chair.

Hale, Micah J. 2005. *Investigating the Role of Acorns in Southern California Hunter-Gatherer Economies*. Guest Speaker at the Antelope Valley Archaeological Society Meeting.

Hale, Micah J. 2005. *Processing Economies, Coastal Settlement, and Intensification in Northern San Diego County.* Presented at the Society for California Archaeology, Sacramento.

Hale, Micah J. 2004. *Cultural Resource Management in Practice: An Overview of Methodological Approaches.* Presented at the Imperial Valley Desert Museum Annual Meetings.

Hale, Micah J. 2003. *The Adaptive Significance of Technological Organization during the Holocene in Southern California.* Discussant in a symposium entitled, *Change and Cultural Adaptations Along the California Coast.* Organized by Seetha Reddy for the 68th Annual Meetings of the Society for American Archaeology, Milwaukee, Wisconsin. David Yesner and Roger Colten, Chairs.

Hale, Micah J. 2003. *The Organization of Subsistence Technology in Southern California During the Holocene.* Guest Speaker for the San Diego County Archaeological Society, January 28, 2003, San Diego.

Hale, Micah J. 2002. *Prehistory Along the Southwestern Shore of Owens Lake: Preliminary Results from the Cartago-Olancha Project*. Presented at the 2002 Northern California Data Sharing Meetings, Society for California Archaeology, Santa Cruz, California.

Hale, Micah J. 2002. *Ground and Battered Stone Along the Western Shores of Owens Lake.* Presented at the 2002 Northern California Data Sharing Meetings, Society for California Archaeology, Santa Cruz, California.

Hale, Micah J. 2001. *Technological and Social Organization during the Millingstone Horizon of Southern California*. Presented at the Society for California Archaeology Annual Meeting, Modesto.

Hale, Micah J. 1999. *The Analysis Method of Formatting Presentations and Lesson Plans in Archaeology*. Presented at the Society for American Archaeology 64th Annual Meeting, Chicago, Illinois.

Hale, Micah J. 1998. *A Practical and Effective Method for Teaching Archaeology to the Public*. Presented at the Society for California Archaeology Annual Meeting, San Diego, California.

Awards

2010: NAVFAC SW, Camp Pendleton, Research Grant, $59,000

2008: U.S. Air Force, Vandenberg AFB, Radiocarbon Grant, $25,000

2008: Fieldwork Fellowship, Graduate Studies, UC Davis, $2,010

2007: Fieldwork Fellowship, Graduate Studies, UC Davis, $1,800

2006: Fieldwork Fellowship, Graduate Studies, UC Davis, $5,650

2005–2009: Graduate Fee Fellowship/Stipend, UC Davis, $74,500

Clearances

- Department of Defense (DoD) High-Security Clearance for SPAWAR, Naval Base Point Loma, NALF San Clemente Island, Vandenberg Air Force Base, MCAGCC Twentynine Palms, Edwards Air Force Base, NAWS China Lake, Yuma Proving Grounds, and MCB Camp Pendleton

David Faith

ASSOCIATE ARCHAEOLOGIST

David Faith (*DAY-vid FAYth; he/him*) is an archaeologist with 8 years' experience in cultural resource management, specializing in various aspects of cultural resources investigations, chiefly within the Southern California region, but also with experience in Arizona, Oregon, Nevada, Virginia, and Tennessee. David's experience includes archival research, reconnaissance surveys, a variety of fieldwork methods, artifact analysis, ground-penetrating radar investigations, and archaeological monitoring. In addition, he has experience with flotation and post-flotation analyses and is proficient in Adobe Illustrator.

Education

California State University, San Bernardino
MA, Applied Archaeology, 2020

Palomar College
Archaeological Excavation and Survey Courses, 2017–2018

American Military University
MA, National Security Studies, 2015
Graduate Certificate in Intelligence Analysis, 2013

Norwich University
MA, Diplomacy (International Terrorism Focus), 2011

University of Tennessee, Knoxville
BS, Nursing, 2004

Certifications

Registered Professional Archaeologist, 2025

Professional Affiliations

Society for American Archaeology, 2025

Pacific Coast Archaeological Society, 2025

Project Experience

Development

Central Wheeler Tank Project, La Mesa, California. As an associate archaeologist, coordinated the cultural and paleontological efforts for the project and presented the Worker's Environmental Awareness Program to the construction staff. (2025–Ongoing)

Archaeological Data Recovery, Village 8 East, Otay Mesa, California. As an associate archaeologist, took part in the data recovery efforts and spearheaded the laboratory work for the project. (2025–Ongoing)

Pacifica Elementary DD, Oceanside, California. As an associate archaeologist, conducted archaeological monitoring for the project. (2025)

North River Road Storm Drain Improvements, Oceanside, California. As an associate archaeologist, led the pedestrian survey and contributed to the inventory report for the project. (2025)

Hesperia CAZ5 Environmental Compliance Services Project, Hesperia, California. As an associate archaeologist, served as the project field director and performed subsurface testing for the project. (2024)

Otay River Estuary Restoration Project, San Diego County, California. As an associate archaeologist, conducted archaeological monitoring for the project. (2024)

French Valley Childcare Project, Riverside County, California. As an associate archaeologist, performed archaeological monitoring for the project. (2024)

Orange County Fire Authority Wildfire Resource Center Site Evaluation, Orange County, California. As an associate archaeologist, led the Phase I pedestrian survey and served as a coauthor of the cultural resources report. (2024)

Belcaro Sand Canyon Project, Santa Clarita, California. As an associate archaeologist, led the Phase I pedestrian survey for the project. (2024)

Mesa Verde Specific Plan California Environmental Quality Act Project, Riverside, California. As an associate archaeologist, conducted a Phase I pedestrian survey for the project. (2024)

Hermosillo Park Rehabilitation, City of Norwalk, Norwalk, California. As an associate archaeologist, conducted the Phase I pedestrian survey for the project. (2024)

Dillon Circles Warehouse Project, Dillon Circles LLC, Desert Hot Springs, California. As an associate archaeologist, spearheaded the Phase I pedestrian survey for the project. (2024)

Yosemite Gardner Site Annexation and Mixed-Use Development, City of Merced, Merced County, California. As an associate archaeologist, authored the cultural resources records search section of the overall built environment report. (2024)

Huntington Villages Environmental Impact Report, New World International Investments LLC, Arcadia, California. As an associate archaeologist, authored the cultural resources record search section of the environmental impact report. (2023)

Nakkar Business Park, Nirmal Nakkar, Perris, California. As an associate archaeologist, conducted the Phase I cultural survey for the project and authored the survey write-up. (2023)

HCC I Lot 5-Environmental Services, Caliente 395, LLC, Phelan, California. As an associate archaeologist, authored the cultural resources record search section of the technical report. (2023)

Aquabella Master Project Master Services Agreement, Highland Fairview Operating Company, Riverside County, California. As an associate archaeologist, completed the records search for the project at the appropriate information center. (2023)

Roblar Road Quarry, Roblar Quarry LLC, Sonoma County, California. As an associate archaeologist, authored the archaeological monitoring report for this project. (2023)

Valley Creek-Indian Center, Citivest Inc., Valley Center, California. As an associate archaeologist, served as a crew member for the Phase I cultural survey for the project. (2023)

Zona Gale 9-Lot TN Subdivision Initial Study/Mitigated Negative Declaration, City of Encinitas, California. As an associate archaeologist, conducted Phase II testing for the project and spearheaded the laboratory analysis and cataloging. (2023)

Vista Old Taylor Project, HumanGood Affordable Housing, Vista, California. As an associate archaeologist, led the Phase I pedestrian survey and served as the primary author of the cultural resources report. (2023)

Grandview Monitoring Project, California West Communities, Oceanside, California. As an associate archaeologist, authored the archaeological monitoring report. (2023)

Pepper Tree Park Villages, Justus Wallace Peppertree Park Villages 7 & 8 LLC, Fallbrook, California. As an associate archaeologist, led the Phase I pedestrian survey and contributed to the subsequent cultural resources report. (2022)

Water Screening and Artifact Analysis Project, City of San Diego, Imperial Beach, California. Responsibilities as an associate archaeologist included leading water screening, artifact analysis, and artifact cataloging for various City of San Diego projects. (2020–Ongoing)

San Marcos Specific Plan Project, AOA San Marcos LLC, San Marcos, California. As an associate archaeologist, spearheaded the records search, pedestrian survey, and cultural resources report for the project. (2022)

East Vista Housing Project, TTLC Vista East Vista LLC, Vista, California. As an associate archaeologist, led the Phase I pedestrian survey for the project. (2022)

Murietta Whitewood Apartment Technical Studies, Murietta Whitewood Multifamily, Murietta, California. As an associate archaeologist, served as the crew chief and led four archaeologists during the extended Phase I testing for the project. Duties included deciding where to excavate and providing direction to other crew members. (2022)

Vista Foothills Project, TTLC Vista East Vista LLC, Vista, California. As an associate archaeologist, led the Phase I pedestrian survey for the project. (2022)

Vista Melrose Residential Mitigated Negative Declaration, TTLC Vista East Vista LLC, Vista, California. As an associate archaeologist, led the Phase I pedestrian survey for the project. (2022)

World Logistics Center, Highland Fairview Operating Company, Riverside County, California. As an associate archaeologist, led the both the archaeological monitoring efforts and multiple Phase I pedestrian surveys for the project. Participated in additional site visits and recordation. (2022–Ongoing)

Panera Bread Project, Manna Development Group, San Marcos, California. As an associate archaeologist, coordinated the archaeological monitoring efforts and authored the monitoring report for the project. (2022)

Lennar Sunbow Project, Lennar Homes of California, Chula Vista, California. As an associate archaeologist, performed cultural monitoring for the project. (2022)

Sandpiper Golf Course Project; Price, Postal, & Parma, LLP; Santa Barbara, California. As an associate archaeologist, served as the crew chief for an extended Phase I testing at the golf course. Led a crew of archaeologists for the duration of the work. (2022)

Roadway Gap Closure on College Boulevard Project, CR Associates, Carlsbad, California. As an associate archaeologist, conducted a Phase I cultural survey of the project area. (2022)

Kaiser Baldwin Park Emergency Department Project, Kaiser Foundation Hospital, Baldwin Park, California. As an associate archaeologist, completed the records search request and collaborated with another staff member to draft the survey report. (2022)

The Heights at Calimesa, Aspire Homes, LLC, Calimesa, California. As an associate archaeologist, served as the field director for this Phase II testing and additional survey project. Made decisions on digging methodology and unit placement. (2022)

Ground-Penetrating Radar Project, Tennessee Department of Military, Milan, Tennessee. As an associate archaeologist, assisted the lead archaeologist in preparing the terrain for a ground-penetrating radar survey and helped conduct the survey. (2022)

Carlsbad Fire Station Project, City of Carlsbad, Carlsbad, California. As an associate archaeologist, prepared the archaeological monitoring memorandum for the project. (2022)

Trilogy at the Polo Club, Polo Estates Venture, LLC, Riverside County, California. As an associate archaeologist, drafted the archaeological and paleontological monitoring memorandum for the project. (2022)

The River Street Marketplace, River Street SJC, LLC, San Juan Capistrano, California. As an associate archaeologist, conducted fieldwork for the project. (2022)

Environmental Services for Idyllwild and the San Jacinto Mountains, County of Riverside, California. As an associate archaeologist, conducted the cultural survey for this emergency outdoor warning system project and drafted the survey report. (2022)

Holmes Ranch Restoration Project, Inland Empire Resource Conservation District, Imperial County, California. As an associate archaeologist, spearheaded the Phase I pedestrian survey for the project. This included using a GPS unit to determine where to do transects, assigning roles to the field crew, completing all the fieldwork paperwork, and ensuring that the project area was appropriately surveyed. Additionally, the post-fieldwork activities included report writing, documentation management, and coordination with the project's archaeological specialist. (2021)

Kaiser Permanente Ambulatory Surgery Center, Kaiser Permanente, Murrieta, California. As an associate archaeologist, conducted archaeological monitoring of the construction activities at the project. (2021)

Lake Drive Storm Drain Project, City of Encinitas, California. As an associate archaeologist, coordinated the pedestrian survey, records search, and served as the lead author for the final technical report. (2021–2022)

Lennar Sunrise Housing Development, Lennar Homes of California, Inc., San Marcos, California. As an associate archaeologist, oversaw and coordinated the monitoring efforts for the project. Also, conducted archaeological monitoring of the construction activities at the project site. (2021–Ongoing)

El Camino Senior Housing, PMB Carmel Valley LLC, Del Mar, California. As an associate archaeologist, excavated numerous shovel test pits (STPs) as part of Phase II testing for the project. This included using a GPS unit to place the excavations in the most appropriate locations and analyzing the recovered artifacts. (2021)

Upham Survey, The Integral Partners Funding LLC, San Marcos, California. As an associate archaeologist, conducted a solitary Phase I pedestrian survey and authored the survey write-up. (2021)

Warner Springs Ranch Resort, Pacific Hospitality Group, Warner Springs, California. As an associate archaeologist, excavated several sites as part of Phase II testing and performed the initial laboratory analysis and cataloging. (2021)

Canyon Springs Medical Center Project, TDA Investment Group, Riverside County, California. As an associate archaeologist, monitored the activities associated with ground-disturbing construction at the project. (2021)

Ivanhoe Ranch, PacVentures Inc., El Cajon, California. Responsibilities as an associate archaeologist included assisting in determining where to excavate, using a Trimble GPS unit to record excavation units, and excavating numerous STPs. Furthermore, as associate archaeologist, completed in-depth laboratory analysis of the excavated materials. (2020)

Discovery Street Improvements Project, Vallecitos Water District, San Marcos, California. As an associate archaeologist, conducted archaeological monitoring for the removal and replacement of multiple sewage pipes. (2020)

Nakano, Pardee Homes, Chula Vista, California. As an associate archaeologist, excavated a host of STPs for Phase II archaeological testing. Additionally, prepared Department of Parks and Recreation (DPR) record updates for the project and laboratory analysis. (2020)

San Diego City Monitoring, City of San Diego, California. As an associate archaeologist, conducted archaeological monitoring of underground utility removal and replacement. (2020)

Desert Hot Springs Library, City of Desert Hot Springs, California. As an associate archaeologist, conducted archaeological monitoring of new building construction. Additionally, coauthored the corresponding final monitoring report. (2020)

French Valley Library Project, Riverside County, French Valley, California. As an associate archaeologist, conducted archaeological monitoring of new building construction. Additionally, coauthored the corresponding final monitoring report. (2020)

Proctor Valley, Proctor Valley Village 14, Jackson-Pendo Development, Otay, Ranch, California. As a field technician, excavated STPs along the proposed trail during Phase II testing. Responsible for the identification, documentation, and collection of cultural resources. (2017; 2019)

Hotel del Coronado North Parking Garage Project, HDC South Beach Development LLC, Coronado, California. As an archaeological field technician, conducted archaeological monitoring for the parking lot extension and new building construction on the premises. Properly recorded feature that was unearthed during the excavation. Provided support in the recordation and evaluation of other features associated with the National Register of Historic Places. (2019–2020)

Steadfast Carlsbad Project, Steadfast Companies, Carlsbad, California. As a field technician, conducted archaeological monitoring for a new housing development. (2019)

Agoura Village East–Extended Phase I Archaeological Investigation, California Commercial Investment Group Inc., Agoura Hills, Los Angeles County, California. Responsibilities as a field technician included excavating STPs and screening excavated soils for artifacts. (2019)

650 Bennet Avenue Project, MooreHoward Investments, LLC, San Marcos, California. As a field technician, performed laboratory processing, analysis, and cataloging of the historic artifacts that were recovered during monitoring. Additionally, authored an in-house document that helped organize the artifacts. (2019)

1225 Cliff Drive Project, Morris Skenderian & Associates, A.I.A., City of Laguna Beach, California. As a field technician, completed archival review to identify known cultural resources within the vicinity of the proposed project site. (2019)

Jefferson at Avalon Specific Plan Project, City of Carson, California. As a field technician, conducted archival and literature research to identify known cultural resources within the proposed project site to address potential impacts as a result of project implementation. (2019)

Berggruen Institute Project, Gibson, Dunn & Crutcher LLP, City of Los Angeles, California. As a field technician, conducted archival review to identify known cultural resources within the proposed project site. (2019)

Wheeler Reef Extension, California State Lands Commission, San Clemente, California. As a field technician, assisted the head archaeologist in a Phase I underwater archaeological survey, prepared the diving gear, assisted the divers on the boat, analyzed the collected materials, and reviewed the diving plans prior to the dives. (2018)

Vineyard II Project, Scott-215, L.P./Lambda, LLC, Murrieta, California. As an archaeological field technician, was crew member for a pedestrian survey of a 6-acre commercial development. (2018)

Education

Education Outreach, Various Public and Private Schools, San Diego County, California. As a field technician, assisted in numerous education outreach events for elementary-aged children through college students to highlight the importance of archaeology and cultural resource management. (2018–Ongoing)

Energy

Equinox Solar, San Bernardino County, California. As an associate archaeologist, served as the field director for the pedestrian survey, authored the site descriptions, prepared DPR forms, and contributed to the cultural report. (2025–Ongoing)

Crown Valley Pipeline Replacements, Construction Management and Inspection Services Project, Laguna Niguel, California. As an associate archaeologist, conducted archaeological monitoring at the project site. (2025)

Bonneville Power Administration Redmond District Cultural Resources Survey, Redmond, Oregon. As an associate archaeologist, served as a crew chief for the pedestrian survey of the project. (2024–2025)

Dandelion TO 13, Maricopa County, Arizona. As an associate archaeologist, participated in a large pedestrian survey for the project. (2024)

Portland General Electric, Detroit, Oregon. As an associate archaeologist, conducted a week of archaeological monitoring at the project site. (2024)

Desert Jewel Battery Energy Storage, San Diego County, California. As an associate archaeologist, served as the field director for the pedestrian survey of the project area. Authored the survey write-up and completed several mapping edits. (2024)

Adelanto Rinaldi Line I Transmission Line Upgrade, Adelanto, California. As an associate archaeologist, served as the field director for the pedestrian survey of the project area. (2024)

Pronghorn Solar and Battery Energy Storage System Project, Antelope Valley, California. As an associate archaeologist, led the Phase I pedestrian survey efforts as the field director for the project and contributed to the Phase I report. (2024)

Confidential Solar Project, Nevada, California. As an associate archaeologist, served as the field director for a pedestrian survey of the project for potential visual effects. (2024)

Confidential Wind Energy Project, Confidential Client, California. As an associate archaeologist, performed flotation and microscopic charcoal and seed analysis for this confidential project. Additionally, as a field technician and associate archaeologist, served as the crew chief for the Phase III data recovery project at a complex prehistoric site and supervised 10 to 15 crew members during the project. Conducted ground-penetrating radar at one of the sites and numerous excavations. Performed laboratory work and other post-recovery artifact analysis efforts. (2020–Ongoing)

E-Group 29 Palms Solar Project, K&L Gates, Twentynine Palms, California. As an associate archaeologist, conducted the initial site assessments for the project and authored the initial site assessment analysis and recommendations. (2023)

Proxima Green Hydrogen Technology Project, Helio Pro LLC, Los Angeles County, California. As an associate archaeologist, served as the field director for Phase II testing. (2023)

Confidential Battery Energy Storage Project, Confidential Client, San Diego County, California. As an associate archaeologist, served as the lead archaeologist for the Phase I pedestrian survey. (2023)

Aratina Solar Project, 29SC 8me LLC, San Bernardino County, California. As an associate archaeologist, served as the field director for the Phase II testing. Also served as the primary author for the Phase II testing report. (2023–Ongoing)

Bellfield Solar Project, 50LW 8me LLC, San Bernardino County, California. As an associate archaeologist, participated in Phase II testing and spearheaded the laboratory work for the solar energy project. (2022)

Confidential Energy Modernization Project, Confidential Client, Riverside County, California. As an associate archaeologist, conducted the Phase I pedestrian survey for the project. (2022)

Confidential Solar Energy Project, Confidential Client, Clark County, Nevada. As an associate archaeologist, assisted with the Phase I pedestrian survey for this confidential solar energy project. (2022)

Confidential Solar Project, Confidential Client, Central California. As an associate archaeologist, served as a crew member for the Phase I pedestrian survey of the project. (2022)

Confidential Solar Energy Project, Confidential Client, California. As an associate archaeologist, completed Phase II tests and subsequent laboratory work for this confidential solar project and led the flotation efforts for organic materials. Conducted archaeological monitoring of solar field development. Additionally, downloaded and edited a large quantity of archaeological monitoring logs for the final report. (2020–2022)

Axton Solar Energy Project, Vesper Energy, Axton, Virginia. As an associate archaeologist, led a crew in Phase I archaeological survey and testing, completed excavations, and was responsible for maintaining accurate field notes and photos. (2021)

Confidential Archaeological Investigations Project, Confidential Client, Mojave Desert, California. As an associate archaeologist, reviewed numerous DPR forms to create a comprehensive in-house database for further use. Edited and created a host of data tables for archaeological research and planning. (2020)

Confidential Solar Energy Center, Confidential Client, California. As an associate archaeologist, monitored the pre-construction activities for this confidential solar energy project. (2020)

Confidential Solar Power Project, Confidential Client, California. As an associate archaeologist and field technician, properly excavated and recorded numerous STPs in support of the Phase II testing plan for this confidential project. In addition, monitored the pre-construction activities associated with the project. (2019–2020)

Confidential Solar Project, Confidential Client, San Diego County, California. As an associate archaeologist, inventoried the artifacts collected during archaeological monitoring to prepare them for delivery to a repository for this confidential solar project. (2020)

Confidential Energy Storage Project, Confidential Client, San Bernardino County, California. As a field technician, assisted in authoring the ethnographic section of the cultural and paleontological report. (2019)

Confidential Solar Project, Confidential Client, Mojave Desert, California. As a field technician, participated in the Phase I surveying and recordation of numerous archaeological sites within the project area. (2019)

Confidential Wind Energy Repowering Project, Confidential Client, Mojave Desert, California. As an archaeological field technician, served as field crew for a Class III pedestrian survey of Bureau of Land Management land and prepared DPR forms for this confidential wind energy project. (2019)

Confidential Wind Energy Project, Confidential Client, San Diego County, California. As a field technician for this confidential wind energy project, conducted pedestrian survey and data recovery testing of cultural resources that would be impacted by the project. Used a GPS unit, documented excavations, and performed in-depth ceramic analysis in the laboratory. (2018)

Confidential Wind Energy Project, Confidential Client, San Diego County, California. As a field technician, conducted a pedestrian survey and data recovery testing for a confidential wind energy project area that encompassed 1,200 acres. Identified and evaluated 21 historic and prehistoric sites. Tasks included artifact analysis and curation preparations, as well as documenting identified sites on DPR forms. (2018)

Otay Ranch Village 14 Project, Jackson Pendo Development, Chula Vista, California. As a field technician, processed artifacts from two prehistoric sites and prepared collections from 55 historic and prehistoric sites for curation. (2017–2018)

Transportation

Confidential Transportation Project, Confidential Client, San Bernardino County, California. As an associate archaeologist, serving as a crew chief for this confidential transportation project. The duties include field directing Phase I pedestrian surveys, Phase II tests, and Phase III data recoveries. Duties also include laboratory work, use of Adobe Illustrator to create graphics from fieldwork, mapping, records searches, DPR form submissions and updates, scheduling and outreach, tribal coordination, site descriptions, report writing, and a variety of report-related tasks. (2021–Ongoing)

Cultural Resources Inventory for Ripley Water Pipeline, County of Riverside, Ripley, California. As an associate archaeologist, served as field crew for the Phase I pedestrian survey for the project. (2022)

California High Speed Rail Project, Dragados USA Inc. and Flatiron West Inc., Tulare and Kern Counties, California. As an associate archaeologist and field technician, organized and prepared numerous cultural and tribal resources survey reports and monthly summaries. (2019–Ongoing)

Mid-Coast Transit Constructors; Stacy and Witbeck, Herzog, and Skanska; San Diego, California. As an associate archaeologist, produced vital components of the final monitoring report. In addition, as a cross-trained archaeological and paleontological field technician, monitored drilling, trenching, and excavations throughout San Diego County. (2018–2020)

Resource Management

Cultural and Paleontological Resources Programmatic Agreement, Various Counties, California. As an associate archaeologist, contributed to the records search efforts for this project. (2024–2025)

Girl Scout Camp Survey, Black Fox Timber Management Group, Julian, California. As an associate archaeologist, served as the crew chief for a portion of the pedestrian survey and coordinated the post-fieldwork mapping efforts. (2022–2023)

Relevant Project Experience

Records Searches, San Diego and Fullerton, California. As an associate archaeologist, completed the in-person records search for a variety of projects at both the South Coastal Information Center and the South Central Coastal Information Center. (2022–Ongoing)

California Statewide Flake Tool Analysis, In-House Dudek Research, San Diego County, California. As a field technician, completed training in flaked stone debitage and flaked tool analysis to support a statewide study. (2017–2018)

Specialized Training

- Metal Detecting Applications in Archaeology, Society for American Archaeology. 2025.
- Submerged Cultural Resources Awareness Workshop (Society for Historical Archaeology Conference): An Advisory Council on Underwater Archaeology (ACUA) Seminar. 2024.
- Underwater Cultural Heritage: An ACUA Seminar. 2020.
- New Miner Certification, Mine Safety and Health Administration. 2020.
- The Art and Science of Flintknapping, University of California Riverside Extension. 2019.
- Artifact Illustration Course. 2018.

Presentations

"A Chronological Analysis of Fish Ridge, San Miguel Island, Channel Islands, California", 2020. Presented at California State University, San Bernardino's 9th Annual Meeting of the Minds.

Matthew DeCarlo, MA, RPA

ARCHAEOLOGIST

Mr. DeCarlo is an archaeologist with 19 years' professional experience with both technical and project management expertise. His project management skills include project proposals, client and Native American coordination, task delegation, and junior staff mentorship. He has supervised teams of archaeologists in conducting archaeological surveys ranging from single residential lot developments to large-scale utility, residential, and energy developments spanning multiple counties, states, and local regulating agencies. He has conducted significance evaluation testing and guided clients through the management of National Register of Historic Places (NRHP) eligible resources. He has developed monitoring plans and overseen monitoring programs, ensuring archaeologists and Native American monitors adhere to certified project's mitigation measures and conditions of approval. His previous experience with varying project types enables Mr. DeCarlo to aid clients in identifying project constraining resources early in project development, navigating agency regulations, and producing cultural resource documents in compliance with the California Environmental Quality Act (CEQA) and Section 106 of the National Historic Preservation Act (NHPA). Contracting directly with lead agencies, Mr. DeCarlo has developed and conducted archaeological sensitivity models to guide Specific Plan and General Plan updates, developed long-term cultural resources management protocols, and facilitated tribal consultation under Assembly Bill 52, Senate Bill 18, and federal regulations.



Education

California State University, Bakersfield
M.A., Anthropology, 2018

University of California, Irvine
B.A., Anthropology, 2006

Certifications

Registered Professional Archaeologist (RPA)

Professional Affiliations

San Diego Archaeological Society

Society for American Archaeology

Society for California Archaeology

Project Experience

Confidential Energy Project, San Bernardino County, California, and Clark County, Nevada. Serving as cultural resources project lead in support of a proposed energy project on private and public lands within California and Nevada. Responsibilities included proposing multiple cultural resources budgets as project scope and location were augmented, dispersing teams of archaeologists to conduct archival records searches at state and Bureau of Land Management (BLM) data centers, and obtaining field work permits across multiple agency jurisdictions. Supervised multiple archaeological survey teams and delegated reporting tasks to produce CEQA and County compliant CEQA reports and Class I and Class III compliant reports for the BLM. Aided the project proponent in analyzing multiple linear project options and considering cultural resource constraints including NRHP eligible sites and visual impacts to a National Historic Trail. Participate in a weekly management meeting with client and other resource representatives to guide project developments including restructuring project sites to avoid significant cultural resources. (Ongoing)

Confidential Energy Project, San Bernardino County, California. Serving as cultural resources project lead in support of a proposed energy project on private and public lands within California. Responsibilities include proposing multiple cultural resources budgets as project scope and location continually change, conducting archival records searches at state and BLM data centers, and draft Class I documents compliant with BLM regulations. Aided the project proponent in analyzing multiple linear project options and considering cultural

resource constraints. Participate in weekly management meeting with client and other resource representatives to guide project developments due to recent federal regulation changes. (Ongoing)

Imperial County Lithium Valley Specific Plan, Imperial County, California. Serving as cultural resources project lead for the proposed Lithium Valley Specific Plan to support the expansion of renewable energy development, lithium extraction, and associated infrastructure and industrial uses. Oversaw the review of archival records searches, GIS analysis of topography, and pedestrian survey of a sample of the 50,000-acre Specific Plan area. Developed a cultural resources sensitivity model to guide the County in its cultural resource management for future developments under the Specific Plan. Participated in multiple tribal consultations and advised the County on tribal cultural resource regulations to develop mutually beneficial mitigation measures. (Ongoing)

The Trails at Carmel Mountain Ranch Project, Carmel Mountain Ranch Community, City of San Diego, San Diego County, California. Served as cultural resources project lead for a proposed residential development in San Diego, California. Responsibilities included proposing cultural resources budget, analysis of archived records, aerial photographs, and Native American outreach. Subcontracted Native American monitors and supervised the reconnaissance survey of the project area. Analyzed possible impacts to cultural resources within the project area and produced a report summarizing the finding of the cultural resources inventory including resource management recommendations. (Ongoing)

City of Vista General Plan Update 2025, City of Vista, San Diego County, California. Served as cultural resources project lead for the proposed City of Vista General Plan Update 2025. To aid the City in addressing recent state statues, guidance, and requirements applicable to land use planning, Mr. DeCarlo conducted a desktop cultural resources inventory to identify potential cultural resource constraints for the General Plan Update. Analysis included the review of archived records, aerial photographs, and Native American outreach. Utilizing this data, coupled with GIS analysis of the City's topography and watersheds, developed a cultural resources sensitivity model for the City's approximately 12,000-acre jurisdiction. This model categorized the areas of the City as low, moderate, and high for their potential to identify cultural resources during future development. (2025)

City of San Diego Underground Utility Program, Various Projects, City of San Diego, San Diego County, California. Served as manager for the cultural resource monitoring of a citywide utility underground program in the City of San Diego. Responsibilities included consultation with program representatives, scheduling and management of field technicians, oversite of daily field logs, recordation of identified cultural resources, and constructing a summary document at the completion of each project phase. (2025)

Confidential Energy Project, Esmeralda County, Nevada. Served as cultural resources project lead for a Class III cultural resources inventory on BLM administered land in support of a proposed energy project in Esmeralda County, Nevada. Responsibilities included proposing cultural resources budget and analysis of archived records and aerial photographs. Acted as field lead during archaeological and paleontological pedestrian survey. Confirmed status of known cultural resources and recorded previously unidentified cultural resources within project area. Coordinated with BLM field office archaeologist to categorize identified resources and analyze possible impacts to cultural resources within the project area. Completed a report summarizing the finding of the cultural resources inventory including resource management recommendations. (2024)

The Ivanhoe Ranch Estates Project, Rancho San Diego, San Diego County, California. Served as cultural resources project lead for the residential development. Following the initial cultural resources inventory and significance testing conducted by another cultural resources firm, Dudek continued the cultural resources review. Responsibilities included negotiating on behave of the client to obtain the previously collected cultural material and excavation notes from the previous firm, reviewing existing data, and completing final documentation to CEQA

and County of San Diego standards. In consultation with the County of San Diego and Native American representatives, conducted expanded archaeological excavations of an archaeological site to redefine the boundaries of a County Resource Protection Ordinance (RPO) and produced an addendum report. Advised the project proponent on redefining the project site to avoid the reduced RPO. (2024).

Municipal Waterways Maintenance Plan, City of San Diego, San Diego County, California. Served as cultural resources project lead for a proposed streamlining plan for routine maintenance of City of San Diego waterway facilities. Determined cultural sensitivity of City waterway facilities through analysis of archived records, aerial photographs, and Native American outreach. Conducted site visits of project facilities while coordinating with Native American representatives. Contributed to Program certification by completing a CEQA compliant technical report summarizing cultural resources impact analysis, resource management considerations, and mitigation measures. Streamlined agency project review by synthesizing proposed maintenance activities within 129 waterway facilities, resource sensitivities, and required mitigation measures into an easily used matrix. Agency staff with no cultural resource specialization can utilize this matrix to ensure project activities are in compliance with specified mitigation measures. Analyzed consistency of individual projects with the MWMP EIR and developed a Cultural Resources Monitoring and Treatment Plans to manage impacts to cultural resources. (2024)

East Field Battery Energy Storage System Project, San Diego, California. Served as cultural resources project lead for the cultural resources inventory in support of a proposed battery energy storage system (BESS) in San Diego County, California. Responsibilities included proposing cultural resources budget, analyzing archival records and aerial photographs, Native American coordination, pedestrian survey, and preparing a final report. Guided NEER's internal tribal liaison in the identification and coordination with regionally affiliated Native American representatives. Acted as field lead during archaeological pedestrian survey and confirmed status of known cultural resources and recorded previously unidentified cultural resources within project area. Identified an inconsistency in the site plan delivered to the County, resulting in mitigation measures that would not protect known NRHP eligible cultural resources from project impacts. By notifying the project proponents and the County of San Diego, prevented destruction of significant cultural resources and fines for the project proponent. Analyzed possible impacts to cultural resources within the project area and completed a report summarizing the finding of the cultural resources inventory including resource management recommendations in conformance with CEQA and County of San Diego regulations. (2024)

San Diego State University Mission Valley Campus Master Plan Project, City of San Diego, California. Served as cultural resources project lead for the proposed SDSU Mission Valley Campus Master Plan. Responsibilities included analysis of archived records, aerial photographs, and Native American outreach. Native American outreach included presenting at Native American project scoping meetings, AB-52 notifications, and attending AB-52 consultation meetings to aid SDSU negotiate tribal mitigation measures. Conducted a pedestrian survey of the project area. Produced both CEQA and Section 106 compliant reports summarizing the finding of the cultural resources inventory including a cultural resources impact analysis, projected resource sensitivities, resource management recommendations, and mitigation measures. (2024)

San Diego State University Fenton Parkway Bridge Project, City of San Diego, California. Served as cultural resources project lead for the proposed SDSU Fenton Parkway Bridge Project. Responsibilities included analysis of archived records, aerial photographs, and Native American outreach. Conducted a pedestrian survey of the project area. Produced both CEQA and Section 106 compliant reports summarizing the finding of the cultural resources inventory including a cultural resources impact analysis, projected resource sensitivities, resource management recommendations, and mitigation measures. (2024)

City of San Diego Underground Utility Program EIR, City of San Diego, San Diego County, California. Served as cultural resources lead for an inventory and evaluation report supporting the Underground Utilities Program in the City of San Diego. Responsibilities included analysis of archived records, aerial photographs, and Native American outreach. Developed criteria to categorize over 800 proposed districts and possible future districts based on cultural sensitivity. Produced a CEQA and City of San Diego compliant report that included mitigation measures for specific district categories to reduce impacts to resources to a less than significant level. (2024)

Double Butte Battery Energy Storage System Project, City of Menifee, California. Served as cultural resources project lead for the cultural resources inventory in support of a proposed battery energy storage system (BESS). Responsibilities included proposing cultural resources budget, delegation of analysis of archived records and aerial photographs, Native American coordination, and pedestrian survey, and mentored junior archaeologist in the preparation of the final report. Assured quality and accuracy of the cultural resources inventory including resource management recommendations in conformance with CEQA. (2023)

Juniper Energy Project, San Bernardino County, California. Served as cultural resources project lead for the cultural resources inventory in support of a proposed solar energy project in San Bernardino County, California. Responsibilities included proposing cultural resources budget, analysis of archived records, aerial photographs, and Native American consultation. Acted as field lead during archaeological pedestrian survey. Confirmed status of known cultural resources and recorded previously unidentified cultural resources within project area. Analyzed possible impacts to cultural resources within the project area and completed a report summarizing the finding of the cultural resources inventory including resource management recommendations. (2023)

UCSD Theater District Living and Learning Neighborhood Project, La Jolla, San Diego County, California. Managed the cultural resource monitoring program for a university neighborhood construction project. Responsibilities included proposing cultural resources budget, developing a Workers Environmental Awareness Program and delivering it to project personnel, and subcontracting Native American monitors. Oversaw archaeological and Native American monitoring teams to assure compliance with project mitigation measures as dictated in a UCSD approved cultural resources mitigation monitoring and reporting program. Evaluated unanticipated cultural resources and recommended mitigation in consultation with UCSD and Native American representatives. Reviewed monitoring team's daily logs and completed a monitoring report summarizing monitoring activities. (2023)

Confidential Energy Project, Clark County, Nevada. Participated in a Class III cultural resources inventory in support of a confidential energy project on BLM administered land in Clark County, Nevada. Responsibilities included analysis of archived records and aerial images. Participated in archaeological pedestrian survey. (2022)

Mountain View Wind Repower Project, Riverside County, California. Served as cultural resources project lead for the cultural resources inventory and evaluation in support of a proposed wind repowering project in Riverside County, California. Responsibilities included proposing cultural resources budget, analysis of archived records, aerial photographs, and Native American outreach. Acted as field lead during archaeological and paleontological pedestrian survey. Confirmed status of known cultural resources and recorded previously unidentified cultural resources within project area. Analyzed possible impacts to cultural resources within the project area and completed a report summarizing the finding of the cultural resources inventory including resource management recommendations. (2022)

Coachella Flats Wind Project, City of Palm Springs, Riverside County, California. Managed the cultural resource monitoring program for the wind energy repowering project. Responsibilities included proposing cultural resources budget, developing a Workers Environmental Awareness Program and delivering it to project personnel, and

subcontracting Native American monitors. Oversaw archaeological and Native American monitoring teams to assure compliance with project mitigation measures and avoidance of known cultural resources. Evaluated unanticipated cultural resources and recommended mitigation in consultation with the City of Palm Springs and Native American representatives. Reviewed monitoring team's daily logs and completed a monitoring report summarizing monitoring activities and unanticipated finds. (2021)

Desert Hot Springs Wind Energy Repowering Project, City of Desert Hot Springs, Riverside County, California. Managed the cultural resource monitoring program for the wind energy repowering project. Responsibilities included proposing cultural resources budget, developing a Workers Environmental Awareness Program and delivering it to project personnel, and subcontracting Native American monitors. Oversaw archaeological and Native American monitoring teams to assure compliance with project mitigation measures and avoidance of known cultural resources. Evaluated unanticipated cultural resources and recommended mitigation in consultation with the City of Desert Hot Springs and Native American representatives. Reviewed monitoring team's daily logs and completed a monitoring report summarizing monitoring activities and unanticipated finds. (2021)

Painted Hills Wind Energy Repowering Project, Riverside County, California. Managed the cultural resource monitoring program for the wind energy repowering project. Responsibilities included proposing cultural resources budget, developing a Cultural Resources Monitoring Plan, developing a Workers Environmental Awareness Program and delivering it to project personnel, and subcontracting Native American monitors. Oversaw archaeological and Native American monitoring teams to assure compliance with project mitigation measures and avoidance of known cultural resources. Evaluated unanticipated cultural resources and recommended mitigation in consultation with the County Archaeologist and Native American representatives. Reviewed monitoring team's daily logs and completed a Phase IV Monitoring Report summarizing monitoring activities and unanticipated finds. (2021)

San Jacinto II Wind Energy Repowering Project, Riverside County, California. Managed the cultural resource monitoring program for the wind energy repowering project. Responsibilities included proposing cultural resources budget, developing an Archaeological Monitoring, Post-Review Discovery, and Unanticipated Effects Plan, developing a Workers Environmental Awareness Program and delivering it to project personnel, and subcontracting Native American monitors. Oversaw archaeological and Native American monitoring teams to assured compliance with project mitigation measures and avoidance of known cultural resources. Evaluated unanticipated cultural resources and recommended mitigation in consultation with the BLM and Native American representatives. Reviewed monitoring team's daily logs and completed a Cultural Resources Monitoring and Discovery Report summarizing monitoring activities and unanticipated finds. (2021)

Ida Avenue Residential Development Project, City of Del Mar, San Diego County, California. Served as cultural resources project lead for a proposed residential development in Del Mar, California. Responsibilities included proposing cultural resources budget, analysis of archived records, aerial photographs, and Native American outreach. Subcontracted Native American monitors and conducted a pedestrian survey of the project area. Analyzed possible impacts to adjacent cultural resources and produced a report summarizing the finding of the cultural resources inventory including resource management recommendations. (2021)

2020 SeaWorld Master Plan Update, City of San Diego, San Diego County, California. Served as archaeological resources project lead for the proposed update of the SeaWorld Master Plan in San Diego, California. Responsibilities included analysis of archived records, aerial photographs, and Native American outreach. Analyzed archival information compared to the topography of the property to determine the Master Plan's

potential to impact cultural resources. Produced a report summarizing the finding of the cultural resource sensitivity and the projects potential to impact resources. (2021)

Sage Meadow Residential Development Project, City of Valley Center, San Diego County, California. Managed the cultural resource monitoring of the construction of a residential building near the Community of Valley Center, California. Responsibilities included proposing cultural resources budget, administration of contract, scheduling and management of field technicians, coordination with and subcontracting of Native American representatives, oversite of daily field logs, recordation of identified cultural resources, and submitting a summary document at the completion of the project. (2020)

The Jacumba Valley Ranch Energy Park Project, San Diego County, California. Served as cultural resources project lead for a proposed solar energy project in San Diego County, California. Led the cultural resources inventory including an archival records search, Native American outreach, and pedestrian survey of the 643-acre area of direct impact. Recorded or updated 30 new or previously recorded cultural resources within the project's area of direct impact and conducted significance testing of 17 cultural resources. Advised the project proponents of significant resources within the area of direct impact and aided in the redevelopment of the project site plan to avoid resources where feasible. Produced a report summarizing the finding of the cultural resources inventory including resource management recommendations in compliance with CEQA and Count of San Diego regulations. Aided County planners in responding to public comments during the certification process of the project environmental impact report. (2019).

Montgomery Middle School Field Lighting Project, City of El Cajon, San Diego County, California. Served as cultural resources project lead for a proposed installation of athletic field lighting in the El Cajon, California. Responsibilities included proposing cultural resources budget, analysis of archived records, aerial photographs, and Native American outreach. Analyzed possible impacts to cultural resources and produced a report summarizing the findings of the cultural resources analysis including resource management recommendations. (2019)

Federal Update for the North Indio Flood Control Channel Project, City of Indio, Riverside County, California. Served as archaeological resources project lead for the updating of state environmental documents for federal regulation compliance for a flood control project in Indio, California. Responsibilities included analysis of previously conducted document, identification of shortfalls with federal regulations, proposed additional archaeological testing for federal compliance, and coordination with project proponents. Conducted archaeological testing and completed a resource significance report for submission to and concurrence from the State Historic Preservation Office. (2019)

East Highline Reservoir Project, City of El Centro, Imperial County, California. Served as cultural resources project lead for a proposed main canal offline storage reservoir project outside the City of El Centro. Responsibilities included analysis of archived records, aerial photographs, and Native American outreach. Also conducted a pedestrian survey of the project area. Produced a report summarizing the finding of the cultural resources inventory including an impact analysis of a National Register of Historic Places listed resource, resource management recommendations, and mitigation measures. (2019)

All-American Canal Surface Waters Seepage Recovery Project, City of El Centro, Imperial County, California. Served as cultural resources project lead for a proposed water recovery project outside the City of El Centro. Responsibilities included analysis of archived records, aerial photographs, and Native American outreach. Also conducted a pedestrian survey of the project area. Produced a report summarizing the finding of the cultural

resources inventory including a cultural resources impact analysis comparing alternate project routes, resource management recommendations, and mitigation measures. (2018)

North City Project, City of San Diego, San Diego County, California. Served as cultural resources project lead for the proposed construction of a water purification program in the City of San Diego. Responsibilities included analysis of archived records, aerial photographs, and Native American outreach. Aided the City with AB-52 tribal consultation and conducted a pedestrian survey of the project area while coordinating with a Native American monitors. Produced a report summarizing the finding of the cultural resources inventory including a cultural resources impact analysis comparing alternate project routes, resource management recommendations, and mitigation measures. (2018)

Morena Pipelines Project, City of San Diego, San Diego County, California. Served as cultural resources project lead for a proposed utility pipeline installation project in the City of San Diego. Responsibilities included analysis of archived records, aerial photographs, and Native American outreach. Also conducted a pedestrian survey of the project area in coordination with a Native American monitor. Produced a report summarizing the finding of the cultural resources inventory and resource management recommendations including mitigation measures. (2018)

1237 West 7th Street Project, City of Los Angeles, Los Angeles County, California. Served as lead analyst and report author for a tribal cultural resources assessment for a proposed urban development project in the City of Los Angeles. Responsibilities included analysis of archived records, aerial photographs, and Native American outreach. Produced a report indicating the presence and the probability of encountering subsurface tribal cultural resources during construction. (2018)

1375 North Saint Andrews Place Project, City of Los Angeles, Los Angeles County, California. Served as lead analyst and report author for a tribal cultural resources assessment for a proposed urban development project in the City of Los Angeles. Responsibilities included analysis of archived records, aerial photographs, and Native American outreach. Produced a report indicating the presence and the probability of encountering subsurface tribal cultural resources during construction. (2018)

Fig Project, City of Los Angeles, Los Angeles County, California. Served as lead analyst and report author for a tribal cultural resources assessment for a proposed urban development project in the City of Los Angeles. Responsibilities included analysis of archived records, aerial photographs, and Native American outreach. Produced a report indicating the presence and the probability of encountering subsurface tribal cultural resources during construction. (2018)

Adams Solar Farm Project, City of Lind, Adams County, Washington. Developed an inadvertent discovery plan for utilization during the development of a solar farm. (2018)

Sanders Site Vernal Pool Mitigation Project in Support of the Pure Water San Diego Program, North City Project, City of San Diego, San Diego County, California. Managed the cultural resource inventory and monitoring program for the vernal pool mitigation project in support of a City-wide recycled water purification program in City of San Diego, California. Responsibilities included proposing cultural resources budget, analysis of archived records, aerial photographs, and Native American outreach. Subcontracted Native American monitors and conducted a pedestrian survey of the project area and produced a report summarizing the finding of the cultural resources inventory including resource management recommendations. Managed the cultural resource monitoring phase of the project including scheduling and management of field technicians, coordination with and subcontracting of Native American representatives, oversite of daily field logs, recordation of identified cultural resources, and submitting a summary document at the completion of the project. (2017)

Oceanside Campus Facilities Master Plan Project, City of Oceanside, San Diego County, California. Served as archaeological resources project lead for a proposed renovation and redevelopment of the Oceanside Campus within the MiraCosta Community College District. Responsibilities included analysis of archived records, aerial photographs, and Native American outreach. Conducted a pedestrian survey of the project area and coordination with a Native American monitor. Aided the District with AB 52 consultation including hosting project site visits with Native American representatives. Produced a report summarizing the finding of the cultural resources inventory and resource management recommendations including mitigation measures. (2017)

San Diego State University New Student Housing Project, City of San Diego, California. Served as cultural resources project lead for the proposed SDSU New Student Housing Project. Responsibilities included analysis of archived records, aerial photographs, and Native American outreach. Native American outreach included a search of the Sacred Lands File at the Native American Heritage Committee, distribution and tracking of AB-52 notifications, and participating in AB-52 consultation meetings. Conducted a pedestrian survey of the project area and produced a report summarizing the finding of the cultural resources inventory including a cultural resources impact analysis, projected resource sensitivities, resource management recommendations, and mitigation measures. (2017)

Kaiser Permanente Irwindale Medical Office Building Project, City of Irwindale, Los Angeles County, California. Managed the cultural resource monitoring of the construction of a Kaiser Permanente medical building in the City of Irwindale. Responsibilities included consultation with program representatives, scheduling and management of field technicians, coordination with Native American representatives, oversite of daily field logs, recordation of identified cultural resources, and submitting a summary document at the completion of the project. (2017)

Fairway Business Park Project, Lake Elsinore, Riverside County, California. Managed the cultural resource monitoring of the construction of a business park in the City of Lake Elsinore. Responsibilities included consultation with program representatives, scheduling and management of field technicians, coordination with Native American representatives, oversite of daily field logs, recordation of identified cultural resources, and constructing a summary document at the completion of the project. (2017)

21st Street Ditch Project, City of Del Mar, San Diego County, California. Aided the City of Del Mar with AB-52 compliance for a proposed wastewater improvement project in the City of Del Mar. Drafted Responsibilities included drafting an AB-52 letter on the City's behalf requesting Native American representative consultation. (2017)

MedVic/MccVic Tower Repair Project, near the City of Yermo, San Bernardino County, California. Served as cultural resources project lead for a proposed electrical transmission tower repair project outside the City of Yermo. Responsibilities included analysis of archived records, aerial photographs, and Native American outreach. Also conducted a pedestrian survey of the project area. Produced a report summarizing the finding of the cultural resources inventory including an impact analysis of a National Register of Historic Places listed resource, resource management recommendations, and avoidance measures. (2016)

Kaiser Permanente Murrieta Valley Medical Center Project, City of Murrieta, Riverside County, California. Managed the cultural resource monitoring of the construction of a Kaiser Permanente medical center in the City of Murrieta. Responsibilities included consultation with program representatives, scheduling and management of field technicians, coordination with Native American representatives, oversite of daily field logs, recordation of identified cultural resources, and submission of a summary document at the completion of the project. (2016)

Kettner Lofts Project, City of San Diego, San Diego County, California. Managed the preliminary cultural resources testing and the construction monitoring of the Kettner Lofts housing development in the City of San Diego. Responsibilities included directing construction personnel in the excavation of testing trenches, documentation of subsurface findings, and consulting with program representatives to establish an appropriate monitoring plan. Management of construction monitoring included scheduling and management of field technicians, coordination with Native American representatives, oversite of daily field logs, recordation of identified cultural resources, and submission of a summary document at the completion of the project. (2016)

Rincon Del Diablo Sewer Master Plan Project, San Diego County, California. Served as cultural resources project lead for the proposed sewer master plan near the City of Escondido. Responsibilities included analysis of archived records, aerial photographs, and Native American outreach. Conducted a pedestrian survey of the project area. Produced a report summarizing the finding of the cultural resources inventory including a cultural resources impact analysis comparing alternate project routes and resource management recommendations. (2016)

Terra Vista Development Project, Victorville, San Bernardino County, California. Served as cultural resources project lead for a proposed residential development in Rancho Cucamonga. Responsibilities included analysis of archived records, aerial photographs, and Native American outreach. Also conducted a pedestrian survey of the project area. Produced a report summarizing the finding of the cultural resources inventory including resource management recommendations. (2016)

Commercial Development Project, Morongo Valley, San Bernardino County, California. Served as cultural resources project lead for a proposed commercial development on Twenty-nine Palms Highway, Morongo Valley. Responsibilities included analysis of archived records, aerial photographs, and Native American outreach. Also conducted a pedestrian survey of the project area. Produced a report summarizing the finding of the cultural resources inventory including resource management recommendations. (2016)

South Amargosa Plaza Project, Victorville, San Bernardino County, California. Served as cultural resources project lead for a proposed commercial development in Victorville. Responsibilities included analysis of archived records, aerial photographs, and Native American outreach. Also conducted a pedestrian survey of the project area. Produced a report summarizing the finding of the cultural resources inventory including resource management recommendations. (2016)

RCP Walker Trails Project, City of Santee, San Diego County, California. Served as cultural resources project lead for the proposed construction of a residential community in the City of Santee. Responsibilities included analysis of archived records, aerial photographs, and Native American outreach. Conducted a pedestrian survey of the project area in coordination with a Native American Monitor. Produced a report summarizing the finding of the cultural resources inventory including a cultural resource impact analysis and management recommendations. (2016)

1836 Columbia Street Project, City of San Diego, San Diego County, California. Served as cultural resources project lead for a proposed urban development project in the City of San Diego. Responsibilities included analysis of archived records, aerial photographs, and Native American outreach. Also conducted a pedestrian survey of the project area and coordination with a Native American monitor. Produced a report summarizing the finding of the cultural resources inventory and mitigation recommendations. (2016)

West of Devers Upgrade Project, Southern California Edison (SCE), Riverside and San Bernardino Counties, California. Served as project manager for a cultural resource impact assessment for a dual transmission line upgrade spanning from North Palm Springs to San Bernardino, California. Tasks included implementing

archaeological surveys and excavations, producing a cultural resource evaluation report, and participation in construction site visits with SCE staff and construction specialists to resolve construction/resource conflicts. Preconstruction activities are nearing completion. (2016)

Devers to Palo Verde 2 (DPV2) Transmission Line Project, SCE, Riverside County, California. Served as field director for the archaeological monitoring and resource management for the construction of a 500-kV transmission line spanning from Blythe to Romoland, California. Tasks included conducting archaeological surveys and excavations; managing construction monitoring teams; producing cultural resource records and reports; and consulting with SCE, construction, and Native American representatives. The final cultural resource report has been submitted and is awaiting approval. (2014)

Mountain Top Healthy Trees Project, USFS, Mount Pinos Ranger District, Santa Barbara County, California. Served as acting district archaeologist for a proposed tree thinning project. To ensure that no previously recorded resources were impacted during the tree mastication, Mr. DeCarlo conducted a records search, delineated mastication boundaries, and monitored the mastication activities. (2010)

ARRA Wilderness Trails Restoration Project, USFS, Mount Pinos Ranger District, Santa Barbara and Ventura Counties, California. Served as acting district archaeologist. Fulfilled cultural resource requirements for National Environmental Policy Act (NEPA) compliance to ensure the Mount Pinos Ranger District of the Los Padres Forest received American Recovery and Reinvestment Act (ARRA) federal funds to conduct trail work within wilderness areas. This required consultation with USFS supervisors to construct a viable timetable, completion of a records search, intensive survey of trails, and collaboration with trail maintenance crew chiefs to protect threatened cultural resources. (2010)

Day Fire Reforestation Project, USFS, Mount Pinos Ranger District, Ventura County, California. Served as acting district archaeologist for the reforestation of areas burned during the 2007 Day Wildfire. Prior to the planting of pine tree saplings, Mr. DeCarlo performed a records search, conducted an archaeological inventory, and evaluated the post-fire condition of previously identified archaeological sites. A survey report and archaeological site records were submitted to the Los Padres National Forest Headquarters. (2010)

Sierra Madre Ridge Archaeological Survey and Rock Art Recordation Project, USFS, Mount Pinos Ranger District, Santa Barbara County, California. Served as field chief for the Sierra Madre Ridge Project, a Section 110 of the National Historic Preservation Act project consisting of three 1-week expeditions to update site records and survey previously unrecorded portions of a known archaeological district. Tasks included leading and training volunteer teams in survey and site recordation methods, updating previously recorded archaeological sites, identification of new sites, surveying previously unrecorded land, and managing fuels near significant sites to prevent possible fire damage. A survey report, site records, and GIS mapping were completed and submitted to the Los Padres National Forest Headquarters. (2009)

NEPA Compliance for the New Chuchupate Ranger Station, USFS, Mount Pinos Ranger District, Ventura County, California. Served as acting district archaeologist. To ensure NEPA compliance and ensure acquisition of ARRA federal funds, conducted a records search, collaborated with the Forest Tribal Liaison, updated previously recorded sites, mapped the existing Chuchupate Ranger Station, conducted an intensive survey, contracted an architectural historian, and submitted a report to the Los Padres National Forest Headquarters. (2009)

Sapaski (Painted Rock) Tribal Protection Meeting, USFS, Mount Pinos Ranger District, Ventura County, California. Served as acting district archaeologist for the Sapaski Tribal Protection Meeting, a collaborative effort with tribal representatives and USFS supervisors to protect a significant rock art resource. Conducted a records search and suggested possible protection strategies to tribal representatives. (2009)

Archaeological Investigation for the Yellow Jacket Fire Project, USFS, Mount Pinos Ranger District, Ventura County, California. Served as acting district archaeologist for the archaeological investigation after the Yellow Jacket Fire. Conducted a records search to identify any previously identified cultural resource within burned or staging areas, appraised sites impacted by both fire and fire-fighting measures, consulted with fire personnel to determine possible impacts, and submitted a report to the Los Padres National Forest Headquarters. (2009)

Appendix B (Confidential)

South Coastal Information Center Records Search Results

Appendix C

Native American Heritage Commission and
Native American Outreach

APPENDIX C

Native American Heritage Commission
and Native American Outreach

Tribal Consultation List Request &
Sacred Lands File Search

Native American Heritage Commission
1550 Harbor Blvd, Suite 100
West Sacramento, CA 95691
916-373-3710
nahc@nahc.ca.gov

***Type of List Requested**

- [x] **Tribal Consultation List - CEQA**
- [ ] **Tribal Consultation List - SB18**
- [ ] **Tribal Contact List (for Cultural Resources Assessments)**
- [ ] **CalNAGPRA**

Project Information

***Project Title:** San Diego River Fire Hazard Mitigation Plan

***Address:** SD River Corridor

***City:** San Diego ***County:** San Diego

Project Description:

The City of Santee is proposing removal of combustible vegetation along the San Diego River corridor for fire management. Dudek is requesting a search of the Sacred Land File.

***Agency/Company/Firm** Dudek

***Contact Person:** Matthew DeCarlo

***Email:** mdecarlo@dudek.com

Phone: 760-815-7067

Additional Request

- [x] **Sacred Lands File Search - *Required Information:***

USGS (7.5-Minute, 1:24,000) Quadrangle Name(s):

La Mesa and El Cajon

Township: 15S **Range:** 1W **Section:** 21, 22, 23, 27, 28, 29

NATIVE AMERICAN HERITAGE COMMISSION

CHAIRPERSON
Reginald Pagaling
Chumash

VICE-CHAIRPERSON
Buffy McQuillen
Yokayo Pomo, Yuki, Nomlaki

SECRETARY
Isaac Bojorquez
Ohlone-Costanoan

PARLIAMENTARIAN
Wayne Nelson
Luiseño

COMMISSIONER
Sara Dutschke
Miwok

COMMISSIONER
Stanley Rodriguez
Kumeyaay

COMMISSIONER
Bennae Calac
Pauma-Yuima Band of Luiseño Indians

COMMISSIONER
Vacant

COMMISSIONER
Vacant

EXECUTIVE SECRETARY
Andrew Alejandre
Paskenta Band of Nomlaki Indians

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov

December 10, 2025

Matthew DeCarlo
Dudek

Via Email to: mdecarlo@dudek.com

Re: Tribal Consultation Under CEQA, San Diego River Fire Hazard Mitigation Plan Project, San Diego County

To Whom It May Concern:

Pursuant to your request, attached is a consultation list of tribes that are traditionally and culturally affiliated with the geographic area of the above-listed project. Additionally, a search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed based on the information submitted for the above referenced project. The results were positive. Please contact the Barona Group of the Capitan Grande and the Viejas Band of Kumeyaay Indians on the attached list for more information. Please also contact the Kumeyaay Cultural Repatriation Committee via phone at (760) 803-5694 for more information. Be aware that tribes do not always record their sacred sites in the SLF, nor are they required to do so. As such, an SLF search is not a substitute for consultation with all tribes that are traditionally and culturally affiliated with a project's geographic area. Please contact all of the listed tribes as they may have information about sacred sites within the project area that is not listed with the NAHC.

Additionally, the NAHC recommends that agencies include with their notification letters, information regarding any cultural resources assessment that has been completed on the area of potential effect (APE), such as:

1. The results of any record search that may have been conducted at an Information Center of the California Historical Resources Information System (CHRIS), including, but not limited to:

- A listing of any and all known cultural resources that have already been recorded on or adjacent to the APE, such as known archaeological sites;
- Copies of any and all cultural resource records and study reports that may have been provided by the Information Center as part of the records search response;
- Whether the records search indicates a low, moderate, or high probability that unrecorded cultural resources are located in the APE; and
- If a survey is recommended by the Information Center to determine whether previously unrecorded cultural resources are present.

2. The results of any archaeological inventory survey that was conducted, including:

- Any report that may contain site forms, site significance, and suggested mitigation measures.

All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for public disclosure in accordance with Government Code section 6254.10.

3. The result of the Sacred Lands File check conducted through the Native American Heritage Commission.

4. Any ethnographic studies conducted for any area including all or part of the APE; and

5. Any geotechnical reports regarding all or part of the APE.

Lead agencies should be aware that records maintained by the NAHC and CHRIS are not exhaustive and a negative response to these searches does not preclude the existence of a tribal cultural resource. A tribe may be the only source of information regarding the existence of a tribal cultural resource, which is why consultation is vital.

This information will aid tribes in determining whether to request formal consultation. If consultation is requested, having the information beforehand will help to facilitate the process.

If you receive notification of a change of address or phone number from a tribe, please inform the NAHC. With your assistance, we can assure that our consultation list remains current.

If you have any questions or require additional information, please contact me at Andrew.Green@nahc.ca.gov.

Sincerely,

Andrew Green

Andrew Green
Cultural Resources Analyst

Attachment

Tribe Name	Contact Person	Contact Address	Phone #	Email Address
Barona Group of the Capitan Grande	Art Bunce, Attorney	1095 Barona Road Lakeside, CA, 92040	(760) 489-0329	buncelaw@aol.com
Campo Band of Diegueno Mission Indians	Marcus Cuero, Chairperson	36190 Church Road, Suite 1 Campo, CA, 91906	(619) 478-9046	marcuscuero@campo-nsn.gov
Campo Band of Diegueno Mission Indians	Ben Dyche, Vice Chairperson	36190 Church Road, Suite 1 Campo, CA, 91906	(619) 478-9046	bdyche@campo-nsn.gov
Campo Band of Diegueno Mission Indians	Daniel Tsosie, THPO	36190 Church Road, Suite 1 Campo, CA, 91906	(619) 760-6480	dtsosie@campo-nsn.gov
Ewiiaapaayp Band of Kumeyaay Indians	Eduardo Mercado, Principle, Grey Wolf Monitoring	1 Crestwood Road Boulevard, CA, 91905	(619) 301-4794	emercado75@hotmail.com
Iipay Nation of Santa Ysabel	Clint Linton, Director of Cultural Resources	P.O. Box 507 Santa Ysabel, CA, 92070	(760) 803-5694	clint@redtailenvironmental.com
Inaja-Cosmit Band of Indians	Rebecca Osuna, Chairperson	2005 S. Escondido Blvd. Escondido, CA, 92025	(760) 737-7628	

Jamul Indian Village	Lisa Cumper, Tribal Historic Preservation Officer	P.O. Box 612 Jamul, CA, 91935	(619) 669-4855	lcumper@jiv-nsn.gov
Jamul Indian Village	Erica Pinto, Chairperson	P.O. Box 612 Jamul, CA, 91935	(619) 669-4785	epinto@jiv-nsn.gov
La Posta Band of Diegueno Mission Indians	Eric La Chappa, Chairman	8 Crestwood Road Boulevard, CA, 91905	(619) 478-2113	ELaChappa@lptribe.net
Manzanita Band of Kumeyaay Nation	Angela Elliott Santos, Chairperson	P.O. Box 1302 Boulevard, CA, 91905	(619) 766-4930	
Mesa Grande Band of Diegueno Mission Indians	Michael Linton, Chairperson	P.O Box 270 Santa Ysabel, CA, 92070	(760) 782-3818	
San Pasqual Band of Diegueno Mission Indians	Allen Lawson, Chairperson	P.O. Box 365 Valley Center, CA, 92082	(760) 749-3200	
Sycuan Band of the Kumeyaay Nation	Bernice Paipa, Cultural Resource Specialist	Sycuan Cultural Center: 910 Willow Glen Drive El Cajon, CA, 92019	(619) 445-6917	bpaipa2@sycuan-nsn.gov

Sycuan Band of the Kumeyaay Nation	Cody Martinez, Chairman	Sycuan Tribal Office: 1 Kwaaypaay Court El Cajon, CA, 92019	(619) 445-2613	cmartinez@sycuan-nsn.gov
Viejas Band of Kumeyaay Indians	Ernest Pingleton, THPO	1 Viejas Grade Road Alpine, CA, 91901	(619) 445-3810	epingleton@viejas-nsn.gov
Viejas Band of Kumeyaay Indians	Ray Teran, Resource Management Director	1 Viejas Grade Road Alpine, CA, 91901	(619) 659-2312	rteran@viejas-nsn.gov

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for consultation with Native American tribes under Public Resources Code Sections 21080.3.1 for the proposed San Diego River Fire Hazard Mitigation Plan Project, San Diego County.

DUDEK
MAIN OFFICE
605 THIRD STREET
ENCINITAS, CALIFORNIA 92024
T 800.450.1818 F 760.632.0164

December 23, 2025 18611.01

Art Bunce, Attorney
Barona Group of the Capitan Grande
1095 Barona Road
Lakeside, CA, 92040

Subject: Information Request for the San Diego River Fire Hazard Mitigation Plan, City of Santee, San Diego County, California

Dear Mr. Bunce,

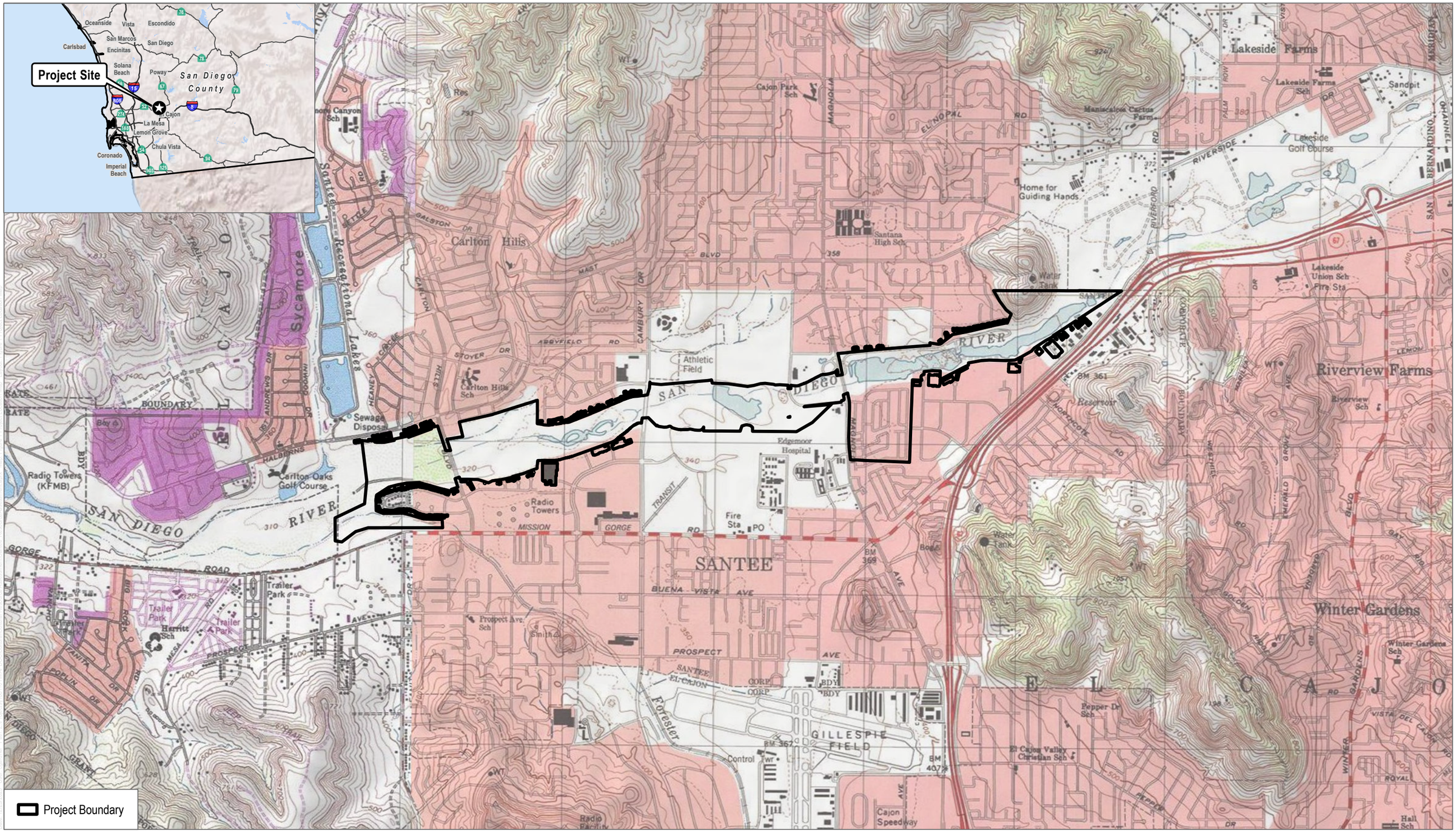
The City of Santee is proposing the San Diego River Fire Hazard Mitigation Plan to reduce wildfire risk by decreasing hazardous fuel loads (flammable vegetation) and mitigating conditions that increase risk of wildlife and fire intensity. Vegetation management/fuel reduction activities will include thinning brush, removing non-native invasive species, and clearing dead vegetation and debris along the San Diego River. Treatments may employ manual (hand tools, chainsaws), mechanical (masticators, chippers), prescribed herbivory, and targeted herbicide applications. The Plan area falls within Township 15 South, Range 1 West, Section 21, 22, 23, 27, 28, and 29 as shown on the La Mesa and El Cajon USGS 7.5' Quadrangles (Figure 1).

The Native American Heritage Commission conducted a Sacred Lands file search. The results were positive. I am writing as part of the cultural inventory process in order find out if you, or your tribal community, have any knowledge of cultural resources or places that may be impacted by the proposed project. This letter does not constitute formal government to government consultation pursuant to Assembly Bill 52.

If you have any information or concerns pertaining to such information, please contact me.

Respectfully,

David Faith, M.A., RPA
Archaeologist
DUDEK
Phone: (442) 232-7313
Email: dfaith@dudek.com



SOURCE: USGS 7.5-Minute Series La Mesa and El Cajon Quadrangles
Township 15S Range 1W Sections 21, 22, 23, 27, 28, 29
1:24,000

DUDEK

0 260 520 Meters
0 1,000 2,000 Feet

FIGURE 1

Project Location Map

San Diego River Fire Hazard Mitigation Plan

Dudek
687 S Coast Highway 101
Ste 110
Encinitas CA 92024

USPS CERTIFIED MAIL



9214 8901 9403 8348 5572 75

MARCUS CUERO CHAIRPERSON
CAMPO BAND OF DIEGUENO MISSION INDIANS
36190 CHURCH RD
STE 1
CAMPO CA 91906-2732

Return Reference Number:18611.01
Username: Marcel Fuentes

Dudek
687 S Coast Highway 101
Ste 110
Encinitas CA 92024

USPS CERTIFIED MAIL



9214 8901 9403 8348 5573 05

BEN DYCHE VICE CHAIRPERSON
CAMPO BAND OF DIEGUENO MISSION INDIANS
36190 CHURCH RD
STE 1
CAMPO CA 91906-2732

Return Reference Number:18611.01
Username: Marcel Fuentes

Dudek
687 S Coast Highway 101
Ste 110
Encinitas CA 92024

USPS CERTIFIED MAIL



9214 8901 9403 8348 5573 29

DANIEL TSOSIE THPO
CAMPO BAND OF DIEGUENO MISSION INDIANS
36190 CHURCH RD
STE 1
CAMPO CA 91906-2732

Return Reference Number:18611.01
Username: Marcel Fuentes

Dudek
687 S Coast Highway 101
Ste 110
Encinitas CA 92024

USPS CERTIFIED MAIL



9214 8901 9403 8348 5573 50

EDUARDO MERCADO PRINCIPLE GREY WOLF MONITORING
EWIIAAPAAYP BAND OF KUMEYAAY INDIANS
1 CRESTWOOD RD
BOULEVARD CA 91905-9725

Return Reference Number:18611.01
Username: Marcel Fuentes

Dudek
687 S Coast Highway 101
Ste 110
Encinitas CA 92024

USPS CERTIFIED MAIL



9214 8901 9403 8348 5581 04

REBECCA OSUNA CHAIRPERSON
INAJA-COSMIT BAND OF INDIANS
2005 S ESCONDIDO BLVD
ESCONDIDO CA 92025-8207

Return Reference Number:18611.01
Username: Marcel Fuentes

Dudek
687 S Coast Highway 101
Ste 110
Encinitas CA 92024

USPS CERTIFIED MAIL



9214 8901 9403 8348 5582 65

LISA CUMPER TRIBAL HISTORIC PRESERVATION OFFICER
PO BOX 612
JAMUL CA 91935-0612

Return Reference Number:18611.01
Username: Marcel Fuentes

Dudek
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Ste 110
Encinitas CA 92024

USPS CERTIFIED MAIL



9214 8901 9403 8348 5582 89

ERICA PINTO CHAIRPERSON
PO BOX 612
JAMUL CA 91935-0612

Return Reference Number:18611.01
Username: Marcel Fuentes

Dudek
687 S Coast Highway 101
Ste 110
Encinitas CA 92024

USPS CERTIFIED MAIL



9214 8901 9403 8348 5583 02

ERIC LA CHAPPA CHAIRMAN
LA POSTA BAND OF DIEGUENO MISSION INDIANS
8 CRESTWOOD RD
BOULEVARD CA 91905-9725

Return Reference Number:18611.01
Username: Marcel Fuentes

Dudek
687 S Coast Highway 101
Ste 110
Encinitas CA 92024

USPS CERTIFIED MAIL



9214 8901 9403 8348 5583 19

ANGELA ELLIOTT SANTOS CHAIRPERSON
MANZANITA BAND OF KUMEYAAY NATION
PO BOX 1302
BOULEVARD CA 91905-0402

Return Reference Number:18611.01
Username: Marcel Fuentes

Dudek
687 S Coast Highway 101
Ste 110
Encinitas CA 92024

USPS CERTIFIED MAIL



9214 8901 9403 8348 5583 71

MICHAEL LINTON CHAIRPERSON
MESA GRANDE BAND OF DIEGUENO MISSION INDIANS
PO BOX 270
SANTA YSABEL CA 92070-0270

Return Reference Number:18611.01
Username: Marcel Fuentes

Dudek
687 S Coast Highway 101
Ste 110
Encinitas CA 92024

USPS CERTIFIED MAIL



9214 8901 9403 8348 5583 88

ALLEN LAWSON CHAIRPERSON
SAN PASQUAL BAND OF DIEGUENO MISSION INDIANS
PO BOX 365
VALLEY CENTER CA 92082-0365

Return Reference Number:18611.01
Username: Marcel Fuentes

Dudek
687 S Coast Highway 101
Ste 110
Encinitas CA 92024

USPS CERTIFIED MAIL



9214 8901 9403 8348 5584 01

BERNICE PAIPA CULTURAL RESOURCE SPECIALIST
SYCUAN BAND OF THE KUMEYAAY NATION
SYCUAN CULTURAL CENTER:
910 WILLOW GLEN DR
EL CAJON CA 92019-2818

Return Reference Number:18611.01
Username: Marcel Fuentes

Dudek
687 S Coast Highway 101
Ste 110
Encinitas CA 92024

USPS CERTIFIED MAIL



9214 8901 9403 8348 5584 32

CODY MARTINEZ CHAIRMAN
SYCUAN BAND OF THE KUMEYAAY NATION
SYCUAN TRIBAL OFFICE:
1 KWAAYPAAY CT
EL CAJON CA 92019-1833

Return Reference Number:18611.01
Username: Marcel Fuentes

Dudek
687 S Coast Highway 101
Ste 110
Encinitas CA 92024

USPS CERTIFIED MAIL



9214 8901 9403 8348 5584 49

ERNEST PINGLETON THPO
VIEJAS BAND OF KUMEYAAY INDIANS
1 VIEJAS GRADE RD
ALPINE CA 91901-1605

Return Reference Number:18611.01
Username: Marcel Fuentes

Dudek
687 S Coast Highway 101
Ste 110
Encinitas CA 92024

USPS CERTIFIED MAIL



9214 8901 9403 8348 5584 63

RAY TERAN RESOURCE MANAGEMENT DIRECTOR
VIEJAS BAND OF KUMEYAAY INDIANS
1 VIEJAS GRADE RD
ALPINE CA 91901-1605

Return Reference Number:18611.01
Username: Marcel Fuentes

David Faith

From: Jason Santos <jasonsantos@manzanita-nsn.gov>
Sent: Friday, January 30, 2026 2:26 PM
To: David Faith
Cc: Angela Elliott Santos; John Elliott; Veronica Santos
Subject: San Diego River Fire Hazard Mitigation Plan

Hello David,

My name is Jason Santos and I am the Lead Monitor and Deputy THPO here at Manzanita Band of the Kumeyaay Nation. We have reviewed our maps and have determined that this project is not within the boundaries of the recognized Manzanita Indian Reservation. However, this project is within the territory boundaries that the tribe considers its Traditional Use Area (TUA). Therefore, we request to be kept in the information loop as the project progresses and would greatly appreciate being maintained on the receiving list for project updates, reports of investigation, and/or any documentation that may be generated regarding previously recorded or newly discovered sites. Furthermore, we recommend archaeological and Tribal Cultural monitoring on all ground disturbing activities given the proximity of known cultural and historic resources. If the project boundaries are modified to extend beyond the currently proposed limits, we request updated information and the opportunity to respond to your changes. We appreciate the outreach and look forward to future involvement. Manzanita offers Tribal Cultural monitoring.

If you have any questions or need additional information, please do not hesitate to contact myself or Veronica Santos (THPO) by telephone at (619) 204-7514 or by e-mail at veronicasantos@manzantia-nsn.gov

Thank you,

Jason Santos
Lead Monitor, Deputy THPO
jasonsantos@manzanita-nsn.gov
(619) 715-6070

David Faith

From: Jason Lavigne <jasonl@sanpasqualtribe.org>
Sent: Friday, February 20, 2026 9:49 AM
To: David Faith
Cc: Desiree Morales Whitman
Subject: San Diego River Fire Hazard Project

Dear David Faith,

The San Pasqual Band of Mission Indians has received your letter regarding the San Diego River Fire Hazard Project.

Currently, the San Pasqual Tribe does not have any comments on the proposed project. However, the Tribe reserves the right to provide comments in the future should additional information become available or circumstances change.

Thank you for the opportunity to review this matter.

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Thank you,

Jason Lavigne
THPO Coordinator
San Pasqual Band of Mission Indians
Email: jaonl@sanpasqualtribe.org
Office: 760-651-5219
Cell: 760-638-7179

Appendix D
(Confidential)

Cultural Resources within Survey Area

Appendix E
(Confidential)

Department of Parks and Recreation Form 523