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RECIRCULATED SECTIONS OF DRAFT ENVIRONMENTAL IMPACT REPORT for the Alpine County Park Project

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Acronyms and Abbreviations

Acronym	Definition
°C	Celsius
µPa	microPascals
2018 Plan	2018 Strategic Fire Plan for California
2050 RTP	2050 Regional Transportation Plan
AB	Assembly Bill
ACM	asbestos containing materials
ACP	Alpine Community Plan
ADA	Americans with Disabilities Act
ADT	average daily traffic
AFPD	Alpine Fire Protection District
AGR	Agricultural Supply
APM	Applicant Proposed Measure
APNs	Assessor's Parcel Numbers
APSA	Aboveground Petroleum Storage Act
AQIA	Air Quality Impact Analysis
ARB	California Air Resources Board
ASCE	American Society of Civil Engineers
ATCM	Air Toxic Control Measure
ATP	Active Transportation Plan
Attainment Plan	Plan for Attaining the National Ozone Standards
AUSD	Alpine Union School District
Basin Plans	water quality control plans
BCLT	Back Country Land Trust
BMO	Biological Mitigation Ordinance
BMP	best management practice
BOS	Board of Supervisors
BP	before present
BRCA	Biological Resource Core Area
BRR	Biological Resources Report
BSA	Biological Survey Area
BSFC	Brake specific fuel consumption
BTU	British thermal unit
ca	circa
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CAFE	Corporate Average Fuel Economy
CAGN	coastal California gnatcatcher
CAL FIRE	California Department of Forestry and Fire Protection

Acronym	Definition
Cal/OSHA	California Division of Occupational Safety and Health
CalARP	California Accidental Release Prevention
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CALGreen	Green Building Standards Code
CalRecycle	California Department of Resource Recycling and Recovery
Caltrans	California Department of Transportation
CAP	Climate Action Plan
CARB	California Air Resources Board
CBC	California Building Code
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CESA	California Endangered Species Act
CFC	California Fire Code
CFR	Code of Federal Regulations
CGS	California Geological Survey
CH_4	methane
Characterization Report	Site Contamination Characterization Report
CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
COLD	Cold Freshwater Habitat
Contract	Williamson Act Contract
County	County of San Diego
County Fire Code	County of San Diego Code of Regulatory Ordinances Title 9, Division 6, Fire Protection
County TSG	County of San Diego Transportation Study Guidelines
CPA	Community Planning Area
CPUC	California Public Utilities commission
CRHR	California Register of Historical Resources
CRMDP	Cultural Resources Monitoring and Discovery Plan
CSAs	County Service Areas
CTR	California Toxics Rule
CUPA	Certified Unified Program Agency

Acronym	Definition
CWA	Clean Water Act
dB	decibel
dBA	A-weighted decibel
DCV	Design Capture Volume
DEHQ	Department of Environmental Health and Quality
Disposal Plan	Soil Disposal Plan
DMA	Drainage Management Area
DOC	California Department of Conservation
DOT	U.S. Department of Transportation
DPM	diesel particulate matter
DPR	Department of Parks and Recreation
DPW	Department of Public Works
DTSC	Department of Toxic Substances Control
DWR	Department of Water Resources
EIR	Environmental Impact Report
EMFAC	EMission FACtor model
EO	Executive Order
EPA	United States Environmental Protection Agency
EPCRA	Emergency Planning and Community Right-to-Know Act
ESA	Endangered Species Act
EV	Electric Vehicle
FEMA	Federal Emergency Management Agency
FEOA	Fire and Emergency Operation Assessment
FGC	Fish and Game Code
FHSZ	Fire Hazard Severity Zone
FHWA	Federal Highway Administration
FIRMs	flood insurance rate maps
FMMP	Farmland Mapping and Monitoring
FPD	Fire Protection District
FTA	Federal Transit Administration
gal/hp-hr	gallons per horsepower-hour
gal/hr	gallons per hour
gal/mile	gallons per mile
GHG	greenhouse gas
GIS	geographic information system
GVWR	gross vehicle weight rating
GWh	gigawatt hours
GWP	global warming potential
H&SC	California Health and Safety Code
HA	hydraulic area
HC	hydrocarbons

Acronym	Definition
HCB	Hermes copper butterfly
HFCs	hydroflourocarbons
HFHSZ	High Fire Hazard Severity Zone
HHDT	heavy-heavy duty truck
HMBP	Hazardous Materials Business Plan
HMD	Hazardous Materials Division
hp-hr	horsepower-hours
HUC	hydrologic unit code
HUs	hydrologic units
Hz	Hertz
I-	Interstate
IFC	International Fire Code
in/s	inches per second
IND	Industrial Service Supply
IPCC	Intergovernmental Panel on Climate Change
IRPs	integrated resource plans
ITP	Incidental Take Permit
JEPA	Joint Exercise of Powers Agreement
JPA	Joint Powers Authority
JRMP	Jurisdictional Runoff Management Plan
LARA	Local Agricultural Resource Assessment
lb/gal	pounds per gallon
lb/hp-hr	pounds per horsepower-hour
LCC	Land Capability Classification
LCFS	low carbon fuel standard
LDA, LDT1, and LDT2	light-duty automobile/light-duty truck vehicle categories
L_{dn}	day-night sound level
LED	light-emitting diode
L_{eq}	equivalent sound level
LESA	Land Evaluation Site Assessment Model
LID	Low Impact Development
L_{min}	minimum sound level
LOS	level of service
LPPA	Local Park Planning Area
LRA	Local Responsibility Area
LT	long-term
Lv	vibration velocity level
L_{xx}	percentile-exceeded sound level
MBTA	Migratory Bird Treaty Act
MEP	maximum extent practicable
Metropolitan	Metropolitan Water District of Southern California

Acronym	Definition
mg/m^3	milligrams per cubic meter
mgd	million gallons per day
MHDT	medium heavy-duty trucks
MICR	maximum incremental cancer risk
MM	mitigation measures
mpg	miles per gallon
MPOs	Metropolitan Planning Organizations
MRZ	Mineral Resource Zone
MS4s	municipal separate storm sewer systems
MSCP	Multiple Species Conservation Program
$MTCO_2e$	metric tons of carbon dioxide-equivalent
MTS	Metropolitan Transit System
MUN	Municipal and Domestic Supply
MWh	megawatt-hour
N_2O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NCCP	Natural Community Conservation Planning
NCP	National Contingency Plan
NHTSA	National Highway Traffic Safety Administration
NO	nitric oxide
NO_2	nitrogen dioxide
NOP	Notice of Preparation
NO_X	oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
O_3	ozone
OES	Office of Emergency Services
ohm-cm	ohm-centimeters
OPR	Governor's Office of Planning and Research
OSHA	Occupational Safety and Health Administration
OSWS	on-site wastewater systems
OWTS	Onsite Wastewater Treatment System
Pb	lead
P-C	Production-Consumption
PDMWD	Padre Dam Municipal Water District
PDPs	Priority Development Projects
PDS	Planning & Development Services
PFCs	perfluorocarbons
PLDO	Park Lands Dedication Ordinance

Acronym	Definition
Plug-in SD	Plug-in San Diego
PLWTP	Point Loma Wastewater Treatment Plant
PM	particulate matter
PM_{10}	inhalable particulate matter
$PM_{2.5}$	fine particulate matter
PMP	Parks Master Plan
Porter-Cologne	Porter-Cologne Water Quality Control Act
ppb	parts per billion
ppm	parts per million
PRC	Public Resources Code
PROC	Industrial Process Supply
project	Alpine Park Project
PV	photovoltaic
QCB	Quino checkerspot butterfly
RAQS	Regional Air Quality Strategy
RCAs	Resource Conservation Areas
RCNM	Roadway Construction Noise Model
RCRA	Resource Conservation and Recovery Act of 1976
REC1	Contact Water Recreation
REC2	Non-contact Water Recreation
Regional Bike Plan	Riding to 2050, the San Diego Regional Bike Plan
Regional Plan	San Diego Forward: The Regional Plan
RES	Regional Energy Strategy
RMP	site Resource Management Plan
rms	root-mean-square
ROG	reactive organic gases
RPS	Renewables Portfolio Standard
RTP	Regional Transportation Plan
RV	recreational vehicle
RWQCB	Regional Water Quality Control Board
SAFE	Safer Affordable Fuel-Efficient
Safety Plan	Site Worker Health and Safety Plan
SANDAG	San Diego Association of Governments
SAP	Subarea Plan
SB	Senate Bill
SCAQMD	South Coast Air Quality Management District
SCIC	South Coastal Information Center
SCS	Sustainable Communities Strategy
SDAB	San Diego Air Basin
SDAPCD	San Diego Air Pollution Control District
SDC	Seismic Design Category

Acronym	Definition
SDCFA	San Diego County Fire Authority
SDCWA	San Diego County Water Authority
SDG&E	San Diego Gas and Electric
SDNHM	San Diego Natural History Museum
SDSD	San Diego County Sheriff's Department
SI	Storie Index
SIP	State Implementation Plan
SLCP	short-lived climate pollutant
SLCP Reduction Strategy	Short-Lived Climate Pollutant Reduction Strategy
SLF	Sacred Lands File
SLM	sound level meter
SLTs	Screening Level Thresholds
SMARA	Surface Mining and Reclamation Act
SO_2	sulfur dioxide
SR-	State Route
SRA	State Responsibility Area
SSA	Sewer Service Area
ST	short-term
SWPPP	Stormwater Pollution Prevention Plan
SWQMP	Stormwater Quality Management Plan
SWRCB	State Water Resources Control Board
TACs	toxic air contaminants
Tanner Act	Toxic Air Contaminant Identification and Control Act
T-BACT	Best Available Control Technology
TCR	tribal cultural resource
TDM	Transportation Demand Management
TDS	total dissolved solids
Technical Advisory	Technical Advisory on Evaluating Transportation Impacts in CEQA
Testing and Profiling Plan	Soil Testing and Profiling Plan
TIA	Transportation Impact Analysis
TIF	Transportation Impact Fee
TIS	Transportation Impact Study
TMDL	total maximum daily load
TSCA	Toxic Substances Control Act 1976
TSG	County of San Diego Transportation Study Guidelines
U.S. EPA	U.S. Environmental Protection Agency
UDC	Unified Disaster Council
Unified Program	Unified Hazardous Waste and Hazardous Materials Management Regulatory Program

Acronym	Definition
USACE	U.S. Army Corps of Engineers
USC	United States Code
USDA	United States Department of Agriculture
USFS	U.S. Forest Service
USFWS	U.S. Fish and Wildlife Service
USGS	United States Geological Survey
UST	Underground Storage Tank
UWMP	Urban Water Management Plan
VHFHSZ	Very High Fire Hazard Severity Zone
Viejas Band	Viejas Band of Kumeyaay Indians
VMT	vehicle miles traveled
VOC	volatile organic compound
WARM	Warm Freshwater Habitat
WILD	Wildlife Habitat
WMA	Watershed Management Area
WPO	Watershed Protection, Stormwater Management, and Discharge Control Ordinance
WUI	wildland urban interface

Reader's Guide for the Alpine County Park Project 2026 Recirculated Draft Environmental Impact Report

The purpose of this Reader's Guide is to summarize relevant actions and changes since the Alpine County Park Project (project), sometimes referred to as the Alpine Community Park Project, was approved and its Final Environmental Impact Report (EIR) was certified in December 2023, with detail on technical modifications included in the accompanying documents presented for public review. The December 2023 FEIR and its associated appendices are available for viewing at the County Parks website (https://www.sdparks.org/content/sdparks/en/AboutUs/Plans/public-review-documents.html) for reference only.

Project History and Litigation Background

The County of San Diego (County) published a Notice of Preparation (NOP) for an EIR for the project on March 8, 2021. The County also published a recorded presentation in lieu of a scoping meeting and initiated a 30-day public comment period on the NOP. The County prepared a Draft EIR (2021 DEIR) to analyze the potential significant environmental impacts resulting from the project, which was circulated for public review and comment on September 30, 2021. The 2021 DEIR had a 47-day public review period. In December 2022, in response to comments received on the 2021 DEIR, the County prepared a Recirculated Draft EIR (2022 RDEIR), to correct deficiencies and provide additional information. The County recirculated for public review the following sections and associated technical appendices: Preface, Executive Summary; Biological Resources (Section 4.4); Hazards and Hazardous Materials (Section 4.9); Wildfire (Section 4.20); and Alternatives (Chapter 6). The 2022 RDEIR had a 75-day public review period, which ended on February 28, 2023. The County revised and refined the EIR after the public review periods and considered all comments received. The County responded to all comments received on the 2021 DEIR and 2022 RDEIR public review, and provided the comments and responses in the Final EIR.

The Final EIR (2023 FEIR) was released in October 2023 and originally set for public hearing on November 8, 2023. On November 7, 2023, the Cleveland National Forest Foundation and California Native Plant Society (Petitioners) submitted comments on the 2023 FEIR. Based on these comments and additional comments from the public requesting additional time to review the 2023 FEIR, the public hearing was continued to December 6, 2023. On December 4, 2023, Petitioners submitted a second comment letter reiterating the concerns raised in their November 7, 2023 letter. On December 6, 2023, the County certified the 2023 FEIR and approved the project.

On January 5, 2024, the Cleveland National Forest Foundation and the California Native Plant Society (Petitioners) filed a lawsuit, alleging approval of the project violated the California Environmental Quality Act (CEQA), the California Planning and Zoning Law, and County Ordinances. The Petitioners also sought declaratory relief, or clarification on the parties' rights and obligations, regarding the County's Biological Mitigation Ordinance (BMO), including whether the project is exempt from the BMO as an essential park project.

The Superior Court of the State of California (Superior Court) ruled in the County's favor for all issues except for the CEQA claim regarding the EIR's analysis of potential impacts related to western spadefoot toad, pallid bat, wildfire, and vehicle traffic public safety. On January 20, 2026, the Superior Court entered a judgment granting the petition for Writ of Mandate (Writ) solely as to

these CEQA issues. The Writ ordered the County to set aside the Board's certification of the EIR for the project and rescind all project approvals, including but not limited to the County's adoption of Environmental Findings and Mitigation, Monitoring, and Reporting Program.

The Court further stated that to the extent that the County revises the project's EIR, the revised environmental analysis must address only the CEQA deficiencies identified in the Court's June 9, 2025 Minute Order. Having found in County's favor on all other issues raised in the petition, except for those matters described below, the Court found that the following updates are necessary under Public Resources Code section 21168.9(b) to comply with the provisions of CEQA:

a. "Western Spadefoot Toad. Respondent shall address, providing reasoned analysis supported by substantial evidence in the record, comments submitted by Petitioners' expert stating that the Spadefoot can travel up to 600 meters from their breeding pools and noting that the USGS recommended an undeveloped buffer of 300 to 400 meters around breeding pools.

b. Pallid Bat. Prior to making any finding that the 200-foot avoidance buffer from potential pallid bat roost sites, as set forth in mitigation measure MM-BIO-8, will avoid or substantially reduce a significant impact, Respondent shall support such a finding with substantial evidence in the record.

c. Wildfire Impacts. Respondent shall separately analyze the significant impacts of the fire risk and its baseline existing conditions before proposing mitigation measures, and shall provide information on *how* it analyzed the effectiveness of the proposed measures.

d. Vehicle Traffic Public Safety. Respondent shall analyze and disclose the traffic hazard impacts concerning South Grade Road, in particular, whether the Project will substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections). In doing so, Respondent shall not delay reasonably feasible analysis and potential impacts of the Project's driveway, the driveway's traffic control device, and sight distance analysis on traffic collisions, including as to pedestrians and bicyclists."

On April 22, 2026, the County Board of Supervisors unanimously approved setting aside the certification of the 2023 FEIR and removing all project approvals, as mandated by the Court.

The Court's June 2025 Minute Order, the January 2026 Judgment, and the January 2026 Writ are attached as Appendix M, *Project Court Documents*, to this EIR.

Res Judicata Applies to All Other Issues

All other issues not addressed in the January 2026 Writ have been fully resolved, and res judicata bars such issues from further litigation. The decertification of the entire 2023 FEIR does not alter the fact that the 2023 FEIR was litigated, and all issues were resolved. Res judicata applies even if an agency rescinds approval of a project and decertifies the entire EIR. (Citizens for Open Government v. City of Lodi [2012] 205 Cal.App.4th 296 [the court applied res judicata even though the city rescinded approval of the project and decertified the prior EIR].) Finally, res judicata bars the litigation of both issues that were actually litigated or could have been litigated. (Citizens for Open Government v. City of Lodi [2012] at 324-325.)

2026 Recirculated Draft EIR

In response to the Court's January 2026 Writ, the County has revised the project's EIR to address the issues listed above. As described above, the revised analysis is only required to address the CEQA deficiencies identified by the Court, and the previously certified 2023 FEIR is not being recirculated in its entirety for public review. The following sections of the EIR are being recirculated for public review in the 2026 Recirculated Draft EIR (2026 RDEIR):

- Biological Resources (Section 4.4): revised with updated western spadefoot and pallid bat analyses and updates to MM-BIO-8: Bat Roost Avoidance.
- Hazards and Hazardous Materials (Section 4.9): revised with updated regulations and wildfire risk analysis comparing baseline conditions to post-project conditions with both required and additional fire prevention measures.
- Transportation and Circulation (Section 4.17): revised with updated traffic hazard analysis related to South Grade Road and change from four-way stop to a two-way stop at project entrance.
- Wildfire (Section 4.20): revised with updated regulations and wildfire risk analysis comparing baseline conditions to post-project conditions with both required and additional fire prevention measures.
- References: updated with new references added to the Sections above.

To address the issues identified by the Court, the following new appendices have been prepared:

- Appendix D2: Addendum to the Biological Resources Report for the Alpine County Park Project
- Appendix I1: Addendum to the Alpine Community Park Transportation Impact Study
- Appendix J1: Addendum to the Fire & Emergency Operational Assessment

Additional clerical changes and minor clarification changes to sections of the 2023 FEIR may occur for purposes of consistency within the FEIR. All changes and a Response to Comments received on this 2026 RDEIR will be published on the County Parks website (sdparks.org) at least 30 days prior to County Board of Supervisors' consideration of certification of the FEIR for the project.

The matrix below describes the specific issues identified by the Court's June 2025 Minute Order and January 2026 Writ, provides a summary resolution, and cites 2026 RDEIR and technical report locations where the identified information can be found.

Court-Identified Issue in the 2023 FEIR	Resolution	Location within 2026 RDEIR and Technical Report
Western Spadefoot Toad		
The County shall address, providing reasoned analysis supported by substantial evidence in the record, comments submitted by Petitioners' expert stating that the Spadefoot can travel up to 600 meters from their breeding pools and noting that the USGS recommended an undeveloped buffer of 300 to 400 meters around breeding pools.	An addendum to the Biological Resources Report was prepared to address the buffer recommended by USGS and substantiate the buffer selected by the County.	Appendix D2
	Threshold 1 impact discussion has been revised to acknowledge the Petitioners' and USGS' comments and further explain the rationale for the project's proposed buffer around breeding pools.	Section 4.4, Threshold 1 Impact Analysis (pg. 4.4-27) Appendix D2, Western Spadefoot Toad Response to Writ
Pallid Bat		
Prior to making any finding that the 200-foot avoidance buffer from potential pallid bat roost sites, as set forth in mitigation measure MM-BIO-8, will avoid or substantially reduce a significant impact, the County shall support such a finding with substantial evidence in the record.	An addendum to the Biological Resources Report was prepared to substantiate the proposed 200-foot avoidance buffer using evidence in the record.	Appendix D2
	Section 4.4, Threshold 1 has been revised to describe the surveys completed for pallid bat in more detail.	Section 4.4, Threshold 1 Special-Status Bat Species (pgs. 4.4-32 and 4.4-35)
	Mitigation measure MM-BIO-8 has been revised to clarify that the minimum buffer distance around maternal roost sites shall be 200 feet, but that the ultimate buffer would be determined by a qualified bat biologist should a roost be discovered during pre-construction surveys.	Section 4.4, Threshold 1 Mitigation Measures (pgs. 4.4-51 through 4.4-52) Appendix D2, Pallid Bat Mitigation

Court-Identified Issue in the 2023 FEIR	Resolution	Location within 2026 RDEIR and Technical Report
	Section 4.4, Threshold 1 has been revised to further explain the rationale for the proposed 200-feet minimum buffer distance around any identified maternal roost sites.	Section 4.4, Threshold 1 Level of Significance After Mitigation (pgs. 4.4-53 through 4.4-54) Appendix D2, Pallid Bat Response to Writ
Wildfire Impacts		
The County shall separately analyze the significant impacts of the fire risk and its baseline existing conditions before proposing mitigation measures, and shall provide information on how it analyzed the effectiveness of the proposed measures.	A fire protection memorandum was prepared to provide fire behavior modeling for the pre- and post-project condition and analyze the project's alignment with the Attorney General's Guidance for Best Practices for Analyzing and Mitigating Wildfire Impacts of Development Projects Under the California Environmental Quality Act.	Appendix J1
	Section 4.20.3 and Figure 4.20-1, *Fire Severity*, has been updated with the most recent Fire Hazard Severity Zones established by CAL FIRE.	Section 4.20.3, Fire Hazard Designations (pg. 4.20-5) Figure 4.20-1 (pg. 4.20-9)
	The wildfire regulations in Section 4.20 have been updated to reflect the current regulations for wildfire prevention, including the California Department of Forestry and Fire Protection's (CAL FIRE's) 2024 Strategic Fire Plan, the 2025 California Fire Code, and the 2025 California Wildland Urban Interface Code have been added to Section 4.20.5.	Section 4.20, Applicable Laws and Regulations (pgs. 4.20-12 through 4.20-25)

Court-Identified Issue in the 2023 FEIR	Resolution	Location within 2026 RDEIR and Technical Report
	The Methodology in Section 4.20 has been updated to describe the fire prevention measures that are assumed for the analysis.	Section 4.20, Methodology (pgs. 4.26 through 4.20-28) Appendix J1, Project Description
	Section 4.20, Threshold 2 impact discussion has been revised to describe existing vegetation, environmental conditions, and fire behavior and then evaluate fire behavior with both required and additional fire prevention measures to demonstrate how the proposed fuel modification, landscaping, and human activity measures reduce wildfire risk.	Section 4.20, Threshold 2 Impact Analysis (pgs. 4.20-32 through 4.20-38) Appendix J1, Impact Summary
	Section 4.9, Threshold 7 impact discussion has been revised to describe existing vegetation, environmental conditions, and fire behavior prior to proposing fire prevention measures, and then evaluates post-development fire behavior to demonstrate how the proposed fuel modification and landscaping measures reduce wildfire risk.	Section 4.9, Threshold 7 Impact Summary (pgs. 4.9-23 through 4.9-30)
Vehicle Traffic Public Safety		
The County shall analyze and disclose the traffic hazard impacts concerning South Grade Road, in particular, whether the Project will substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections). In doing so, the County shall not delay reasonably feasible analysis and potential impacts of the Project's driveway, the driveway's traffic control device, and sight distance	An addendum to the Alpine Community Park Project Traffic Impact Analysis was prepared to further analyze and disclose traffic hazard impacts along South Grade Road, including driveway sight distance, traffic control device analysis, pedestrian and bicyclist safety, and additional safety treatments considered.	Appendix I1

Court-Identified Issue in the 2023 FEIR	Resolution	Location within 2026 RDEIR and Technical Report
analysis on traffic collisions, including as to pedestrians and bicyclists.	Section 4.17, Threshold 3 impact discussion has been revised to describe the updated pedestrian and bicycle hazard, sight distance, traffic control, and design features analyses performed in Appendix I1 and more clearly address traffic hazards associated with South Grade Road. Threshold 3 has also been revised to clarify that the project would implement a two-way stop instead of an all-way stop at the project's proposed driveway at the Calle de Compadres and South Grade Road intersection per the recommendation of the updated traffic safety analysis.	Section 4.17, Threshold 3 Impact Analysis (pgs. 4.17-13 through 4.17-18) Appendix I1, Response to Writ
	Section 4.17, Threshold 3 impact discussion has been revised to describe the parking demand analysis performed in Appendix I1 and address pedestrians parking and walking along or across South Grade Road. The updated analysis includes program scheduling requirements to be included as part of the project through conditions of approval.	Section 4.17, Threshold 3 Impact Analysis (pgs. 4.17-13 through 4.17-18) Appendix I1, Response to Writ
	Section 4.17, Threshold 3 impact discussion has been revised to describe pedestrian and bicyclist safety.	Section 4.17, Threshold 3 Impact Analysis (pgs. 4.17-13 through 4.17-18) Appendix I1, Response to Writ

Court-Identified Issue in the 2023 FEIR	Resolution	Location within 2026 RDEIR and Technical Report
	Section 4.17, Threshold 3 impact discussion has been revised to acknowledge the sight distance deficiency at project Driveway #2 and more thoroughly describe the site plan review process that would require sufficient sight distance to be satisfied and shown on project plans before issuance of a grading or construction permit.	Section 4.17, Threshold 3 Impact Analysis (pgs. 4.17-13 through 4.17-18) Appendix I1, Response to Writ
	Section 4.17, Threshold 3 impact discussion has been revised to clarify the analysis and recommended stop control measures to prevent significant traffic hazard impacts.	Section 4.17, Threshold 3 Impact Analysis (pgs. 4.17-13 through 4.17-18) Appendix I1, Response to Writ
	Section 4.17, Threshold 3 impact discussion has been revised to list the scheduling requirements for all organized sports activities at the park to ensure the parking lot does not become overburdened.	Section 4.17, Threshold 3 Impact Analysis (pgs. 4.7-13 through 4.17-18) Appendix I1, Response to Writ

2026 Recirculated Draft EIR Format

The 2026 RDEIR follows a similar approach as the 2022 RDEIR that is appended to the October 2023 FEIR, making track changes edits to the applicable version of the sections noted above. Each change from the 2023 FEIR is shown in double ~~strike-out~~/underline for the ease of reader review. Single ~~strike-out~~/underline indicates changes that were made between the 2022 RDEIR and the 2023 FEIR and are not new revisions made for the 2026 RDEIR. Throughout the 2026 RDEIR, "Recirculated Draft EIR" refers to the 2022 RDEIR, while the 2026 RDEIR is referred to as such ("2026 Recirculated Draft EIR" or "2026 RDEIR").

Figures with a single slash are figures that were modified between the 2022 RDEIR and the 2023 FEIR; figures with a double slash (X) are figures that were modified between the 2023 FEIR and the 2026 RDEIR; figures with no slashes are the most current version of that figure. Where figures have been replaced, the old figure is presented ahead of the new figure. Only one figure, Figure 4.20-1, has been revised for the 2026 RDEIR.

Public Comment on the 2026 Recirculated Draft EIR

The sections listed above are being recirculated for a 46-day public review period beginning on July 31, 2026.

As described above, only the deficiencies identified by the Court related to western spadefoot, pallid bat, wildfire risk, and vehicle traffic public safety are required to be addressed in the 2026 RDEIR. Pursuant to the legal principles described above and CEQA Guidelines Section 15088.5(f)(2), reviewers should limit their comments to only the EIR revisions in the recirculated sections and supplemental documents (Appendices D2, I1, and J1*)* referenced in or appended to this Reader's Guide.

Comments must be received by September 14, 2026, at 5:00 p.m., and should reference the project name: Alpine County Park Project, SCH# 2021030196. Comments must be submitted to Megan Doran at the County Department of Parks and Recreation (DPR) address listed below or via email to: CountyParksCEQA@sdcounty.ca.gov.

Department of Parks and Recreation
ATTN: Megan Doran
5510 Overland Avenue, Suite 270
San Diego, CA 92123

For additional information, please contact: Megan Doran atCountyParksCEQA@sdcounty.ca.gov or (619) 909-6309.

Files Availability. The 2026 RDEIR sections and the previous 2023 FEIR, as well as the new appendices and this Reader's Guide with attachments are available on the DPR website: https://www.sdparks.org/content/sdparks/en/AboutUs/Plans/public-review-documents.html, at the County of San Diego, Department of Parks and recreation, 5510 Overland Avenue, Suite 270, San Diego, CA 92123, and at the Alpine County Library, located at 1752 Alpine Boulevard, Alpine, CA 91901.

Section 4.4
Biological Resources

4.4.1 Overview

This section describes existing conditions at the project site, applicable laws and regulations with respect to biological resources, the biological resources present within the project site, and the impacts and mitigation measures required for implementation of the project.

4.4.2 Existing Conditions

A biological resource analysis was conducted for the project by reviewing literature and records from available databases and resources, and conducting biological resource surveys within the Biological Survey Area (BSA). The BSA includes the entirety of the ~~approximately~~ 96.6-acre project site. Note that only 94.2 net acres required surveys because 2.4 acres of the parcel is within the public right-of-way along South Grade Road. Vegetation surveys, special-status plant surveys, and invasive plant mapping were conducted in February and March 2019. Special-status plant surveys and special-status wildlife surveys were conducted in the BSA between February and September 2019, with the second-year Quino checkerspot butterfly (QCB) (*Euphydryas editha quino*) study conducted in March 2020 and a specialized survey for chocolate lily (*Fritillaria biflora*) conducted in late March 2021. Additional Engelmann oak surveys and mapping were conducted in June and September 2020. An additional vegetation survey was conducted in June and July 2022 to update vegetation conditions within the BSA and confirm that the mapping met a 0.10-acre minimum mapping unit requirement. Focused surveys for western spadefoot *(Spea hammondii)* were also conducted in 2022. The methods used during these biological resource surveys are provided in the Biological Resources Report (BRR), which is included as Appendix D to ~~this~~the Recirculated Draft EIR. An Addendum to the BRR (Appendix D2) was prepared in July 2026 with an updated analysis related to western spadefoot and pallid bat.

4.4.2.1 Physical Conditions

The BSA is in the central foothills of San Diego County, within the unincorporated community of Alpine. The natural setting of the southern portion of the BSA consists of relatively flat grasslands that slope slightly from northeast to a low point to the southwest. The terrain is rougher to the north; boulders and rock outcrops are dominated by scrub, chaparral, and woodland vegetation. Furthermore, the hills are steeper to the north; a small hilltop is present just east of the northeast corner of the BSA. Land surrounding the BSA is relatively flat, partially because of grading for developments. Steeper mountains with canyons, ravines, and drainages are found farther to the north and the south, outside of Alpine. Nearby reservoirs include El Capitan Reservoir to the north and Loveland Reservoir to the south. Elevations range from approximately 1,900 feet above mean sea level at the southwest corner of the BSA along South Grade Road to approximately 2,100 feet above mean sea level at the northeast corner of the BSA.

Several dirt trails traverse the BSA, most notably in the northern portion. Other trails connect the eastern portion of the property, in areas where many hikers begin their treks to the north, south, and west and into Wright's Field. South Grade Road, a paved two-lane road, borders the BSA to the south and east.

4.4.2.2 Current Fire Fuel Reduction Zones

In accordance with the County Consolidated Fire Code and the Alpine Fire Protection District Ordinance, the County ~~is clearing~~clears vegetation within the fire fuel reduction zones listed below, which, historically, have been cleared per the direction of the Alpine Fire District. These recommendations are also contained within the Fire and Emergency Operational Assessment (FEOA~~}~~) prepared by Rohde & Associates.

- At the far northeast edge of the County's parcel where it abuts residences along Engelmann Oak Lane, 100 feet south of their property lines. This area is currently cleared of all vegetation and mapped as disturbed habitat.
- Along South Grade Road, within 30 feet of the edge of the road. This area along the County's parcel includes predominantly Valley needlegrass grassland and smaller stands of open Engelmann oak woodland at the northern and eastern edges that transitions to denser scrub vegetation. Moderate to steep slopes are found toward the southern and western edges of the County's parcel. No Engelmann oaks have been removed as part of clearing, but the trees are limbed in coordination with a certified arborist, as needed, to prevent wildfires from spreading along contiguous tree canopies.

4.4.2.3 Vegetation Communities/Land Cover

Vegetation mapping within the BSA was conducted by ICF biologists in February and March 2019 by walking meandering transects and observing the area from selected vantage points that allowed an expansive view of the BSA. An additional vegetation survey was conducted in June and July 2022 to update vegetation conditions within the BSA and confirm that the mapping met a 0.10-acre minimum mapping unit requirement.

Vegetation communities were mapped pursuant to County guidelines (County of San Diego 2010b). These communities were described and assigned numerical codes, according to the *Terrestrial Natural Communities of California* (Holland 1986), as modified by Oberbauer et al. (2008). The 11 general vegetation communities/land cover types observed within the BSA were disturbed habitat; Diegan coastal sage scrub; Diegan coastal sage scrub, *Baccharis* dominated; flat-topped buckwheat; coastal sage-chaparral transition; southern mixed chaparral; Valley needlegrass grassland; non-native grassland; open Engelmann oak woodland; non-native woodland; and eucalyptus woodland (Figure 4.4-1~~:~~; Table 4.4-1). A full description of each vegetation community/land cover type present within the BSA can be found in the BRR, which is included as Appendix D to ~~this~~the Recirculated Draft EIR. Valley needlegrass grassland is the most common vegetation community, composing approximately 26.1 acres of the BSA.

Vegetation

- Coastal Sage-Chaparral Transition
- Diegan Coastal Sage Scrub
- Disturbed Coastal Sage Scrub
- Diegan Coastal Sage Scrub: Baccharis-dominated
- Disturbed Habitat
- Eucalyptus Woodland
- Flat-topped Buckwheat
- Disturbed Flat-topped Buckwheat
- Flat-topped Buckwheat - Fuel Break
- Non-native Grassland; Non-Native Grassland
- Non-Native Grassland - Fuel Break
- Non-Native Woodland
- Open Engelmann Oak Woodland
- Southern Mixed Chaparral
- Valley Needlegrass Grassland
- Disturbed Valley Needlegrass Grassland
- Valley Needlegrass Grassland - Fuel Break

Proposed Project

- Alpine County Park
- Existing Trails to be Maintained
- Leach Field
- Sewer Pipe
- Native Habitat Avoidance
- New Fuel Reduction Area
- Existing Fuel Reduction Area (Not a Part of Project)
- County-Owned Parcel

Source: SanGIS 2019 imagery

N

0 250 500

Feet

Oak Ln

Engelmann

S Grade Rd

Calle

S Grade Rd

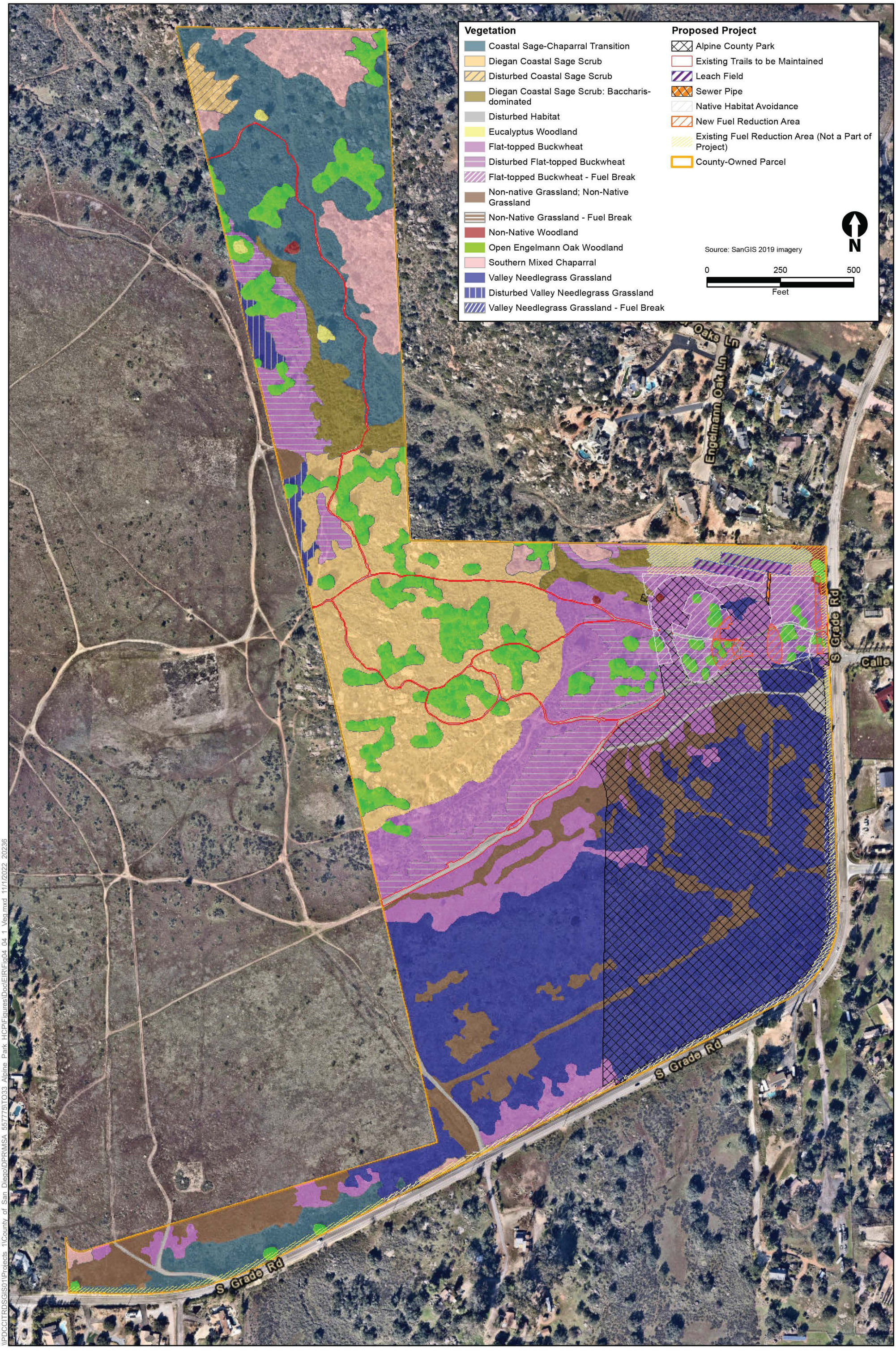
S Grade Rd

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COUNTY OF SAN DIEGO PARKS AND RECREATION

ICF

Figure 4.4-1
Vegetation Communities
Alpine Park Project



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Figure 4.4-1
Vegetation Communities
Alpine Park Project

Table 4.4-1. Vegetation Communities Occurring Within the BSA

Oberbauer Code	Vegetation Community	Area in BSA (acres)
11300	Disturbed Habitat	2.7
32500	Diegan Coastal Sage Scrub	12.2
	Disturbed Diegan Coastal Sage Scrub	0.5
32530	Diegan Coastal Sage Scrub, Baccharis dominated	2.5
32800	Flat-topped Buckwheat	10.1
	Disturbed Flat-topped Buckwheat	9.1
	Flat-topped Buckwheat – Existing Fire Fuel Reduction Zone	0.2
37G00	Coastal Sage-Chaparral Transition	11.0
37120	Southern Mixed Chaparral	4.0
42110	Valley Needlegrass Grassland	24.4
	Disturbed Valley Needlegrass Grassland	0.7
	Valley Needlegrass Grassland – Existing Fire Fuel Reduction Zone	1.1
42200	Non-Native Grassland	8.4
	Non-native Grassland – Existing Fire Fuel Reduction Zone	< 0.1
71181	Open Engelmann Oak Woodland	7.1
79000	Non-Native Woodland	0.2
79100	Eucalyptus Woodland	0.1
Total[1a]		94.2

[a.] Sum of values does not equal total because of rounding.

4.4.2.4 Candidate, Sensitive, and Special-Status Species

Special-status species are those plants or animals that have been officially listed, proposed for listing, or identified as candidates for listing as threatened or endangered under provisions of the federal Endangered Species Act (ESA) and the California Endangered Species Act (CESA). Included is any animal listed as a Species of Special Concern or a fully protected species by the ~~s~~State or any plant ranked according to the Rare Plant Ranking System of the California Native Plant Society (CNPS). Special-status species also include those listed on the County's Sensitive Plant List and Sensitive Animal List.

Special-Status Plant Species

The desktop analysis for sensitive plant species was performed for this project by reviewing the California Natural Diversity Database (CNDDB) and CNPS database. The CNDDB and CNPS record search for sensitive plant species was conducted using the U.S. Geological Survey's Alpine 7.5-minute quadrangle map and the nine surrounding quadrangle maps. The search identified 83 species with potential to occur within the BSA (see Appendix I of the BRR, which is included as Appendix D to ~~this~~the Recirculated Draft EIR).

Special-status plant surveys were conducted within the BSA by qualified ICF botanists between April and August 2019. ICF botanists traversed the BSA from meandering transects to identify the locations of special-status plants. A specialized survey for chocolate lily (*Fritillaria biflora*) was conducted in late March of 2021, during the peak time for this species to bloom throughout the BSA.

Species that were not observed within the BSA were determined to have little to no potential to occur on site because three thorough special-status plant surveys were conducted in 2019, which was an excellent rain year for Southern California. The surveys concluded that no federally or ~~s~~State-listed endangered or threatened plant species were observed within the BSA. The following eight sensitive plant species were observed in the BSA, including seven sensitive plant species listed in the California Rare Plant Ranking (CRPR) and in the County Sensitive Plant Lists, and one species only listed on County List D (Figure 4.4-2~~).~~). Decumbent goldenbush (*Isocoma menziesii* var*. decumbens*) and delicate clarkia (*Clarkia delicata*) are listed as CRPR 1B.2 and County List A. Five plants of limited distribution are listed as CRPR 4 and County List D including Engelmann oak (*Quercus engelmannii*), Palmer's grapplinghook (*Harpagonella palmeri*), San Diego County viguiera (*Bahiopsis laciniata*), small-flowered microseris (*Microseris douglasii* ssp*. ~~p~~Platycarpha*), and Southern California black walnut (*Juglans californica*). Chocolate lily (*Fritillaria biflora*), which was observed within the BSA, is a County List D plant, indicating it has a limited distribution or is uncommon but not presently rare or endangered. A complete list of potentially occurring special-status plants is provided in Appendix I of the BRR (Appendix D to ~~this~~the Recirculated Draft EIR).

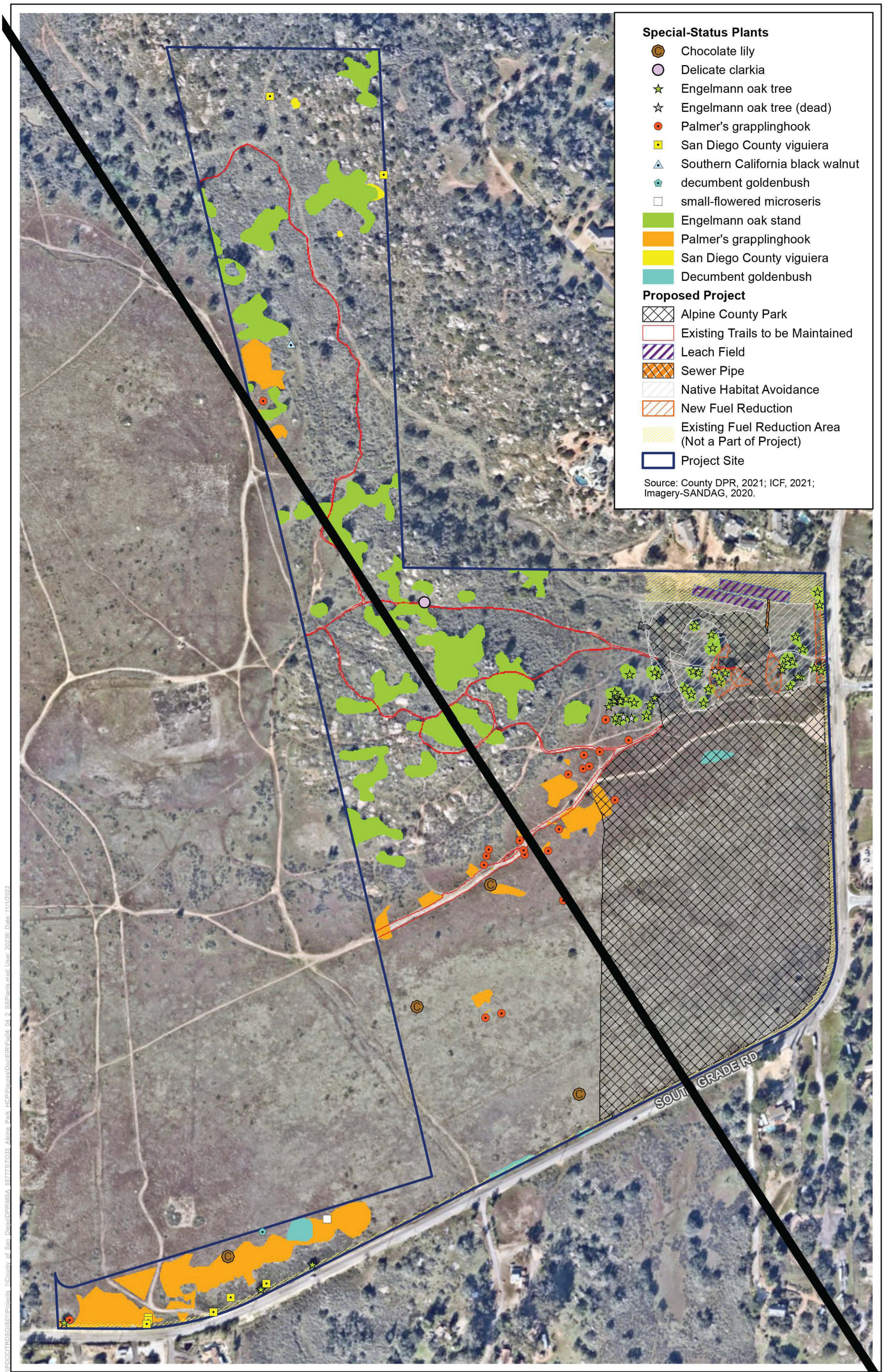
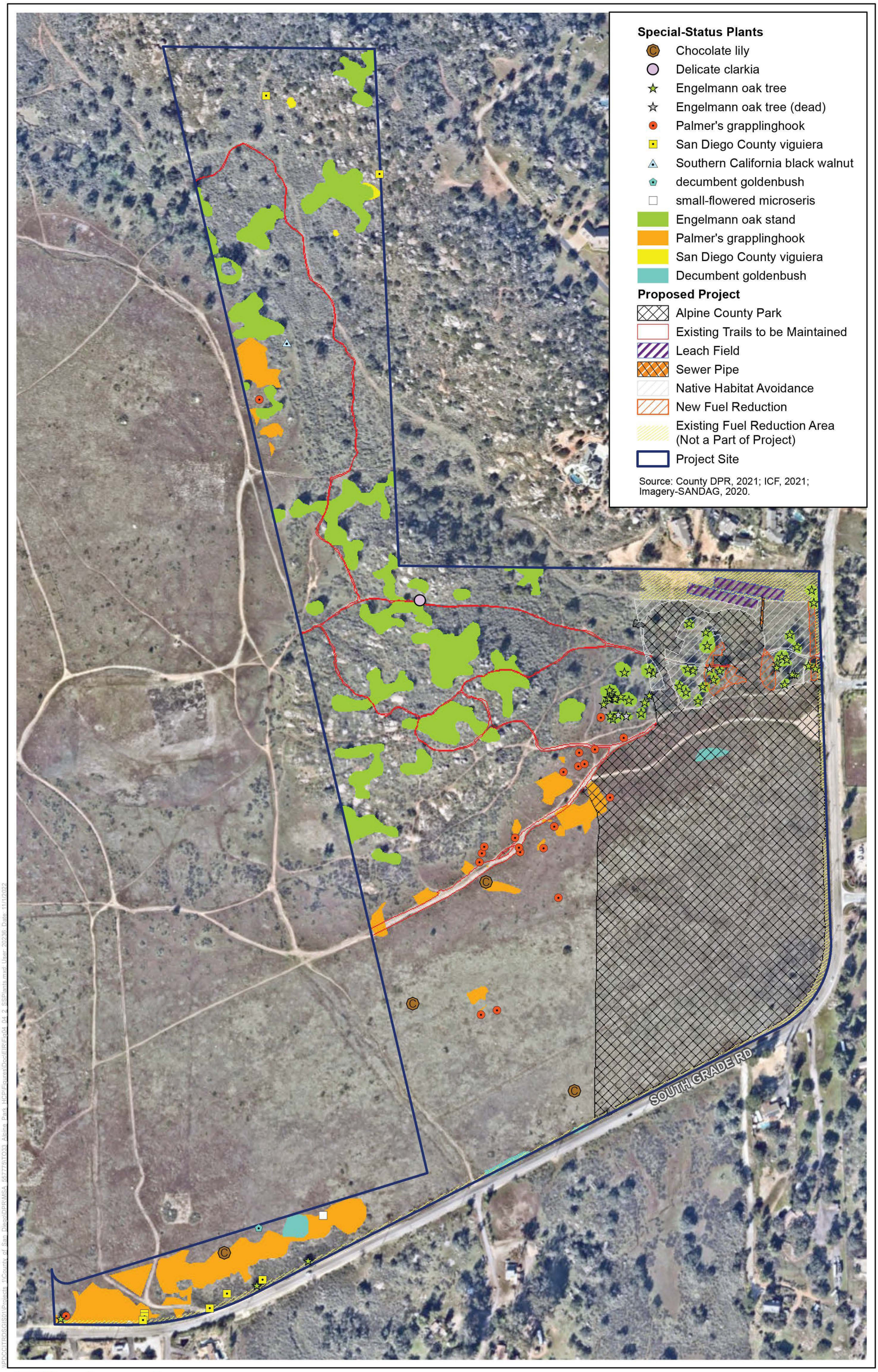


Figure 4.4-2
Special-Status Plants
Alpine Park Project

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Figure 4.4-2
Special-Status Plants
Alpine Park Project

Special-Status Wildlife Species

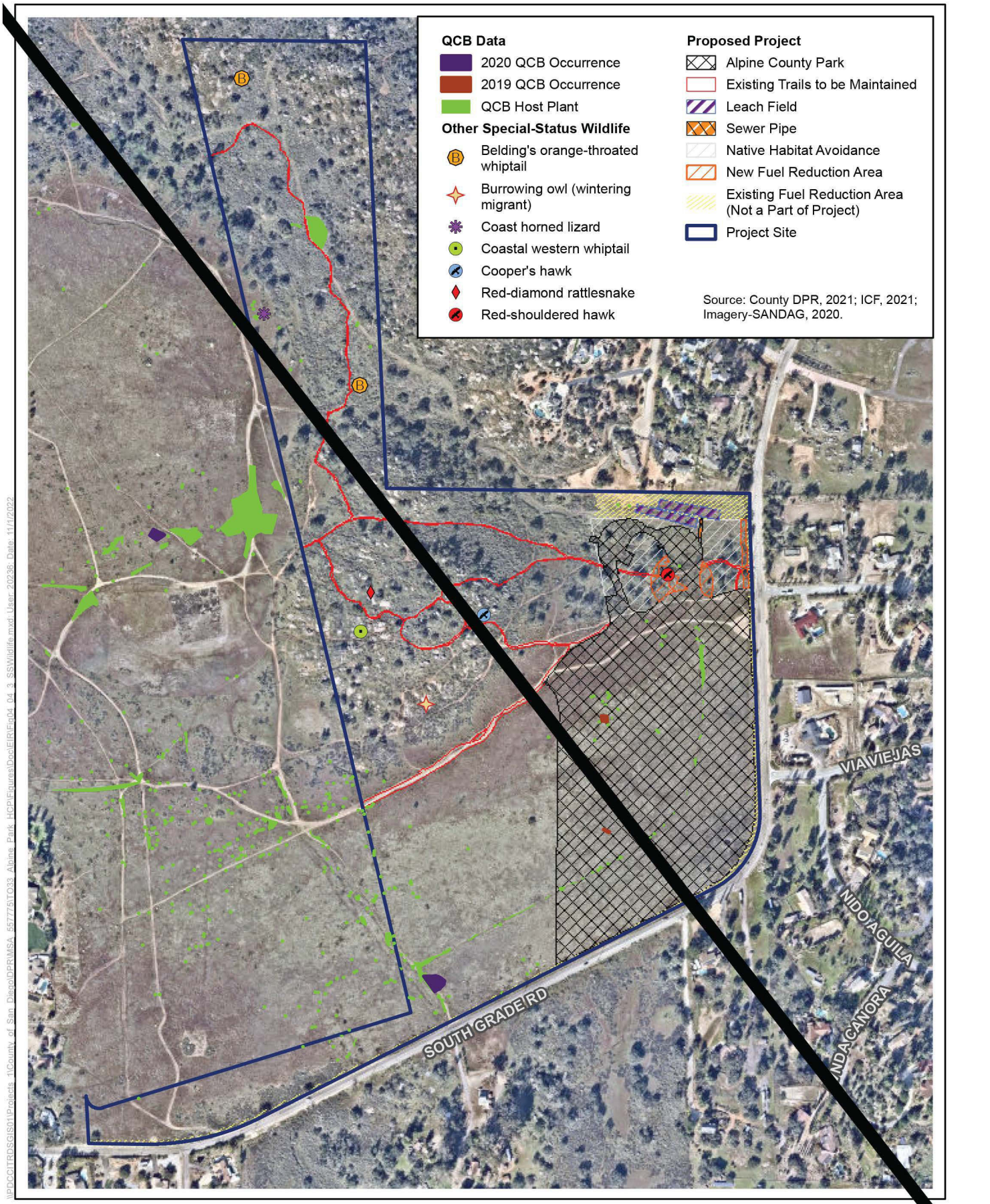
Following a thorough literature and records search (see the BRR, which is included as Appendix D to ~~this~~the Recirculated Draft EIR), special-status wildlife surveys for the project were conducted between February and September 2019, with second-year of QCB and Hermes copper butterfly (HCB) (*Lycaena hermes*) studies conducted in 2020. ICF biologists conducted focused wildlife surveys for locally endemic and listed San Diego and Riverside fairy shrimp (*Streptocephalus woottoni*, *Branchinecta sandiegonensis*), QCB, HCB, burrowing owl (*Athene cunicularia*), coastal California gnatcatcher (CAGN) (*Polioptila californica californica*), and locally endemic listed bat species. In 2022, focused surveys for western spadefoot were conducted, verification and refinement to the vegetation map was completed, and an additional bat survey was conducted. The BRR (Appendix D to ~~this~~the Recirculated Draft EIR) provides details on the methods used for these surveys. QCB was observed during both 2019 and 2020 (Figure 4.4-3~~).~~).

The following special-status bats were observed during bat surveys: big free-tailed bat (*Nyctinomops macrotis*), pallid bat (*Antrozous pallidus*), pocketed free-tailed bat (*Nyctinomops femorosaccus*), Townsend's big-eared bat (*Corynorhinus townsendii*), western long-eared myotis (*Myotis evotis*), western mastiff bat (*Eumops perotis*), western red bat (*Lasiurus blossevillii*), western small-footed myotis (*Myotis ciliolabrum*), western yellow bat (*Lasiurus xanthinus*), and Yuma myotis (*Myotis yumanensis*). Western spadefoot adults were observed within the BSA but outside the project footprint. No evidence of breeding western spadefoot was observed in 2022. In 2019, which was an exceptionally wet year, western spadefoot eggs were observed within one seasonally inundated basin during one survey.

The following special-status wildlife species were incidentally observed within the BSA during surveys conducted in 2019 and 2020: Belding's orange-throated whiptail (*Aspidoscelis hyperythra*), Blainville's (coast) horned lizard (*Phrynosoma blainvillii*), coastal western whiptail (*Aspidoscelis tigris stejnegeri*), red-diamond rattlesnake (*Crotalus ruber*), a wintering migrant burrowing owl, Cooper's hawk (*Accipiter cooperii*), red-shouldered hawk (*Buteo lineatus*), and western bluebird (*Sialia mexicana*) (Figure 4.4-3).

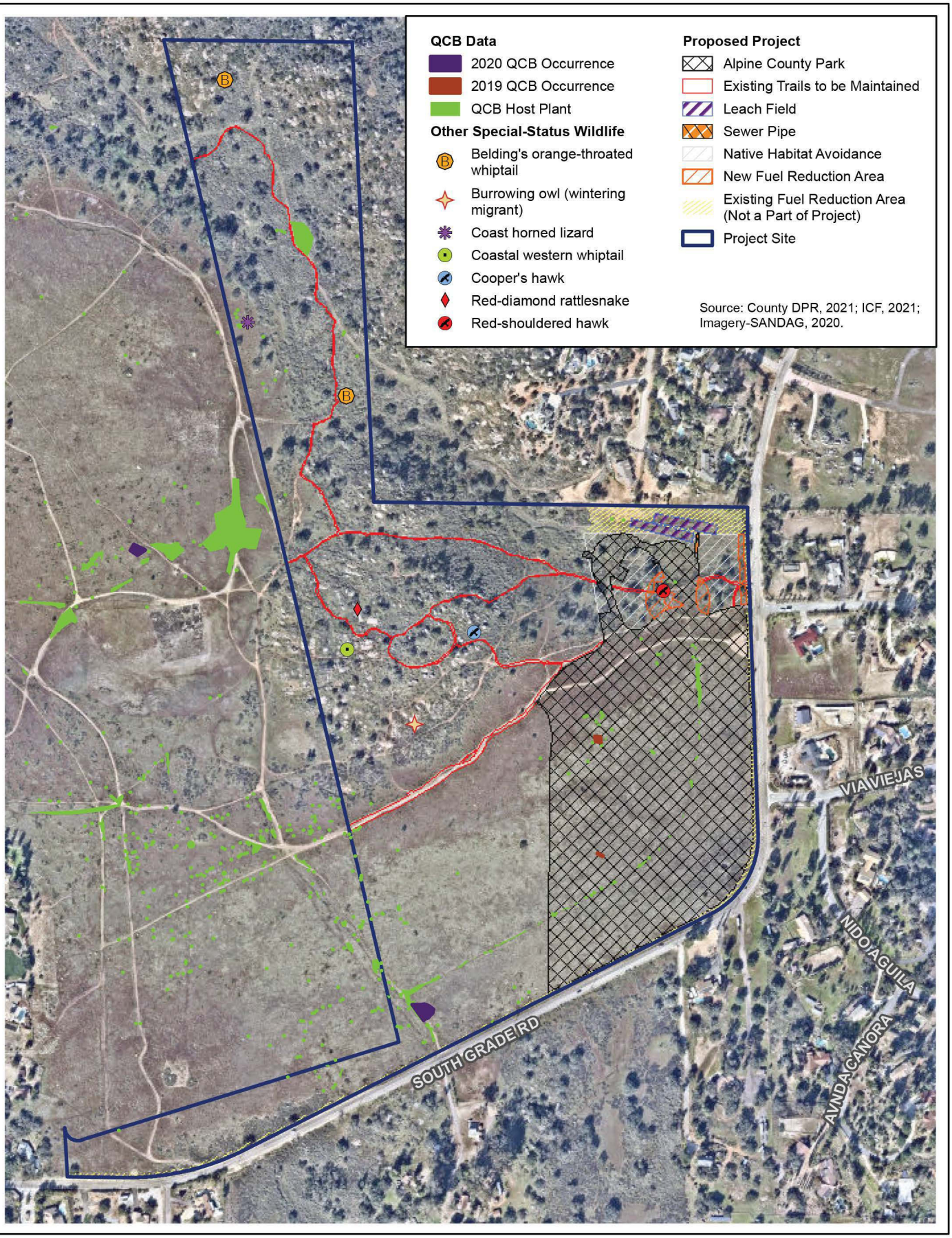
Although not observed, the following special-status species were determined to have moderate or high potential to occur within the BSA, based on habitat types and range distribution: Baja California coachwhip (*Masticophis fuliginosus*), California glossy snake (*Arizona elegans occidentalis*), coast patch-nosed snake (*Salvadora hexalepis virgultea*), Coronado skink (*Plestiodon skiltonianus interparietalis*), Southern California legless lizard (*Anniella stebbinsi*), Bell's sage sparrow (*Artemisiospiza belli belli*), burrowing owl (breeding occurrence), ferruginous hawk (*Buteo regalis*), grasshopper sparrow (*Ammodramus savannarum*), Lawrence's goldfinch (*Spinus lawrencei*), Oregon vesper sparrow (*Pooecetes gramineus affinis*), Southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*), white-tailed kite (*Elanus leucarus*), northwestern San Diego pocket mouse (*Chaetodipus fallax fallax*), San Diego black-tailed jackrabbit (*Lepus californicus bennettii*), and Bryant's (San Diego desert) woodrat (*Neotoma bryanti*).

Protocol surveys for both listed fairy shrimp and CAGN were negative. Based on survey results and a literature review, the following species were determined to have low potential to occur; therefore, impacts on these species are not evaluated in this 2026 Recirculated Draft~~Final~~ EIR: HCB, locally endemic and listed San Diego and Riverside fairy shrimp, and CAGN. Appendix I in the BRR (Appendix D to ~~this~~the Recirculated Draft EIR) provides a complete discussion regarding all special-status wildlife species with potential to occur and those that were observed.



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Figure 4.4-3
Special-Status Wildlife
Alpine Park Project



0 250 500 Feet
1 in = 500 ft

N

Figure 4.4-3
Special-Status Wildlife
Alpine Park Project

4.4.2.5 Jurisdictional Waters and Wetlands

During the vegetation mapping conducted in February and March 2019, ICF biologists searched the BSA for any indication of surface water flows to determine if a delineation of potentially jurisdictional aquatic features was required. No such surface water features were observed on-site; as a result, no formal delineation of jurisdictional water features was required or conducted.

4.4.3 Applicable Laws and Regulations

4.4.3.1 Federal

Endangered Species Act of 1973

The ESA was enacted in 1973 to provide protection to threatened and endangered species and their associated ecosystems. "Take" of a listed species is prohibited, except when authorization has been granted through a permit under Section 4(d), 7, or 10(a) of the act. *Take* means to harass, harm, shoot, wound, kill, trap, capture, or collect or to attempt to engage in any of these activities without a permit.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) was enacted in 1918. Its purpose is to prohibit the killing or transport of covered native migratory birds—or any part, nest, or egg of any such bird—unless allowed by another regulation adopted in accordance with the MBTA. The list of species that are protected by this act includes almost all native non-game species.

Clean Water Act

In 1948, Congress first passed the Federal Water Pollution Control Act. This act was amended in 1972 and became known as the Clean Water Act (CWA). The CWA regulates the discharge of pollutants into the waters of the U.S. Under Section 404, permits need to be obtained from the U.S. Army Corps of Engineers (USACE) for discharge of dredge or fill material into waters of the U.S. Under Section 401 of the act, water quality certification from the Regional Water Quality Control Board (RWQCB) needs to be obtained if there are to be any impacts on waters of the U.S.

4.4.3.2 State

California Endangered Species Act

The CESA prohibits the take of any species that the California Fish and Game Commission determines to be a threatened or endangered species; CESA is administered by the California Department of Fish and Wildlife (CDFW). The CESA is found in California Fish and Game Code (FGC) Sections 2050–2116. Incidental take of these listed species can be approved by CDFW. The CESA definition of take means to hunt, pursue, catch, capture, or kill or attempt to hunt, pursue, catch, capture, or kill.

California Fish and Game Code

The California FGC regulates the taking or possessing of birds, mammals, fish, amphibians, and reptiles. It also provides additional protections for endangered species and regulations regarding lakes and streams and associated fish and wildlife habitat. Provisions regarding the protections for nesting birds are described in California FGC Section 3503; these make it unlawful to take, possess, or needlessly destroy the nest or eggs of most wild birds.

~~4.4.3.3 Regional Local~~

4.4.3.3 ~~County~~

Multiple Species Conservation Program

The project is within the planning boundaries of the Multiple Species Conservation Program (MSCP) County Subarea Plan, and the proposed open space area associated with the project will add to the network of preserved land in the area. The project is within a designated Pre-Approved Mitigation Area.

The MSCP is a cooperative habitat program that encompasses 582,000 acres and establishes a 172,000-acre preserve system in southwestern San Diego County. The MSCP covers 85 plant and animal species and 23 vegetation communities. Agencies participating in the MSCP include the County, other local jurisdictions, the U.S. Fish and Wildlife Service (USFWS), and CDFW.

Local jurisdictions and special districts implement their respective portions of the MSCP through Subarea plans (County 1997), which describe specific implementing mechanisms for the MSCP. The combination of the subregional MSCP Plan and Subarea plans serve as a Multiple Species Habitat Conservation Program pursuant to Section 10(a)(1)(B) of the ESA, the Natural Community Conservation Planning Program pursuant to the California Natural Community Conservation Planning Act of 1991, and the CESA. The 96.6-acre project site is fully owned and operated by County DPR.

4.4.3.4 Local

County of San Diego General Plan

The 2011 County General Plan Update is the first comprehensive update to the County General Plan since the 1970s. The County General Plan Update, which applies to all unincorporated portions of San Diego County, directs population growth and provides plans for infrastructure needs, development, and resource protection. The County General Plan Update guides the growth and development of the unincorporated ~~San Diego County~~area by using innovative planning principles that have been designed to create livable communities and balance environmental objectives with the need for adequate infrastructure, housing, agriculture, and economic viability. The County General Plan Update consists of ~~six~~seven elements: Land Use, Mobility, Housing, Conservation and Open Space, Safety, ~~and~~ Noise, and Environmental Justice.

The goals and policies from the County General Plan listed below are applicable to the discussion of biological resources.

Land Use

GOAL LU-2 Maintenance of the County's Rural Character. Conservation and enhancement of the unincorporated County's varied communities, rural setting, and character.

LU-2.2 Relationship of Community Plans to the General Plan. Community Plans are part of the General Plan. These plans focus on a particular region or community within the overall General Plan area. They are meant to refine the policies of the General Plan as they apply to a smaller geographic region and provide a forum for resolving local conflicts. As legally required by state law, Community Plans must be internally consistent with General Plan goals and policies of which they are a part. They cannot undermine the policies of the General Plan. Community Plans are subject to adoption, review and amendment by the Board of Supervisors in the same manner as the General Plan.

LU-2.8 Mitigation of Development Impacts. Require measures that minimize significant impacts to surrounding areas from uses or operations that cause excessive noise, vibrations, dust, odor, aesthetic impairment and/or are detrimental to human health and safety.

GOAL LU-6 Development—Environmental Balance. A built environment in balance with the natural environment, scarce resources, natural hazards, and the unique local character of individual communities.

LU-6.1 Environmental Sustainability. Require the protection of intact or sensitive natural resources in support of the long-term sustainability of the natural environment.

LU-6.6 Integration of Natural Features into Project Design. Require incorporation of natural features (including mature oaks, indigenous trees, and rock formations) into proposed development and require avoidance of sensitive environmental resources.

LU-6.7 Open Space Network. Require projects with open space to design contiguous open space areas that protect wildlife habitat and corridors; preserve scenic vistas and areas; and connect with existing or planned recreational opportunities.

GOAL LU-10 Function of Semi-Rural and Rural Lands. Semi-Rural and Rural Lands that buffer communities, protect natural resources, foster agriculture, and accommodate unique rural communities.

LU-10.2 Development—Environmental Resource Relationship. Require development in Semi-Rural and Rural areas to respect and conserve the unique natural features and rural character, and avoid sensitive or intact environmental resources and hazard areas.

Conservation and Open Space

GOAL COS-2 Sustainability of the Natural Environment. Sustainable ecosystems with long-term viability to maintain natural processes, sensitive lands, and sensitive as well as common species, coupled with sustainable growth and development.

COS-2.1 Protection, Restoration and Enhancement. Protect and enhance natural wildlife habitat outside of preserves as development occurs according to the underlying land use designation. Limit the degradation of regionally important natural habitats within the Semi-Rural and Rural Lands regional categories, as well as within Village lands where appropriate.

COS-2.2 Habitat Protection through Site Design. Require development to be sited in the least biologically sensitive areas and minimize the loss of natural habitat through site design.

GOAL COS-21 Park and Recreational Facilities. Park and recreation facilities that enhance the quality of life and meet the diverse active and passive recreational needs of County residents and visitors, protect natural resources, and foster an awareness of local history, with approximately ten acres of local parks and 15 acres of regional parks provided for every 1,000 persons in the unincorporated County.

~~**COS-21.4** Regional **Parks.** Require new regional parks to allow for a broad range of recreational activities and preserve special or unique natural or cultural features when present.~~

COS-21.5 Connections to Trails and Networks. Connect public parks to trails and pathways and other pedestrian or bicycle networks where feasible to provide linkages and connectivity between recreational uses.

GOAL COS-23 Recreational Opportunities in Preserves. Acquisition, monitoring, and management of valuable natural and cultural resources where public recreational opportunities are compatible with the preservation of those resources.

COS-23.1 Public Access. Provide public access to natural and cultural (where allowed) resources through effective planning that conserves the County's native wildlife, enhances and restores a continuous network of connected natural habitat and protects water resources.

County of San Diego Biological Mitigation Ordinance

The County adopted the Biological Mitigation Ordinance (BMO) in 2010 to protect the County's biological resources and prevent their degradation and loss by guiding development outside of a Biological Resource Core Area (BRCA) and by establishing mitigation standards that will be applied to discretionary projects (County of San Diego 2010a).

Adoption and implementation of the BMO enables the County to achieve the conservation goals set forth in the Subarea Plan for the MSCP and sets forth the criteria for avoiding impacts on BRCAs and on plant and animal populations within those areas. The BMO also stipulates the mitigation requirements (ratios) for all projects requiring a discretionary permit. Mitigation ratios vary based on whether the project and proposed mitigation lands are within a BRCA. The 96.6-acre site qualifies as a BRCA as defined in the BMO.

The project is exempt from the provisions in the BMO. Per Section 86.503, of the BMO, the BMO does not apply to a public facility or public project, determined to be essential by the County, such as a County Park or County recreational facility, provided that the County decision-making body considering an application for such a project makes the following findings:

a) The facility or project is consistent with the County General Plan, the MSCP Plan, and Subarea Plan;

b) All feasible mitigation measures have been incorporated into the facility or project, and there are no feasible, less environmentally damaging locations, alignments, or non-structural alternatives that would meet project objectives;

c) Where the facility or project encroaches into a wetland or floodplain, mitigation measures are required that result in a net gain in wetland and/or riparian habitat;

d) Where the facility or project encroaches into steep slopes, native vegetation will be used to revegetate and landscape cut and fill areas;

e) No mature riparian woodland is destroyed or reduced in size due to otherwise allowed encroachments; and

f) All Critical Populations of Sensitive Plant Species Within the MSCP Subarea (Attachment C of Document No. 0769999 on file with the Clerk of the Board); Rare, Narrow Endemic Animal Species Within the MSCP Subarea, (Attachment D of Document No. 0769999 on file with the Clerk of the Board); Narrow, Endemic Plant Species Within the MSCP subarea (Attachment E of Document No. 0769999 on file with the Clerk of the Board); and San Diego County Sensitive Plant Species, as defined herein, will be avoided as required by, and consistent with, the terms of the Subarea Plan.

Alpine Community Plan

The Alpine Community Plan (ACP) implements the goals and policies of the County General Plan for the Alpine area (County of San Diego 1979). The plan was prepared in accordance with Section 65101 of the Government Code, State of California, and Board of Supervisors Policy I-1. The ACP, amended on December 14, 2016, represents a specific guide for land use, conservation, and circulation; a guide for use by service delivery specialists; and recommendations to facilitate the coordination of plans of other public agencies as well as the private sector. The goals, policies, and recommendations listed below from the ACP are applicable to land use.

Chapter 1, Community Character

Policy/Recommendation 1: Regulatory agencies shall ensure that future projects are consistent with the goals, policies and recommendations contained in the Alpine Community Plan. [PP]

Policy/Recommendation 4: Site designs should:

a. Grading shall not unduly disrupt the natural terrain, or cause problems associated with runoff, drainage, erosion, or siltation. Landscape disturbed by grading shall be revegetated. [PP, C, DPW]

b. Have grading plans that maximize retention of sensitive native vegetation, existing tree stands, and rock outcroppings, and natural topography. [PP, DPW]

Policy/Recommendation 6: Require retention of mature trees in all public and private development projects, wherever possible. [PP, DPW]

Chapter 9, Conservation

Goal 1: Promote the well-planned management of all valuable resources, natural and man-made, and prevent the destruction and wasteful exploitation of natural resources, where feasible.

Policy/Recommendation 1: Encourage the protection and conservation of unique resources in the Alpine Planning Area. [AP]

Policy/Recommendation 2: Important plant, animal, mineral, water, cultural and aesthetic resources in the Alpine Plan area shall be protected through utilization of the Resource Conservation Area designations and appropriate land usage. [AP]

Policy/Recommendation 6: Utilize all measures to preserve rare, threatened, or endangered plant life, including on-site protection through open space easement. Off-site propagation for reintroduction of suitable habitat to be coordinated by the Conservation Subcommittee. [AP, PP]

Policy/Recommendation 7: Protect the rare Engleman [sic] oak, wherever possible. [AP, PP]

Chapter 10, Open Space

Goal: Provide a system of open space that preserves the unique natural elements of the community, retains and extends areas in open space that are recognized as valuable for conservation of resources, open space uses that promote public health and safety. Open space areas, along with areas which are inappropriate for urbanization or required as buffers for urban development, that harmonize with and help integrate conservation and recreation components, creating a well-balanced community of natural plant and animal habitat and humans alike.

Policy/Recommendation 1: Encourage the development and preservation of a system of open space for wildlife corridors linking residential areas to permanent open space in the Cleveland National Forest and nearby lakes and wildlife preservation areas. [County DPR, AP]

Policy/Recommendation 3: Incorporation of open space areas as integral parts of project site designs, preserving environmental resources, providing recreation for residents, and buffers to maintain neighborhood identities. [PP]

Policy/Recommendation 5: Incorporate publicly-owned land into a functional recreation/open space system, wherever feasible. [County DPR, AP]

Policy/Recommendation 11: Enhance health and safety and conserve natural resources through the preservation of open space. [GEN, County DPR, AP]

Policy/Recommendation 12: Provide recreational opportunities through the preservation of open space areas. [County DPR, AP]

Policy/Recommendation 13: Preserve and encourage publicly and privately-owned open space easements. [County DPR, AP]

Chapter 11, Recreation

Policy/Recommendation 9: Encourage the acquisition and development of park lands which will protect outstanding scenic and riparian areas, cultural, historical and biological resources. [County DPR, PP]

4.4.4 Project Impact Analysis

This section addresses direct and indirect impacts on biological resources that would result from implementation of the project. The impact analysis is focused on project components that would occur within the BSA, including fire management activities, construction and operation of Alpine Park, formalization of approximately 1 acre of existing multi-use trails, establishment of a Native

Habitat Avoidance Area, construction of public restroom facilities, and establishment of an open space~~/preserve~~ on the project site. Each component is described in detail below:

- Alpine Park: ~~The~~ County DPR is proposing development of Alpine Park, an approximately ~~22.2~~25-acre active park within 96.6 acres of undeveloped land. The active park would include amenities such as multi-use turf areas, a baseball field, an all-wheel park, a bike skills area, recreational courts (~~i.e.~~, g., for basketball, pickleball), fitness stations, a leash-free dog area, restroom facilities, an administrative facility/ranger station, equestrian staging area and a corral, a nature play area, a community garden, a volunteer pad, picnic areas with shade structures and picnic tables, game table plaza, and multi-use trails.
- New Fire Fuel Reduction Zones: In accordance with the County Consolidated Fire Code and the Alpine Fire Protection District Ordinance, the County will clear vegetation along South Grade Road, providing an additional 20 feet beyond the existing 30-foot fire fuel modification zone along South Grade Road where it is adjacent to the project footprint and north to the end of the County parcel (see Section 4.4.2.2). The County will also clear vegetation within 100 feet of the volunteer parking pad in the northern portion of the proposed park. This includes "landscape replacement" clearing within 30 feet of the volunteer parking pad in Zone A. No Engelmann oaks are in this zone. Within Zone B, the County will achieve a 75 percent reduction in fire-line intensity out to approximately 100 feet from the volunteer parking pad. Zone B fire fuel reductions will include removing shrub fuels (predominantly flat-topped buckwheat) by a minimum of 50 percent and grass/herb fuels by a minimum of 80 percent. Four Engelmann oak canopies are located in Zone B areas, and three Engelmann oak canopies are located within the additional 20-foot-wide clearing along South Grade Road as described above. Although Engelmann oaks will not be removed for fire fuel reduction purposes, these oaks may be limbed to prevent fire from spreading through the canopies, as needed, in coordination with a certified arborist. These recommendations are also contained in the FEOA prepared by Rohde & Associates, provided as Appendix J of ~~this~~the Recirculated Draft EIR.
- Multi-Use Trails: In addition to the active park, the project would result in the maintenance of approximately 1 acre of existing multi-use trails throughout the project site. A number of smaller informal trails that are currently in use will be closed as part of the project, as well.
- Native Habitat Avoidance Area: These areas are within the generalized boundary of Alpine Park, but they would not be subject to mass grading or vegetation removal during site preparation activities. These areas are at the northern end of the proposed park, adjacent to the proposed equestrian staging area.
- Public Restroom Facilities: Implementation of the project would include construction of public restroom facilities. ~~The~~ County DPR may implement a septic system and associated leach field to accommodate sewage from the proposed restroom facilities. Another option under consideration is for ~~the~~ County DPR to extend a sewer line into the proposed Alpine Park, which would preclude the need for the septic system. For purposes of this analysis, both the sewer line and septic system are considered.
- Open Space~~/Preserve~~: Approximately 67.5 acres of the undeveloped 96.6-acre parcel would be conserved as open space~~/preserve~~ land.

4.4.4.1 Methodology

Biological resource impacts can be considered direct, indirect, or cumulative. They are also either permanent or temporary in nature.

Direct: Occur when biological resources are altered, disturbed, or destroyed during project implementation. Examples include clearance of vegetation, encroachment into wetland buffers (not applicable on this project), diversion of surface water flows, and the loss of individual species and/or their habitats.

Indirect: Occur when project-related activities affect biological resources in a manner that is not direct. Examples include elevated noise and dust levels, increased human activity, decreased water quality, changes to hydrological conditions not resulting in type conversion of vegetation community, and the introduction of invasive wildlife (domestic cats and dogs) and plants.

Cumulative: Occur when biological resources are either directly or indirectly affected to a minor extent as a result of a specific project, but the project-related impacts are part of a larger pattern of similar minor impacts. The overall result of these multiple minor impacts from separate projects is considered a cumulative impact on biological resources.

Temporary: Temporary impacts can be direct or indirect and are considered reversible. Examples include the removal of vegetation from areas that will be revegetated, elevated noise levels, and increased levels of dust.

Permanent: Permanent impacts can be direct or indirect and are not considered reversible. Examples include removing vegetation from areas that will have permanent structures placed on them or landscaping an area with non-native plant species.

All potential project-related impacts (direct, indirect, and cumulative) were evaluated as a part of this assessment. The project would have primarily three classes of impacts: (1) permanent direct impacts on vegetation communities, sensitive plants species, and habitat for sensitive animals; (2) indirect temporary effects on certain sensitive natural communities, sensitive animals, or sensitive plant species from construction-related activities such as dust deposition, increased human presence, and noise associated with construction equipment; and (3) indirect permanent effects resulting from operation of the ~~regional~~ park ~~system~~, such as an increased public presence that may indirectly affect animal movement or behaviors. Table 4.4-2 summarizes the types of impacts associated with this project.

Table 4.4-2. Summary of Project Components and Associated Impacts

General Location	Project Component	Impact Type	Sum of Acres
County Park and Trails	Active Park	Permanent	22.2
	Leach Field	Permanent	0.4
	New Fire Fuel Modification Zones	Permanent	0.5
Total Permanent Impacts			23.1
Open Space~~/Preserve~~	Native Habitat Avoidance Area	Temporary Indirect	2.1
	Pipe leading to leach field	Temporary Direct	< 0.1

General Location	Project Component	Impact Type	Sum of Acres
	All other areas	Resource Management/ Habitat Enhancement Activities Only	65.4
Total Preserved			67.5
Existing Trails to Be Maintained		Impact Neutral	1.0
Existing Fuel Reduction Areas (not a part of project)		N/A	2.6
Grand Total			**94.2**

4.4.4.2 Thresholds of Significance

Appendix G of the CEQA Guidelines

The following significance criteria, based on Appendix G of the CEQA Guidelines, provide the basis for determining the significance of impacts associated with biological resources resulting from the implementation of the project. The determination of whether a biological resource impact would be significant is based on the professional judgment of ~~the~~ County DPR as Lead Agency, supported by the recommendations of qualified personnel at ICF, and substantial evidence in the administrative record.

Impacts are considered significant if the project would result in any of the following:

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 CDFW or ~~U.S. Fish and Wildlife Service (~~USFWS~~).~~.
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 CDFW or USFWS.
3. Have a substantial adverse effect on ~~s~~State or federally protected wetlands (including, but not limited to, marshes, vernal pools, coastal areas, etc.) through direct removal, filling, hydrological interruption, or other means.
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.
5. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
6. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or ~~s~~State Habitat Conservation Plan.

County of San Diego Guidelines for Determining Significance

According to the County Guidelines for Determining Significance, any of the following conditions would be considered significant (County of San Diego 2010b):

- 3.A. The project would impact one or more individuals of a species listed as federally or ~~s~~State

endangered or threatened.

- 3.B. The project would impact an on-site population of a County List A or B plant species, or a County Group I animal species, or a species listed as a ~~s~~State Species of Special Concern.
- 3.C. The project would impact the local long-term survival of a County List C or D plant species or a County Group II animal species.
- 3.D. The project may impact arroyo toad aestivation, foraging, or breeding habitat.
- 3.E. The project would impact golden eagle habitat.
- 3.F. The project would result in a loss of functional foraging habitat for raptors.
- 3.G. The project would impact the viability of a core wildlife area, defined as a large block of habitat that supports a viable population of a sensitive wildlife species or an area that supports multiple wildlife species.
- 3.H. The project would cause indirect impacts to levels that would likely harm sensitive species over the long term.
- 3.I. The project would impact occupied burrowing owl habitat.
- 3.J. The project would impact occupied coastal cactus wren habitat.
- 3.K. The project would impact occupied Hermes copper habitat.
- 3.L. The project would impact nesting success of sensitive animals (as listed in the Guidelines for Determining Significance) through grading, clearing, fire fuel modification, and/or noise generating activities such as construction.
- 4.A. Project-related grading, clearing, construction or other activities would temporarily or permanently remove sensitive native or naturalized habitat on or off the project site.
- 4.B. Any of the following will occur to or within jurisdictional wetlands and/or riparian habitats as defined by USACE, CDFW and the County of San Diego: removal of vegetation; grading; obstruction or diversion of water flow; adverse change in velocity, siltation, volume of flow, or runoff rate; placement of fill; placement of structures; construction of a road crossing; placement of culverts or other underground piping; any disturbance of the substratum; and/or any activity that may cause an adverse change in native species composition, diversity and abundance.
- 4.C. The project would draw down the groundwater table to the detriment of groundwater-dependent habitat, typically a drop of 3 feet or more from historical low groundwater levels.
- 4.D. The project would cause indirect impacts to levels that would likely harm sensitive habitats over the long term.
- 4.E. The project does not include a wetland buffer adequate to protect the functions and values of existing wetlands.
- 5.A. Any of the following will occur to or within jurisdictional wetlands as defined by USACE: removal of vegetation; grading; obstruction or diversion of water flow; adverse change in velocity, siltation, volume of flow, or runoff rate; placement of fill; placement of structures; construction of a road crossing; placement of culverts or other underground piping; any disturbance of the substratum; and/or any activity that may cause an adverse change in native species composition, diversity and abundance.

- 5.B. The project would draw down the groundwater table to the detriment of groundwater-dependent federal wetlands, typically a drop of 3 feet or more from historical low groundwater levels.
- 5.C. The project does not include a wetland buffer adequate to protect the functions and values of existing wetlands.
- 6.A. The project would prevent wildlife access to foraging habitat, breeding habitat, water sources, or other areas necessary for their reproduction.
- 6.B. The project would substantially interfere with connectivity between blocks of habitat or would potentially block or substantially interfere with a local or regional wildlife corridor or linkage.
- 6.C. The project would create artificial wildlife corridors that do not follow natural movement patterns.
- 6.D. The project would increase noise and/or nighttime lighting in a wildlife corridor or linkage to levels proven to affect the behavior of the animals identified in a site-specific analysis of wildlife movement.
- 6.E. The project does not maintain an adequate width for an existing wildlife corridor or linkage and/or would further constrain an already narrow corridor through activities such as (but not limited to) reduction of corridor width, removal of available vegetative cover, placement of incompatible uses adjacent to it, and placement of barriers in the movement path.
- 6.F. The project does not maintain adequate visual continuity (i.e., long lines-of-site) within wildlife corridors or linkage.
- 7.A. For lands outside of the MSCP, the project would impact coastal sage scrub vegetation in excess of the County's 5 percent habitat loss threshold as defined by the Southern California Coastal Sage Scrub Natural Community Conservation Planning (NCCP) Guidelines.
- 7.B. The project would preclude or prevent the preparation of the subregional NCCP. For example, the project proposes development within areas that have been identified by the County or resource agencies as critical to future habitat preserves.
- 7.C. The project will impact any amount of sensitive habitat lands as outlined in the Resource Protection Ordinance (RPO).
- 7.D. The project would not minimize and/or mitigate coastal sage scrub habitat loss in accordance with Section 4.3 of the NCCP Guidelines.
- 7.E. The project does not conform to the goals and requirements as outlined in any applicable Habitat Conservation Plan (HCP), Habitat Management Plan (HMP), Special Area Management Plan (SAMP), Watershed Plan, or similar regional planning effort.
- 7.F. For lands within the MSCP, the project would not minimize impacts to BRCAs, as defined in the BMO.
- 7.G. The project would preclude connectivity between areas of high habitat values, as defined by the Southern California Coastal Sage Scrub NCCP Guidelines.
- 7.H. The project does not maintain existing movement corridors and/or habitat linkages as defined by the BMO.

- 7.I. The project does not avoid impacts to MSCP narrow endemic species and would impact core populations of narrow endemics.
- 7.J. The project would reduce the likelihood of survival and recovery of listed species in the wild.
- 7.K. The project would result in the killing of migratory birds or destruction of active migratory bird nests and/or eggs (Migratory Bird Treaty Act).
- 7.L. The project would result in the take of eagles, eagle eggs or any part of an eagle (Bald and Golden Eagle Protection Act).

4.4.4.3 Project Impacts and Mitigation Measures

Threshold 1: The project would 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~~Wildlife or U.S. Fish and Wildlife Service.

County Park and Trails

Impact Discussion

Construction

Construction of the active park would require grading equipment for site preparation as well as standard construction equipment, such as earthmoving equipment, tractors, excavators, backhoes, a water truck, drill rig, bobcat, forklift, rollers, a rubber tire loader, wheel tractor scrapers, an air compressor, a generator set, crane, and concrete truck. Construction would result in temporary direct and indirect impacts on the area due to an increase in noise levels, truck traffic, and ground-disturbing activities. Construction would have direct permanent impacts through the removal of native vegetation and habitat with construction of the active park.

Impacts on a maximum of 22.4 acres of native habitats (see Table 4.3-4, below, under Threshold 2) ~~are anticipated~~could occur from construction of the proposed park. The 22.4 acres of impacts represent approximately 4.9 percent of the total available open space and conserved lands within the immediate vicinity of the County's parcel. These existing open space and conserved lands include 1) the Wright's Field Preserve; 2) contiguous privately held open space lands, including some with conservation easements; and 3) the proposed ~~preserve~~open space lands within the remainder of the County's parcel.

As mentioned in Section 3.4, *Project Construction*, the project would be constructed in two phases. Impacts from Phase 1 would occur within the northern portion of the proposed impact area and consist of a maximum of 7.8 acres for construction of the active park, 0.4 acre for installation of the leach field, and 0.5 acre for new fire fuel modifications. Impacts from Phase 2 would occur primarily in the southern portion of the proposed active use park and would consist of a maximum of 14.3 acres from construction of the southern portion of the active use park.

Special-Status Plant Species

Of the eight sensitive plant species found within the BSA, two would be permanently and directly affected by implementation of the project: decumbent goldenbush and Palmer's ~~grappling hook.~~grapplinghook. Decumbent goldenbush would be directly affected at one location in the north-central portion of the active park, within an area that supports approximately 110 individuals covering approximately 3,500 square feet. This represents approximately half of the individuals observed on-site; these individuals are located at the far eastern range for this taxon. Decumbent goldenbush is a County List A species and therefore the impacts would be significant (**Impact-BIO-1**).

Approximately 13,857 Palmer's grapplinghook individuals were observed during special-status plant surveys in 2019. Of the 13,857 individuals, 200 would be affected by the construction of the active park, representing approximately 1 percent of the on-site population of this County List D species. Individuals would be removed during grading and site preparation for the project. Because of the relatively low number of individuals affected, as well as the relatively large number of individuals in the entirety of the BSA, impacts would not result in a regional decline in the species and therefore would be less than significant.

Chocolate lily, delicate clarkia, small-flowered microseris, and Southern California black walnut were all observed within the BSA. ~~These~~Furthermore, none of these four species are ~~not~~ within 50 feet of the proposed park footprint and, as such, indirect impacts on these species from construction (i.e., from dust deposition) are expected to be minimal and not result in direct mortality of any of these species. Because these four species would not be directly impaffected by ~~4.4-24~~construction of the project~~. Because of the widespread nature of Palmer's grapplinghook, as well as the relatively low number of individuals that would be directly removed by the project~~ and indirect impacts would not result in direct mortality, these impacts would be less than significant.

The County redesigned the project's equestrian staging area to avoid impacts on Engelmann oaks. Areas identified as a "Native Habitat Avoidance Area" would not be subject to grading or vegetation removal during site preparation activities (see Figure 4.4-6~~).~~). As a result, no Engelmann oak individuals or their associated canopies would be within the proposed grading limits of the project, and no direct temporary or direct permanent impacts on Engelmann oaks would occur with construction. Grading and site development would occur entirely outside of the canopy dripline of all Engelmann oaks.

The County is proposing grading and site development within 0.94 acre of land within a 50-foot root protection zone[1] where Engelmann oak root zones are located. Activities within the root protection zone would include grading/site preparation (e.g., compaction) and construction of park infrastructure (Figure 4.4-6). These activities would occur within the root protection zone of approximately 25 Engelmann oak trees, including one individual that was noted by the County's arborist in 2020 to be in very poor health and/or dying. Although grading activities would occur within the root protection zone, as mentioned above, none of those activities would occur directly under the canopy of any Engelmann oaks, and no Engelmann oaks would be removed as a result of construction activities associated with the project. However, activities within the root protection zone have the potential to result in indirect impacts and decline in these 25 Engelmann oaks over time. Although indirect impacts during construction would be temporary, it is possible that, within

[1] Root protection zones are defined in Section 3.5.5 of the County's Report Format and Content Requirements document as 50 feet "outward from the outside edge of the oak canopy" (County of San Diego 2010a).

the root protection zone, they could cause damage to the oaks that would not be visible during or even immediately after construction activities occur. This damage could cause a permanent decline in these oaks, resulting in mortality. In addition, fire fuel modification activities would occur within approximately 0.1 acre of Engelmann oak woodland. Approximately seven Engelmann oak tree canopies are within the area where fire fuel management would occur. Four of these oaks are in the Zone B fire fuel reduction zone where canopy thinning of some oaks may be required, in coordination with a certified arborist. The other three oaks are directly west of South Grade Road, in the 20-foot area where fire fuel management would be extended from the existing fire fuel management area along South Grade Road. Impacts within the root protection zone could potentially be significant, absent mitigation (**Impact-BIO-2)**.

Short-term indirect impacts could occur on decumbent goldenbush, Palmer's grapplinghook, and Engelmann oak during construction activities because each of these sensitive species would occur within 200 feet of the active park. Construction-related indirect impacts could include dust deposition that could alter the photosynthetic vigor of these individual plants and the potential spread of invasive species into the open space ~~preserve~~ from the construction area. These short-term indirect impacts could become permanent if invasive species become established and are not eradicated. Potential erosion of the soil around these special-status plants also could occur from stormwater runoff associated with construction (grading) activities. Dust control measures would be required for this project (see Section 4.3, *Air Quality*), as would stormwater pollution prevention best management practices (BMPs). These would reduce impacts from dust and erosion. As part of the County's long-term management of the ~~preserve~~open space, invasive species and noxious weeds would be ~~managed~~ abated. As a result, these indirect impacts on special-status plants are not expected to result in a long-term decline of any of these species and would be less than significant.

Special-Status Wildlife Species

The following special-status wildlife species were observed within the BSA during surveys and are included in the impact analysis for the project (see below): QCB, Belding's orange-throated whiptail, Blainville's (coast) horned lizard, coastal western whiptail, red-diamond rattlesnake, western spadefoot, burrowing owl (wintering migrant), Cooper's hawk, red-shouldered hawk, western bluebird, big free-tailed bat, pallid bat, pocketed free-tailed bat, Townsend's big-eared bat, western long-eared myotis, western mastiff bat, western red bat, western small-footed myotis, western yellow bat, and Yuma myotis. In addition, the following special-status species, which were determined to have moderate or high potential to occur within the BSA, are also included in the impact analysis below: Baja California coachwhip, California glossy snake, coast patch-nosed snake, Coronado skink, Southern California legless lizard, Bell's sage sparrow, burrowing owl (breeding occurrence), ferruginous hawk, grasshopper sparrow, Lawrence's goldfinch, Oregon vesper sparrow, Southern California rufous-crowned sparrow, white-tailed kite, Northwestern San Diego pocket mouse, San Diego black-tailed jackrabbit, and Bryant's (San Diego desert) woodrat.

Invertebrates

The project is not within a recovery area or designated critical habitat for QCB (USFWS 2003). The project would result in impacts on two of seven locations (29 percent) where QCB adults were observed in the past on the project site or in Wright's Field, including an observation made in 2010, as documented in the USFWS Carlsbad Fish and Wildlife Office data (2019) and during surveys in 2019 and 2020 (**Impact-BIO-3**). Both locations would be affected by construction of Alpine Park. No locations would be affected by maintenance of the existing trails. Five locations (71 percent) where

QCB adults were observed in the past would be permanently protected within either the Wright's Field Preserve or the proposed open space~~/preserve~~.

Incidental take of QCB could occur in the form of harassment, harm, injury, or mortality during construction. Direct impacts that could result in incidental take of QCB would occur through the permanent removal of 22.4 acres of occupied habitat. Direct impacts on QCB adult locations and host plants (e.g., dot-seed plantain [*Plantago erecta*]) are shown in Figure 4.4-3. Because of the configuration of the proposed park, which would have a straight western extent and an eastern edge defined by South Grade Road, it is not anticipated that QCB would experience additional edge effects compared to baseline conditions. The BSA currently experiences edge effects along South Grade Road, an area where the highest concentration of invasive species was observed and where fuel modification activities are currently conducted within approximately 30 feet of the edge of South Grade Road. After park construction, the edge effects would be moved to the western edge of the park and similar in severity on QCB to baseline conditions.

Indirect impacts on QCB also would occur because of the project. The loss of native forbs that provide QCB with nectar would occur within the 22.4 acres of occupied QCB habitat where the active park would be constructed. The loss of these nectar plants would reduce the carrying capacity of the site to support QCB in perpetuity. During construction, QCB also may avoid habitat along the western edge of the proposed active park because of an increased presence of noise, dust deposition on plants adjacent to the construction areas, and human presence. Indirect effects associated with noise and fugitive dust are not expected to be significant after completion of grading and construction activities.

HCB was not observed within the project site during comprehensive surveys in 2019 and 2020. In addition, HCB has not been documented on the County's property in publicly available databases, such as San Diego Association of Governments (SANDAG) (2011) and CNDDB (2020). Occurrences nearby have been documented at the northern portion of Wright's Field, in an area where spiny redberry is much more abundant than on the County's property, and on a privately held parcel south of Wright's Field. There are approximately 68 spiny redberry within the County's parcel, representing approximately 4 percent of the 1,679 spiny redberry individuals mapped during the HCB surveys on both the County's parcel and Wright's Field. Furthermore, no impacts on spiny redberry would occur from construction of the proposed Alpine Park, activities in the new fire fuel reduction areas, or the associated maintenance of existing trails. As a result, no impacts on HCB individuals are anticipated.

Although development of the active park would result in project activities (i.e., construction of the active park, potential installation of the septic system, and maintenance of the trails) occurring on 20.3 acres of designated critical habitat for HCB, only 4 acres contain the physical and biological features critical to conservation of the species, such as areas with flat-topped buckwheat, including disturbed flat-topped buckwheat. The County's Guidelines for Determining Significance (2010b) considers impacts on occupied HCB habitat to be significant. Because the site is currently unoccupied by HCB, impacts on critical habitat for the species would be less than significant. The USFWS would consider impacts on HCB critical habitat resulting from the project as part of its review of the Habitat Conservation Plan the County is preparing to address impacts on QCB.

Amphibians

Western spadefoot may also be affected by the project. One breeding pool of approximately 157 square feet (AP-7) was documented within the active park development footprint. This breeding

pool may be utilized by western spadefoot when seeking to expand from the core population in Wright's Field Preserve during exceptionally wet years, such as 2019 when an egg mass was observed in AP-7. AP-7 ~~will~~would be filled in during construction of the active park (**Impact-BIO-4**). Impacts on this potential breeding pool would be significant absent mitigation.

As described in the Western Spadefoot Survey Report (Appendix D), the core breeding population of western spadefoot is located within seasonally inundated basins in Wright's Field Preserve. A recent Orange County study (Baumberger et al. 2019) that documented the distances from breeding pools to burrow locations led to a determination that the mean distance of burrows from breeding pools was 40 meters with a range from 1 to 262 meters, as described in Appendix D2. In a different Orange County study (Halstead et al. 2021), a western spadefoot individual was documented traveling up to 602 meters from its breeding pools, although this same study concludes that most western spadefoot home range areas are less than one hectare (a linear travel range of approximately 56[2] meters, assuming the home range area is a circle around a pool). This range of 56 meters represents the linear distance a western spadefoot individual could travel from the breeding pool at the center of its one-hectare home range area in any given direction. Halstead et al. (2021) found variations between the distances toads were found to travel in relation to breeding pools. For example, 95 percent of the toads were found within 486 meters of their breeding pool at one site, and 95 percent of the toads were within 187 meters at another site. This shows there is a wide variation in the distances that spadefoots will travel in relation to their breeding pools. This spatial variation was found with most western spadefoot populations, and this context-dependent behavior suggests that site-specific management is necessary for western spadefoot.

The 262-meter buffer proposed by the project provides far more habitat than even the largest individual home range area observed during the Halstead study, which was up to 6 hectares, or a linear travel range of approximately 138 meters (again assuming the home range area is a circle around a pool). The USGS has also recommended an undeveloped buffer of 300 to 400 meters around breeding pools for the City of Santee Subarea Plan (Rochester et al. 2017); however, this recommendation was due to site-specific characteristics where a larger buffer was necessary to connect pools to habitat outside of the Plan area, which is not the case at the project site. For example, the 262-meter buffer is only the proposed distance between the breeding pools and the project's construction limits. There is a much larger buffer to the west (600 meters to the nearest development) and north (850 meters to the nearest development) of the occupied pool because of the location of Wright's Field Preserve, which provides additional western spadefoot habitat. This is a key site-specific difference between the project site and the City of Santee Subarea Plan; a buffer of 300 to 400 meters is not required because the project's 262-meter buffer is more than sufficient to connect breeding pools to additional western spadefoot habitat. What's more, the Rochester study acknowledges Baumberger's documentation that western spadefoot travel as far as 262 meters from breeding pool sites and uses this finding to draft the buffers considered for the City of Santee Subarea Plan, as discussed on pages 5 through 7 of that study (Rochester et al. 2017). Given the evidence in the record, including the studies cited herein and the existing site conditions, it is reasonable to assume that western spadefoot burrows and estivating adults could be expected to occur within approximately 262 meters of the known breeding pools in Wright's Field Preserve. The area within this 262-meter distance includes the western portion of the BSA but not areas within the proposed active park where grading would occur (see Figure 4.4-4~~).~~). A buffer of this size would be

[2] The area of a circle is calculated as $A=\pi r^2$, where A is area; π is pi, a mathematical constant approximately equal to 3.14; and r is the radius of the circle, which is the distance from the center of the circle to any point on its circumference. Solving for the radius of circle with an area of one hectare (equivalent to 10,000 square meters) yields a distance of approximately 56 meters.

more than adequate to conserve the average home range of a western spadefoot, which has been shown to be fewer than 60 meters, as discussed above. As a result, it is not anticipated that western spadefoot individuals would burrow/estivate within the proposed development footprint for the active park; therefore, it is unlikely that individuals would be crushed or killed during construction activities such as grading.

Adult western spadefoot also emerge a few nights per year to forage and breed (San Diego Management and Monitoring Program 2022). These activities are most likely to occur within the same general area as burrowing habitat, although the presence of eggs within basin AP-7 during 2019 demonstrates that they can migrate farther east and into the area proposed for park development during these nocturnal breeding events but only during particularly wet years. Because these foraging and breeding events happen in the evening when construction equipment would not be active, it is unlikely that direct impacts on western spadefoot, such as crushing or illegal collecting, would occur during foraging and breeding events.

As described above, there is much documented variation in the distances western spadefoot will travel from their breeding pools, and the 262-meter buffer provided at the project site offers adequate protection for the species, given the site-specific conditions and how the western spadefoot uses resources within the project site and its vicinity.

Additional analysis and detail related to western spadefoot is provided in an Addendum to the BRR (Appendix D2) prepared in July 2026.

Reptiles

Orange-throated whiptail, coast horned lizard, coastal western whiptail, and red-diamond rattlesnake were observed within the BSA. Baja California coachwhip, California glossy snake, coast patch-nosed snake, Coronado skink, and Southern California legless lizard were not observed but could occur within the project site. These nine species would be directly and indirectly affected through implementation of the active park during construction (**Impact-BIO-5**). Direct impacts include the conversion of all native and naturalized habitats within the proposed active park footprint that could support these species. Direct impacts could occur during construction of the active park if individuals are in the construction footprint.

Indirect impacts on these species could occur during construction of the project. Indirect temporary impacts during construction include increased dust from grading and construction, increased noise from construction crews and equipment, and increased foot traffic during construction. However, dust control measures would be required for this project (see Section 4.3) and would reduce these impacts to less-than-significant levels.

Birds

Construction of the active park would have permanent direct and indirect impacts on avian species that are endemic to the region, including special-status avian species. A wintering burrowing owl was observed incidentally during surveys in 2019. Cooper's hawk, a California Species of Special Concern; red-shouldered hawk, a County Group I species; and western bluebird, a County Group II species, were observed in the BSA during protocol surveys in 2019 and 2020 and are expected to be affected by the project. Bells' sage sparrow, burrowing owl (breeding occurrence), ferruginous hawk, grasshopper sparrow, Lawrence's goldfinch, Oregon vesper sparrow, Southern California rufous-crowned sparrow, and white-tailed kite have either moderate or high potential to occur (either breeding or foraging, or both) within the BSA.

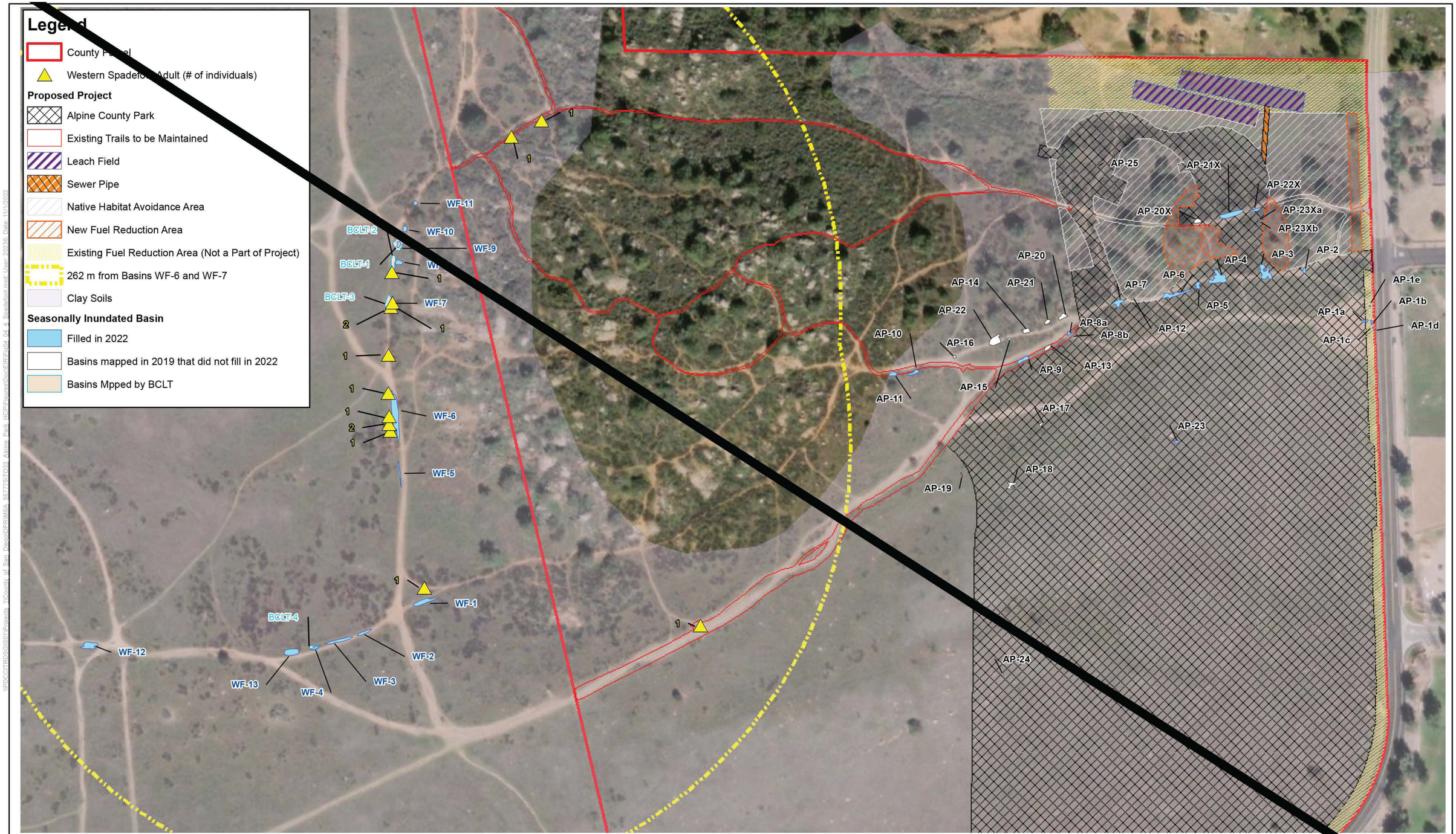
Table 4.4-3 summarizes the proposed impacts on habitat for special-status avian species and raptors, grouped by habitat requirements. These impacts are presented in the context of the regionally available habitat for these species groups in the adjacent Wright's Field Preserve and within privately held, directly contiguous open space lands in the immediate vicinity of the ~~proposed~~ project. This analysis shows that the 18 acres of impacts on grassland habitat from the ~~proposed~~ project reflect approximately 14 percent of the available grassland habitat in the immediate habitat block west, north, and south of the project site. By comparison, only 2 percent of the available scrub habitat in the immediate vicinity would be affected by the ~~proposed~~ project. Impacts on habitat for all special-status avian species, most of which are either California Species of Special Concern or Group I species, would be significant, absent mitigation (**Impact-BIO-6**).

Table 4.4-3. Avian Species Impacts and Availability of Habitat in Immediate Vicinity

Avian Species Group	Species Included in Group	Permanent Direct Impacts on Habitat	Available Open Space~~/ Preserve~~ Land		Percent Impact Compared to All Available Open Space~~/Preserve~~ Land[b]
			Habitat in Alpine Park Preserve (acres)	Habitat in Immediate Vicinity[a]	
Generalist Avian Species	Cooper's hawk, red-shouldered hawk, white-tailed kite, raptors	22.4	67.2	379.6	5%
Grassland Obligates/ Open Habitat	Burrowing owl (wintering and breeding), grasshopper sparrow, Oregon vesper sparrow, ferruginous hawk	18.4	15.4	113.4	14%
Scrub Habitat Specialists	Bell's sage sparrow, Southern California rufous-crowned sparrow	4.0	44.7	127.8	2%
Woodland Specialists	Lawrence's goldfinch, western bluebird	0.1 (No direct removal of Engelmann oaks)	6.6	135.5	0.1%

a. Includes areas within Wright's Field Preserve as well as privately held open spaces, some of which are permanently conserved through conservation easements. Source: SANDAG Conserved Lands GIS data; SANDAG 2012 Vegetation Data for Western San Diego County GIS data.

b. Vegetation data for this analysis included the site-specific vegetation mapping conducted for the ~~proposed~~ project in the BSA and SANDAG 2012 Vegetation Data for Western San Diego County GIS data for all areas outside the BSA. Vegetation data outside of the BSA is not as precise as field-verified vegetation data, but for the general habitat types (grassland, shrubland, etc.) required in this analysis, the SANDAG vegetation data is sufficiently accurate to estimate the relative extent of impacts from the ~~proposed~~ project.



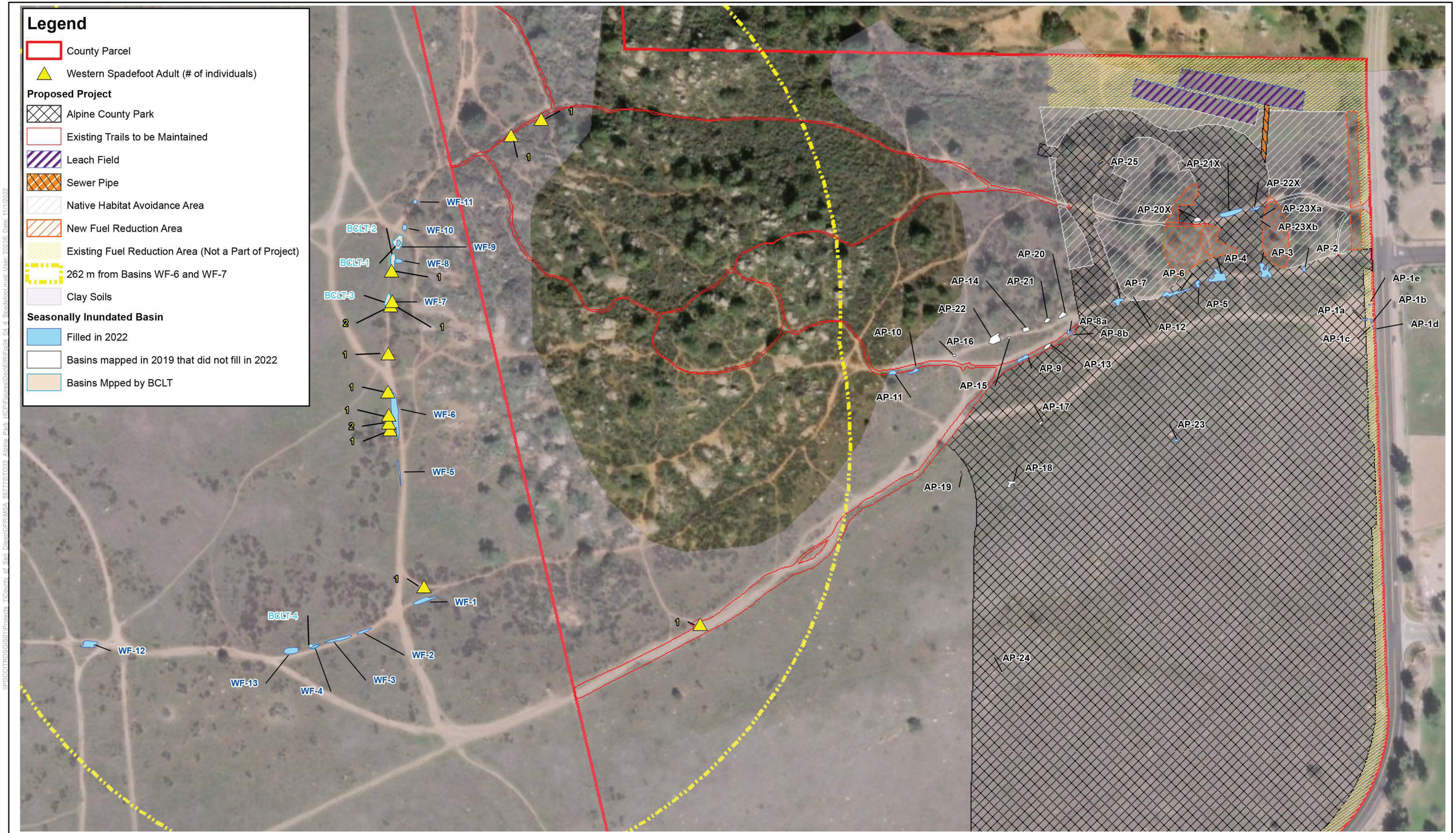
Source: Esri, DigitalGlobe (2018)

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Figure 4.4-4
Western Spadefoot
Alpine Park Project



Source: Esri, DigitalGlobe (2018)

0 150 300 Feet

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Figure 4.4-4
Western Spadefoot
Alpine Park Project

Direct mortality of nesting avian species, including both common species protected under the MBTA and special-status avian species, also could occur during construction. Direct mortality could occur if eggs, chicks, or adults are crushed or destroyed by construction equipment or if nests are abandoned because of an increase in noise and human presence during construction. This impact (**Impact-BIO-7**) would be significant.

Although the burrowing owl that was observed was a transient winter migrant and breeding season surveys were negative, burrowing owl could still occur within the BSA and possibly within the areas proposed for grading for the active park. Ground squirrel burrows exist throughout the BSA; if breeding burrowing owls are present during construction activities, direct mortality of this species, including eggs or chicks, could occur. Impacts on breeding burrowing owl would be significant absent mitigation (**Impact-BIO-8**).

Implementation of the project would also result in the loss of approximately 22.4 acres of functional foraging habitat for raptors. Valley needle grassland and non-native grassland both serve as prime foraging habitat for raptors, as do the open scrub habitats on the site. The project footprint would affect these types of habitats, resulting in a loss of functional foraging habitat for raptors. Impacts on functional foraging habitat for raptors would be significant, absent mitigation (**Impact-BIO-9**).

Temporary direct impacts would occur during construction of the project. Expected impacts include increased dust from grading and construction, increased noise from construction crews and equipment, increased foot traffic during construction, and increased noise from crews and equipment. This may temporarily alter the natural behaviors of avian species in the area. However, dust control measures would be required for this project and would reduce impacts to less-than-significant levels.

Mammals

Special-Status Bats

Passive and active surveys for bats were conducted in July, August, and September 2019, and July 2022. Fifteen of the 22 known bat species in San Diego County were detected on the property, 10 of which are considered special-status species. Seven are listed as California Species of Special Concern: pallid bat, Townsend's big-eared bat, western red bat, western yellow bat, western mastiff bat, pocketed free-tailed bat, and big free-tailed bat (Figure 4.4-5~~).~~). Three County Group II bat species were also observed in the BSA: western long-eared myotis, western small-footed myotis, and Yuma myotis. Permanent direct and temporary indirect impacts on these species would be expected to occur from construction activities that permanently remove habitat for these species. -These bat species were observed foraging over most of the native habitats in the BSA, especially within the open Engelmann oak woodland, flat-topped buckwheat, and native and non-native grasslands within the project footprint. Direct impacts on up to 22.4 acres of native habitats would remove foraging and possibly roosting habitat for these bat species during vegetation clearing associated with construction of Alpine Park (**Impact-BIO-10**).

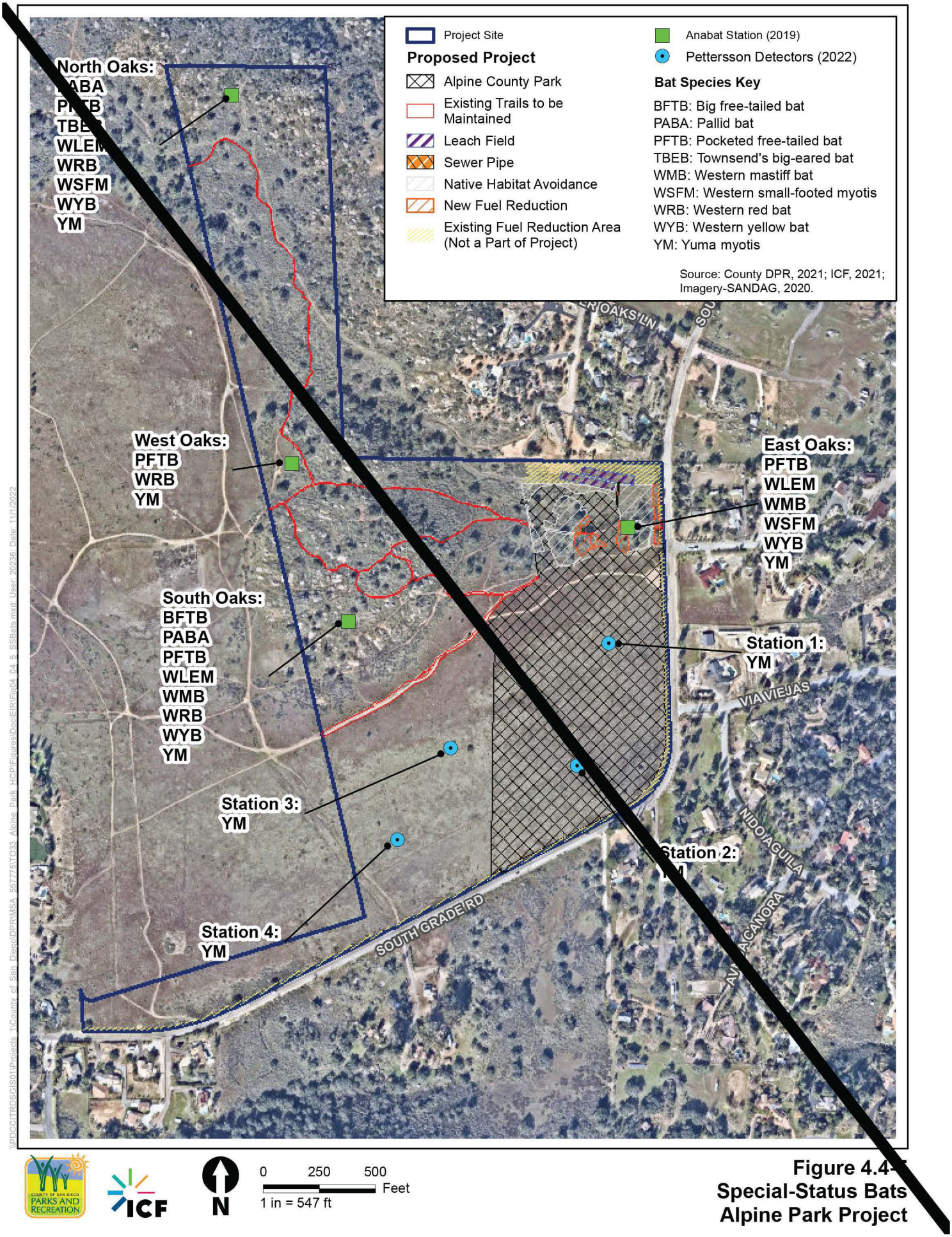
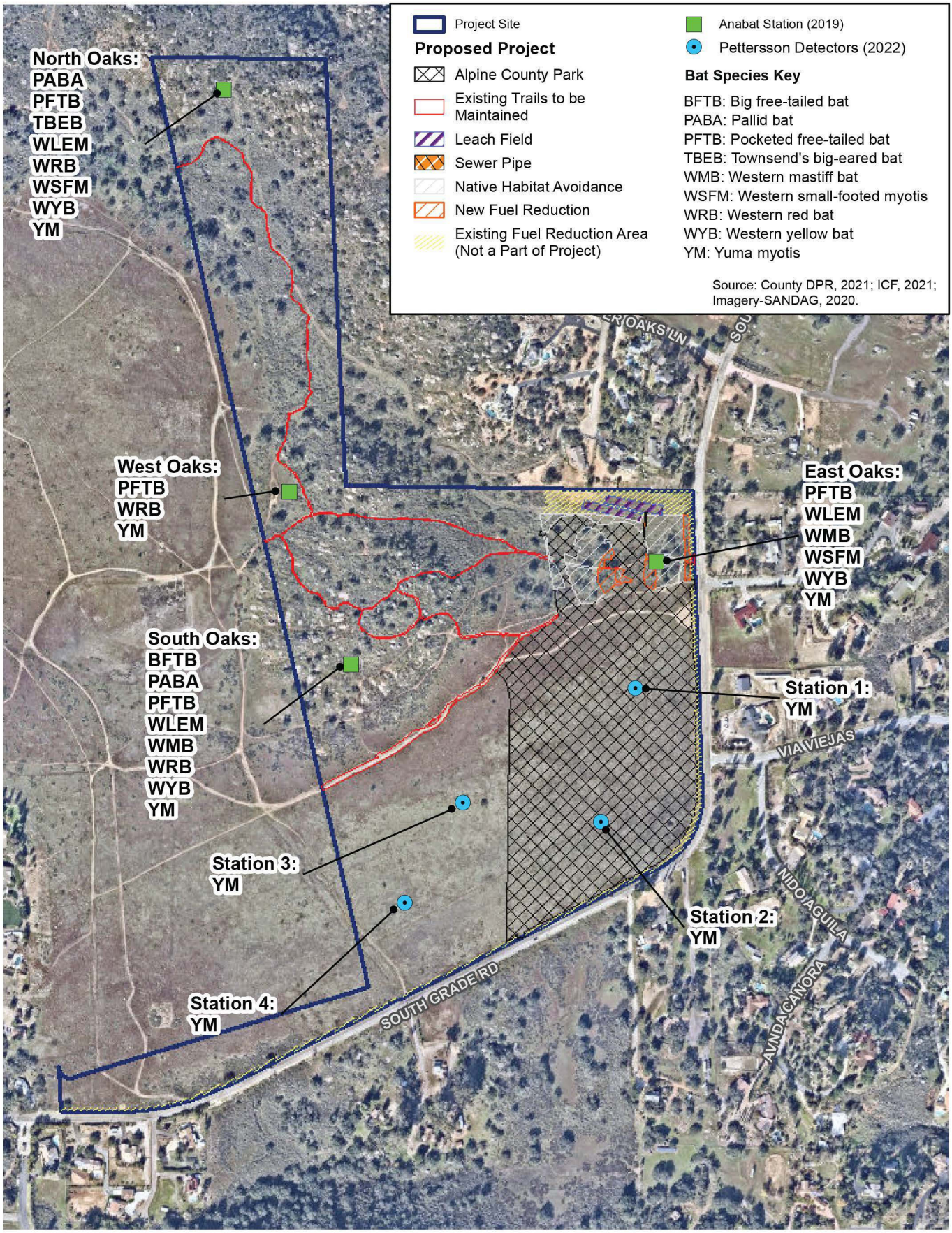


Figure 4.4-5
Special-Status Bats
Alpine Park Project



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1 in = 547 ft

Figure 4.4-5
Special-Status Bats
Alpine Park Project

~~As mentioned above, i~~Impacts on pallid bat foraging habitat would be significant. This species is particularly vulnerable to impacts associated with the ~~proposed~~ project because of the rarity of known roost sites in San Diego County (there are only two known pallid bat colony sites) (Stokes 2018). Pallid bats were acoustically detected five times within the preserve portion of the project site during the September 2019 passive survey (ICF 2022). This is outside of the maternity season (April 1-August 31) for the species. Therefore, the detections made were likely foraging, as opposed to roosting, individuals. Additionally, four of the five detections were in the northern portion of the preserved area more than 2,000 feet away from the proposed project impacts where the developed park will be. The closest detection of pallid bat was more than 500 feet west of proposed project impacts, also in the preserved area of the project site. The individual pallid bats observed during focused bat surveys are believed to~~may~~ belong to the~~a~~ maternal colony that roosts in Viejas at a private residence ~~or in a yet-unknown location~~. The roost is within an occupied house, indicating that pallid bats will withstand some level of disturbance and noise associated with human disturbance. However, p~~P~~allid bat also has a very specific foraging strategy; it utilizes grasslands and open oak woodlands as its main foraging habitat. In addition, this species has characteristics that affect its success with increased urbanization. This includes its tendency to fly at low altitude, its inability to fly for prolonged distances, and its specialized foraging strategies.

Implementation of the project would not affect any known roosting habitat or maternal colony sites; however, roost sites for some of these species are very difficult to detect. There may be some potential for bats, such as pallid bat, to use rock outcrops as roost sites. Pallid bats also may roost in very small crevices within rocks. Rock outcrops that pallid bats may use for roosting were observed west of proposed construction areas, which is close enough for roosting females to potentially experience distress during critical developmental periods, such as when they are pregnant or caring for young. Western red bats may also roost within the foliage of the Engelmann oaks on the site, making them very difficult to detect visually. Bat biologists often require telemetry tracking to positively identify western red bat.

No large rock outcrops or trees would be removed as part of construction of the project. However, construction activities may occur directly adjacent to Engelmann oaks and within approximately 200 feet of rock outcrops. Bat species are particularly vulnerable to impacts on maternal roost sites, such as within oaks or rock crevices. Although direct removal of trees or large boulders is not proposed as part of construction for the active park, high-pitched frequencies (e.g., from surveying equipment) could harm maternal roost sites, resulting in roost abandonment or thermal shock. These impacts could cause direct mortality of pregnant females or pups. The impacts would be significant under the County's guidelines (County of San Diego 2010b), absent mitigation (**Impact-BIO-11**).

Indirect impacts on bat species, such as disruption of foraging behavior, could occur if construction takes place during evening hours. Because bats are nocturnal species and construction is expected to occur during daytime hours, indirect impacts on these species due to construction activities would be minimal and would not be expected to alter natural behaviors. Maintenance of existing trails near or within oak woodlands is not expected to alter the quality of foraging habitat or affect roosting habitat for these species because the trails occur within already-disturbed areas of bare ground.

Additional analysis and detail related to pallid bat is provided in an Addendum to the BRR (Appendix D2) prepared in July 2026.

Other Special-Status Mammals

The northwestern San Diego pocket mouse, San Diego black-tailed jackrabbit, and Bryant's (San Diego desert) woodrat were determined to have moderate potential to occur within the BSA and be affected by implementation of the project. Suitable habitat for all three species can be found in the Valley needlegrass grasslands, non-native grasslands, and open flat-topped buckwheat scrub habitats within the BSA as well as the construction footprint of Alpine Park. Grasslands and flat-topped buckwheat within the construction footprint would be directly affected and converted to a developed park, removing it as habitat that could support the species (**Impact-BIO-12**). Temporary direct and indirect impacts on the species are expected to occur during and post-construction of the project. Temporary direct impacts on these species include possible accidental take due to construction activities, increased dust from grading and construction, increased foot traffic during construction, and increased noise pollution from crews and equipment. Natural behaviors of these species would be affected. However, dust control measures would be required for this project and would reduce these impacts to less-than-significant levels.

Because these species are active mostly at night (Tremor et al. 2017), foraging habits are not expected to be significantly affected, but construction activities may cause them to be active during the day to avoid construction activities. The San Diego pocket mouse is known to utilize burrows for shelter. Because this species is less active during the day, the time when construction would be most active, direct impacts on this species, including the potential for direct mortality through crushing, is possible because San Diego pocket mouse individuals might be resting in burrows.

Operation

Operation of Alpine Park includes maintenance of the park and existing trail system, fire fuel management activities (i.e., vegetation trimming and clearing), as well as ongoing usage of the park and trails by the public. The equestrian staging area would contain receptacles for waste and equestrian manure; a Manure Management Plan would be prepared for the project to control disease vectors and pests, such as mosquitoes and other animals/insects that are vectors for disease or impacts on human health. The County has proposed additional signage, and a live-~~in~~on volunteer and park rangers to monitor the Alpine Park Preserve and Alpine Park. As such, it is anticipated that fewer long-term impacts on special-status plants and animals would occur after implementation of the ~~proposed~~ project compared to baseline conditions. The sections below provide additional details on this conclusion.

Impacts on Wright's Field

Operation of Alpine Park and its associated trails has the potential to increase usage on trails within the adjacent Wright's Field Preserve. This increased usage would have the potential to increase impacts on special-status plants and wildlife, consistent with the impacts described below. However, the proposed Alpine Park would be approximately 600 to 800 feet away from the eastern edge of Wright's Field. At that distance, impacts from operation of the active park and formalization of the trails would dissipate considerably and be considered less than significant. Night lighting is intended to be for security and on motion sensors, rather than full time, and would not be used during operation of the park; therefore, impacts on nocturnal animals are not anticipated. Impacts on the Wright's Field trail system from the presence of the active park are not expected to dramatically change the nature or intensity of trail usage at Wright's Field because of both the distance from the park to Wright's Field and the different usage preferences. Users who come to the active park for ball sports or skateboarding are not anticipated to also be hiking the distances required to access

Wright's Field regularly. In addition, Wright's Field is accessed from its own entrance on the far western edge of its boundary.

Although some increase in trail usage can be expected from the easier parking within the proposed park, users can currently park along South Grade Road to access trails within the County's parcel and do so regularly. Usage of the trails in Wright's Field is anticipated to be driven by changing conditions in the larger community, including population growth and the availability of other open space areas, even public health hazards such as the coronavirus pandemic, which increased park usage throughout San Diego County. As a result, operation of Alpine Park is not anticipated to result in significant impacts on special-status plants or animals in the adjacent Wright's Field Preserve.

Special-Status Plant Species

Trail maintenance is not expected to have direct permanent or temporary impacts on any special-status species or their habitats. Park rangers will ensure that trail maintenance is consistent with the Preserve's Resource Management Plan (RMP) and does not impact populations of rare plants.

Maintenance of the park site would be completed within the perimeter fence that would be constructed around the park; therefore, there would be no effects from park maintenance on special-status plants because none would occur within the active park site once construction is complete.

All special-status species present in the BSA have the potential to be trampled from unauthorized, off-trail users within the proposed Alpine Park Preserve, which could result in plant decline or mortality. Unauthorized off-trail activities observed in the BSA have included off-trail trampling~~,~~ and building of bike jumps/berms. Implementation of the project would include additional signage to educate the public and inform them of avoidance areas, and park rangers and a live-~~in~~on volunteer to monitor the Alpine Park Preserve and Alpine Park. The presence of the active park has the potential to draw additional people onto the trails and open space~~/preserve~~ areas. This potential increase in the number of people using the trails could result in direct impacts on special-status plants if park users go off-trail and sensitive plants are trampled or crushed. Off-trail trampling is a special concern for low-growing annuals such as the two delicate clarkia individuals observed approximately 6 feet from the main east–west trails through the north-central portion of the open space~~/preserve~~, as well as the Palmer's grapplinghook near the east–west trail/vehicle access path through the south-central portion of the open space~~/preserve~~. Within 10 feet of this trail/vehicle access path, fewer than 100 ~~individual~~ Palmer's grapplinghook individuals were noted in 2019. The potential impacts on Palmer's grapplinghook would be less than significant because of the widespread nature of this County List D species (San Diego Natural History Museum 2021). Impacts are not expected on the two delicate clarkia individuals during operation of the trail system because of the County's proposed management of the Alpine Park Preserve, within which these individuals will be located. Signage and fencing will be implemented in specific locations, in accordance with the RMP. Furthermore, it is unlikely that additional trail use would affect the Engelmann oaks and Southern California black walnut because of their size. Similarly, increased traffic on trails is not likely to jeopardize the long-term existence of the San Diego County viguiera because of the location of these individuals far north of the open space~~/preserve~~, an area that is not heavily traveled, as well as the widespread nature of this taxa (San Diego Natural History Museum 2021~~).~~.). With implementation of management of the Alpine Park Preserve, the potential for impacts on special status plants from the operation of the Project would be less than significant.

Other potential long-term impacts resulting from operation of the active park and formalization of the existing trail system include an increase in invasive plant propagules being introduced into the open space~~/preserve~~. This, combined with the existing bare ground that exists along these trails, could create an environment that could support invasive species, creating more competition with the special-status species. Invasive plant management along the edges of the trails will be a management focus for the County during the long-term resource management associated with the open space~~/preserve~~. As a result, these activities would not present a significant impact on the regional long-term survival of special-status plants present on the site.

Impacts to Engelmann oaks could potentially occur during fire fuel reduction activities, as described above, but would occur in coordination with a certified arborist. No other special-status plants or host plants for QCB or HCB occur within these new fire fuel management zones.

Special-Status Wildlife Species

As mentioned above, operation of the active park includes maintenance of the park and existing trail system as well as the ongoing usage of the park and trails by the public. Maintenance of the trails and the park site would result in occasional noise and additional human presence along the trail and at the edge of the park adjacent to the open space~~/preserve~~. This noise could disrupt behavioral patterns of special-status wildlife adjacent to these activities, with varying degrees of intensity, based on the distance of the animal from the noise source and its ability to withstand noise and other anthropogenic disturbances. Noise impacts from maintenance activities would not result in direct mortality of individual special-status wildlife species and would not result in a regional decline of these species. As such, these impacts would be less than significant. Furthermore, proper maintenance of the park, such as trash collection and disposal, would reduce impacts on special-status wildlife species in the open space~~/preserve~~ by ensuring that litter would not blow into the open space~~/preserve~~ and entice wildlife to ingest trash. This would also help control animal pest infestations that could disrupt special-status wildlife use of the proposed Alpine Park Preserve.

The following sections describe the potential impacts on special-status wildlife species from additional human usage of the trails and open space~~/preserve~~ areas. Much of the discussion that follows reflects the latest research on the subject of "recreational ecology," which is an interdisciplinary field that studies the ecological impacts of recreational activities and the management of these impacts (CDFW 2020).

Invertebrates

Post-construction, the existence of Alpine Park would increase the amount of anthropogenic influence in the areas along the existing trails. The existing trails currently support a few scattered dot-seed plantain individuals that may be trampled with increased use of the trails. These impacts are also included in total impacts on QCB host plants, described under *Construction*, above. Other indirect impacts may be similar to those described for the federally endangered Karner blue butterfly (*Lycaeides melissa samuelis*) (CDFW 2020). In that study, the Karner blue butterfly flushed in the presence of hikers, similar to how they might respond to natural predators. Recreational activities also restricted the choice of and access to host plants due to the presence of hikers, rendering the quality of the habitat within 33 feet of the trail unsuitable.

Within the 96.6-acre project site, approximately 3,450 host plants are located within 33 feet of existing trails that would be formalized as part of the project. QCB may be restricted from accessing these host plants, reducing the potential reproductive success of individuals. These indirect impacts

from increased human presence along trails may cumulatively result in reduced use by QCB of habitat immediately surrounding the trails. QCB has persisted at the project site over time and is presumed to currently utilize areas adjacent to trails, especially in areas where host plants are located. The increase in human activity from formalization of the trails and creation of the Alpine Park is not expected to result in regional long-term decline of this species or additional direct take of individuals. The large stand of dot-seed plantain in the northern portion of the project site (see Figure 4.4-3) is directly adjacent to and surrounded to the east by closed-canopy scrub habitat that was determined during protocol-level surveys to not be suitable for QCB, in accordance with the definition of "excluded areas" in the 2014 USFWS survey guidelines. In the southern portion of the project area, dot-seed plantain was mapped within approximately 20 to 30 feet of the existing dirt road that leads to the Wright's Field property. This road is being maintained for access to Wright's Field; it is not anticipated that this road will see a major increase in either pedestrian or vehicular traffic from the ~~proposed~~ project. The other alternative for accessing Wright's Field would be from the south, directly off South Grade Road. This access road is much more overgrown and supports a significantly larger population of dot-seed plantain. This is where ICF directly observed QCB in 2020. As a result, the proposed access road to Wright's Field through the central portion of the County's parcel reflects the least impactful option for permanent access to the Wright's Field Preserve with respect to QCB. In addition, County DPR would restrict access to approximately 3,300 feet of existing trails throughout the open space~~/preserve~~, allowing those areas to naturally revegetate and stabilize. Dot-seed plantain has been documented on the project site colonizing old roads and trails; it appears to have a competitive advantage over annual grasses in these compacted soils. Annual grasses can outcompete dot-seed plantain in other areas; therefore, it is probable that the closed trails may support host plants in the future. As a result, it is not anticipated that operational effects of the project would result in additional significant impacts on QCB, beyond those described for construction, above.

Reptiles and Amphibians

Post-construction, the existence of Alpine Park would increase the amount of anthropogenic influence in the areas immediately surrounding the park footprint. There is a possibility for increased foot traffic, mountain bike traffic, and horse traffic within the trail system that is proposed to be formalized as part of the project. These trails exist in habitat that could support special-status reptiles and amphibian species, such as the Belding's orange-throated whiptail, coast horned lizard, coastal western whiptail, and red-diamond rattlesnake, which were observed within the BSA, and other special-status reptile species that could occur within the BSA. With an increase in these activities, there is an increased risk of these species being crushed, especially from mountain bike activities. Bike-caused fatalities may occur because amphibians and reptiles may be attracted to trails for thermoregulation and thereby become vulnerable to collisions with bikes (CDFW 2020). An increased presence of humans also means an increased presence of domestic dogs, which may predate on these species. Dogs' scent can linger as well, long after a dog has left an area, which can repel special-status wildlife species (CDFW 2020). This is true for both leashed and unleashed dogs.

As mentioned above, the County has proposed additional signage and a live-~~in~~on volunteer and park rangers to monitor the Alpine Park Preserve and Alpine Park as part of project implementation. Moreover, the public is currently accessing the County property for hiking and mountain biking, in some instances along trails that would be closed as part of the project. The presence of an active park adjacent to these trails is not anticipated to significantly increase mortality or reduce the viability of special-status reptiles or amphibians over the long-term because of the differences in

user preferences between the two forms of recreation. There most likely would be an increase in the number of horses on the property compared to baseline condition due to the construction of an equestrian staging area. Horses move much slower than most reptile species, and as such, most reptiles would be adroit enough to avoid being crushed by hooves. However, these impacts would be significant absent mitigation because they could directly and permanently affect Group I wildlife species and/or California Species of Special Concern (**Impact-BIO-13**).

Western Spadefoot

During development of the proposed trails, the County worked closely with the Back Country Land Trust (BCLT) to determine which trails to close and which to keep open to the public. One of the factors in these decisions was the presence of known population of western spadefoot within seasonally inundated basins along roads/trails in the eastern portion of Wright's Field Preserve. An existing trail, currently located along a steep section of the "knoll" or central hill on the County's parcel, leads visitors directly into the area where western spadefoot is known to breed on Wright's Field. BCLT has noted erosion issues in the past along this segment of trail and recommended the County close it to minimize further erosion issues. To accommodate this request, the County is proposing to close that trail as part of the project. One trail segment that would remain open leads visitors into Wright's Field Preserve just north of the area where western spadefoots are known to breed. This trail is less steep, and erosion is not a concern in this segment.

Spadefoots forage only during brief periods; therefore, it is unlikely that trail users and/or their pets would pose a risk to western spadefoots from being crushed, predated, or killed. For most of the year, western spadefoots are underground in protected burrows; when foraging, they typically do so at night. Moreover, it is not anticipated that the presence of the active park or formalization of existing trails would dramatically increase the number of users on the trails such that the small number of western spadefoots that may be foraging during the day at peak breeding times would face a significantly higher risk from direct crushing or predation. These risks are currently present and will continue to be present but pose a very minimal risk to western spadefoots. As a result, operational impacts on western spadefoot would be less than significant.

Birds

Similar to QCB, discussed above, special-status avian species may be affected by increases in the number of hikers using the trail system because they may be flushed from their resting or nesting locations more often with increased foot traffic. Increased rates of flushing in avian species has the potential to negatively impact thermoregulation abilities, nesting success, and ability to forage for food successfully. Thresholds vary for how many users can be in an area before birds are negatively affected, but it is generally accepted that more visitors will cause more wildlife effects (CDFW 2020). Dog-specific disturbance (e.g., lingering dog scent, predation) has been studied for birds, with no evidence that birds become habituated to dog presence, even with leashed dogs and even where dog walking was frequent (CDFW 2020).

There is also the possibility that increased car traffic within the park footprint may result in additional collisions with avian species flying over the park. These impacts may cumulatively result in reduced numbers of special-status avian species as well as a decrease in use of habitat immediately surrounding the project footprint. These impacts would be significant absent mitigation because they could directly and permanently affect Group I wildlife species and/or California Species of Special Concern (**Impact-BIO-13**).

Impacts on nesting birds also may occur during fire fuel management activities proposed for the project. Activities such as vegetation removal or tree limbing could cause direct mortality to special-status and common avian species protected under the MBTA. These impacts would be significant, in accordance with **Impact-BIO-7**, described above. As recommended in the FEOA, nesting bird surveys must be conducted prior to these activities if they are conducted during the nesting season.

Mammals

Special-Status Bats

Operation of the project is not expected to have significant temporary or permanent impacts on special-status bat species. Because bats are nocturnal and the park hours would be from sunrise to sunset, with no night lighting allowed, anthropogenic activity is not expected to have an impact on bat behavior.

Other Special-Status Mammals

The northwestern San Diego pocket mouse, San Diego black-tailed jackrabbit, and Bryant's (San Diego desert) woodrat were determined to have moderate potential to occur within the BSA. These species could experience impacts similar to those described for reptiles, above, during operation of the project. These include collisions with mountain bikes, predation by dogs, and avoidance of habitat areas due to lingering dog scent. Humans may ~~can~~ reduce habitat suitability and the carrying capacity of habitat areas for mammals due to these actions. These impacts may cumulatively result in reduced numbers of special-status mammal species as well as a decrease in use of habitat immediately surrounding the project footprint.

As mentioned above, the County has proposed additional signage and a live-~~in~~on volunteer and park rangers to monitor the Alpine Park Preserve and Alpine Park as part of project implementation. Moreover, the public is currently accessing the County property for hiking and mountain biking, in some instances along trails that would be closed as part of the project. The presence of an active park adjacent to these trails is not anticipated to significantly increase mortality or reduce the viability of special-status mammals over the long-term because of the differences in user preferences between the two forms of recreation. There likely would be an increase in the number of horses on the property compared to baseline condition due to the construction of an equestrian staging area. However, horses move much slower than most mammal species, and as such, most mammals, including the three discussed in this section, would be skilled at avoiding hooves. However, these impacts would be significant absent mitigation because they could directly and permanently affect Group I wildlife species and/or California Species of Special Concern (**Impact-BIO-13**).

Impact Determination

Implementation of the project would have a substantial adverse effect, either directly or through habitat modifications, on species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations or by CDFW and USFWS. Potentially significant~~.~~ and significant impact(s) include the following:

Impact-BIO-1: Significant Impacts on Decumbent Goldenbush. Of the 226 decumbent goldenbush individuals observed within the survey area, 110 would be affected by the project, which is nearly half of the on-site population. These impacts would be significant on the existing population of decumbent goldenbush, absent mitigation.

Impact-BIO-2: Potentially Significant Impacts on Engelmann Oaks. No direct impacts on any Engelmann oaks would occur because of implementation of the project. Indirect impacts may include potential grading within the root protection zone. Approximately 0.94 acre is within the root protection zone where grading/site preparation (e.g., compaction) and construction of park infrastructure would occur (Figure 4.4-6). Impacts would occur within the root protection zone, but not within the canopy/dripline, of approximately 25 Engelmann oak trees, including one individual that appears to be dying. These oaks are at risk of injury or mortality if construction activities damaged the root zones or aboveground portions of the trees. Canopy thinning may be conducted under the supervision of a certified arborist, as part of fire fuel management in these areas. Engelmann oaks have endured challenges in recent years that threaten the long-term survival of the species; these challenges include development, pest infestations, and climate change impacts. As a result, impacts within the root protection zone and impacts associated with fire fuel management activities could potentially be significant, absent mitigation.

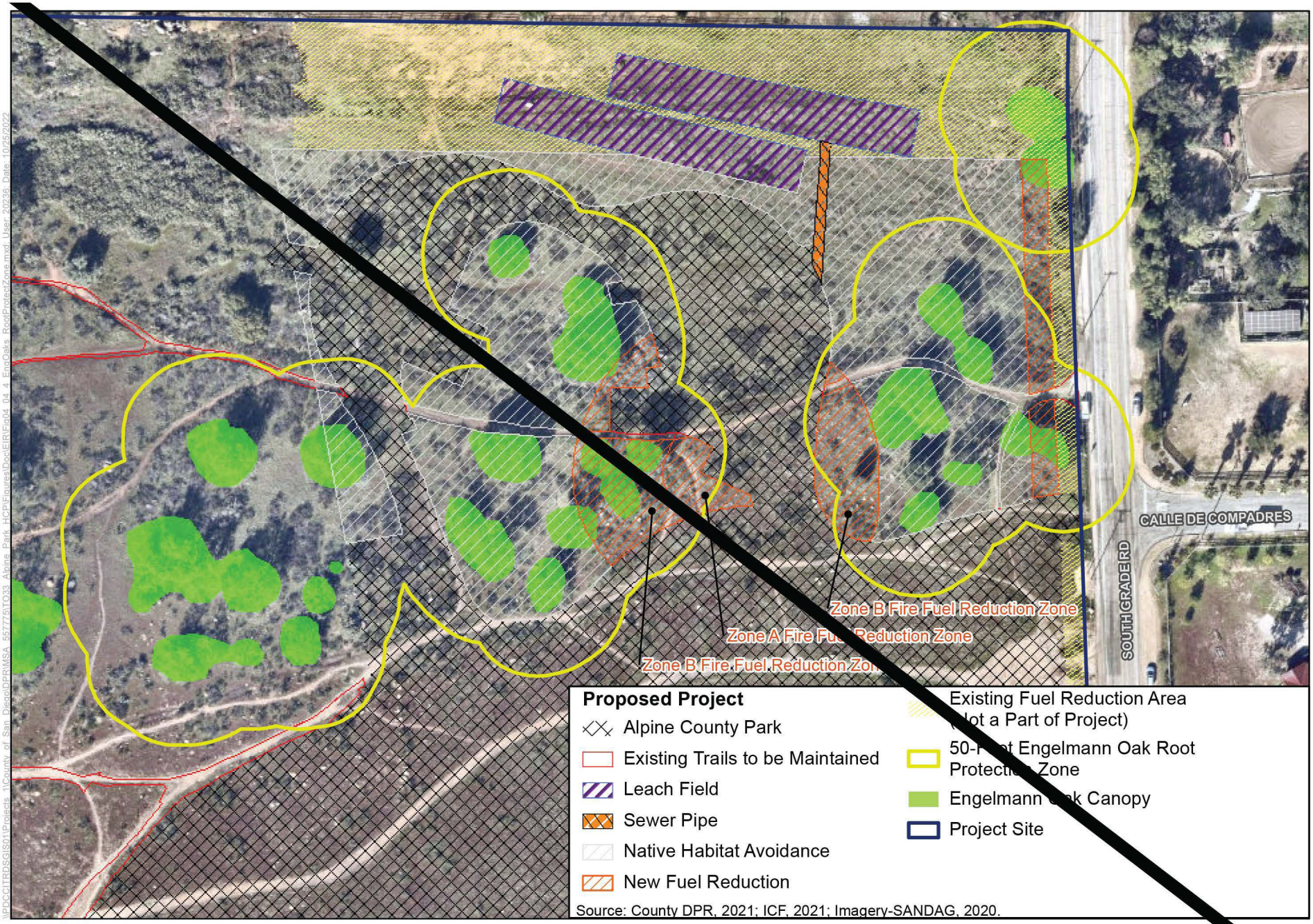


Figure 4.4-6
Engelmann Oak Root Protection Zone Impacts
Alpine County Park Project

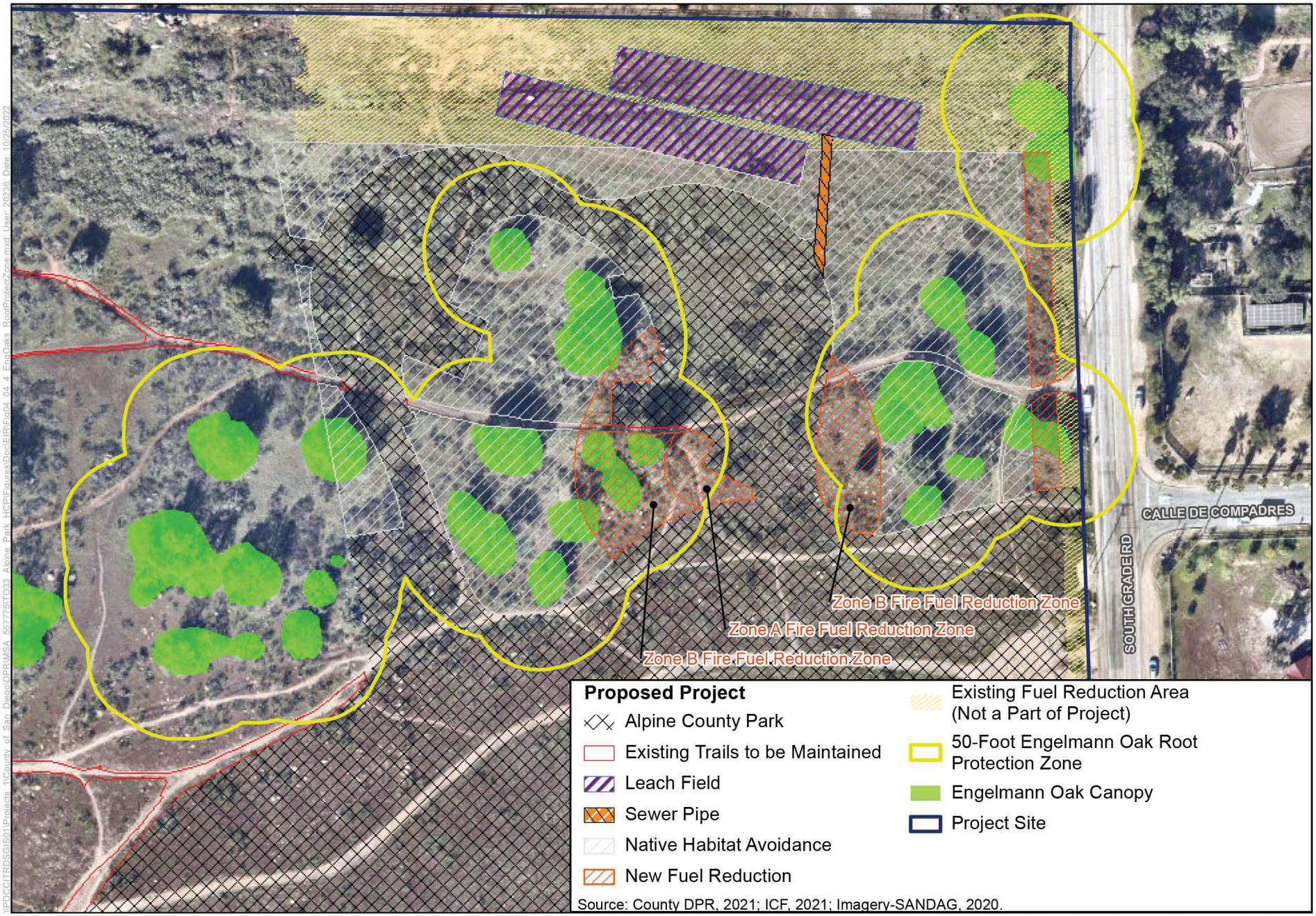


Figure 4.4-6
Engelmann Oak Root Protection Zone Impacts
Alpine County Park Project

Impact-BIO-3: Significant Impacts on QCB Occupied Habitat During Construction. Occupied QCB habitat would be affected by construction and maintenance of the project. Impacts on occupied QCB habitat would be significant.

Impact-BIO-4: Significant Impacts on Western Spadefoot. One seasonally inundated basin (AP-7) within which western spadefoot eggs were observed in 2019 would be filled in during construction of the active park. This impact could limit the ability of western spadefoot within the core breeding habitat on Wright's Field to expand territory during wet years. This could cause declines in the core population over time because it would restrict locations where breeding activities could occur and reduce breeding refugia sites. These impacts could potentially be significant, absent mitigation.

Impact-BIO-5: **Habitat Impacts on Special-Status Reptiles.** Impacts on eight special-status reptile species (California glossy snake, coast patch-nosed snake, coast horned lizard, coastal western whiptail, Coronado skink, orange-throated whiptail, red-diamond rattlesnake, and Southern California legless lizard) could potentially be significant, absent mitigation. Coast horned lizard and orange-throated whiptail are MSCP covered species that are considered adequately conserved with implementation of the South County MSCP. The larger ~~preserve~~open space being assembled with implementation of the South County M~~C~~SCP affords the remaining six species (not covered under the MSCP) additional regional conservation benefits because these species are generalists and can utilize a wide variety of habitats that are permanently protected under the MSCP. ~~As a result, impacts on these species would be less than significant.~~

Impact-BIO-6: Habitat Impacts on Special-Status Avian Species. Impacts on 22.4 acres of foraging and/or breeding habitat for special-status avian species could potentially be significant, absent mitigation. Southern California rufous-crowned sparrow and ferruginous hawk are MSCP covered species that are considered adequately conserved with implementation of the South County MSCP. The larger ~~preserve~~open space being assembled with implementation of the South County M~~C~~SCP affords some of these generalist species (e.g., Cooper's hawk, red-shouldered hawk, white-tailed kite) additional conservation benefits at a regional level because these species are generalists and can utilize a wide variety of habitats that are permanently protected under the MSCP. ~~As a result, impacts on avian special-status species and raptors would remain less than significant.~~

Impact-BIO-7: **Impacts on MBTA-Protected Avian Species During Breeding Season**. Impacts on the nesting success of any bird protected by the MBTA, such as removal of an active nest during construction or the loss of eggs or chicks from construction noise or human presence, would be significant.

Impact-BIO-8: Potential Impacts on Breeding Burrowing Owl. Although not documented as breeding on-site, burrowing owl could begin breeding within areas proposed for construction in the future. Potential impacts on breeding burrowing owl during construction would be significant.

Impact-BIO-9: Impacts on Raptor Foraging Habitat. Impacts on 22.4 acres of prime foraging habitat for raptors would be significant.

Impact-BIO-10: Habitat Impacts on Special-Status Bats. Impacts on up to 22.4 acres of habitat for special-status bats would be significant absent mitigation due to the small home ranges and specialized foraging habits for some of these species, lack of coverage for these species in the MSCP, and the California Species of Special Concern and/or Group I status for most of these species, indicating their relative rarity in the County.

Impact-BIO-11: Potential Impacts on Maternal Bat Roost Sites. Impacts on any bat species roost sites, such as rock crevices or oak trees, could result in direct mortality of adults and possibly juvenile bats. Even if direct impacts on these sites do not occur, roosting females may be negatively affected by increased noise and disturbance within proximity of their roost sites, which could result in increased mortality of young or similar reduction in fecundity. Furthermore, roosting bats may be very difficult to detect; therefore, it would be hard to know if impacts on roost sites were occurring, absent detailed studies using mist nesting, tracking, and telemetry. Direct or indirect impacts on roost sites causing mortality or reproductive decline in special-status bats would be significant, absent mitigation.

Impact-BIO-12: Impact on Other Special-Status Mammals During Construction. Impacts on special-status mammal species would be significant, absent mitigation. The larger ~~preserve~~open space being assembled with implementation of the South County M~~C~~SCP affords these species some conservation benefits at a regional level because these species are generalists and can utilize a wide variety of habitats that are permanently protected under the MSCP. However, these species are not covered under the MSCP, and as such, impacts on these species would be significant, absent mitigation.

Impact-BIO-13: Impacts on Group I Wildlife Species/California Species of Special Concern During Operation. Operation of the ~~proposed~~ project may result in reduced numbers of special-status species due to an increase in mortality rates as well as a decrease in use of habitat immediately surrounding the project footprint. These impacts on Group I Wildlife Species/California Species of Special Concern could potentially be significant, absent mitigation.

Mitigation Measures

~~The~~ County DPR proposes the following mitigation measures to reduce potentially significant impacts to below a level of significance.

For **Impact-BIO-1**: **Significant Impacts on Decumbent Goldenbush**

MM-BIO-1: Replace Decumbent Goldenbush. To mitigate for significant impacts on decumbent goldenbush, ~~the~~ County DPR shall replace at a 3:1 mitigation ratio any affected decumbent goldenbush individuals. Individual plants and/or seeds will be salvaged from the onsite population prior to the start of construction and installed within the open space~~/preserve~~. Plantings shall be monitored for a minimum of 3 years to ensure the 3:1 mitigation ratio has been met and that the planted individuals have properly established themselves. Seed/material from onsite populations may be contract grown to provide replacement plantings.

For **Impact-BIO-2**: **Potentially Significant Impacts on Engelmann Oaks**

MM-BIO-2: Implement Engelmann Oak Avoidance and Minimization Measures. The following measures will minimize and avoid potential impacts on Engelmann oaks resulting from the Project:

1. Engelmann oaks within 50 feet of any mass grading shall be fenced entirely around the tree dripline to ensure that no construction activities, including equipment staging, vegetation grubbing, driving, or grading, occur within the tree's dripline. These restrictions shall be communicated to the construction contractor prior to work in this area.

2. To mitigate for any potential significant impacts to Engelmann oak trees, the County will monitor the health of all Engelmann oaks within 200 feet of the proposed Alpine County Park development footprint for 5 years following construction. A certified arborist with experience monitoring oak health will conduct the monitoring. Mortality or serious declines in the health of the Engelmann oaks during these 5 years within this area will be mitigated at a 3:1 ratio, should significant impacts occur. Specifically, three Engelmann oaks will be planted for each oak tree that has died or is in serious decline. The mitigation would occur within on-site Engelmann oak woodland areas that will be permanently protected. Planting shall occur within either the Native Habitat Protection Area or within the northwestern portion of the open space ~~preserve~~. All oak plantings must be certified pathogen free, including for *Phytophthora* species.
3. Any areas within the Engelmann oak root protection zone (i.e., all areas within 50 feet of Engelmann oak canopy) shall be identified on a map that is provided to the construction contractor. Any grading or construction activities within the root protection zone shall be monitored to minimize impacts on oaks to the maximum extent possible. Training shall be provided for the construction contractor by a biological monitor prior to the start of construction activities in this area. This training will detail ways that the construction contractor can reduce impacts as much as possible on Engelmann oaks within the root protection zone. The following avoidance and minimization measures must be implemented: (1) minimizing repetitive travel routes within the root protection zone, (2) restricting any long-term storage of heavy materials within the root protection zone, and (3) restricting work within the root protection zone when the ground is wet to avoid compaction as much as possible after a rain event. Additional avoidance and minimization measures not envisioned here that can be feasibly implemented during construction must be identified and implemented.

For **Impact-BIO-3: Significant Impacts on QCB-Occupied Habitat During Construction**

MM-BIO-3: Ensure No Net Loss of Quino Host Plants and Provide Permanent Protection of Quino Habitat~~.. The.~~ County DPR shall seek a Section 10 Incidental Take Permit (ITP) for impacts on QCB-occupied habitat and comply with any additional mitigation required by the ITP. Regardless of the conservation measures required under the ITP, the County will mitigate for impacts on occupied QCB habitat by providing, at a minimum, on-site preservation of occupied habitat for QCB within the open space~~/preserve~~ and ensure that no net loss of QCB host plants will occur because of the project. ~~The~~ County DPR shall ensure that there is no net loss of QCB host plants by performing on-site enhancement and restoration activities within QCB habitat, including planting dot-seed plantain, removing thatch to support healthy populations of dot-seed plantain, and maintaining and monitoring these enhancement areas for a minimum of 5 years. Construction activities shall not occur until the ITP is secured. Conservation measures shall be implemented pursuant to that ITP and will include measures to restore and enhance QCB habitat and provide permanent habitat protection and maintenance activities within the open space~~/preserve~~.

As part of its ongoing monitoring, the County will demonstrate that QCB persists on the project site at the end of the 5-year restoration and enhancement period. If QCB can no longer be found on either the County's ~~preserve~~open space or within the adjacent Wright's Field in a normal flight-year at the end of the 5-year restoration period, the County will secure a specific off-site parcel that will contribute meaningfully to the species' long-term conservation.

For **Impact-BIO-4**: **Significant Impacts on Western Spadefoot**

MM-BIO-~~:~~ -4: Western Spadefoot. The County will mitigate for impacts on one western spadefoot breeding pool, approximately 157 square feet in size, by creating three permanent basins, encompassing a minimum of 471 square feet, to support western spadefoot breeding. These constructed basins will be created within clay soils on the permanently protected lands on the County's parcel, no closer than 100 feet from the western edge of Alpine Park. Basins will be constructed within approximately 262 meters of the core breeding population on Wright's Field to maximize opportunities for western spadefoots on Wright's Field to naturally expand into these newly constructed basins. No basins will be constructed within the areas proposed for QCB habitat enhancement activities.

Hydrological analysis will be conducted prior to site selection to map the micro-watersheds in potential sites and ensure the constructed basins fill naturally with rainwater. Basins will be constructed to allow for maximum inundated depths of approximately 18 to 24 inches (20 to 60 centimeters), with the goal that they remain inundated long enough to increase the chances for breeding to be successful during dry years. Conversely, the newly constructed basins shall be designed in such a way that they support standing water for only several weeks following seasonal rains and aquatic predators (e.g., fish, bullfrogs, crayfish) cannot become established. Because ponding duration is so critical to the success of this effort, additional studies may be needed to estimate infiltration rates, soil profile, depth of clay soil layer, etc. The County will conduct these studies, as needed, to estimate the ponding duration within constructed basins. Terrestrial habitat surrounding the proposed relocation site shall be as similar in type, aspect, and density to the location of the existing pool(s), as feasible.

The County will develop a Western Spadefoot Habitat Mitigation and Monitoring Plan to describe requirements for the constructed basins, how basin sites are chosen, what activities will be conducted during the installation of the new basins, adaptive management, maintenance activities, access controls (e.g., fences), and what monitoring and reporting activities will occur and when. The data for the micro-habitat hydrological analysis will also be presented within this plan. The Western Spadefoot Habitat Mitigation and Monitoring Plan will be provided to the CDFW and USFWS for review and comment.

The new basins will be constructed concurrently with Alpine Park, and western spadefoots observed within the project footprint will be relocated to suitable basins outside the project footprint.

Monitoring of the newly constructed basins will be conducted during the wet season (approximately December through April) at approximately weekly intervals, beginning with the first significant rain event each year for 5 years following completion of basin construction. The County's biologist will map the spatial extent of the basins, document the inundation depths of the basins and breeding outcomes, and determine if adaptive management is needed to increase survival and recruitment within the constructed basins. Notes will be made if egg masses or larvae are observed. One nocturnal adult survey will also be conducted in each of the 5 years when a breeding event is occurring in order to document the foraging/mobility patterns of western spadefoots in the area of the new basins. The County will also monitor the core breeding population on the Wright's Field Preserve, using the same methods described above (i.e., basin mapping, weekly checks, nocturnal survey) to document the population dynamics of the entire population over time.

Monitoring/survey data will be provided to CDFW and USFWS by the monitoring biologist following each monitoring period; a written report summarizing the monitoring results will be provided to CDFW and USFWS at the end of the monitoring effort each year. Success criteria for the monitoring program shall include evidence of a ponding duration that is suitable for western spadefoot reproduction within at least one of the constructed basins during at least one of the 5 years of monitoring.

After exclusionary fencing has been installed around all initial proposed ground-disturbing construction, but prior to initiation of initial ground disturbance, the spadefoot biologist will conduct at least three nighttime surveys for spadefoots within the fenced area. Surveys will continue until no more spadefoots are captured and relocated out of the fenced footprint and/or upon the recommendations of the spadefoot biologist. These surveys will be conducted during appropriate climatic conditions and during the appropriate hours (i.e., nighttime, during rain events in breeding season) to maximize the likelihood of encountering spadefoots. If climatic conditions are not highly suitable for spadefoot activity, spadefoot habitat in the project footprint will be watered to encourage aestivating toads to surface. All spadefoots found within the project area will be captured and translocated by the spadefoot biologist to the nearest suitable habitat outside of the work area. Upon completion of these surveys and prior to initiation of construction activities, the spadefoot biologist will report the capture and release locations of all spadefoots found and relocated during these surveys to CDFW and USFWS.

For **Impact-BIO-5**: **Habitat Impacts on Special-Status Reptiles**

APM-BIO-1: Establishment of the Open Space Preserve and **MM-BIO-9: Provide Compensatory Habitat-Based Mitigation** (see Threshold 2, below). Habitat-based mitigation will be provided consistent with **MM-BIO-9**, below, for significant impacts on special-status reptiles.

For **Impact-BIO-6: Habitat Impacts on Special-Status Avian Species**

APM-BIO-1: Establishment of the Open Space Preserve and **MM-BIO-9: Provide Compensatory Habitat-Based Mitigation** (see Threshold 2, below). Habitat-based mitigation will be provided consistent with **MM-BIO-9**, below, for significant impacts on special-status avian species.

For **Impact-BIO-7**: **Impacts on MBTA-Protected Avian Species During Breeding Season**

MM-BIO-5: Avoid and Minimize Impacts on Special-Status Avian Species and Other Birds Protected under the MBTA. To mitigate for potentially significant impacts on sensitive nesting birds and raptors, ~~the~~ County DPR shall avoid ground-disturbing activities during the bird breeding season to keep the project in compliance with ~~s~~State and federal regulations regarding nesting birds (i.e., the federal MBTA and California FGC). The bird breeding season is defined as January 15 to September 15, which includes the tree-nesting raptor breeding season of January 15 to July 15, the ground-nesting raptor breeding season of February 1 to July 15, and the general avian breeding season of February 1 to September 15.

If removal cannot be avoided during the bird and/or raptor nesting season, a nesting bird survey shall be conducted no more than 72 hours prior to ground-disturbing activities by a qualified avian biologist within 500 feet of proposed ground- or vegetation-disturbing activities. Biologists will also survey for raptor nests up to 1,500 feet from proposed ground- or vegetation-disturbing activities. This is necessary to definitively ascertain whether raptors or

other migratory birds are actively nesting on the project site or in a vicinity that could be indirectly affected by work activities (i.e., through noise or visual disturbances). Special attention will be paid to determining the presence of nesting grassland-endemic bird species, such as grasshopper sparrow, that may be nesting within the dense grasses present within the proposed development footprint.

If any active nests are detected, the area shall be flagged and mapped on construction plans, along with a buffer, as recommended by the qualified biologist. The buffer area(s) established by the qualified biologist shall be avoided until the nesting cycle is complete or it is determined that the nest is no longer active. The qualified biologist shall be a person familiar with bird breeding behavior and capable of identifying the bird species of San Diego County by sight and sound. The biologist shall determine if alterations to behavior have occurred as a result of human interaction. Buffers may be adjusted, based on observations by the biological monitor of the response of nesting birds to human activity.

For **Impact-BIO-8: Potential Burrowing Owl Breeding Impacts**

MM-BIO-6: Burrowing Owl Preconstruction Surveys. Prior to initiation of project clearing, grading, grubbing, or other construction activities, pre-construction surveys for the presence of burrowing owl, to verify species absence, will be conducted, including surveying suitable habitat within the project footprint and a 300-foot buffer by a qualified biologist; no grading shall occur within 300 feet of an active burrowing owl burrow. The pre-construction surveys shall follow the take avoidance survey methods outlined in the *Staff Report on Burrowing Owl Mitigation* (CDFW 2012). The first survey shall be conducted within 30 days of initial site disturbance, and the second survey shall occur within 24 hours of initial site disturbance.

Following the initial pre-grading survey, the project site will be monitored for new burrows each week until grading is complete. Subsequent pre-construction surveys will be required if lapses in the project occur that exceed 72 hours. If present in the project construction footprint or within 300 feet of the project site, coordination with CDFW and USFWS shall occur to establish measures to avoid potential impacts on burrowing owl. Such measures will be decided in coordination with the CDFW and USFWS and follow the "Strategy for Mitigating Impacts to Burrowing Owls in the Unincorporated County" (Attachment A of the County's Report Format and Content Requirements – Biological Resources).

Following the first pre-construction survey within 30 days of initial site disturbance, the qualified biologist will submit a Pre-Grading Survey Report to the County, CDFW, and USFWS within 14 days of the survey and include maps of the project site. If any burrowing owls are observed, the burrowing owl locations on aerial photos and in the format described in the mapping guidelines of the County's Report Format and Content Requirements – Biological Resources will be included. A qualified biologist will attend the pre-construction meeting to inform construction personnel about the burrowing owl requirements.

For **Impact-BIO-9**: **Impacts on Raptor Foraging Habitat**

APM-BIO-1: Establishment of the Open Space Preserve and **MM-BIO-9: Provide Compensatory Habitat-Based Mitigation** (see Threshold 2, below). Habitat-based mitigation will be provided consistent with **MM-BIO-9**, below, for significant impacts on raptor foraging habitat.

For **Impact-BIO-10**: **Habitat Impacts on Special-Status Bats**

APM-BIO-1: Establishment of the Open Space Preserve and **MM-BIO-9: Provide Compensatory Habitat-Based Mitigation** (see Threshold 2, below). Habitat-based mitigation will be provided consistent with **MM-BIO-9**, below, for significant impacts on pallid bat foraging habitat.

MM-BIO-7: Support Pallid Bat. ~~The~~ County DPR shall work with a bat expert to design and install bat boxes that attract pallid bat prior to vegetation removal activities commencing on the site. These bat boxes should be designed to accommodate both solitary individuals and maternal roost sites. Bat box design should reflect the best practices at the time of installation and be specific to larger-sized bats like pallid bat with respect to roost chamber sizes, etc. Design and placement of bat boxes should also consider how to best maintain proper roost temperature. When possible, the bat boxes should be placed along the edges of the wooded areas on the site. Final design, numbers, and placement of bat boxes will be determined by the bat expert in consultation with County DPR using the best practices known at the time.

Monitoring of the bat boxes shall be conducted quarterly for the first 2 years and twice ~~-~~ yearly during years 3 through 5 after installation. Any problems that are noted (e.g., mortality, predation) shall be addressed in consultation with the bat expert. Occupancy status, including species, numbers, etc., shall be documented to the extent possible without disturbing the occupants. If, after the first 2 years, a bat box remains unoccupied by any bat species, ~~the~~ County DPR and bat expert will discuss if the bat box needs to be repositioned on the site or redesigned. An annual report shall be prepared by the bat expert or designee to document the findings of the monitoring visits. The County will provide copies of this annual report to the CDFW and also include updates on the bat box monitoring on the site in the County's annual report for the MSCP.

For **Impact-BIO-11: Potential Impacts on Maternal Bat Roost Sites**

MM-BIO-8: Bat Roost Avoidance. Because of the difficulty in detecting all potentially occurring roosting bats (e.g., the western red bat within the Engelmann oaks, pallid bats within rock crevices), no construction activities that could disturb a maternal roost site will occur during the pupping season (typically April 1 through August 31). This measure specifically precludes high-frequency surveying as well as intensive noise-generating activities (e.g., jack-hammering, etc.) anywhere on the project construction footprint as well as a 200-foot buffer around the project construction footprint~~within 200 feet of any Engelmann oaks or rock outcrops~~ during the pupping season.

If construction activities must occur ~~within this 200-foot avoidance buffer~~ during the pupping season, the County will conduct definitive bat roost surveys to determine the presence or absence of maternal day-roost and/or night-roost locations ~~within the 200-foot avoidance buffer that overlaps the construction footprint~~. These surveys will be conducted throughout the entirety of the project construction footprint as well as a 200-foot buffer around the project construction footprint. The bat biologist(s) who conduct these surveys shall have the appropriate education, training, and experience. The bat roost survey methodology will be described in a Bat Roost Management, Monitoring, and Mitigation Plan, which will be prepared at least 30 days prior to the start of construction and provided to CDFW.

Bat roost survey methods may include mist netting and tracking individual bats using telemetry and/or additional acoustic surveys that are timed to determine if individual Engelmann oaks or rock outcrops on or within 200 feet~~the 200-foot~~ of the project construction footprint~~avoidance~~

~~buffer are~~ support~~ing~~ bat roost sites. Surveys will be conducted for at least one hour after sunset to monitor for emergence. If any maternal roost sites ~~within the 200 -foot avoidance buffer~~ are identified, an appropriate avoidance buffer of at least 200 feet shall be established around that roost site in accordance with the requirements established in the Bat Roost Management, Monitoring, and Mitigation Plan. Avoidance buffer distances will account for the ability of that individual bat species to tolerate specific types of low- and high-frequency construction noise and other human disturbance associated with the project. No construction activities that could disrupt the roost site will be permitted within the established avoidance buffer. Additionally, any roost occurring on site will have at least a 400-foot buffer from light sources without shields and at least a 250-foot buffer from any stationary exhaust source present for more than two minutes.

Bat biologists will monitor construction activities occurring adjacent to the avoidance areas for the bat roost sites in accordance with the Bat Roost Management, Monitoring, and Mitigation Plan. Monitoring frequency and duration also will conform to the Bat Roost Management, Monitoring, and Mitigation Plan and be used to determine that the established bat roost avoidance buffers are large enough to prevent maternal roost site impacts, including, but not limited to, roost site abandonment. Avoidance buffers will be expanded if any stress or disturbance to the maternal roost site is observed during monitoring. In years 1, 3, and 5 following construction completion, the County will conduct bat surveys, including maternal bat roost surveys, within the areas originally surveyed prior to construction.

If the maternal bat roost sites previously observed prior to and during construction are still observed during these monitoring surveys, no additional mitigation will be required. If any maternal roost sites observed prior to or during construction are no longer present (i.e., are not observed in any of the three post-construction surveys), the County will mitigate for the loss of the maternal roost site at a 2:1 ratio using methods agreed upon in the Bat Roost Management, Monitoring, and Mitigation Plan. This may include planting additional Engelmann oaks within the proposed ~~preserve~~open space if the affected maternal roost site utilized Engelmann oak trees or by building artificial bat roosts specifically for the affected bat species.

For **Impact-BIO-12**: **Habitat Impacts on Special-Status Mammals**

APM-BIO-1: Establishment of the Open Space Preserve and **MM-BIO-9: Provide Compensatory Habitat-Based Mitigation** (see Threshold 2, below). Habitat-based mitigation will be provided consistent with **MM-BIO-9**, below, for significant impacts on special-status mammals.

For **Impact-BIO-13: Impacts on Group I Wildlife Species/California Species of Special Concern During Operation.**

APM-BIO-1: Establishment of the Open Space Preserve and **MM-BIO-9: Provide Compensatory Habitat-Based Mitigation** (see Threshold 2, below). Habitat-based mitigation will be provided consistent with **MM-BIO-9**, below, for significant impacts on special-status wildlife species resulting from implementation of the ~~proposed~~ project.

Level of Significance After Mitigation

Impact-BIO-1 through **Impact-BIO-~~10~~13** would be reduced to less than significant after implementation of **MM-BIO-1** through **MM-BIO-7** as well as **APM-BIO-1** and the habitat-based mitigation described under **MM-BIO-9**, below.

The planned Alpine Park Preserve, to be created with implementation of the project, contains all key habitat components required by QCB, including significant host plant populations, nectaring resources, and hilltops and ridgelines. The Alpine Park Preserve is also contiguous with existing conserved lands located within the Wright's Field Preserve. When combined, 98 percent of the known individual host plants associated with the Alpine Occurrence Complex would be conserved between the two preserves. Similarly, the permanent protection of habitat for special-status plant and wildlife species within the Alpine Park Preserve would add an additional 67.5 acres to the approximately 380 acres of open space (including Wright's Field and privately held open space land, some of which is permanently protected through conservation easements) in the immediate vicinity. Furthermore, pre-construction nesting bird surveys would be conducted in accordance with **MM-BIO-5** to avoid direct mortality of eggs, chicks, or adults during the breeding season.

To prevent impacts to pallid bat, **MM-BIO-8** would require a pre-construction survey on and within 200 feet of the project construction footprint, and if any maternal roost sites are identified, an appropriate avoidance buffer of at least 200 feet would be established by the bat biologist in accordance with the Bat Roost Management, Monitoring, and Mitigation Plan. As described in Appendix D2, a 200-foot survey buffer around the project construction footprint is sufficient to protect roosting pallid bats, if present. Because studies specific to pallid bats are limited, studies on North American bat species in general have been included herein to illustrate effective buffers for roosting bats. Several studies have documented smaller buffers for different species of roosting bats, some as small as 39 feet, as being effective for protecting maternity roosts of sensitive bat species in the US (O'Keefe 2009).

The USFWS recommends a 150-foot buffer for avoiding tree removal during the maternity season for northern long ears (Myotis septentrionalis), a federally endangered species of bat (USFWS 2022). Although this is a different species of bat, it is a federally listed species, giving it a higher level of protection compared to the pallid bat. Like the pallid bat, this species is known to roost in trees.

Like the USFWS, the US Forest Service (USFS) calls for a 150-foot primary buffer for northern long ear and three additional species of forest-dwelling bats, including Indiana bat (Myotis sodalis), little brown bat (M. lucifugus), and tricolored bat (Perimyotis subflavus; USFS 2024). They require a 150-foot primary roost buffer centered on all known suitable roosts (including maternity and non-maternity roosts), which protects the integrity and function of the roost, and avoids impacts to roosting bats. The primary 150-foot buffer around a suitable roost safeguards the roost and its current condition, characteristics, and associated microclimate from direct effects (USFWS 2016). A 150-foot buffer will protect known roosts from intentional damage or destruction (e.g., felling, burning, girdling, etc.) at all times of the year. The USFS also designates a 'secondary' species-specific buffer of variable size around a known active maternity roost. The secondary buffer typically includes multiple known and undocumented primary and alternate roost trees use d by the maternity colony. These known and unknown roosts collectively comprise the core maternal roosting area (USFS 2024). The buffer determined by the bat biologist in accordance with MM-BIO-8 will be large enough to protect the primary and secondary roosts, if present.

An acoustical study at a park in Santa Clara found that a buffer of 100 feet was sufficient to protect an active maternity roost for a common north American bat species; at 100 feet, the bat colony did not abandon its roost (H. T. Harvey & Associates 2006).

Although there are varying recommendations for buffer size around bat maternity colonies, the County has selected a survey buffer of 200 feet, which is documented to have provided successful protection of bat maternity roosts of many bat species during a variety of projects, as described above. Mitigation measure **MM-BIO-8** also establishes that if any maternal roost sites within the project construction footprint and a 200-foot buffer around the project construction footprint are identified, an appropriate avoidance buffer shall be established around that roost site in accordance with the requirements established in the Bat Roost Management, Monitoring, and Mitigation Plan. This language provides a buffer that a bat expert deems necessary to protect the well-being of a roosting bat during the maternity season, depending upon what work activities are proposed to occur within the buffer. For example, if the bat expert retained to complete the survey recommends a 500-foot buffer, the mitigation measure would require it to be implemented. Avoidance buffers would be expanded if any stress or disturbance to the maternal roost site is observed during monitoring. In this manner, **MM-BIO-8** would ensure that any potential roost sites on and within 200 feet of the project construction footprint are identified and adequately protected during construction.

As a result, **MM-BIO-1** through **MM-BIO-9** would reduce the project's impacts on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations or by CDFW or USFWS to a less-than-significant level.

Open Space~~/Preserve~~

Impact Discussion

County DPR would implement conservation measures in the project's Habitat Conservation Plan to preserve occupied habitat for QCB and ensure no net loss of QCB host plants from the project. The Habitat Conservation Plan proposes protection of habitat and permanent on-site restoration and enhancement of QCB habitat within the open space~~/preserve~~. Long-term management of the open space~~/preserve~~ would also occur as part of the County's commitment to species conservation as a signatory to the MSCP and as outlined in an RMP that will be prepared for the project.

There is the possibility that impacts on special-status wildlife and special-status plants may occur during long-term management and habitat restoration/enhancement activities. Palmer's grapplinghook, for instance, occurs in habitats similar to those of dot-seed plantain. Individual Palmer's grapplinghook occurrences have been mapped and included in the habitat enhancement plans, with specific measures to avoid these areas and any future occurrences of special-status plants that are noted during restoration/enhancement activities. There is also potential for inadvertent take of a small number of QCB to occur in the open space ~~preserve~~ when implementing habitat management activities through accidental trampling of QCB larvae. These impacts would be avoided by ensuring that habitat restoration/enhancement activities occur only outside of the flight season for QCB and that work directly within patches of dot-seed plantain is prohibited.

Impact Determination

The purpose of the long-term management and habitat restoration activities is to improve habitat for special-status species. These benefits would outweigh potential impacts on special-status species

resulting from management/restoration actions. As a result, impacts on special-status species from these actions would be less than significant.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

Impacts would be less than significant.

Threshold 2: The project would have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by CDFW or USFWS.

County Park and Trails

Impact Discussion

The clearing of native vegetation during grading and site preparation would be required for construction of the project. Development of the project would result in direct permanent impacts on up to 23.1 acres of land, of which 22.4 acres are considered sensitive natural communities and classified as Tier I through Tier III (Table 4.4-4) (Figure 4.4-1). Table 4.4-4 summarizes the maximum project impacts on habitat types/vegetation communities from development of the project.

Table 4.4-4. Maximum Project Impacts on Vegetation Communities and Land Cover

Impact Type		Permanent Impacts[d]			Temporary Impacts		Impact Neutral	Total
Vegetation Community/Land Cover[a]	Tier[c]	Active Park	Leach Field	New Fire Fuel Modification Areas	Native Habitat Avoidance Area	Sewer Pipe	Maintenance of Existing Trails	
Disturbed Habitat (11300)	IV	0.5	0.1	< 0.1	< 0.1	—	1.0	1.6
Diegan Coastal Sage Scrub (32500), Including Disturbed and Baccharis Dominated (32530)	II	< 0.1	—	—	< 0.1	—	—	< 0.1
Disturbed Flat-topped Buckwheat (32800)	II	1.6	0.3	0.3	1.0	< 0.1	—	3.2
Flat-topped Buckwheat (32800)	II	1.7	—	0.1	0.7	< 0.1	—	2.4
Flat-topped Buckwheat – Existing Fire Fuel Modification Zone (32800)	II	< 0.1	—	—	—	—	—	< 0.1
Coastal Sage-Chaparral Transition (37G00)	II	—	—	—	—	—	—	—
Southern Mixed Chaparral (37120)	III	—	—	—	—	—	—	—
Valley Needlegrass Grassland (42100)	I	14.5	—	—	<0.1	—	—	14.5
Valley Needlegrass Grassland – Existing Fire Fuel Modification Zone (42100)	I	0.3	—	—	—	—	—	0.3
Disturbed Valley Needlegrass Grassland (42100)	I	—	—	—	—	—	—	—
Non-Native Grassland (42220)	III	3.6	—	—	—	—	—	3.6
Open Engelmann Oak Woodland (71181)	I	—	—	0.1	0.4	—	—	0.5
Non-Native Woodland (79000)	IV	< 0.1	—	< 0.1	< 0.1	—	—	< 0.1
Eucalyptus Woodland (79100)	IV	—	—	—	—	—	—	—
	Total[b]	**22.2**	**0.4**	**0.5**	**2.1**	**<0.1**	**1.0**	**26.1**

a. Vegetation categories and numerical codes are from Holland (1986) and Oberbauer et al. (2008).
b. Individual rows may not sum to total because of rounding.
c. Tier categories are defined in the County's Biological Mitigation Ordinance.
d. An additional 471 square feet of impacts on sensitive natural communities would occur from implementation of the western spadefoot mitigation measure (**MM-BIO-4**), requiring the construction of three basins for spadefoot. It is not known exactly where these basins would be constructed, but impacts would be mitigated in accordance with **MM-BIO-9** and the ratios stipulated in the Biological Mitigation Ordinance.

Construction

Permanent direct impacts on sensitive natural communities would occur, mostly within Valley needlegrass grassland, disturbed flat-topped buckwheat stands, Engelmann oak woodland, and non-native grasslands (**Impact-BIO-14**). Permanent direct impacts on Engelmann oak woodlands were reduced to a minimum during ~~the~~ County DPR's redesign of the concept plan for the proposed park in 2020. ~~The~~ County DPR would avoid all direct impacts (i.e., removal) of individual Engelmann oak trees during construction, and no construction activities (e.g., staging or grading) would occur within any dripline/canopy of Engelmann oaks. See Threshold 1, above, for a complete discussion of potential significant impacts associated with grading and fire clearing in the root protection zones of approximately 25 Engelmann oaks within Engelmann oak woodlands—specifically, within or under the canopy of seven Engelmann oaks. These impacts would be significant per **Impact-BIO-2**, above.

Construction of the project is not anticipated to cause indirect impacts on Valley needlegrass grassland, disturbed flat-topped buckwheat stands, Engelmann oak woodland, or non-native grasslands at levels that would be likely to harm sensitive habitats because of standard BMPs, such as dust control (see Section 4.4-2, *Existing Conditions*). Compliance with the General Construction Permit would require preparation of a Stormwater Pollution Prevention Plan for the project site, which would outline the BMPs that would be implemented during construction activities to prevent soil erosion and runoff from the construction site to nearby sensitive natural communities.

Operation

Although anthropogenic presence is likely to increase through construction of Alpine Park, measures have been sought to reduce impacts on the sensitive natural communities in the adjacent open space~~/preserve~~. The current informal trail system would be converted to a more formalized system, discouraging unauthorized uses within open space~~/preserve~~. A permanent live-~~in~~on volunteer would also be situated within Alpine Park, which would further reduce indirect impacts on sensitive habitats through an increased monitoring presence in the area.

Fire fuel reductions zones associated with the ~~proposed~~ project are described in the introductory paragraph of Section 4.4.4. See Threshold 1, above, for a complete discussion of potentially significant impacts associated with fuel management activities that would occur within Engelmann oak woodlands, which would occur in coordination with a certified arborist. These impacts could potentially be significant per **Impact-BIO-2**, above.

Impact Determination

Impact-BIO-14: Direct Impacts on Sensitive Natural Communities. Direct impacts on up to 22.4 acres of Tier I, II, and III sensitive natural communities (i.e., Valley needlegrass grassland, flat-topped buckwheat stands, non-native grasslands) would be significant.

The project would directly and permanently affect Engelmann oak woodland, Valley needlegrass, non-native grassland, and flat-topped buckwheat within a ~~Biological Resource Core Area (BRCA).~~BRCA. Engelmann oak woodland and Valley needlegrass are listed as Tier I vegetation communities, flat-topped buckwheat is listed as a Tier II vegetation community, and non-native grassland is listed as a Tier III vegetation community in Attachment K of the ~~Biological Mitigation Ordinance (BMO).~~BMO. Impacts on Tier I through Tier III vegetation communities would be significant, absent mitigation.

Mitigation Measures

~~The~~ County DPR proposes the following applicant-proposed measure (APM) and mitigation measure to reduce **Impact-BIO-14** to below a level of significance.

APM-BIO-1: Establishment of the Open Space Preserve: As required under the County's MSCP Subarea Plan, Alpine Park Preserve will be managed in perpetuity in accordance with an RMP. This plan will outline management activities to be carried out by the County. The activities that are likely to be included in the RMP would enhance and preserve the affected sensitive natural communities. These activities include long-term monitoring of on-site preservation areas, non-native and invasive species vegetation management, and habitat restoration in the ~~preserve~~open space, as applicable. Through these strategic measures to mitigate for impacts, the preserved sensitive natural communities will be managed to maintain high-quality and functioning habitat and ~~the~~ County DPR will demonstrate its long-term commitment to species conservation within the open space~~/preserve~~.

MM-BIO-9: Provide Compensatory Habitat-Based Mitigation. To mitigate for potentially significant impacts on Tier I, Tier II, and Tier III habitats, the County will provide compensatory mitigation consistent with its BMO ~~to reduce significant impacts on sensitive vegetation communities. Mitigation will be provided within open space preserve and/or within offsite location(s), as summarized below~~mitigation ratios. Mitigation will be provided commensurate with the acres of impacts incurred during each phase of construction and will be provided through the following: 1) on-site preservation within the open space, 2) on-site restoration of non-native grassland (Tier III) to native grassland (Tier I) and 3) off-site restoration of non-native (Tier III) to native grassland (Tier I) within Wright's Field, anticipated only as a result of Phase 2 implementation and 4) off-site mitigation for non-native grasslands, anticipated only as a result of Phase 2 implementation.

Table 4.4-5. summarizes the maximum mitigation requirements if both Phase 1 and Phase 2 are implemented.

Table 4.4-5. Maximum Mitigation Requirements

Tier[a]	Total Impacts	Mitigation Ratio	Maximum Mitigation Requirement	On-site Mitigation[b]	Off-site Mitigation (Phase 2 only)
Tier I	14.86	2:1	29.73	17.48 acres of preservation plus 4.84 acres of restoration (see **MM-BIO-10**)	7.41 acres of restoration in Wright's Field Preserve (see **MM-BIO-10**)
Tier II	3.97	1.5:1	5.95	5.95	None
Tier III	3.57	1:1	3.57	None	3.57[b]

a. Tiers correspond to those described in the County's BMO.

b. Habitat-based mitigation for permanent direct impacts on non-native grassland during Phase 2 implementation will be satisfied through purchase of credits and/or land acquisition of a similar high-quality non-native grassland in an off-site location.

MM-BIO-10: Native Grassland Mitigation. Impacts on 14.79 acres of Valley needlegrass grassland will be mitigated at a 2:1 ratio through preservation of 10.60 acres of Valley

needlegrass grassland and 6.88 acres of open Engelmann oak woodland on-site, in addition to 4.84 acres of restoration of non-native grassland to Valley needlegrass grassland within the County's parcel and 7.41 acres of restoration on Wright's Field Preserve. All restoration will be in accordance with a Habitat Restoration and Enhancement Plan (HREP) approved by the Wildlife Agencies (USFWS and CDFW). Success criteria established in that HREP will include achieving at least a 5 percent absolute cover of purple needlegrass within restoration areas while retaining cover and species composition similar to that of the native forbs currently present within non-native grassland areas on-site. If restoration does not meet the restoration goals, the County will implement adaptive management measures, to be approved by the Wildlife Agencies.

Level of Significance After Mitigation

APM-BIO-1, MM-BIO-9, and **MM-BIO-10** would provide compensatory mitigation, including through preservation and restoration for **Impact-BIO-14,** thereby reducing potentially significant direct and permanent impacts on sensitive vegetation communities to less than significant.

Open Space~~/Preserve~~

Impact Discussion

The County's management of the Alpine Park Preserve has the potential to affect sensitive natural communities. County DPR will implement conservation measures in the project's Habitat Conservation Plan to ensure no net loss of QCB host plants from the project site. These activities will result in the potential for disturbance to sensitive natural communities within the QCB enhancement areas, such as trampling and raking vegetation to reduce the total load of non-native grass seeds. Restoration of non-native grass areas to native grasslands also could result in similar impacts. Long-term management of the open space~~/preserve~~ will occur as part of the County's commitment to species conservation as a signatory to the MSCP and as outlined in a RMP that will be prepared for the project. These impacts are intended to improve sensitive natural communities over the long-term, and as such, the overall improvement to these habitats would far outweigh any short-term temporary impacts that might occur during restoration work. As such, impacts associated with the County's management of its open space in the Alpine Park Preserve would be less than significant.

Impact Determination

Impacts on sensitive natural communities from the proposed long-term management and habitat restoration/enhancement activities within the open space~~/preserve~~ would be less than significant.

~~**Impact-BIO-14: Direct Impacts on Sensitive Natural Communities.** Direct impacts on up to 22.3 acres of Tier I, II, and III sensitive natural communities (i.e., Valley needlegrass grassland, flat-topped buckwheat stands, and nonnative grasslands) would be significant.~~

~~The project would directly and permanently affect Engelmann oak woodland, Valley needlegrass, nonnative grassland, and flat-topped buckwheat within a Biological Resource Core Area (BRCA). Engelmann oak woodland and Valley needlegrass are listed as Tier I vegetation communities, flat-topped buckwheat is listed as a Tier II vegetation community, and nonnative grassland is listed as a Tier III vegetation community in Attachment K of the Biological Mitigation Ordinance (BMO). Impacts on Tier I through Tier III vegetation communities would be significant, absent mitigation.~~

~~Mitigation Measures~~

~~The County DPR proposes **APM-BIO-1** and **MM-BIO-9** (above) to reduce **Impact-BIO-14** to below a level of significance.~~

~~Level of Significance After Mitigation~~

~~**APM-BIO-1, MM-BIO-9,** and **MM-BIO-10** would provide compensatory mitigation, including through preservation and restoration for **Impact-BIO-14,** thereby reducing potentially significant direct and permanent impacts on sensitive vegetation communities to less than significant.~~

Threshold 3: The project would not have a substantial adverse effect on ~~s~~State or federally protected wetlands (including, but not limited to marshes, vernal pools, coastal areas, etc.) through direct removal, filling, hydrological interruption, or other means.

Impact Discussion

No wetland features or aquatic resources were found within the BSA during any field surveys. As a result, there would be no impact on any ~~s~~State or federally protected wetlands (including, but not limited to, marshes, vernal pools, coastal areas) from the project.

Impact Determination

The project would not have a substantial adverse effect on ~~s~~State or federally protected wetlands. Impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

Impacts would be less than significant.

Threshold 4: The project would not substantially interfere 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.

Impact Discussion

The BSA and the adjacent Wright's Field are surrounded by low-density exurban residential development. As such, the BSA and Wright's Field currently function as an "island" of habitat with limited connectivity to open space and other preserve areas. The project would be constructed at the eastern edge of this island of open space~~/preserve~~, leaving a smaller but similarly situated island of habitat west of the active park.

Residential development within the past 15 to 20 years in the vicinity of the project site has substantively changed how wildlife can move north and east of the County's parcel. Specifically, three large houses north of the County parcel along Engelmann Oak Lane were built during this time period, restricting the movement of terrestrial mesofauna to the north. Two additional homes east of the intersection of South Grade and Boulder Oak Lane were also built in this timeframe. These homes constrain wildlife movement from the far northeastern corner of the County parcel to points farther east. Large-lot residential development, many with fences around their perimeter, currently restricts wildlife movement from due east of the County parcel to points farther east. Wildlife movement, therefore, north and east of the County parcel is already constrained to backyards where there are gaps in fences or where animals can move under or over fences. Development of the equestrian center at the northern end of the proposed active park would further restrict east–west movement at this northeastern edge of the County parcel; however, an area of open space (where the leach field for the septic system is proposed), approximately 100 feet in width, would remain in this area for east–west movement of terrestrial fauna.

On the southern end of the proposed park, development could potentially constrain wildlife movement from south to north for approximately 500 feet where the active park is proposed directly north of the Findel Ranch portion of Wright's Field. This 500-foot stretch represents only approximately 30 percent of the total linear distance where wildlife ostensibly cross from protected lands (i.e., the Findel Ranch section of Wright's Field) south of South Grade Road into the Wright's Field/County parcel to the north, or vice-versa. Approximately 1,060 feet remain where wildlife could cross from the Findel Ranch portion of Wright's Field into the proposed Alpine Park Preserve, ensuring that wildlife movement would continue to the extent it currently does in that portion. Most small mammals/meso-carnivore that are expected to use these habitat blocks can utilize widths of less than 1,000 feet as movement corridors. As a result, a reduction of approximately 30 percent of the width of this corridor from the ~~proposed~~ project would not substantially change wildlife movement patterns from baseline conditions.

Development of the Project would not significantly alter the way that wildlife utilize this contiguous block of open space. The conversion of 22.4 acres of native habitat to a developed park facility would not significantly constrain wildlife movement because the park would be adjacent to existing development on three sides and situated at the far eastern edge of the approximately 450-acre contiguous block of habitat in the immediate vicinity (i.e., the adjacent Wright's Field Preserve and privately held, directly contiguous open space lands in the immediate vicinity of the ~~proposed~~ Project, some of which are protected through a conservation easement). The Alpine Park Preserve would be created on the western edge of the park, contiguous to Wright's Field Preserve, and maintained as an MSCP preserve in perpetuity. Trails would be utilized by medium and large mammals for ease of movement through the ~~preserve~~open space, similar to baseline conditions. No features would be constructed that would impinge any movement areas, including ridgelines or canyons.

There is the potential for more vehicle collisions along South Grade Road compared to baseline conditions because the proposed park would draw additional vehicles to this portion of South Grade Road. However, there is currently a risk associated with this crossing, and the relative impact of the park on traffic in this area is not anticipated to result in a significant impact on existing wildlife movement in this area.

Impact Determination

The project would not result in substantial interference 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 would be less than significant.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

Impacts would be less than significant.

Threshold 5: The project would conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance, or conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or ~~s~~State Habitat Conservation Plan.

Impact Discussion

The project would be consistent with the MSCP, the County General Plan, and the ACP. It would not conflict with any Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or ~~s~~State Habitat Conservation Plan. This is described within the *Multiple Species Conservation Program Conformance Statement* document, which is included as ~~Attachment E of this~~Appendix D1 to the Recirculated Draft EIR.

The proposed volunteer parking pad would be within the northern end of Alpine Park. The location results in the need for a Zone A and Zone B fire fuel modification zone, as described above. The County Consolidated Fire Code, Section 4907.2, Fuel Modification (f), states:

> When the subject property contains an area designated to protect biological or other sensitive habitat or resource, no building or other structure requiring a fuel modification zone shall be located so as to extend the fuel modification zone into a protected area.

The County redesigned the site plan in the fall of 2022 to move the volunteer parking pad from its previous location, approximately 12 feet from the edge of the proposed ~~preserve,~~open space and avoid having the fire fuel modification zone (Zone A and Zone B) extend into the ~~preserve~~open space. Its new location is more centrally located, directly adjacent to the equestrian staging area; it extends into the Native Habitat Avoidance Area within the equestrian center loop road. The Native Habitat Avoidance Area would be preserved after construction is complete. As such, the placement of this volunteer parking pad is not entirely consistent with these provisions in the County Consolidated Fire Code and as such, the impacts would be significant (**Impact-BIO-15**).

Impact Determination

Impact-BIO-15: Conflicts with County Consolidated Fire Code. The project would potentially conflict with the County's Consolidated Fire Code—specifically, the provision to prevent impacts

within a biological open space~~/preserve~~ contained in Section 4907.2, Fuel Modification (f). Impacts would be potentially significant, absent mitigation.

Mitigation Measures

~~The~~ County DPR proposes the following APM and mitigation measure to reduce **Impact-BIO-15** to below a level of significance.

> **APM-BIO-1: Establishment of the Open Space Preserve** ~~and~~**, MM-BIO-9: Provide Compensatory Habitat-Based Mitigation**, and **MM-BIO-10: Native Grassland Restoration** (see Threshold 2). Habitat-based mitigation will be provided ~~consistent with **MM-BIO-9**, above,~~ for significant impacts on ~~special-status reptiles~~sensitive natural communities and this mitigation will reduce the overall severity of the effect of placing the volunteer parking pad within the Native Habitat Avoidance Area.

Level of Significance After Mitigation

Impacts would be less than significant after mitigation.

4.4.5 Summary of Significant Impacts

Table 4.4-6. Summary of Significant Biological Resources Impacts and Mitigation Measures

Summary of Potentially Significant Impact(s)	Summary of Mitigation Measure(s)	Level of Significance After Mitigation	Rationale for Finding After Mitigation
Impact-BIO-1: Significant Impacts on Decumbent Goldenbush	**MM-BIO-1: Replace Decumbent Goldenbush**	Less than Significant	Mitigation ensures that no net loss of decumbent goldenbush individuals will occur.
Impact-BIO-2: Potentially Significant Impacts on Engelmann Oaks	**MM-BIO-2**: **Implement Engelmann Oak Avoidance and Minimization Measures**	Less than Significant	Any potential impacts on Engelmann oak resulting from grading or compaction in the root protection zone or fire clearing will be mitigated through on-site planting, resulting in no net loss of Engelmann oaks on-site.
Impact-BIO-3: Significant Impacts on QCB-Occupied Habitat During Construction	**MM-BIO-3: QCB Mitigation**	Less than Significant	Impacts on QCB-occupied habitat will be mitigated through permanent on-site preservation of occupied QCB habitat. Impacts on QCB host plants will be mitigated through a 1:1 replacement through on-site restoration and enhancement. Long-term monitoring of Quino populations on the site will occur; County to confirm persistence of Quino after 5 years or contribute to Quino recovery in a significant way in off-site locations.
Impact-BIO-4: Significant Impacts on Western Spadefoot	**MM-BIO-4: Western Spadefoot Mitigation**	Less than Significant	Impacts on one breeding pool will be mitigated by constructing three new breeding pools closer to the core breeding population on Wright's Field. Impacts during construction will be avoided by installing exclusionary fencing and translocating individuals to outside of the construction footprint.

Summary of Potentially Significant Impact(s)	Summary of Mitigation Measure(s)	Level of Significance After Mitigation	Rationale for Finding After Mitigation
Impact-BIO-5: Habitat Impacts on Special-Status Reptiles	**APM-BIO-1 Establishment of the Open Space Preserve** **MM-BIO-9: Provide Compensatory Habitat-Based Mitigation**	Less than Significant	Permanent protection of habitat for these species will occur within the Alpine Park Preserve and potentially in off-site locations (non-native grasslands), reducing impacts to less than significant.
Impact-BIO-6: Habitat Impacts on Special-Status Avian Species	**APM-BIO-1 Establishment of the Open Space Preserve** **MM-BIO-9: Provide Compensatory Habitat-Based Mitigation**	Less than Significant	Permanent protection of habitat for these species will occur within the Alpine Park Preserve and potentially in off-site locations (non-native grasslands), reducing impacts to less than significant.
Impact-BIO-7: Impacts on MBTA-Protected Avian Species During Breeding Season	**MM-BIO-5: Avoid and Minimize Impacts on Special-Status Avian Species and Other Birds Protected under the MBTA**	Less than Significant	Avoidance of nests during construction will ensure no direct mortality of eggs or chicks will occur.
Impact-BIO-8: Potential Impacts on Breeding Burrowing Owl	**MM-BIO-6: Burrowing Owl Preconstruction Surveys.**	Less than Significant	Pre-construction take avoidance surveys will be conducted to avoid take of any breeding burrowing owls on-site. If found, consultation with the wildlife agencies will occur to ensure burrowing owl are not negatively affected by the project.
Impact-BIO-9: Impacts on Raptor Foraging Habitat	**APM-BIO-1 Establishment of the Open Space Preserve** **MM-BIO-9: Provide Compensatory Habitat-Based Mitigation**	Less than Significant	Permanent protection of habitat for these species will occur within the Alpine Park Preserve and potentially in off-site locations (non-native grasslands), reducing impacts to less than significant.

Summary of Potentially Significant Impact(s)	Summary of Mitigation Measure(s)	Level of Significance After Mitigation	Rationale for Finding After Mitigation
Impact-BIO-10: Habitat Impacts on Special-Status Bats	**MM-BIO-7: Protect Pallid Bat**	Less than Significant	Pallid bat boxes will help attract pallid bats to a permanently protected location in ~~the county~~San Diego County (i.e., the open space/preserve) where there is a higher chance for long-term reproductive success than in private parcels where long-term persistence of this species is less certain. Potential stress to pallid bat from the loss of foraging habitat on the project site will be offset by access to bat boxes, providing safe, secure roost sites.
	APM-BIO-1: Establishment of the Open Space Preserve **MM-BIO-9: Provide Compensatory Habitat-Based Mitigation**		Permanent protection of habitat for these species will occur within the Alpine Park Preserve and in off-site locations (non-native grasslands), reducing impacts to less than significant.
Impact-BIO-11: Potential Impacts on Maternal Roost Sites	**MM-BIO-8: Bat Roost Avoidance**	Less than Significant	Avoiding construction activities that could negatively affect the reproductive outcomes of roosting bats will reduce potential significant impacts on these species.
Impact-BIO-12: Habitat Impacts on Special-Status Mammals	**APM-BIO-1 Establishment of the Open Space Preserve** **MM-BIO-9: Provide Compensatory Habitat-Based Mitigation**	Less than Significant	Permanent protection of habitat for this taxa group will occur within the Alpine Park Preserve and potentially in off-site locations (non-native grasslands), reducing impacts to less than significant.
Impact-BIO-13: Operational Impacts on Special-Status Wildlife Species	**APM-BIO-1 Establishment of the Open Space Preserve** **MM-BIO-9: Provide Compensatory Habitat-Based Mitigation**	Less than Significant	Permanent protection of habitat for these groups will occur within the Alpine Park Preserve and potentially in off-site locations (non-native grasslands), reducing impacts to less than significant.

Summary of Potentially Significant Impact(s)	Summary of Mitigation Measure(s)	Level of Significance After Mitigation	Rationale for Finding After Mitigation
Impact-BIO-14: Direct Impacts on Sensitive Natural Communities	**APM-BIO-1: Establishment of the Open Space Preserve** **MM-BIO-9: Provide Compensatory Habitat-Based Mitigation** **MM-BIO-10: Native Grassland Mitigation**	Less than Significant	**APM-BIO-1, MM-BIO-9,** and **MM-BIO-10** provide compensatory mitigation, including preservation and restoration, for **Impact-BIO-14,** thereby reducing potentially significant direct and permanent impacts on sensitive vegetation communities to less than significant.
Impact-BIO-15: Conflicts with County Consolidated Fire Code	**APM-BIO-1: Establishment of the Open Space Preserve** **MM-BIO-9: Provide Compensatory Habitat-Based Mitigation** **MM-BIO-10: Native Grassland Mitigation**	Less than Significant	The purpose of the provision in the County Consolidated Fire Code that requires fire fuel management zones not to extend into ~~preserve~~open space areas is to reduce impacts on sensitive natural communities and the species that depend on them. **APM-BIO-1, MM-BIO-9,** and **MM-BIO-10** provide compensatory mitigation, including preservation and restoration, thereby reducing ~~potentially significant direct and permanent impacts on sensitive vegetation communities to less than significant.~~the overall severity of the placement of infrastructure within and adjacent to open space areas.

Section 4.9
Hazards and Hazardous Materials

4.9.1 Overview

This section describes the environmental and regulatory settings for hazards and hazardous materials at the project site. It also describes impacts on hazards and hazardous materials that would result from implementation of the project.

A hazardous material is any substance that, because of its quantity, concentration, or physical or chemical properties, may pose a hazard to human health and the environment. Under California Code of Regulations (CCR) Title 22, the term *hazardous substance* refers to both hazardous materials and hazardous wastes. Both are classified according to four properties: (1) toxicity, (2) ignitability, (3) corrosiveness, and/or (4) reactivity (CCR Title 22, Chapter 11). A hazardous material is defined in ~~CCR Title 22~~Health and Safety Code Section 25501 as:

> ~~[a] substance or combination of substances which~~(n)(1) "Hazardous material" means a material listed in paragraph (2) that, because of its quantity, concentration, or physical, or chemical ~~or infectious~~ characteristics, ~~may either (1) cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or (2) pose~~poses a ~~substantial~~significant present or potential hazard to human health ~~or~~and safety or to the environment ~~when improperly treated, stored, transported~~if released into the workplace or the environment, or a material specified in an ordinance adopted pursuant to paragraph (3).
>
> (2) Hazardous materials include all of the following:
>
> (A) A substance or product for which the manufacturer or producer is required to prepare a material safety data sheet pursuant to the Hazardous Substances Information and Training Act (Chapter 2.5 (commencing with Section 6360) of Part 1 of Division 5 of the Labor Code) or pursuant to any applicable federal law or ~~disposed of or otherwise managed (CCR~~regulation.
>
> (B) A substance listed as a radioactive material in Appendix B of Part 30 (commencing with Section 30.1) of Title ~~22 § 66260.~~10~~).~~ of the Code of Federal Regulations, as maintained and updated by the United States Nuclear Regulatory Commission.
>
> (C) A substance listed pursuant to Title 49 of the Code of Federal Regulations.
>
> (D) A substance listed in Section 339 of Title 8 of the California Code of Regulations.
>
> (E) A material listed as an extremely hazardous waste, as defined in Section 25115, a hazardous waste, as defined in Section 25117, or a hazardous substance, as defined in Section 25316.

Hazardous materials in various forms can cause death, serious injury, long-lasting health effects, and damage to buildings, homes, and other property. Hazards to human health and the environment can occur during production, storage, transportation, use, or disposal of hazardous materials.

4.9.2 Existing Conditions

4.9.2.1 Hazardous Materials

The hazardous materials information in this section is based on a review of the Regional Water Quality Control Board (RWQCB) GeoTracker and Department of Toxic Substances Control (DTSC) EnviroStor online databases. The database review identified the following hazardous materials site

within the project footprint, High School No 12, Study Area B, Wright's Field, at 2480 South Grade Road in Alpine, California. In 2008, the Grossmont Union High School District evaluated the project site, which was one of three locations considered for construction of a new high school. A Phase I Environmental Site Assessment (ESA) was prepared as part of that evaluation. A March 20, 2008, letter from DTSC to the Grossmont Union High School District concluded that there were no hazardous material releases or presence of naturally occurring hazardous materials. The letter concurred with the Phase I ESA's conclusion that further investigation at the project site was not required.

There are no other listed hazardous materials sites within the project footprint or within a 0.25-mile radius from the project site.

4.9.2.2 Proximity to Schools

Joan MacQueen Middle School is located approximately 0.4-mile west of the project site at 2001 Tavern Rd, Alpine, California. Boulder Oaks Elementary School is located approximately 0.7-mile west of the project site at 2320 Tavern Rd.

4.9.2.3 Proximity to Airports and Airstrips

The nearest airport to the project site is On the Rocks Airport (1CA6), which is approximately 4.5 miles southeast of the project site (AirNav.com 2021).

4.9.2.4 Emergency Response Plan

The County of San Diego (County) Office of Emergency Services (OES) coordinates the County's overall response to disasters. OES notifies appropriate agencies when a disaster occurs, coordinates with responding agencies, ensures that resources are available and mobilized, plans for disaster response and recovery, and develops preparedness materials for the public. OES acts as the staff to the Unified Disaster Council (UDC), which was established under a joint powers agreement among all 18 incorporated cities and the County. The UDC coordinates plans and programs countywide to ensure the protection of life and property.

4.9.2.5 Wildfire Hazards

The California Department of Forestry and Fire Protection (CAL FIRE) has mapped areas with significant fire hazards in ~~the county~~San Diego County through its Fire and Resource Assessment Program. Specifically, CAL FIRE defines and maps Fire Hazard Severity Zones (FHSZs) to identify the potential fire hazard severity expected in different areas of the ~~s~~State, as required by Public Resources Code (PRC) Sections 4201–4205. FHSZ determinations are based on an area's vegetation, topography (slope), weather (including winds), crown fire potential, and ember production and movement potential. FHSZs are classified as Very High, High, or Moderate in areas of California where the ~~s~~State is responsible for fire protection (i.e., State Responsibility Areas [SRAs]) (CAL FIRE 2007).

According to CAL FIRE's "Fire Hazard Severity Zones in SRA" map, the project site is in a Very High Fire Hazard Severity Zone (VHFHSZ) (CAL FIRE 2007). In response to this designation, the San Diego County Fire Protection District (FPD)/CAL FIRE and the ~~Alpine FPD~~AFPD enforce robust fire prevention regulations in the project area.

A Fire and Emergency Operation Assessment (FEOA) was prepared to identify wildfire risks at the project site (Rohde and Associates 2021); the following information in this section is from the FEOA. The FEOA noted that the project site historically has been subject to wildfires. -The FEOA identified the following site-specific wildfire and ignition risks at the project site:

- Proximity to South Grade Road, a known location with human related fire ignition factors. The location of South Grade Road, on the southeast boundary of the land for Alpine Park, poses elevated ignition risks because of passing vehicles—specifically, vehicle exhaust, hot materials discarded from vehicles, vehicle accidents, off-road parking, dragging tow chains, or related hazards;
- Adjacency of the site to significant human activity, including homes and ranches. The proximity of homes and ranches to County Department of Parks and Recreation (DPR) and Back Country Land Trust (BCLT) Wright's Field Preserve lands poses existing risks from human-related fire ignition factors, extending from these properties to the site;
- Robust public usage of the site for both dispersed and organized recreation. Human use could increase on the site with development of the park, thereby increasing the associated human-related fire ignition factors;
- Location of the park site with respect to historical major wildfire corridors. The current conditions of the project site consist primarily of unmanaged vegetation that includes annual grasslands and grass-shrub, which are highly receptive to ignition and rapid fire spread, particularly during offshore Santa Ana wind events, which usually produce critical fire weather that includes low humidity. Historical wildfire corridors that experience both Santa Ana winds and onshore wind-driven conditions are within proximity of the project site. Past wildfires have traversed this corridor;
- Heavy fuel concentrations on some County/Back Country Land Trust (BCLT) lands. Heavier fuels, such as coastal sage or mixed chaparral plant communities with fuel loading from 20 to 40 tons per acre, could present extreme burning characteristics during critical fire weather, including high thermal outputs, rapid rates of spread, and spotting;
- Current off-road parking and occasional vehicle trespass. Trespassing does occasionally occur, although vehicle access is currently blocked by light fencing; and
- Potential increase in demand for local public safety resources due to developed park use. The proposed park uses will introduce new sources of human activity at the site that could place increased demand on local public safety resources.

The current conditions of the project site consist primarily of vegetation that includes annual grasslands and grass-shrub, which are highly receptive to ignition and rapid fire spread, particularly during offshore Santa Ana wind events, which usually produce critical fire weather that includes low humidity. As described further in Threshold 7 below, fire behavior modeling indicates that under existing conditions, wildfire behavior could be severe during a Santa Ana wind event with a fire burning in existing vegetation fuels. During extreme offshore wind events with 28-mph sustained winds and 41-mph wind gusts, flame lengths up to approximately 18.1 feet are expected with rates of fire spread up to 6.2 miles per hour and ember spotting distances of up to 1.1 miles. The project site currently experiences occasional unauthorized public access and trespassing events that place it at risk for human-caused wildfire ignition. While County DPR monitors the site to minimize unauthorized use, these activities are common in open public spaces.

The following vegetation fuel modification and human activity fire prevention measures currently exist on the project site:

Vegetation Fuel Modification

- EXISTING: Maintenance of an existing 30-foot buffer where vegetation has been cleared adjacent to the roadside along the County property, which has been historically cleared and is required by AFPD, and is not part of this project.
- EXISTING: Maintenance of a historically cleared and existing 100-foot buffer where vegetation has been cleared where there are adjoining properties along the northern boundary of the County-owned parcel, which is required by AFPD and is not part of this Project.

Human Activity

- EXISTING: Small swing gate as a vehicle control barrier
- EXISTING: Weekly checks of the project site by rangers

The existing vegetation fuel modification fire prevention measures adjacent to the roadside and adjoining properties provide maintenance of some hazardous vegetation fuels, but the project site remains largely dominated by unmaintained vegetation that poses a wildfire risk. The small swing gate and weekly ranger checks provide some access restriction and enforcement presence, but the project site remains subject to occasional unauthorized vehicular and pedestrian public access to and within hazardous vegetation fuels, making it vulnerable to potential smoking, vehicle, or other ignition hazards that increase wildfire risk.

For additional information on wildfire hazards, as well as prevention measures, please see Section 4.20, *Wildfire*.

4.9.3 Applicable Laws and Regulations

4.9.3.1 Federal

Federal Toxic Substances Control Act/Resource Conservation and Recovery Act/Hazardous and Solid Waste Act

The federal Toxic Substances Control Act (TSCA) of 1976 and the Resource Conservation and Recovery Act (RCRA) of 1976 established a U.S. Environmental Protection Agency– (U.S. EPA-) administered program to regulate the generation, transport, treatment, storage, and disposal of hazardous waste. TSCA authorized U.S. EPA to secure information on all new and existing chemical substances and control any substances determined to cause unreasonable risks to public health or the environment. The RCRA was amended in 1984 by the Hazardous and Solid Waste Act, which affirmed and extended the "cradle to grave" system of regulating hazardous wastes.

Comprehensive Environmental Response, Compensation, and Liability Act/ Superfund Amendments and Reauthorization Act

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly known as "Superfund," was enacted by Congress on December 11, 1980. This law (42 United States Code [USC] 103) provides broad federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. CERCLA establishes requirements concerning closed and abandoned hazardous waste sites, provides for liability of persons responsible for releases of hazardous waste at these sites, and establishes a trust fund to provide for cleanup when no responsible party can be identified. CERCLA also enabled the revision of the National Contingency Plan (NCP). The NCP (Code of Federal Regulations [CFR] Title 40, Part 300) provides the guidelines and procedures needed to respond to releases and threatened releases of hazardous substances, pollutants, or contaminants. The NCP also established the National Priorities List. CERCLA was amended by the Superfund Amendments and Reauthorization Act on October 17, 1986.

The Emergency Planning and Community-Right-to-Know Act

The Emergency Planning and Community Right-to-Know Act (EPCRA) of 1986 was created to help communities plan for chemical emergencies and respond to concerns regarding environmental and safety hazards resulting from the storage and handling of toxic chemicals. The EPCRA requires the reporting of storage, use, and releases of hazardous substances to federal, state, and local governments.

Section 402 of the Clean Water Act: National Pollutant Discharge Elimination System Permits

Clean Water Act Section 402 establishes the National Pollutant Discharge Elimination System (NPDES), a permitting system for discharges of pollutants, except dredged or fill material, into waters of the U.S. In California, Regional Water Quality Control Boards (RWQCB) administer the program. Section 402(p) requires permits for discharges of stormwater from industrial/construction and municipal separate storm sewer systems (MS4s). In addition, construction sites on 1 acre of land or more are required to obtain an NPDES permit.

Occupational Safety and Health Administration

The mission of the Occupational Safety and Health Administration (OSHA) is to ensure the safety and health of American workers by setting and enforcing standards; providing training, outreach, and education; establishing partnerships; and encouraging continual improvement in workplace safety and health. OSHA establishes and enforces protective standards and reaches out to employers and employees through technical assistance and consultation programs. OSHA standards are listed in 29 CFR 1910.

Department of Transportation Hazardous Materials Regulations (49 CFR 100–185)

U.S. Department of Transportation (DOT) hazardous materials regulations cover all aspects of hazardous materials packaging, handling, and transport. These include Parts 107 (Hazard Materials Program), 130 (Oil Spill Prevention and Response), 172 (Emergency Response), 173 (Packaging

Requirements), 174 (Rail Transportation), 176 (Vessel Transportation), 177 (Highway Transportation), 178 (Packaging Specifications), and 180 (Packaging Maintenance).

4.9.3.2 State

Department of Toxic Substances Control Regulations

DTSC regulates hazardous waste, primarily under the authority of the federal RCRA and the California Health and Safety Code (H&SC) (primarily Division 20, Chapters 6.5 through 10.6, and CCR Title 22, Division 4.5). Other laws that affect hazardous waste are specific to handling, storage, transportation, disposal, treatment, reduction, cleanup, and emergency planning. CCR Title 22, Division 4.5, Chapter 11, Article 3, highlights the procedures for identifying hazardous waste into these 4 categories: ignitable, corrosive, reactive, and toxic. CCR Title 22, Division 4.5, Chapter 11, Article 5, categorizes hazardous waste into acutely hazardous waste, extremely hazardous waste, non-RCRA hazardous waste, RCRA hazardous waste, special waste, and universal waste. CCR Title 22 also underscores the guidelines for managing hazardous waste, which pertain to storage, housekeeping, recordkeeping, and inspecting.

DTSC's Environmental Health Standards for the Management of Hazardous Waste is included in CCR Title 22, Division 4.5. All hazardous waste generators must comply with the guidelines, as enforced by DTSC, for identifying, labeling, accumulating, preparing, and preventing outcomes related to hazardous waste.

Cortese List

Government Code Section 65962.5 requires the California Environmental Protection Agency (CalEPA) to develop a list of sites with hazardous waste and substances (Cortese List). This includes DTSC- and H&SC-identified hazardous waste sites; Department of Health Services-listed contaminated public drinking water wells; SWRCB-listed underground storage tank (UST) leaks, solid waste facilities, and hazardous waste sites; and other sites as designated by various other ~~s~~State and local governments. Government Code Section 65962.5 requires the Cortese List to be updated at least annually. The Cortese List complies with the CEQA requirements by providing information about the location of hazardous material releases.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act (Porter-Cologne) restricts the disposal of waste or any other activity that may degrade waters of the ~~s~~State. Porter-Cologne requires the cleanup of wastes that are below hazardous concentrations but capable of affecting the quality of surface water and groundwater (§ 13002). Porter-Cologne established nine Regional and State Water Boards, which are primarily responsible for protecting water quality in California. Regional Water Boards regulate discharges by issuing permits through NPDES for waste discharge requirements for nonpoint-source discharges. Anyone discharging materials or proposing to discharge materials that could affect water quality must file a report of waste discharge, unless the discharge would be into a community sewer system.

Hazardous Waste Control Act (§ 25100 et seq.)

DTSC is responsible for enforcing the Hazardous Waste Control Act (H&SC § 25100 *et seq*.), which creates the framework under which hazardous wastes are managed in California. The law provides for the development of a ~~s~~State hazardous waste program that administers and implements the provisions of the federal RCRA cradle-to-grave waste management system in California. It also provides for the designation of California-only hazardous waste and development of standards that are equal to or, in some cases, more stringent, than federal requirements.

Unified Hazardous Waste and Hazardous Materials Management Regulatory Program

The Unified Hazardous Waste and Hazardous Materials Management Regulatory Program (Unified Program) (H&SC Chapter 6.11 §§ 25404–25404.9) provides authority to the Certified Unified Program Agency (CUPA). The County of San Diego, Department of Environmental Health and Quality, Hazardous Materials Division (HMD), has been the CUPA for San Diego County since 1996 (County of San Diego 2021). The Unified Program consolidates six ~~s~~State-regulated environmental programs into one program under CalEPA. The six programs are:

- Aboveground Petroleum Storage Act (APSA) Program,
- California Accidental Release Prevention (CalARP) Program,
- Hazardous Materials Business Plan (HMBP) Program,
- Hazardous Materials Management and Inventory Program,
- Hazardous Waste and Hazardous Waste Treatment Program, and
- UST Program.

California Code of Regulations, Title 8—Industrial Relations

Occupational safety standards exist in federal and state laws to minimize worker safety risks from both physical and chemical hazards in the workplace. The California Division of Occupational Safety and Health (Cal/OSHA) and the federal OSHA are the agencies responsible for assuring safety in the workplace. Cal/OSHA assumes primary responsibility for developing and enforcing standards for safe workplaces and work practices. These standards apply to construction activities.

California Labor Code (Division 5, Parts 1, 6, 7, and 7.5)

The California Labor Code is a collection of regulations that include regulation of the workplace to ensure appropriate training on the use and handling of hazardous materials and operation of equipment and machines that use, store, transport, or dispose of hazardous materials. Division 5, Part 1, Chapter 2.5, ensures that employees who oversee handling hazardous materials are appropriately trained and informed with respect to the materials they handle. Division 5, Part 7, ensures that employees who work with volatile flammable liquids are outfitted with appropriate safety gear and clothing.

California Building Code and Fire Code

The California Fire Code (CFC), CCR Chapter 9, Title 24, was created by the California Building Standards Commission and based on the International Code Council-created International Fire Code. It 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 CFC regulates the use, handling, and storage of hazardous materials at fixed facilities. The CFC and the California Building Code (CBC) use a hazard classification system to determine what protective measures are required to promote fire and protect life safety. These measures involve construction standards, property line separation, and specialized equipment. To ensure that the safety measures are met, the CFC employs a permit system, based on hazard classification. The CFC is updated every 3 years.

The CFC includes requirements for building construction and vegetation management within designated Wildlife Urban Interface (WUI) areas. In such areas, all new buildings must comply with the CBC, which defines building construction requirements to reduce wildfire exposure. In addition, buildings within the WUI must comply with California laws and regulations that require maintenance of a "defensible space" of 100 feet from structures (PRC § 4291; CCR § 1299.03). In particular, Chapter 7A establishes minimum standards for the protection of life and property by increasing the ability of a building in an FHSZ and an SRA or WUI fire area to resist the intrusion of flames or burning embers projected by a vegetation fire. Therefore, the CFC contributes to a systematic reduction in conflagration losses.

4.9.3.3 Regional

San Diego County Code Title 6, Division 8

San Diego County Code of Regulatory Ordinances Title 6, Division 8, Chapters 8 through 11, establishes the HMD as the local CUPA. The HMD, which is responsible for public health, safety, and the environment, inspects businesses or facilities that handle or store hazardous materials, generate hazardous waste, generate medical waste, and own or operate USTs. HMD also administers the California Accidental Release Prevention Program and the Aboveground Petroleum Storage Act Program and provides specialized instruction to small businesses through its Pollution Prevention Specialist. HMD has the authority under ~~s~~State law to inspect facilities with hazardous materials or hazardous waste and, in cases where a facility is in noncompliance with the applicable ~~s~~State law or regulations, take enforcement action.

Projects are required to notify HMD regarding the use, handling, release (i.e., spills), storage, or disposal of hazardous materials and hazardous waste in accordance with existing ~~s~~State law and County ordinance. The notification is the initial step in the HMD permitting process, which requires businesses to obtain and maintain a Unified Program Facility Permit if they handle or store hazardous materials, are part of the California Accidental Release Prevention Program, generate or treat hazardous wastes or medical waste, store at least 1,320 gallons of aboveground petroleum, or own or operate USTs. The applicant requesting a permit must use the State of California Environmental Reporting System and submit the online request within 30 days.

If a building permit is required, California Government Code Section 65850.2 prohibits building departments from issuing a final Certificate of Occupancy to businesses or facilities that handle hazards materials unless they have submitted and met the requirements of a hazardous materials

business plan. The plan contains detailed information on the storage of hazardous materials at regulated facilities and serves to prevent or minimize damage to public health, safety, and the environment from a release or threatened release of a hazardous material. The hazardous materials business plan also provides emergency response personnel with adequate information to help them better prepare and respond to chemical-related incidents at regulated facilities.

San Diego County Emergency Operations Plan

The Operational Area Emergency Operations Plan describes a comprehensive emergency management system that provides for a planned response to situations associated with natural disasters, technological incidents, terrorism, and nuclear-related incidents. It delineates operational concepts related to various emergency situations, identifies components of the Emergency Management Organization, and describes overall responsibilities for protecting life and property and ensuring the overall well-being of the population. The plan also identifies sources of outside support which might be provided (through mutual aid and specific statutory authorities) by other jurisdictions, ~~s~~State and federal agencies, and the private sector.

The plan cites authorities and references to support the plan, which has five objectives:

1. Provide a system for the effective management of emergency situations;
2. Identify lines of authority and relationships;
3. Assign tasks and responsibilities;
4. Ensure adequate maintenance of facilities, services, and resources; and
5. Provide a framework for adequate resources for recovery operations.

County of San Diego Multi-Jurisdictional Hazard Mitigation Plan

The Multi-Jurisdictional Hazard Mitigation Plan includes an overview of the risk-assessment process, identifies hazards present in the jurisdiction, and provides hazard profiles and vulnerability assessments. The plan also identifies goals, objectives, and actions for each jurisdiction in ~~the~~San Diego County, including all cities and the County ~~unincorporated areas.~~. For the ~~unincorporated portions of the County 13~~County's hazard mitigation plan, 4 goals have been developed ~~for their hazard mitigation plans~~:

~~1. Promote disaster-resistant future development.~~

~~2. Increase public understanding and support for effective hazard mitigation,~~

1. ~~Build and support~~Foster safe, sustainable, and thriving environments,
2. Reduce the possibility of damages and losses to existing assets (such as people, critical facilities/infrastructures, and county-owned facilities,
3. Enhance local capacity and commitment to become less vulnerable to all hazards~~,~~ and

~~4. Enhance hazard mitigation coordination and communication with federal, state, local, and tribal governments.~~

~~The remaining nine goals reduce the potential for damage and loss involving existing assets—particularly people, critical facilities and infrastructure, and County-owned facilities—due to:~~

~~5. Dam failure,~~

~~6. Earthquake and liquefaction,~~

~~7. Coastal storms/erosion/tsunami,~~

~~8. Landslides,~~

~~9. Floods,~~

~~10. Structural fires/wildfires,~~

~~11. Extreme weather and drought,~~

~~12. Manmade hazards, and~~

~~13. Hazardous materials releases.~~

4. Promote regional culture of hazard understanding, support, and preparedness.

These 4 goals have 23 corresponding prioritized actions which have been identified to reduce hazards and improve community safety. Prioritized actions include but are not limited to:

- Limit Development in Floodplains and Other Hazardous Areas: County Department of Public Works (DPW) will continue to limit development of park structures and facilities in floodplains and other hazardous areas.
- Invasive and Noxious Weed Control (Vegetation Management): The County Department of Agriculture, Weights & Measures will continue to promote cooperative vegetation management programs that promote hazard mitigation will be critical in continue to mitigate wildfire risks from vegetation.
- Hazard Mitigation Action Adoption: County Planning & Development Services (PDS), County FPD, County Technology Office, County Communications Office, and County Office of Emergency Services will publicize and encourage the adoption of appropriate hazard mitigation actions throughout the region.
- MSCP Open Space Acquisitions Efforts: County DPR will continue open space acquisition efforts, such as purchasing land that could be preserved/protect natural resources and undeveloped land in high hazard areas.
- San Diego County Fire Community Emergency Response Team's Community Emergency Preparedness Outreach Program: Utilize County FPD's Community Emergency Response Team (trained and background checked volunteers) to conduct in-person outreach training, events, and activities bringing emergency preparedness information to underserved populations in their rural communities.
- The California Wildfire Mitigation Program - Home-Hardening Initiative: County FPD is currently working with the California Governor's Office of Emergency Services to pilot the California Wildfire Mitigation Program Home-Hardening Initiative. The Home Hardening Initiative aims to perform defensible space and retrofit measures on existing residential homesites to mitigate against wildfire losses. This program targets high social-vulnerability communities and provides financial assistance to qualifying low- and moderate-income households. This pilot program will be implemented in three highrisk areas within San Diego County: Dulzura, Potrero, and Campo.

San Diego County Wildland–Urban Interface Fire Emergency Response Plan

The San Diego County Fire Chiefs' Association and the San Diego County Police Chiefs' and Sheriff's Association are responsible for approving the San Diego County Wildland–Urban Interface Fire Emergency Response Plan, which is the County's standard emergency response and evacuation management plan format for wildfire. Staff are encouraged to become familiar with the plan and be prepared to integrate with public safety responders in response to emergencies. Park personnel are urged to develop additional emergency response plans consistent with the plan as well as the means and methods necessary for emergency communications with the public. Staff should consider the evacuation and "trigger point" criteria in the plan and determine if additional time will be required to mobilize internal staff and implement the plan. (~~p~~Please see Section 4.20, *Wildfire*, for a detailed assessment of the San Diego County Wildland-Urban Interface Fire Emergency Response Plan~~).~~)

County of San Diego Code of Regulatory Ordinances Sections 68.401–68.406, Defensible Space for Fire Protection Ordinance

This ordinance addresses issues associated with an accumulation of weeds, rubbish, and other materials on private property that creates a fire hazard and could be injurious to the health, safety, and general welfare of the public. Under the ordinance, the presence of such weeds, rubbish, and other materials is a public nuisance that requires abatement in accordance with the provisions of this section. The ordinance is enforced in all ~~county service areas~~County Service Areas (CSAs) as well as unincorporated areas ~~of the County~~ that are outside a fire protection district. All fire protection districts have a combustible vegetation abatement program, and many have adopted the County's ordinance.

County of San Diego Code of Regulatory Ordinances Sections 96.1.005 and 96.1.202, Removal of Fire Hazards

The San Diego County Fire Protection District, in partnership with CAL FIRE, the Bureau of Land Management, and the U.S. Forest Service, is responsible for enforcing defensible space inspections. Inspectors from CAL FIRE are responsible for the initial inspection of properties, ensuring that an adequate defensible space has been created around structures. If violations of program requirements are noted, inspectors provide a list of required corrective measures and a reasonable timeframe for completing the task. If violations still exist upon reinspection, the local fire inspector will forward a complaint to the County for further enforcement action.

County of San Diego Consolidated Fire Code

The County ~~of San Diego~~, in collaboration with the local fire protection districts, created the first Consolidated Fire Code in 2001; it contains County and fire protection district amendments to the CFC. The purpose of consolidation with respect to the adoptive ordinances of the County and local fire districts is to promote consistency in the interpretation and enforcement of the CFC and protect public health and safety. This involves permit requirements for the installation, alteration, or repair of fire-protection systems and penalties for violations of the code. The Consolidated Fire Code provides minimum requirements for access, water supply and distribution, construction, fire-protection systems, and vegetation management. Additionally, it regulates hazardous material and provides associated measures to ensure that public health and safety are protected from incidents related to hazardous substance releases.

County Department of Planning and Land Use Fire Prevention in Project Design Standards

Following the October 2003 wildfires, the ~~County DPR's~~County's Department of Planning and Land Use (now ~~Planning and Development Services~~PDS) incorporated several fire prevention strategies into the discretionary project review process for CEQA projects. One of the more significant changes is the requirement ~~that~~for most discretionary permits (e.g., subdivision and use permits) in WUI areas to include a fire protection plan for review and approval. A fire protection plan is a technical report that considers the topography, geology, combustible vegetation (i.e., fuel types), climatic conditions, and fire history at the project location. The plan addresses the following (among others) in terms of compliance with applicable codes and regulations: water supply, primary and secondary access, travel time to the nearest fire station, ~~structure~~distance structures are setback from property lines, ignition-resistant building features, fire-protection systems and equipment, impacts on existing emergency services, defensible space, and vegetation management.

4.9.3.4 Local

Alpine Fire Protection District Ordinance

The ~~Alpine FPD~~AFPD was formed in 1957 to provide fire protection for the community of Alpine. Its Board of Directors created the ~~Alpine FPD~~AFPD Ordinance (No. 2020-01), which adopted the CFC, including Appendices B, C, H, I, and K; the International Fire Code; and National Fire Protection Association Standards 13, 13-R, and 13-D, as referenced in Chapter 80 of the CFC, together with ~~Alpine FPD~~AFPD amendments. The CFC is adopted for the protection of public health and safety. The ~~Alpine FPD~~AFPD Ordinance (No. 2020-01) includes additions, insertions, deletions, and changes to sections and chapters of the CFC.

Alpine Community Wildfire Protection Plan

The original Alpine Community Wildfire Protection Plan was developed by the Alpine Public Safety Committee, a subcommittee of Supervisor Dianne Jacob's Alpine Revitalization Committee, with guidance and support from the U.S. Forest Service, CAL FIRE, California Department of Transportation, County OES, County ~~Department of Planning and Land Use (now Planning and Development Services~~PDS, County Sheriff's Department, ~~Alpine FPD~~AFPD, Viejas Fire Department, and ~~Greater~~ Alpine Fire Safe Council. The intent of the plan is to optimize the use of scarce resources (i.e., money, people, equipment) to achieve the greatest overall benefit to the community (Alpine Public Safety Committee 2021). The primary goal is to prioritize projects, as follows:

- Defensible space around structures,
- Defensible space along evacuation routes, and
- Hazardous fuels reductions.

A key element of the planning strategy is to link together existing and future fuel-reduction projects so they can provide contiguous corridors of protection along a perimeter surrounding the Alpine area. The areas being linked together involve defensible space projects for community homes and evacuation routes, natural and/or human-made fuel breaks created through agency efforts, and burned areas. Priority is then given to those areas that can achieve the greatest degree of protection with the limited resources available.

Alpine Community Plan

The *Alpine Community Plan* (County of San Diego 2020) amended on December 14, 2016, outlines guidelines and policies for development within the community plan area. The policies and recommendations that apply to wildfire risk are as follows:

Safety Policy 3. Encourage development with fire-preventive development practices and fire resistant plant types.

Safety Policy 4. Consider fire hazards in Alpine a serious and significant environmental impact during review of Environmental Impact Reports.

Conservation Policy 13. Encourage the continuation of support for the brush management program in conjunction with other public agencies to reduce wildfire hazards.

4.9.4 Project Impact Analysis

4.9.4.1 Methodology

The project would develop Alpine Park and associated trails and conserve approximately 73 acres of open space~~/preserve~~ land. The following discussion evaluates impacts associated with hazards and hazardous materials should the project be implemented. With respect to existing conditions, the analysis assesses direct and indirect impacts related to hazards and hazardous materials using the thresholds presented below. To address wildfire risk under Threshold 7, a Fire Protection Memorandum was completed for the project by Dudek in July 2026 (Appendix J1), which includes fire behavior modeling and research about best practices for managing wildfire risk to assess the effectiveness of the project's vegetation fuel modification and human activity fire prevention measures.

4.9.4.2 Thresholds of Significance

Appendix G of the CEQA Guidelines

Based on guidance provided in Appendix G of the CEQA Guidelines, the project would result in a significant impact if it would:

1. Create a significant hazard for the public or the environment through the routine transport, use, or disposal of hazardous materials.
2. Create a significant hazard for the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.
3. Emit hazardous emissions or involve handling hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school.
4. Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard for the public or the environment.

5. For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport, public use airport, or private airstrip, result in a safety hazard or excessive noise for people residing or working in the project area.
6. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.
7. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires.

County of San Diego Guidelines for Determining Significance

The following *County of San Diego Guidelines for Determining Significance, Hazardous Materials and Existing Contamination* (County of San Diego 2007), guide the evaluation of whether a significant impact related to hazardous substances and existing contamination would be likely to occur as a result of project implementation. A project will generally be considered to have a significant effect if it proposes any of the items listed below, absent specific evidence to the contrary. Conversely, if a project does not propose any of the items, it will generally not be considered to have a significant effect related to hazardous substances and existing contamination, absent specific evidence of such an effect.

1. The project is a business, operation, or facility that would handle hazardous substances in excess of the threshold quantities listed in Chapter 6.95 of the H&SC, generate hazardous waste regulated under Chapter 6.5 of the H&SC, and/or store hazardous substances in USTs regulated under Chapter 6.7 of the H&SC and therefore would not be able to comply with applicable hazardous substance regulations.
2. The project is a business, operation, or facility that would handle regulated substances that are subject to CalARP Risk Management Plan requirements and, in the event of a release, could adversely affect children's health due to the presence of a school or day-care facility within 0.25 mile of the project.
3. The project is on or within 0.25 mile of a site identified in one of the regulatory databases compiled pursuant to Government Code Section 65962.519 or otherwise known to have been the subject of an investigation regarding a release of hazardous substances and, as a result, may result in a significant hazard for the public or the environment.
4. The project proposes structures for human occupancy and/or significant linear excavation within 1,000 feet of an open, abandoned, or closed landfill (excluding burn sites) and, as a result, would create a significant hazard for the public or the environment.
5. The project is proposed on or within 250 feet of the boundary of a parcel identified as containing burn ash (from the historic burning of trash) and, as a result, would create a significant hazard for the public or the environment.
6. The project is proposed on or within 1,000 feet of a formerly used defense site and it has been determined that it is probable that munitions or other hazards are located on the site that could represent a significant hazard for the public or the environment.
7. The project could result in human or environmental exposure to soil or groundwater that exceeds U.S. EPA Region 9 Preliminary Remediation Goals, CalEPA California Human Health Screening Levels, or Primary State or Federal Maximum Contaminant Levels for applicable contaminants; therefore, exposure would represent a hazard for the public or the environment.

8. The project would involve the demolition of commercial, industrial, or residential structures that may contain asbestos-containing materials, lead-based paint, and/or other hazardous materials and, as a result, represent a significant hazard for the public or the environment.

4.9.4.3 Project Impacts and Mitigation Measures

Threshold 1: Implementation of the project would not create a significant hazard for the public or the environment through the routine transport, use, or disposal of hazardous materials.

County Park and Trails

Impact Discussion

Construction

Project construction would involve the routine transport, use, and disposal of hazardous materials, such as solvents, paints, oils, grease, and caulking. Such transport, use, and disposal must comply with applicable regulations, such as those discussed under Section 4.9.3, *Applicable Laws and Regulations*. Although small amounts of hazardous materials would be transported, used, and disposed of during the construction phase, these materials are typically used in construction projects and would not represent the transport, use, and disposal of acutely hazardous materials. In addition, best management practices (BMPs) would be employed during construction to prevent spills of hazardous materials into the surrounding environment, as required by the project-specific Stormwater Pollution Prevention Plan (SWPPP) to be prepared under the Construction General Permit (Order No. 2009-009-DWQ, NPDES No. CAS000002, as amended by Order 2010-014-DWQ and 2012-06-DWQ). Therefore, potential construction impacts associated with the routine transport, use, or disposal of hazardous materials would be less than significant.

Operation

The project would develop Alpine Park and associated trails and conserve approximately 73 acres of open space~~/preserve~~ land. Facilities within Alpine Park would include multi-use turf areas, a baseball field, an all-wheel parea~~k~~, bike skills area, recreational courts (i.e., for basketball, pickleball), fitness stations, leash-free dog area, restroom facilities, an administrative facility/ranger station, equestrian staging area with a corral, a nature play area, a community garden, a volunteer pad, picnic areas with shade structures and picnic tables, a game table plaza, and trails. Operations associated with the project (i.e., restrooms, ranger station, administrative facility) would use hazardous chemicals that are currently used for park operations and typical in these types of settings. These could include common materials such as toners, paints, restroom cleaners, and other maintenance materials. Grounds and landscape maintenance within the project area would use a variety of commercial products that are considered to be hazardous materials, including fuels, cleaners and degreasers, solvents, paints, lubricants, adhesives, sealers, and pesticides/herbicides. These products would not be stored or used in quantities that would result in a significant release. Any spills involving these materials would be small, localized, and cleaned up as they occur. Furthermore, the transport, use, and disposal of hazardous materials would comply with all applicable federal, ~~s~~State, and local regulations. Therefore, potential operational impacts associated with the routine transport, use, or disposal of hazardous materials would be less than significant.

Impact Determination

The project would not result in a significant hazard for the public or the environment through the routine transport, use, or disposal of hazardous materials. Impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

Impacts would be less than significant.

Open Space~~/Preserve~~

Impact Discussion

Construction

Project construction would involve the routine transport, use, and disposal of hazardous materials, such as solvents, paints, oils, grease, and caulking. Such transport, use, and disposal must comply with applicable regulations, such as those discussed in Section 4.9.3, *Applicable Laws and Regulations*. Although small amounts of hazardous materials would be transported, used, and disposed of during the construction phase, these materials are typically used in construction projects and would not represent the transport, use, or disposal of acutely hazardous materials. In addition, BMPs would be employed during construction to prevent spills of hazardous materials into the surrounding environment, as required by the project-specific SWPPP to be prepared under the Construction General Permit (Order No. 2009-009-DWQ, NPDES No. CAS000002, as amended by Order 2010-014-DWQ and 2012-06-DWQ). Therefore, potential construction impacts associated with the routine transport, use, or disposal of hazardous materials would be less than significant.

Operation

Operation of the project's open space~~/preserve~~ portion is not anticipated to require the use of hazardous materials. Therefore, potential operational impacts associated with the routine transport, use, or disposal of hazardous materials would be less than significant.

Impact Determination

The project would not result in a significant hazard for the public or the environment through the routine transport, use, or disposal of hazardous materials. Impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

Impacts would be less than significant.

Threshold 2: Implementation of the project would create a significant hazard for the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

County Park and Trails

Impact Discussion

Construction

As discussed in Section 4.9.2. *Existing Conditions*, a review of the GeoTracker and EnviroStor online databases identified one EnviroStor listing within the project site, High School No. 12, Study Area B, Wright's Field, at 2480 South Grade Road in Alpine. There are no other listed hazardous material sites within the project footprint or within a 0.25-mile radius of the project site. A March 20, 2008, letter from DTSC to the Grossmont Union High School District concluded that there were no hazardous material releases or presence of naturally occurring hazardous materials at the project site. However, there was no information in the letter regarding soil testing, and, due to the former agricultural uses present on the project site, there could potentially be residual soil contamination from the historic use of herbicides or pesticides. Ground-disturbing construction activities could potentially result in the release of contaminated soil into the environment (**Impact HAZ-1**). Therefore, construction impacts would be potentially significant.

Operation

Once operational, the project would not be expected to create a significant hazard for the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. As discussed under Threshold 1, the project would use hazardous materials such as toners, paints, restroom cleaners, fuels, cleaners and degreasers, solvents, paints, lubricants, adhesives, sealers, and pesticides/herbicides during operation. Since proper procedures would be adhered to, it is unlikely that such materials would be stored or used in quantities that would result in a release of any significance. Any spills involving these materials would be small, localized, and cleaned up as they occur. Furthermore, the transport, use, and disposal of hazardous materials would comply with all applicable federal, ~~s~~State, and local regulations, which would reduce the risk of hazardous material releases. Therefore, operational impacts would be less than significant.

Impact Determination

Impact HAZ-1: Potential Release of Contaminated Soil. Construction of the project would potentially result in the release of contaminated soil into the environment. Impacts would be potentially significant.

Mitigation Measures

MM-HAZ-1: Prepare and Implement a Soil Management Plan. Prior to the commencement of soil-disturbing construction activities, the County will retain a licensed professional geologist, professional engineering geologist, or professional engineer with experience in contaminated site redevelopment and restoration to prepare and submit a soil and groundwater management

plan to the County for review and approval. After the County's review and approval, the County will implement the soil and groundwater management plan, which will include the following:

- A *Site Contamination Characterization Report* (Characterization Report) delineating the vertical and lateral extent and concentration of residual contamination from the site's past uses in areas where soil would be disturbed. The Characterization Report will include a compilation of data, based on a historical records review and prior reports and investigations, and, where data gaps are found, new soil and groundwater sampling to characterize the existing vertical and lateral extent and concentration of residual contamination.
- A *Soil Testing and Profiling Plan* (Testing and Profiling Plan) for materials that will be disposed of during construction. All potential contaminants of concern will be tested, including CCR Title 22 metals, polycyclic aromatic hydrocarbons, volatile organic compounds, herbicides, pesticides, polychlorinated biphenyls, or any other potential contaminants, as specified within the Testing and Profiling Plan. The Testing and Profiling Plan will document compliance with CCR Title 22 for proper identification and segregation of hazardous and solid waste as needed for acceptance at a CCR Title 22-compliant off-site disposal facility. All excavation activities will be actively monitored by a registered environmental assessor for the potential presence of contaminated soils and compliance with the Testing and Profiling Plan.
- A *Soil Disposal Plan* (Disposal Plan), which will describe the process for excavation, stockpiling, dewatering, treating, loading, and hauling of soil from the site. This plan will be prepared in accordance with the Testing and Profiling Plan (i.e., in accordance with CCR Title 22, CCR Title 27, DOT Title 40 CFR Part 263), and current industry best practices for the prevention of cross-contamination, spills, or releases. Measures will include, but not be limited to, segregation into separate piles for waste profile analysis based on organic vapor and visual and odor monitoring.
- A *Site Worker Health and Safety Plan* (Safety Plan) to ensure compliance with 29 CFR Part 120, Hazardous Waste Operations and Emergency Response, regulations for site workers at uncontrolled hazardous waste sites. The Safety Plan will be based on the characterization report and planned site construction activity to ensure that site workers who are potentially exposed to contamination in soil are trained, equipped, and monitored during site activities. Training, equipment, and monitoring will ensure that workers will not be exposed to contaminants above personnel exposure limits established by Table Z, 29 CFR Part 1910.1000. The Safety Plan will be signed by and implemented under the oversight of a ~~s~~State certified industrial hygienist.

Level of Significance After Mitigation

Impact HAZ-1 would be reduced to less than significant after implementation of **MM-HAZ-1,** which would ensure preparation and implementation of a Soil Management Plan.

Open Space~~/Preserve~~

Impact Discussion

Construction and Operation

Because ground-disturbing construction activities are not proposed as part of the project's open space~~/preserve~~ portion, this project component would not create a significant hazard for the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

Impact Determination

The open space~~/preserve~~ component would not result in a significant hazard for the public or the environment. Impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

Impacts would be less than significant.

Threshold 3: Implementation of the project <u>would</u> emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.

County Park and Trails

Impact Discussion

Construction

Nearby schools include Joan MacQueen Middle School, approximately 0.4-mile west of the project site at 2001 Tavern Rd in Alpine, and Boulder Oaks Elementary School, approximately 0.7-mile west of the project site at 2320 Tavern Rd. As mentioned under Threshold 1, project construction would involve the routine handling of hazardous materials such as solvents, paints, oils, grease, and caulking. These materials must be handled in compliance with applicable regulations, such as those discussed in Section 3.8.2, *Regulatory Setting*. Small amounts of these materials would be handled during construction; however, these are typical for construction projects and would not include acutely hazardous materials. In addition, BMPs would be employed during construction (e.g., parking and refueling vehicles and equipment in one area, practicing good housekeeping, properly disposing of hazardous waste) to prevent spills of hazardous materials into the surrounding environment.

As discussed previously, the project site does not have a history of onsite contamination; however, a Soil Management Plan would be prepared to evaluate potential for contaminated soils on the project site associated with former agricultural uses (**MM-HAZ-1**). Because the Soil Management Plan **<u>(MM-HAZ-1)</u>** would ensure proper handling of potentially contaminated soils during construction, and routine handling of hazardous materials would be in compliance with applicable regulations,

impacts from emissions or handling of hazardous materials near schools would be reduced to less than significant.

Operation

Operations associated with the project (i.e., restrooms, ranger station, administrative facility) would use hazardous chemicals that are currently used for park operations and typical in these types of settings. These could include common materials such as toners, paints, restroom cleaners, and other maintenance materials. Grounds and landscape maintenance within the project area would use a variety of commercial products that are considered hazardous materials, including fuels, cleaners and degreasers, solvents, paints, lubricants, adhesives, sealers, and pesticides/herbicides. These products would not be stored or used in quantities that would result in a significant release. Any spills involving these materials would be small, localized, and cleaned up as they occur. Therefore, potential operational impacts associated with emissions or the handling of hazardous materials near schools would be less than significant.

Impact Determination

Impact HAZ-1: Potential Release of Contaminated Soil. Ground-disturbing construction activities could potentially result in impacts from emissions or the handling of hazardous materials near schools. Impacts would be potentially significant.

Mitigation Measures

Implement **MM-HAZ-1**, as described above.

Level of Significance After Mitigation

Impact-HAZ-1 would be reduced to less than significant after implementation of **MM-HAZ-1**, which would ensure the proper handling of potentially contaminated soils during construction as well as the proper handling of hazardous materials near schools.

Open Space~~/Preserve~~

Impact Discussion

Construction and Operation

Because ground-disturbing construction activities are not proposed as part of the project's open space~~/preserve~~ portion, this project component would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.

Impact Determination

Impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

Impacts would be less than significant.

Threshold 4: The project would 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 ~~not~~ create a significant hazard for the public or the environment.

County Park and Trails

Impact Discussion

Construction and Operation

As discussed under Threshold 2, a review of the GeoTracker and EnviroStor online databases only identified one EnviroStor listing within the project site, High School No 12, Study Area B, Wrights Field, at 2480 South Grade Road in Alpine. There are no other listed hazardous materials sites within the project footprint or a 0.25-mile radius of the project site. This site's potential impact to the project is analyzed under Threshold 2. With implementation of **MM-HAZ-1**, the project site is not anticipated to create a significant hazard for the public or the environment.

Impact Determination

Impact HAZ-1: Potential Release of Contaminated Soil. Impacts would be potentially significant.

Mitigation Measures

Implement **MM-HAZ-1**, as described above.

Level of Significance After Mitigation

Impacts would be less than significant.

Open Space~~/Preserve~~

Impact Discussion

Construction and Operation

Because ground-disturbing construction activities are not proposed as part of the open space~~/preserve~~ portion of the project, this project component is not anticipated to create a significant hazard for the public or the environment.

Impact Determination

Impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

Impacts would be less than significant.

Threshold 5: For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport, public use airport, or private airstrip, the project would not result in a safety hazard or excessive noise for people residing or working in the project area.

County Park and Trails and Open Space~~/Preserve~~

Impact Discussion

Construction and Operation

The project is not within an airport land use plan or within 2 miles of a public airport or public use airport (San Diego County Regional Airport Authority 2021). The nearest airport to the project site is On the Rocks Airport (1CA6), approximately 4.5 miles southeast of the project site (AirNav.com 2021). Therefore, the project is not anticipated to result in a safety hazard or excessive noise due to proximity to an airport, and no impact would occur.

Impact Determination

Impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

Impacts would be less than significant.

Threshold 6: The project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

County Park and Trails and Open Space~~/Preserve~~

Impact Discussion

Construction and Operation

South Grade Road serves as a regional route for evacuation traffic and carries significant traffic daily (Rohde and Associates 2020). As discussed in Section 4.17, *Transportation and Circulation*, a transportation impact study (TIS) was prepared by CR Associates in April 2020 to identify vehicular impacts associated with the operation of the project (CR Associates 2020). The TIS was performed in accordance with the County of San Diego Traffic Impact Guidelines. No significant impacts related to traffic were identified in the TIS. Therefore, the project would not interfere with the operational

area emergency plan or the multijurisdictional hazard mitigation plan. Furthermore, the project would not prohibit subsequent plans from being established or prevent the goals and objectives of existing plans from being carried out. Therefore, the project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan, and impacts would be less than significant.

Impact Determination

Impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

Impacts would be less than significant.

Threshold 7: The project would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires.

County Park and Trails and Open Space~~/Preserve~~

Impact Discussion

For additional analysis of wildfire hazards, please see Section 4.20, *Wildfire*. According to CAL FIRE's Fire Hazard Severity Zones in SRA Map, the project site is in a VHFHSZ (CAL FIRE 2007). Rohde and Associates prepared an FEOA on June 25, 2021, to identify wildfire risks at the project site (Appendix J) (Rohde and Associates 2021). As noted above, t~~T~~he FEOA identified the following site-specific wildfire and ignition risks at the project site:

- Proximity to South Grade Road, a known location with human-related fire ignition factors;
- Adjacency of the site to significant human activity, including homes and ranches;
- Robust public usage of the site for both dispersed and organized recreation;
- Location of the park site with respect to historical major wildfire corridors;
- Heavy fuel concentrations on some County/Wright's Field Preserve ~~BCLT~~ lands;
- Current off-road parking and occasional vehicle trespass; and
- Potential increase in demands on local public safety resources as a result of developed park use.

These specific risks are analyzed in the *Operation* discussion below.

Construction

As noted, the project site is partially within a VHFHSZ. Heat or sparks from construction equipment and vehicles, as well as the use of flammable materials, have the potential to ignite adjacent vegetation and start a fire, especially during weather events with low humidity and high wind speeds that are typically experienced in the summer and fall, but can occur year-round in the San

Diego region. County DPR and its contractors would implement standard BMPs for the mitigation of potential ignition sources. Such BMPs include the following:

- All vehicles would be required to carry a fire extinguisher in case of accidental fire ignition,
- Vehicles would not be permitted to park or idle over dry brush, and
- Proper wildfire awareness, reporting, and suppression training will be provided to construction personnel.

Implementation of standard BMPs would reduce the potential for ignition and increase the ability of on-site workers and staff to control and extinguish a wildfire event. Therefore, construction of the project would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires.

Operation

Operation of the project could introduce new conditions that could exacerbate wildfire risk at the project site. While development of the project would reduce the fuel load on the project site by developing natural habitat with a built environment, operation of the project would introduce visitors to the project site who were not previously present. Given the high percentage of wildfires in Southern California that are ignited by human-related causes, this could exacerbate existing wildfire risks on the site. ~~(please see Section 4.20, Wildfire, for a detailed assessment of the wildfire risk and its management). The measures discussed below would also be in effect.~~

The project would comply with ~~County Code of Regulatory Ordinances~~ Title ~~3~~9, Division ~~5, Chapter 3, as well as Appendix IIA~~1, of the ~~Uniform Fire Code~~CFC. Furthermore, County DPR would be required to comply with the Defensible Space for Fire Protection Ordinance (County of San Diego 2011). That ordinance would require~~s~~ combustible vegetation; dead, dying, or diseased trees; green waste; rubbish; or other flammable materials to be cleared within 30 feet of the property line and within 10 feet of each side of a highway, private road, or driveway in order to maintain defensible space (County of San Diego 2011). The project would also be required to comply with the County of San Diego Fire Service Conditions stipulated by County Fire Services personnel (i.e., County Fire Marshall) upon review and approval of the project.

Access to the park has been designed in coordination with County DPR, ~~the~~ County ~~Department of Public Works~~DPW, and County Fire Services personnel to ensure accommodation for large pieces of fire apparatus and horse trailers as they enter and exit. In addition, as part of project operations, signs with park rules and regulations would be clearly posted, in compliance with County Code of Regulatory Ordinances Title 4, Public Property, Division 1, Parks and Recreation, Chapter 1, County Parks and Recreation. The rules, which would be enforced by park employees as described in Section 4.17.4.3, would include, but not be limited to, the following:

- Smoking would be prohibited.
- Campfires and open flames would be prohibited, and barbeques would be locked on red-flag days. County DPR has procedures for the enforcement of "open flame bans," which are initiated by declaration of a red-flag warning. County DPR would integrate signage and other interpretive stations at key site entrance points, indicating red-flag conditions when announced by fire agencies. When a warning is issued, region managers would reach out to the field staff and begin the process of shutting down all barbeques by signing and banning/taping them off until the

warning is lifted. Additional signage would be posted at park entrances and throughout the park. Park personnel would patrol the park to enforce the ban.

- No person would be allowed to use, transport, carry, fire, or discharge any fireworks, firearm, weapon, air gun, archery device, slingshot, or explosive of any kind across, in, or into a County park.
- Parking would occur in designated staging areas.

County DPR would prepare a Site Evacuation Plan as part of operational planning for the project. The Site Evacuation Plan would include emergency contact information, evacuation routes and established meeting places, and safety protocols to ensure the safe evacuation of visitors and employees of the park. County DPR would also implement recommendations provided in the FEOA prepared by Rohde and Associates for the project as outlined below.

Because the project would introduce potential ignition sources to a previously undeveloped open space area, fire prevention protocols would be implemented as part of the project. The following fire prevention protocols, which were recommended in the Rohde and Associates assessment, would be implemented as fire prevention measures~~project design features~~:

- Facility Fire-Safe Design. County DPR shall design appropriate facility elements and ensure County fire and building code compliance to reduce wildfire risks for users and the area. The proposed f~~F~~ire-resistive landscaping would create a fire-safe area where the two dog parks, ~~three soccer~~open fields, and baseball diamond are proposed. In addition, the paved parking lot, basketball and pickleball courts, equestrian area, and other cleared areas would not only provide a buffer that would protect the park from wildfire but also provide a temporary safe refuge area with safe ingress and egress (Rohde and Associates 2021).
- Fire-Resistive Landscaping. All landscape vegetation on park premises would be consistent with the guidelines of the County ~~Department of Planning and Development Services~~PDS as well as the County's approved fire-resistive landscape plant palette. Generally, these plants would:
    - Grow close to the ground;
    - Have a low sap or resin content;
    - Grow without accumulating dead branches, needles, or leaves;
    - Be easily maintained and pruned;
    - Be drought tolerant;
    - Be responsive to adequate irrigation to maintain a "green" state; and
    - Not present intense thermal outputs during combustion.
- Safe Refuge Sites. The proposed p~~P~~arking and equestrian areas would naturally serve as emergency safe routes, providing broad expanses of non-combustible surfaces. These areas would be free of combustible ground cover and cleared of native vegetation whenever possible. Because equestrians would most likely use County facilities as temporary safe refuge sites during wildfires, the equestrian facility would need to be designed to be both substantial and fire resistive so as to provide secure and safe housing for large animals and prevent accidental releases due to animal panicking during wildfires.

- Fuel Modification Program. County DPR shall implement a long-term fuel modification program. This management would be accomplished on a scale needed to alleviate identified fire behavior potential while limiting environmental impacts from the treatment and offering the highest protection value for the expense and effort. The goals of this fuel modification program would be to reduce wildfire intensity enough to offer reasonable protection to adjacent structural assets, limit landowner liability from wildfire damage to adjoining properties, provide protection for DPR/BCLT site development, and ensure safe public refuge at key sites. Existing fuel modification maintenance includes a 30-foot buffer of vegetation clearance along the frontage of South Grade Road on the County property and a 100-foot buffer of vegetation clearance and defensible space at adjoining properties along the northern boundary of the County-owned parcel, as directed by ~~the Alpine FPD~~AFPD Defensible Space Requirements (Alpine FPD 2022). This document is attached as Appendix L. While the AFPD Defensible Space Requirements have been updated since 2022, as described below, the proposed 30-foot and 100-foot buffers remain in compliance with the most recent requirements. ~~The County will specifically implement a 100-foot buffer of vegetation clearance that extends from the volunteer pad, an additional 20-foot buffer of vegetation clearance adjoining the 30-foot buffer of vegetation clearance (total of 50-foot buffer clearance) adjacent to the roadside within the proposed park footprint, as well as a 20-foot buffer adjoining the 30-foot buffer approximately 100 feet south of the northeast corner of the County's parcel in order to reduce hazards associated with increased human-related fire ignition factors. The aggregate 50-foot vegetation clearance and 30-foot vegetation clearance also reduce an extension of wildfire from the historical wildfire corridor on the east face of the site.~~

- Fuel Reduction Zones. The project also shall achieve ~~Zone A~~ compliant fuel modification around the Alpine Park facility per fire and building code requirements, with the goal of 100 percent fire exclusion from the project site. The objective of the landscape replacement ~~in Zone A will be~~is to eliminate the potential for wildfire occurrence through establishment of a fire-resistive landscape around principal park facilities and structures at the minimum distances required by code. This has been designed through the proposed landscape around sports fields and buildings, subject to ~~Alpine~~AFPD Fire Marshal review and approval during the permitting process (Rohde and Associates 2021). ~~Zone B fuel reduction shall occur adjacent to Zone A along property lines, where practical, and around key public facilities such as the parking areas, equestrian staging areas, and similar locations. Fuel modification in Zone B should be designed to achieve fire prevention goals while maintaining viable habitat and preserving ecological values. The objective of fuel treatment in Zone B is to achieve at least a 75 percent reduction in fire-line intensity from a wildfire moving from native fuels into a constructed fuel modification zone (Rhode and Associates 2021). The County will implement a 100-foot fuel reduction area extending from the volunteer pad under Zone A and Zone B compliance.~~ The AFPD Defensible Space requirements were recently updated to include Zone 0 Immediate Zone, Zone 1 Intermediate Zone, and Zone 2 Extended Zone. Zone 0, comprised of the first five feet extending outward from an exterior wall, is required to be maintained clear and free of all combustible materials. Zone 0 would include the removal of existing vegetation. Zone 1 begins at the end of Zone 0 and extends to 50 feet. Zone 1 does not need to be free of combustible materials, however plants and vegetation in this zone must be maintained. The AFPD includes height and diameter restrictions, as well as requires vegetation in this zone to be irrigated and maintained so that dead or dying vegetation and plants are removed. Finally, Zone 2 is an additional 50 feet, beginning at the edge of Zone 1. Zone 2 has less strict requirements than the other zones, but

still requires active maintenance of vegetation, limbing trees dependent on the height of the tree, and the removal of combustible vegetation below the tree canopy.

- Fuel Modification Criteria: A–O in FEOA (Appendix J)
    - Treatment Methods. County DPR shall implement one or more of the recommended treatment method alternatives, including:
        - Mechanical treatment, including mowing or plowing, may be used to establish fuel modification in grass where terrain is within the mechanical limits of equipment to extend parking lot or equestrian staging area clearance for safe refuge.
        - Grazing for grass and lighter fueled sites such as sage scrub in the south half or northwest quarter.
        - Hand treatment by hand crews is recommended for steep sites and sites with heavy fuels such as shrub fuel and steep-sloped areas in the northwest quarter of the combined site.
        - Spot control with herbicides. Herbicides would be used to control undesired weeds or selective vegetation within fuel modification areas.
- Partner Collaboration for Fire Prevention. County DPR shall coordinate with neighboring entities, including BCLT, ~~Greater~~ Alpine Fire Safe Counsel, the ~~AlpineFPD~~AFPD, San Diego County FPD, CAL FIRE, County ~~Road Department~~DPW, and San Diego Gas & Electric, on regional defensible-space initiatives, fuel modification, and structural defense initiatives, including sharing of resources, planning, and costs.
- Comply with the Regional Wildfire and Evacuation Plan (see Section 4.20, *Wildfire*). The San Diego County WUI Fire Emergency Response Plan has been updated for the Alpine southeast area as a part of the Rohde and Associates FEOA (Appendix J). This document, which is also approved by the San Diego County Fire Chiefs Association and San Diego County Police Chiefs' and Sheriff's Association ~~and~~, is the County standard emergency response and evacuation management plan ~~format~~ for wildfire. County DPR shall implement the project in compliance with the plan.
- Comply with Site-Specific Wildfire and Evacuation Plan. An Alpine Community Park Fire Evacuation Analysis was developed by Chen Ryan Associates (Appendix K) to assess the time required for emergency evacuation from the project site under several scenarios, assuming a wind-driven fire that results in a required evacuation affecting the project site and surrounding community. The traffic evacuation simulations presented within the analysis found that evacuation traffic generated by the project would not significantly increase the average evacuation travel time or result in unsafe evacuation timeframes. Evacuation flow would be able to be effectively managed.

As described in Appendix J1, fire behavior modeling of four potential fire scenarios was completed under post-development conditions that include removal of hazardous vegetation and installation of landscaping consistent with a park use that also complies with the required fuel modification standards of the AFPD. There is no situation where the project would be built without defensible space and fuel modification as required by applicable codes; as such, these required features were included in the fire behavior modeling. In addition, the project includes existing and additional

vegetation fuel modification fire prevention measures, which are also assumed to be implemented in the vegetation fuel modification fire behavior modeling:

- EXISTING: Continued maintenance of an existing 30-foot buffer where vegetation has been cleared adjacent to the roadside along the County property, which has been historically cleared and is required by AFPD.

- EXISTING: Continued maintenance of a historically cleared and existing 100-foot buffer where vegetation has been cleared where there are adjoining properties along the northern boundary of the County-owned parcel, which is required by AFPD and is not part of this project.

- REQUIRED BY CODE: Creation of a 100-foot vegetation buffer, as part of the project, that would extend from the volunteer pad.

- ADDITIONAL: An additional 20-foot buffer adjacent to the existing 30-foot buffer along the park footprint for a total of 50 feet of reduced vegetation cover.

- ADDITIONAL: An additional 20-foot buffer adjacent to the existing 30-foot buffer approximately 100 feet south of the northeast corner of the County's parcel.

In addition to the vegetation fuel modification fire prevention features described above, the project also proposes human activity fire prevention measures. The existing swing gates and weekly ranger checks described in Section 4.9.2.5 would be replaced by a stronger vehicle control barrier and a live-on volunteer, maintenance staff, and a park ranger to help with maintenance and management of the property. The following required and additional human activity fire prevention measures are proposed for the project:

- REQUIRED BY CODE: Prohibition of smoking (County Code of Regulatory Ordinances Section 41.118.5).

- REQUIRED BY CODE: Prohibition of the use of barbecues when a Red Flag Warning has been issued (County Code of Regulatory Ordinances Section 41.118).

- REQUIRED BY CODE: Prohibition of the use, transport, carrying, firing, or discharging any fireworks, firearm, weapon, air gun, archery device, slingshot, or explosive of any kind across, in, or into the park except as authorized under Section 41.117 of the County Code of Regulatory Ordinances (County Code of Regulatory Ordinances Section 41.117).

- ADDITIONAL: Prohibition of campfires and open flames.

- ADDITIONAL: Prohibition of overnight use of the park.

- ADDITIONAL: Strengthening of the vehicle control barriers and provision of improved fire-safe parking.

  ADDITIONAL: A live-on volunteer, maintenance staff, and a park ranger to help with maintenance and management of the property who will also monitor and enforce the following:

As detailed in Appendix J1, four wildfire scenarios were modeled for vegetation types under three conditions: 1) the existing baseline condition, 2) the project with the fire prevention measures

required by the applicable building and fire codes, and 3) the project with the additional fire prevention measures proposed by the County. The project proposes all of the fire prevention features listed above, but a separate analysis of the project with only the required fire prevention measures represents a "pre-mitigation" condition that can be used to assess project impacts in the absence of mitigation. Research about human behavior and ignition risk was also conducted to assess the effectiveness of the human activity fire prevention measures implemented in the three conditions above. The existing condition is described in Section 4.9.2.5 above. A discussion of the effectiveness of the project's fire prevention measures for the project with the required fire prevention measures and for the project with the additional fire prevention measures is provided below.

Project with Required Fire Prevention Measures

The project would be required to implement certain fire prevention measures mandated by building and fire codes, which would convert existing hazardous vegetation fuels to maintained landscaping and vegetation fuel modification zones that meet code requirements. The same four wildfire scenarios were modeled for the project with the required vegetation fuel modification fire prevention measures listed above. The only vegetation fuel modification measures that are not required by the relevant codes is vegetation modification within two 20-foot vegetation buffer areas adjacent to the existing 30-foot buffer along the park footprint and the existing 30-foot buffer approximately 100 feet south of the northeast corner of the County's parcel. The analysis for the project condition with the required fire prevention measures assumes that the vegetation in the buffer would remain unmaintained flat-topped buckwheat and fire activity in the additional 20-foot buffer areas would remain the same as the existing condition.

Modeling results demonstrate that in the project with the required vegetation fuel modification measures condition, flame lengths in areas with vegetation modification would be reduced by approximately 4.6 feet to 12 feet depending on the location. Similarly, fire intensity in the fuel modification areas would be reduced by up to 3,008 BTU/feet/second; rate of spread would be reduced by up to 4 mph; and ember spotting distance would be reduced by up to 0.8 miles compared to the existing condition.

Regarding ignition and human activity, the project is anticipated to lead to additional human presence at the site, which could increase fire risk by introducing additional opportunities for human-caused fire ignitions. However, the project would be subject to the restrictions in the County Code of Regulatory Ordinances, which prohibits ignition sources such as smoking or fireworks. On-site signage would inform visitors about the prohibited activities on the project site. The existing weekly ranger checks would enforce these prohibitions using clear communication and direct verbal warnings, which would also present opportunities for education about fire dangers. Ongoing enforcement, education, and signage would increase public awareness about the restrictions on the project site, minimizing ignition potential even when rangers are not present. Still, due to the lack of a daily enforcement presence, the occasional unauthorized access of the project site is not expected to be meaningfully reduced for the project with required fire prevention measures condition, meaning some ignition potential would still exist for this hypothetical condition. However, the irrigated and managed landscaping proposed for the project reduces the risk of an on-site ignition becoming an off-site wildfire by replacing a nearly continuous field of hazardous, easily ignited vegetation with ignition-resistant landscaping arranged in accordance with defensible space and fuel modification requirements. The project with required fire prevention measures would

implement defensible space requirements and vegetation modification to ensure that impacts related to wildfire would be less than significant, with no mitigation required.

Project with Additional Fire Prevention Measures

The only vegetation fuel modification fire prevention measures that exceed code requirements are the additional 20-foot buffer areas. These buffer areas would further reduce fire activity on the project site by providing more area with maintained landscaping and irrigation. The proposed project would result in a reduction in buffer area flame lengths (3 feet compared to 18 feet without the vegetation modification), fire intensity (up to 63 BTU/feet/second compared to up to 3,037 BTU/feet/second without the vegetation modification), rate of spread (0.2 mph compared to up to 6.2 mph without the vegetation modification), and ember spotting (up to 0.3 miles compared to up to 1.1 miles without the vegetation modification) compared to existing conditions.

Regarding ignition and human activity, the project includes fire prevention measures that exceed the requirements of the County Code of Regulatory Ordinances, as listed above. Additional measures include a live-on volunteer, maintenance staff, and a park ranger to help with maintenance and management of the property; strengthened vehicle control barriers and fire-safe parking; and the prohibition of campfires and overnight use of the park. As described in Appendix J1, one of the most effective means of reducing ignitions is to combine effective education with judicious enforcement. Pairing restrictions (such as the prohibition of smoking) with on-site enforcement personnel establishes a comprehensive compliance framework by providing the legal authority necessary to support enforcement actions and penalties for violations; active monitoring and enforcement capacity to identify noncompliance and request compliance or summoning assistance from law enforcement; and direct public education and outreach that promotes awareness of regulations and reduces the likelihood of future violations. With the additional vegetation fuel modification and human activity fire prevention measures, impacts related to wildfire would continue to be less than significant, with no mitigation required.

Implementation of the project, including the aforementioned fire prevention measures~~project design features~~, compliance with applicable ordinances and regulations, and enforcement of County DPR rules and regulations would reduce the potential for the project to expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires. Impacts would be less than significant.

Impact Determination

Implementation of the project would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires. Impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

Impacts would be less than significant.

Threshold 8: The project would not be a business, operation, or facility that would handle hazardous substances in excess of the threshold quantities listed in Chapter 6.95 of the H&SC, generate hazardous waste regulated under Chapter 6.5 of the H&SC, and/or store hazardous substances in Underground storage tanks regulated under Chapter 6.7 of the H&SC, and the project would comply with applicable hazardous substance regulations.

County Park and Trails and Open Space~~/Preserve~~

Impact Discussion

As discussed above under Threshold 1, project construction would involve the routine transport, use, and disposal of hazardous materials, such as solvents, paints, oils, grease, and caulking. Potential construction impacts associated with the routine transport, use, or disposal of hazardous materials would be less than significant. Operations associated with the project (i.e., restrooms, ranger station, administrative facility) would use hazardous chemicals that are currently used for park operations and typical in these types of settings. These products would not be stored or used in quantities that would result in a significant release. Potential operational impacts associated with the routine transport, use, or disposal of hazardous materials would be less than significant. The project would not propose a business, operation, or facility that would handle hazardous substances in excess of the threshold quantities listed in Chapter 6.95 of the H&SC, generate hazardous waste regulated under Chapter 6.5 of the H&SC, and/or store hazardous substances in USTs regulated under Chapter 6.7 of the H&SC. The project would comply with applicable hazardous substance regulations.

Impact Determination

Impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

Impacts would be less than significant.

Threshold 9: The project would be a business, operation, or facility that would handle regulated substances subject to CalARP Risk Management Plan requirements that in the event of a release could adversely affect children's health due to the presence of a school or day care within one-quarter mile of the facility.

County Park and Trails and Open Space~~/Preserve~~

Impact Discussion

As discussed under Threshold 3, nearby schools include Joan MacQueen Middle School, approximately 0.4 mile west of the project site at 2001 Tavern Road, Alpine, and Boulder Oaks Elementary School, approximately 0.7 mile west of the project site at 2320 Tavern Road. Project construction would involve the routine transport, use, and disposal of hazardous materials, such as solvents, paints, oils, grease, and caulking. Operations associated with the project (i.e., restrooms, ranger station, administrative facility) would use hazardous chemicals that are currently used for park operations and typical in these types of settings. These materials would be stored or used in quantities that would not result in a significant release. Any spills involving these materials would be small, localized, and cleaned up as they occur. As discussed under Threshold 2, ground-disturbing construction activities could potentially result in a release of contaminated soil into the environment (**Impact HAZ-1**). Therefore, construction impacts would be potentially significant.

Impact Determination

Impact HAZ-1: Potential Release of Contaminated Soil. Ground-disturbing construction activities could potentially result in impacts from emissions or handling of hazardous materials near schools. Impacts would be potentially significant.

Mitigation Measures

Implement **MM-HAZ-1**, as described above.

Level of Significance After Mitigation

Impact-HAZ-1 would be reduced to less than significant after implementation of **MM-HAZ-1**, which would ensure the proper handling of potentially contaminated soils during construction as well as the proper handling of hazardous materials near schools.

Threshold 10: The project would be located on or within one-quarter mile of a site identified in one of the regulatory databases compiled pursuant to Government Code Section 65962.519 or otherwise known to have been the subject of a release of hazardous substances and, as a result, the project may result in a significant hazard for the public or the environment.

County Park and Trails and Open Space~~/Preserve~~

Impact Discussion

As discussed under Thresholds 2 and 4, a review of the GeoTracker and EnviroStor online databases only identified one EnviroStor listing within the project site, High School No 12, Study Area B, Wrights Field, at 2480 South Grade Road, Alpine. There are no other listed hazardous materials sites within the project footprint or a 0.25-mile radius from the project site. This site's potential impact ~~pm~~on the project is analyzed under Threshold 2. With implementation of **MM-HAZ-1**, the project site is not anticipated to create a significant hazard for the public or the environment.

Impact Determination

Impact HAZ-1: Potential Release of Contaminated Soil. Impacts would be potentially significant.

Mitigation Measures

Implement **MM-HAZ-1**, as described above.

Level of Significance After Mitigation

Impacts would be less than significant.

Threshold 11: The project does not propose structures for human occupancy and/or significant linear excavation within 1,000 feet of an open, abandoned, or closed landfill (excluding burn sites) and, as a result, the project would not create a significant hazard for the public or the environment.

County Park and Trails and Open Space~~/Preserve~~

Impact Discussion

The project does not propose structures for human occupancy and/or significant linear excavation within 1,000 feet of an open, abandoned, or closed landfill (excluding burn sites). Therefore, it would not create a significant hazard for the public or the environment.

Impact Determination

There would be no impact.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

There would be no impact.

Threshold 12: The project is not proposed on or within 250 feet of the boundary of a parcel identified as containing burn ash (from the historic burning of trash) and, as a result, the project would not create a significant hazard for the public or the environment.

County Park and Trails and Open Space~~/Preserve~~

Impact Discussion

The project site is not on or within 250 feet of a parcel identified as containing burn ash (from the historic burning of trash). Therefore, it would not create a significant hazard for the public or the environment.

Impact Determination

There would be no impact.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

There would be no impact.

Threshold 13: The project would not be proposed on or within 1,000 feet of a formerly used defense site and munitions or other hazards are not located on site that could represent a significant hazard for the public or the environment.

County Park and Trails and Open Space~~/Preserve~~

Impact Discussion

The project site is not on or within 1,000 feet of a formerly used defense site. Therefore, it would not represent a significant hazard for the public or the environment.

Impact Determination

There would be no impact.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

There would be no impact.

Threshold 14: The project could result in human or environmental exposure to soil or groundwater that exceeds U.S. EPA Region 9 Preliminary Remediation Goals, CalEPA California Human Health Screening Levels, or Primary State or Federal Maximum Contaminant Levels for applicable contaminants and the exposure would represent a hazard to the public or the environment.

County Park and Trails and Open Space~~/Preserve~~

Impact Discussion

As discussed under Threshold 2, ground-disturbing construction activities could potentially result in the release of contaminated soil into the environment (**Impact HAZ-1**), thereby resulting in human or environmental exposure to contaminated soil. Soil at the project site could potentially exceed U.S. EPA Region 9 Preliminary Remediation Goals, CalEPA California Human Health Screening Levels, or Primary State or Federal Maximum Contaminant Levels for applicable contaminants. Therefore, construction impacts would be potentially significant.

Impact Determination

Impact HAZ-1: Potential Release of Contaminated Soil. Impacts would be potentially significant.

Mitigation Measures

Implement **MM-HAZ-1**, as described above.

Level of Significance After Mitigation

Impact HAZ-1 would be reduced to a less-than-significant level after implementation of **MM-HAZ-1**, which would ensure preparation and implementation of a Soil Management Plan.

Threshold 15: The project would not involve the demolition of commercial, industrial, or residential structures that may contain asbestos-containing materials, lead-based paint, and/or other hazardous materials and, as a result, the project would not represent a significant hazard for the public or the environment.

County Park and Trails and Open Space~~/Preserve~~

Impact Discussion

The project would not involve the demolition of commercial, industrial, or residential structures.

Impact Determination

There would be no impact.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

There would be no impact.

4.9.5 Summary of Significant Impacts

Table 4.9-1. Summary of Significant Hazards and Hazardous Materials Impacts and Mitigation Measures

Summary of Potentially Significant Impact(s)	Summary of Mitigation Measure(s)	Level of Significance After Mitigation	Rationale for Finding After Mitigation
Impact HAZ-1: Potential Release of Contaminated Soil	**MM-HAZ-1: Prepare and Implement a Soil Management Plan**	Less than Significant	**MM-HAZ-1** would ensure proper identification, handling, and disposal of contaminated soils if encountered on the project site.

Section 4.17
Transportation and Circulation

4.17.1 Overview

This section describes the existing conditions and laws and regulations related to transportation, circulation, and mobility, followed by an analysis of the project's potential to impact these facilities.

The information provided in this section is summarized from the *Alpine Community Park – VMT Analysis* prepared by Chen Ryan Associates in ~~August~~September 2020 (Appendix H) and the *Alpine Park Transportation Impact Study* (TIS) prepared by Chen Ryan Associates in ~~April~~July 2020 (Appendix I). An Addendum to the TIS was prepared by Chen Ryan Associates in July 2026 to respond to the Court's request for an updated analysis related to traffic hazards (Appendix I1). The Addendum is supported by a parking generation analysis, sight distance analysis, traffic safety analysis, and an overview of other safety treatments considered by the County.

4.17.2 Existing Conditions

This section describes the regional and local roadways, public transit systems, and bicycle/pedestrian facilities in the project site vicinity.

4.17.2.1 Existing Transportation Conditions

Regional Facilities

Regional access to the project site is provided by the interstate and ~~s~~State freeway systems, which are both under the California Department of Transportation's (Caltrans') jurisdiction. The following freeways provide access to the vicinity of the project site.

- Interstate (I-) 8 provides regional transit in an east-to-west route that extends from the western coast of San Diego to Casa Grande in central-southern Arizona. I-8 travels through the northern portion of the Alpine Community Plan Area, and through the most densely developed portion of the community. I-8 is approximately one mile north of the project site. ~~Access to/from Alpine from I-8 is provided from the Victoria Park Terrace/Alpine Blvd. interchange to the west and to/from the Willows Rd./Alpine Blvd. Interchange to the east.~~
- State Route (SR-) 79 provides regional access in San Diego and Riverside Counties in a north-to-south route from the I-8 ~~-~~just east of Alpine to Beaumont, in Riverside County. SR-79 is approximately 7.8 miles to the northeast of the project site.

Local Facilities

Roadways

There are two main roadways in the project vicinity, that provide access to the project site.

- South Grade Road creates a ~~circuitous~~ loop around the project site, traveling ~~south~~ from ~~its intersection with Alpine Blvd. in~~ the northwest portion of Alpine to the south, and then back to the north ~~in~~on the eastern portion of the Alpine community~~, connecting again with Alpine Blvd.~~. South Grade Road borders the southern and eastern portions of the project site and provides access to the project site.
- Tavern Road is a main north-to-south roadway that traverses through the community of Alpine and ~~also~~ provides access to the project area. Tavern Road is approximately 0.90 miles to the west of the project site.

Public Transportation Services

Regional public transportation serving the Alpine Community Plan Area includes bus services provided by the San Diego Metropolitan Transit System (MTS). Bus routes 838 and 888 serve Alpine by way of stops along Alpine Boulevard, Tavern Road, and Arnold Way. The closest bus stop is approximately 0.88 miles north of the project site~~, at ??~~.

Pedestrian and Bicycle Facilities

Bicycle facilities are categorized as Class I, II, and III facilities. Class I facilities are off-street, paved bike paths; Class II facilities are bike lanes that are generally identified as a separate lane of a roadway; and Class III facilities are bike routes that are shared with vehicles along a roadway. There are limited bicycle facilities in the project vicinity; Alpine Boulevard has ~~a~~ Class III bike route from its intersection with Tavern Road to its intersection with Honey Hill Ranch Road~~, which is approximately 1/8 mile to the east of South Grade Rd.~~ There are no bike facilities along South Grade Road adjacent to the project site. All County of San Diego roadways (excluding freeways, except where allowed by Caltrans) are open for travel by bicycle, regardless of bikeway treatment.

4.17.3 Applicable Laws and Regulations

4.17.3.1 State

Senate Bill 743

Governor Jerry Brown signed Senate Bill (SB) 743 on September 27, 2013, which mandated a change in the way that public agencies evaluate transportation impacts of projects under CEQA, focusing on vehicle miles traveled (VMT)), rather than level of service (LOS) and other delay-based metrics. SB 743 states that new methodologies under CEQA ~~must be used to evaluate~~are needed for evaluating transportation impacts that are ~~targeted at reducing~~better able to reduce GHG emissions and traffic-related air pollution, promoting the development of a multimodal transportation system, and providing clean, efficient access to destinations. It further intended to balance the need for LOS standards with the ~~s~~State's need to build infill housing and mixed-use commercial developments within walking distance of mass transit facilities and downtowns or town centers. SB 743 allow~~s~~ed for measurements of transportation impacts that ~~can~~could include VMT, VMT per capita, automobile trip generation rates, or automobile trips generated. Accordingly, SB 743 required the Governor's Office of Planning and Research (OPR) to amend the ~~State~~ CEQA Guidelines to reflect these changes.

~~State~~ CEQA Guidelines Section 15064.3

In response to SB 743, the Office of Planning and Research added Section 15064.3 of the ~~State~~ CEQA Guidelines, as part of a comprehensive Guidelines update, adopted by the California Natural Resources Agency in December 2018. Section 15064.3 describes specific considerations for evaluating a project's transportation impacts and identifies VMT as the most appropriate measure to determine the significance of transportation impacts. Section 15064.3 generally states that a project's effect on automobile delay shall not constitute a significant environmental impact under CEQA. The specific criteria for analyzing transportation impacts are provided in Section 15064.3, subdivision (b) of the ~~State~~ CEQA Guidelines. In general, SB 743 indicates that the total VMT that exceeds an applicable threshold of significance may indicate a significant impact.

Technical Advisory on Evaluating Transportation Impacts in CEQA

In response to SB 743 and the addition of Section 15064.3 to the ~~State~~ CEQA Guidelines, the OPR adopted the *Technical Advisory on Evaluating Transportation Impacts in CEQA* (Technical Advisory) in December 2018 to provide technical recommendations on methods for assessing VMT, thresholds of significance, and mitigation measures. The recommendations in the Technical Advisory are intended to provide guidance to agencies and the public for assessing VMT-related transportation impacts under CEQA. Details of the recommended thresholds of significance from the Technical Advisory are provided in Section 4.~~17~~14.4.2, below.

4.17.3.2 Regional

San Diego Association of Governments

San Diego Forward: The Regional Plan

SANDAG's *San Diego Forward: The Regional Plan* (Regional Plan) was adopted by the SANDAG Board of Directors on October 9, 2015, to establish a long-range blueprint for the San Diego region's growth and development through the year 2050. The Regional Plan was developed in close partnership with the region's 18 cities and ~~San Diego~~the County ~~government~~, and aims to provide innovative mobility choices and planning to support a sustainable quality of life in a healthy region with a vibrant economy. The Regional Plan integrates ~~both~~ the 2004 Regional Comprehensive Plan ~~and,~~ the 2050 Regional Transportation Plan (RTP~~)~~), and the Sustainable Communities Strategy (SCS) into one unified plan. By incorporating the SCS, the Regional Plan is in compliance with SB 375, which identifies how the region will address GHG emissions to meet ~~s~~State-mandated levels and focuses on land use planning and transportation issues in an attempt to develop sustainable growth patterns on a regional level.

State law requires ~~RTPs~~the RTP to be updated every four years. The State ~~of California~~ established climate mandates for regional planning organizations across the ~~s~~State in 2018; so the SANDAG Board of Directors approved a two-year extension to develop the 2021 Regional Plan. ~~A Draft~~The final 2021 Regional Plan is ~~anticipated to be~~ available ~~for~~to the public ~~review in spring 2021.~~

Riding to 2050, the San Diego Regional Bike Plan

Riding to 2050, the San Diego Regional Bike Plan (Regional Bike Plan) was developed to support the 2004 Regional Comprehensive Plan and the 2050 RTP in implementing the regional strategy for

utilizing bicycles as a valid form of everyday travel. The Regional Bike Plan, as a part of the SCS mandated by SB 375, provides for a detailed Regional Bike Network, as well as the programs that are necessary to support it. Implementation of the Regional Bike Plan would help the region meet its goals for reducing GHG emissions and improve mobility.

2018 Regional Transportation Improvement Program

The 2018 Regional Transportation Improvement Program ~~(RTIP)~~ is a multi-billion-dollar 5-year program of major transportation projects funded by federal, ~~s~~State, TransNet local sales tax, and other local and private funding covering fiscal year 2016/2017 to 2020/2021. The program development process, which includes ~~an~~the air quality emissions analysis for all regionally significant projects, requires approval by the Federal Highway Administration ~~(FHWA)~~ and the Federal Transit Administration ~~(FTA).~~. The ~~RTIP~~Regional Transportation Improvement Program is a prioritized program designed to implement the region's overall strategy for providing mobility and improving the efficiency and safety of the transportation system, while reducing transportation-related air pollution in support of efforts to attain federal and ~~s~~State air quality standards for the region. The program also incrementally implements the Regional Plan, which is the long-range transportation plan for the San Diego region (SANDAG 2015).

4.17.3.3 Local

County of San Diego ~~Regulatory Ordinances, Sections 77.201 – 77.220, Transportation Impact Fee~~

~~The Transportation Impact Fee (TIF) program provides funding for mitigation of cumulative impacts and for proportional construction of transportation facilities needed to support traffic generated by new development to meet State law requirements. Per the County Board of Supervisors ordinance, effective December 31, 2012, the County will collect TIF at or before building permit issuance for projects that generate new trips.~~

County of San Diego General Plan Policies

The General Plan includes goals and policies that address transportation and traffic within the Mobility, Land Use, and Safety elements. The~~se~~ goals and policies that are applicable to the project are summarized below.

Mobility Element

Policy M-2.1: Level of Service Criteria. Require development projects to provide associated road improvements necessary to achieve an LOS of "D" or higher on all Mobility Element roads except for those where a failing LOS has been accepted by the County pursuant to the criteria specifically identified in the accompanying text box (Criteria for Accepting a Road Classification with LOS E/F). When development is proposed on roads where a failing LOS has been accepted, require feasible mitigation in the form of road improvements or a fair share contribution to a road improvement program, consistent with the Mobility Element road network.

Policy M-2.2: Access to Mobility Element Designated Roads. Minimize direct access points to Mobility Element roads from driveways and other non-through roads to maintain ~~adequate~~the capacity and improve traffic operations.

Policy M-2.3: Environmentally Sensitive Road Design. Locate and design public and private roads to minimize impacts on significant biological and other environmental and visual resources. Avoid road alignments through floodplains to minimize impacts on floodplain habitats and limit the need for constructing flood control measures. Design new roads to maintain wildlife movement and retrofit existing roads for that purpose. Utilize fencing to reduce roadkill and to direct animals to under crossings.

Policy M-3.1: Public Road Rights-of-Way. Require development ~~projects~~ to dedicate right-of-way for public roads and other transportation routes identified in the Mobility Element roadway network (see Mobility Element Network Appendix), Community Plans, or Road Master Plans. Require the provision of sufficient right-of-way width, as specified in the County Public Road Standards and Community Trails Master Plan, to adequately accommodate all users, including transit riders, pedestrians, bicyclists, and equestrians.

Policy M-3.2: Traffic Impact Mitigation. Require development ~~projects~~ to contribute ~~their~~ "its fair share" toward financing transportation facilities, including mitigating the associated direct and cumulative traffic impacts caused by their project on both the local and regional road networks. Transportation facilities include road networks and related transit, and pedestrian, bicycle and equestrian facilities.

Policy M-3.3: Multiple Ingress and Egress. Require development ~~projects~~ to provide multiple ingress/egress routes in conformance with State law, and local regulations.

Policy M-4.4: Accommodate Emergency Vehicles. Design and construct public and private roads to allow for necessary access for appropriately sized fire apparatus and emergency vehicles while accommodating outgoing vehicles from evacuating residents.

~~**Policy M-11.2: Bicycle and Pedestrian Facilities in Development**. Require development projects and town center plans in Villages and Rural Villages to incorporate site design and on-site amenities for alternate modes of transportation, such as comprehensive bicycle and pedestrian networks and facilities. This will include both on-street facilities as well as off-street bikeways to safely serve the full range of intended users. Also designate areas for transit facilities, where appropriate and coordinated with the transit service provider.~~

~~**Policy M-11.4: Pedestrian and Bicycle Network Connectivity**. Require development projects in Villages and Rural Villages to provide comprehensive internal pedestrian and bicycle networks that connect to existing or planned adjacent community and county-wide networks.~~

Land Use Element

Policy LU-5.5: Projects that Impede Non-Motorized Travel. Ensure that development projects and road improvements do not impede bicycle and pedestrian access. Where impacts on existing planned routes would occur, ensure that impacts are mitigated, and acceptable alternative routes are implemented. Examples include large parking areas that cannot be crossed by non-motorized vehicles, and new developments that block "through access" on existing or potential bicycle and pedestrian routes.

Policy LU-6.10: Protection from Hazards. Require that development ~~projects~~ be located and designed to protect property and residents from the risks of natural and man-induced hazards.

Policy LU-9.8: Village Connectivity and Compatibility with Adjoining Areas. Require new development within Villages to include road networks, pedestrian routes, and amenities that create or maintain connectivity; and site, building, and landscape design that is compatible with surrounding areas. (See applicable community plan for possible relevant policies.)

Safety Element

Policy S-3.4: Service Availability. Plan for development where fire and emergency services are available or planned.

Policy S-3.5: Access Roads. Require development ~~projects~~ to provide additional access roads when necessary to provide for safe access of emergency equipment and civilian evacuation concurrently.

Policy S-14.1: Vehicular Access to Development. Require development ~~projects~~ to provide vehicular connections that reduce response times and facilitate access for law enforcement personnel, whenever feasible.

Alpine Community Plan

The *Alpine Community Plan*, amended in December 2016, contains goals, policies and recommendations to maintain an effective circulation system in the community. There are no specific policies or recommendations for ~~development projects~~developments within ~~the~~ Alpine community that are applicable to transportation and circulation.

San Diego County Active Transportation Plan

The San Diego County Active Transportation Plan (ATP) promotes active transportation through pedestrian and bicycle improvements throughout the unincorporated ~~County~~area. The ATP consists of an update to the County's Bicycle Transportation Plan (dated 2008) and the Pedestrian Area Plans (prepared for Alpine, Borrego Springs, Fallbrook Town Center, Lakeside Town Center and Spring Valley) into one combined ATP. The ATP was approved by the County Board of Supervisors on October 31, 2018. The ATP identifies goals, objectives, and actions related to improving safety to reduce auto collisions with cyclists and pedestrians, increasing accessibility and connectivity with an active transportation network, and improving public health by encouraging walking and biking. The plan identifies existing and proposed bikeways, and classifies bikeways into three types of bicycle facilities: bike path, bike lane, and cycle track. *Bike paths* refer to paths that provide for bicycle travel on a paved right-of-way completely separated from any street or highway. A *bike lane* provides a striped and stenciled lane for one-way travel on a street or highway. *Cycle tracks* provide a physically separated bikeway for the exclusive use of bicycles.

County of San Diego Transportation Study Guidelines

The County of San Diego Transportation Study Guidelines (TSG), adopted in January~~September~~ 2026~~2~~ in response to SB 743, provides criteria on how projects should be evaluated for consistency related to the County's transportation goals, policies, and plans, and through procedures established under CEQA (County 2026). The TSG establishes thresholds of significance and the contents and procedures for preparing a Transportation Study for projects in the unincorporated area. The TSG aids in determining appropriate mitigation under CEQA, as well as site-specific improvements to the transportation system to accommodate project traffic.

4.17.4 Project Impact Analysis

4.17.4.1 Methodology

Potential transportation and circulation impacts associated with the project are summarized below based on information contained in Appendix I of ~~this~~the Draft EIR. Methods used to determine impacts are based ~~in part~~ on ~~the County of San Diego Traffic Study Guidelines and in conformance with the State of~~ OPR's *Technical Advisory on Evaluating Transportation Impacts in CEQA* (Technical Advisory), as well as input from the County of San Diego Department of Public Works~~.~~ (DPW)~~)~~.

Transportation and Circulation During Construction

As discussed in Section 4.14.3.1, SB 743 establishes VMT as the new criteri~~on~~a for determining transportation impacts. Section 15064.3 was added to the ~~State~~ CEQA Guidelines to address SB 743. In relation to construction VMT analyses, ~~State~~ CEQA Guidelines Section 15064.3 (b)(3) states:

> "Qualitative Analysis. If existing models or methods are not available to estimate the vehicle miles traveled for the particular project being considered, a lead agency may analyze the project's vehicle miles traveled qualitatively. Such a qualitative analysis would evaluate factors such as the availability of transit, proximity to other destinations, etc. For many projects, a qualitative analysis of construction traffic may be appropriate."

For the purposes of ~~determining~~analyzing construction-related VMT impacts of the project, the analysis qualitatively considers the potential change in VMT due to construction, types of construction-related congestion and traffic hazards.

Transportation and Circulation During Operation

The ~~San Diego~~ County Board of Supervisors adopted new guidelines for the County ~~of San Diego Transportation Study Guidelines (~~TSG in January~~September~~ 2026~~2~~. These County ~~TSG) on June 24, 2020.~~ specific thresholds are in accordance and aligned with the industry's best practice and guidance from the OPR to conduct the VMT analysis. The recently adopted County TSG is consistent with ~~the State~~ CEQA Guidelines and utilizes VMT as a metric for evaluating transportation-related impacts. Per the County TSG, all projects within the unincorporated ~~portions of San Diego County~~area are required to ~~use~~go through a screening process to determine the level of transportation analysis that is required. An excerpt of the screening process is provided in Attachment A of Appendix I. The 2026 update to the TSG removed the screening criteria for projects located in infill village areas and small residential and employment projects.

Based on Section 3.3 of the County TSG, when conducting a screening analysis, projects that can be classified within any of the following screening criteria are assumed to have a less than significant VMT impact, due to project's characteristic and/or location and are therefore exempt from additional VMT CEQA analysis:

- *Project located in VMT efficient area*: A VMT efficient area is any area with an average VMT per Resident, VMT per Employee, or VMT per Service Population below the baseline average for the ~~Unincorporated County average.~~San Diego region. Land use projects may qualify for the use of VMT efficient area screening if the project can be reasonably expected to generate a VMT per Resident, per Employee, or per Service Population, respectively, that is similar to the existing land uses in the VMT efficient area.

- ~~*Project located in infill Village Area:* An infill development is defined by OPR as "…building within unused and underutilized lands within existing development patterns, typically but not exclusively within urban areas." Multiple land use and transportation network variables were identified to create a quantitative definition for "infill development" in the County, including household density, intersection density, and job accessibility. Development in more dense areas with high job accessibility leads to more diversity in land use, demand for transit (bus and trolley) and multimodal infrastructure (walking and biking), and shorter vehicle trips, which reduce GHGs and VMT.~~
- ~~*Small residential and employment projects:* Projects generating less than 110 daily vehicle trips (trips are based on the number of vehicle trips calculated using national ITE trip generation rates with any alternative modes/location-based adjustments are applied) may be presumed to have a less than significant impact absent substantial evidence to the contrary.~~
- *Project located in Transit Accessible Area*: Projects located within a half mile of an existing major transit stop or an existing stop along a high-quality transit corridor may be presumed to have a less than significant impact absent substantial evidence to the contrary. Note that Sprinter stations are considered major transit stops. This presumption may not apply if the project:
    - Has a Floor Area Ratio of less than 0.75.
    - Includes more parking for use by residents, customers, or employees of the project than required by the County.
    - Is inconsistent with SANDAG's most recent Sustainable Communities Strategy (SCS).
    - Replaces affordable residential units with a smaller number of moderate- or high-income residential units.
- *Locally serving retail/service projects:* Local serving retail/service projects less than 50,000 square feet may be presumed to have a less than significant impact absent substantial evidence to the contrary. Local serving retail/service generally improves the convenience of shopping close to home and has the effect of reducing vehicle travel.
- *Locally serving public facilities and other uses*: Public facilities that serve the surrounding community or public facilities that are passive use may be presumed to have a less than significant impact absent substantial evidence to the contrary. These do not include facilities or uses that would attract users from outside the vicinity of the use. The following are examples of locally serving facilities and uses:
    - Transit centers
    - Schools
    - Libraries
    - Post offices
    - Park-and-ride lots
    - Local health/medical clinics
    - Law enforcement and fire facilities
    - ~~Local~~Open space preserves, local parks, and trailheads
    - Government offices

- Communication and utility buildings
- Water sanitation buildings
- Waste management buildings

- *Redevelopment projects with greater VMT efficiency*: Redevelopment projects with greater VMT efficiency in which a project replaces existing VMT-generating land uses, the project may be presumed to have a less than significant impact if the total project VMT is less than the existing land use's total VMT, absent substantial evidence to the contrary.
- *Affordable housing*: An affordable housing project may be presumed to have a less than significant impact absent substantial evidence to the contrary if 100% of units are affordable.

Projects that do not meet the screening criteria are required to conduct a VMT analysis using either the County's screening map or the SANDAG Regional Transportation Model to determine whether the project is below the threshold established in the County TSG.

~~The~~Additionally, the TIS (Appendix I) was prepared to identify potential transportation related impacts on roadway segments, intersections, and freeway on-ramps associated with the project. This TIS was performed in accordance with the requirements of the County TSG and in conformance with the enhanced CEQA project review process. LOS is the metric for describing operational conditions within a traffic stream, and the motorist's and/or passengers' perception of operations. A LOS definition generally describes these conditions in terms of such factors as delay, speed, travel time, freedom to maneuver, interruptions in traffic flow, queuing, comfort, and convenience. Table 4.17-1 describes generalized definitions of the various LOS categories (A through F) as applied to roadway operations. LOS D is considered acceptable within the ~~County of San Diego.~~unincorporated area.

Table 4.17-1 Level of Service Definitions

LOS Category	Definition of Operation
A	This LOS represents a completely free-flow condition, where the operation of vehicles is virtually unaffected by the presence of other vehicles and only constrained by the geometric features of the highway and by driver preferences.
B	This LOS represents a relatively free-flow condition, although the presence of other vehicles becomes noticeable. Average travel speeds are the same as in LOS A, but drivers have slightly less freedom to maneuver.
C	At this LOS the influence of traffic density on operations becomes marked. The ability to maneuver within the traffic stream is clearly affected by other vehicles.
D	At this LOS, the ability to maneuver is notably restricted due to traffic congestion, and only minor disruptions can be absorbed without extensive queues forming and the service deteriorating.
E	This LOS represents operations at or near capacity. LOS E is an unstable level, with vehicles operating with minimum spacing for maintaining uniform flow. At LOS E, disruptions cannot be dissipated readily thus causing deterioration down to LOS F.
F	At this LOS, forced or breakdown of traffic flow occurs, although operations appear to be at capacity, queues form behind these breakdowns. Operations within queues are highly unstable, with vehicles experiencing brief periods of movement followed by stoppages.

Roadway segment LOS standards and thresholds provide the basis for analysis of arterial roadway segment performance. The analysis of roadway segment LOS is based on the functional classification of the roadway, the maximum capacity, roadway geometrics, and existing or forecast average daily traffic volumes. Appendix I presents the existing roadway segments and intersections, the roadway segment capacity, and LOS standards utilized to analyze roadways evaluated in the TIS.

4.17.4.2 Thresholds of Significance

Appendix G of the ~~State~~ CEQA Guidelines

The following significance criteria are based on Appendix G of the ~~State~~ CEQA Guidelines and provide the basis for determining the significance of impacts on existing transportation and circulation conditions as a result of the project's implementation. The determination of whether a transportation and circulation impact would be significant is based on the answers to the threshold questions.

Impacts are considered significant if the project would result in any of the following:

1. Conflict with a program, plan, ordinance, or policy addressing the circulation system.
2. Conflict or be inconsistent with ~~State~~ CEQA Guidelines Section 15064.3, subdivision (b).
3. Substantially increase hazards because of a geometric design feature or incompatible uses.
4. Result in inadequate emergency access.

County of San Diego Guidelines for Determining Significance

~~The San Diego County Board of Supervisors adopted the County TSG on June 24, 2020.~~ The ~~recently adopted 2022~~ County TSG was adopted on January 14~~September 28~~, 202~~62~~, and is consistent with the ~~State~~ CEQA Guidelines and utilizes VMT as a metric for evaluating transportation-related impacts. Per the County TSG, all projects within the unincorporated portions of San Diego County are required to ~~use~~go through a screening process to determine the level of transportation analysis that is required. Under SB 743, CEQA analysis can no longer use road congestion or the amount of time a driver is delayed on the road—commonly measured by LOS—when analyzing transportation impacts. Therefore, instead of using LOS, a project's environmental impacts must be evaluated by the amount and distance people drive to destinations.

4.17.4.3 Project Impacts and Mitigation Measures

Threshold 1: The project would not conflict with a program, plan, ordinance, or policy addressing the circulation system.

County Park ~~and~~, Trails, and Open Space ~~/Preserve~~

Impact Discussion

Construction

The programs, plans, ordinances, and policies addressing the circulation system that are applicable to the project have been described above in Section 4.17.3. The project's potential to conflict with

~~SD~~SB 743 is addressed in the analysis for the next threshold question (Threshold 2) as it relates to ~~State~~ CEQA Guidelines Section 15064.3(b).

Construction may result in temporary partially or completely blocked northbound or southbound travel lanes along South Grade Road and/or Tavern Road due to the use of large construction equipment, construction material deliveries, and construction of the sewer line in the centerline of South Grade Road and Tavern Road. The project also includes the development of a vegetated berm along the eastern and southern boundary of the project site along South Grade Road. The project includes improvements to circulation facilities including a decomposed granite walking path situated between the proposed berm and South Grade Road, the primary ingress/egress driveway on the northeastern side of the project site~~,~~ across from Calle De Compadres (Driveway #1), and the secondary ingress/egress in the southwestern corner of the project site (Driveway #2). Construction of the circulation-related features of the project may encroach into the public right-of-way during portions or the entirety of the construction process. These temporary lane closures or impediments within the roadway could delay or obstruct the movement of traffic along South Grade Road and Tavern Road. However, when construction interrupts the normal function of a roadway, a Traffic Control Permit must be obtained from ~~the~~ County ~~of San Diego Department of Public Works~~DPW. County DPR or its contractors would be responsible for obtaining the Traffic Control Permit which requires the installation and maintenance of appropriate traffic control in accordance with a Traffic Control Plan. The traffic control methods used to maintain safe traffic flow could include barriers, signs, and flags. The implementation of the Traffic Control Plan would ensure continued flow of traffic in the public right-of-way during construction. Otherwise, all construction would occur within the project site, and would not prevent the implementation of circulation programs or plans for the surrounding circulation system, including but not limited to roadway improvements or development of bicycle or pedestrian facilities. As such, the project would not conflict with a program, plan, ordinance, or policy addressing the circulation system; impacts would be less than significant.

Operation

Operation of the project would involve active and passive recreational facilities, as well as the associated circulated-related improvements~~, as mentioned above,~~ along South Grade Road, as mentioned above. Operation of the active and passive park would also contribute to additional users of the surrounding circulation system, primarily accessing the project site by car. The project is estimated to draw an average of 500 daily visitors. The potential effect of the daily visitors to regional VMT goals as it relates to SB 743 and ~~State~~ CEQA Guidelines Section 15064.3(b) is discussed ~~under Threshold 2,~~ below. ~~The~~Otherwise, the project would not include any features that would change or prevent the use of local circulation facilities.

~~The~~Furthermore, the TIS ~~prepared~~conducted by Chen Ryan for the project (Appendix I) analyzed the effect of project-generated traffic on the existing transportation facilities. The TIS analysis indicates all of the roadway segments and intersections included in the study area operated at acceptable LOS B. The existing roadway segments plus the project conditions are anticipated to operate at acceptable LOS C or better, and intersections are anticipated to continue to operate at acceptable LOS B or better with the addition of project traffic. The results of the analysis state that the addition of project traffic would not cause a significant impact to the study area roadway segments and intersections when compared to both existing conditions plus the project, as well as future conditions (based on growth projections) plus the project. This indicates the project would not have a detrimental effect on the LOS of project area roadways and intersections, and would be

consistent with the local policies governing target LOS thresholds, including but not limited to, the County of San Diego General Plan. Therefore, operation of the project would not conflict with the implementation of any programs, plans, ordinances, and policies addressing the circulation system. Impacts would be less than significant.

Impact Determination

The project would not conflict with any programs, plans, ordinances, and policies addressing the circulation system. Impacts would be less than significant.

Mitigation Measures

Mitigation is not required.

Level of Significance After Mitigation

Impacts would be less than significant.

Threshold 2: The project would not conflict or be inconsistent with ~~State~~ CEQA Guidelines Section 15064.3, subdivision (b).

County Park, Trails, and Open Space~~/Preserve~~

Impact Discussion

Construction

Construction of the project would provide construction jobs for the region; however, the construction jobs are expected to be filled ~~by current~~with construction personnel from the local labor market, and would not increase the demand ~~for~~on construction personnel such that individuals would be traveling from outside the region to fill the positions. Therefore, project construction jobs would result in redistributing existing vehicle trips around the region and would not induce an increase in VMT. Furthermore, implementation of the Traffic Control Plan pursuant to the Traffic Control Permit~~,~~ in the event of encroachment into the public right-of-way during construction activities~~,~~ would serve to reduce potential impacts on vehicle travel. Therefore, the project would not induce ~~or~~an increase in VMT and would not conflict or be inconsistent with ~~State~~ CEQA Guidelines Section 15064.3, subdivision (b), and the impact would be less than significant.

Operation

A screening analysis was conducted by Chen Ryan (see Appendix I) for the project using the County TSG screening criteria outlined in Section 4.17.4.1. *Methodology.* Based upon the OPR guidelines and criterion provided therein as well as Attachment A of Appendix I, the project ~~would fall under the local~~ is considered locally serving public facilities and other uses (open space preserves, local parks, and trailheads) category. The County TSG states that local ~~serving~~ public facilities ~~and other uses~~that fall in the public serving category are presumed to have less than significant VMT impact. Therefore, operation of the project would not conflict or be inconsistent with ~~State~~ CEQA Guidelines Section 15064.3, subdivision (b), and the impact would be less than significant.

Impact Determination

The project would not conflict or be inconsistent with ~~State~~ CEQA Guidelines Section 15064.3, subdivision (b), and the impact would be less than significant.

Mitigation Measures

Mitigation is not required.

Level of Significance After Mitigation

Impacts would be less than significant.

Threshold 3: The project <u>would not</u> substantially increase hazards because of a geometric design feature or incompatible uses.

County Park, Trails<u>,</u> and Open Space~~/Preserve~~

Impact Discussion

Construction

The project would involve the construction of two ingress/egress driveways providing access to the parking and staging areas within the park from South Grade Road<u>. as well as a two-way</u>~~an all-way~~ <u>stop at South Grade Road and Calle De Compadres.</u> As part of the standard project approval process, the proposed access improvements would be reviewed by ~~the~~ County ~~of Department of Public Works (~~DPW~~)~~ for safety and sight distance standards. Upon review of the improvements, County DPW would either approve the plans or provide specific recommendations for improving the safety of the proposed ingress/egress. County DPR would comply with all recommendations of County DPW.

As discussed in the analysis for Threshold 1, if encroachment into the public-right-of-way is to occur during construction of certain project elements, including the optional sewer line, or due to the use of large equipment or vehicles, a Traffic Control Plan pursuant to the Traffic Control Permit would be implemented. As part of the Traffic Control Plan, barriers, signs, or flags ~~may be~~<u>maybe</u> used to direct traffic. These traffic control devises would be approved during the review and approval process for the Traffic Control Permit, ensuring that they would be appropriate and safe devi~~c~~<u>s</u>es that would not create a hazard. The optional sewer line in the ~~center-line~~<u>centerline</u> along South Grade Road and Tavern Road would require a Traffic Control Plan during construction. Therefore, construction of the project would not substantially increase hazards because of a geometric design feature or incompatible uses; impacts would be less than significant.

Operation

Upon approval of the transportation improvements by County DPW during construction, the project would not contain any hazards related to geometric design features. Operation of the project would not include any incompatible uses, such as farm equipment that could result in safety hazards related to increased congestion and faster moving vehicles encountering slower moving vehicles along South Grade Road. Work trucks may ~~periodically~~ be utilized at the project site for maintenance

or landscaping; however, these types of vehicles do not represent an incompatible use on a rural roadway such as South Grade Road.

Driveway Safety

The TIS~~TIA~~ completed by Chen Ryan (Appendix I) performed a queuing analysis for the two proposed driveways for access to the project. The primary park entrance (Driveway #1) would be located on the eastern side of the property as a new intersection leg of the South Grade Road and Calle de Compadres intersection, and the second driveway (Driveway #2) would include a new intersection at the southern end of the property. Both driveways would allow full access to the project site. Based on the queuing analysis, the vehicle queues at the project driveways and South Grade Road are expected to fit within the existing storage ~~lanes~~ and would not impede traffic at the driveway or the adjacent roadway system. (Queuing analysis results can be found in Appendix H of Appendix I.) The TIS~~TIA~~ also included a site access evaluation. As part of the evaluation, an all-way stop-controlled intersection warrant analysis was conducted to determine if the peak hour volumes at the intersection of Calle de Compadres (the location of proposed Driveway #1) justified the installation of stop signs at the intersection for all directions of traffic. According to Caltrans' *California Manual on Uniform Traffic Control Devices* (2014), the intersection does not meet the minimum peak hour volumes for an all-way stop-controlled intersection. Additionally, the project driveways are projected to operate at LOS A, indicating free-flowing traffic, during both AM and PM peak hours with the addition of the project-generated traffic.

The Addendum to the TIS (Appendix I1) also performed a sight distance analysis to assess vehicular hazards when entering and exiting the project site. Field observations were conducted in April 2026 to evaluate stopping sight distance and corner sight distance at both project driveways. For context, stopping sight distance is the distance, measured along the travel lane on South Grade Road, that a driver needs to perceive an object or vehicle ahead and bring their own vehicle to a complete stop before reaching it (i.e. *Does a driver traveling on the main road have enough distance to see a vehicle emerging from the driveway and stop before reaching it?*). Corner sight distance is the sight distance available to a driver stopped at the driveway approach, measured in each direction along South Grade Road (i.e. *Does a driver waiting at the driveway have enough visibility along the main road to judge whether it is clear to enter?*).

There are no stopping sight distance deficiencies at any of the four approaches at both driveways. Full stopping sight distance compliance at all four approach directions means that every driver traveling on South Grade Road, regardless of vehicle type, has the sight distance necessary to perceive a vehicle at either driveway approach and bring their vehicle to a complete stop before reaching it. The County's passenger car corner sight distance standard is satisfied at both approach directions of Driveway #1 (northbound and southbound) and at the southwestbound approach of Driveway #2, three of the four approach directions evaluated. At the northeastbound approach of Driveway #2, the available corner sight distance is below the County standard. This condition is attributable to pre-existing vegetation and rock and boulder outcroppings located within the sight triangle on the project site, and is not a condition created or introduced by the project. The exact extent of vegetation obstructions within the sight triangle is dependent on field conditions at any given time. However, corrective measures, including vegetation clearing and removal or grading of the rock/boulder outcroppings shall be completed and verified through the standard site plan review and improvement plan approval process pursuant to the County of San Diego Site Design Standards and Roadway Design Standards, which require that sight distance requirements be satisfied and shown on project plans prior to approval by the County of San Diego Department of

Public Works. Sight distance triangle exhibits identifying the areas within which vegetation clearing and grading are to be maintained clear are provided in the Driveway Sight Distance Evaluation (Attachment C of Appendix I1). Compliance with County standards would be verified and approved before final design approval and issuance of a grading or construction permit to ensure that hazards due to sight distance are prevented for the project.

Upon implementation of the required brush management and vegetation clearing measures, corner sight distance at Driveway #1 would meet the applicable standard, and drivers exiting the park would have sufficient visibility of South Grade Road to safely maneuver the intersection. Additionally, the relatively low side-street and driveway volumes compared to South Grade Road would create substantially differing approach volumes, and all-way stop control under these conditions would impose unnecessary delay on through traffic. Installing all-way stop control at an unwarranted location may also introduce operational and safety concerns, including rear-end collision potential from unexpected deceleration on a high-speed approach, queue spillback into the through traffic stream, and reduced driver compliance over time if the control device is perceived as unnecessary. Based on the availability of adequate stopping sight distance and corner sight distance, side-street stop control is recommended and proposed at both Driveway #1 and Driveway #2. This side street stop control would require exiting park vehicles to stop and yield before entering South Grade Road while allowing through traffic on South Grade Road to remain unimpeded, avoiding the potential operational and safety concerns posed by an all-way stop in these locations. ~~The~~Although ~~the intersection at South Grade Road and Calle de Compadres will operate adequately with~~does not ~~meet the Caltrans minimum peak hour volumes for~~ an "all-way" stop, the County will implement an ~~all-way~~ stop-controlled intersection at Calle de Compadres. ~~as an additional project design feature to improve safety conditions, although not required. The access routes would not substantially increase at the intersections with South Grade Road, or internally on the project site.~~

Geometric Hazards

Regarding potential hazards associated with road geometry, the Addendum to the TIS (Appendix I1) analyzed crash data from the past five years, consistent with the standard analytical window recommended by the FHWA, to assess any existing or potential geometric hazards. In addition to the five-year crash history, a separate review of two historical pedestrian and driver fatalities that occurred in 2016 and 2012, respectively, outside of the standard five-year window, was conducted to provide a conservative analysis and confirm that the conditions associated with the prior incident are not introduced or replicated by the project. A review of the crash types and movement patterns over the past five years indicates that the crashes are consistent with driver behavior (improper turning, driving under the influence of alcohol or drug, and automobile right of way) rather than geometric deficiency. The 2016 incident occurred approximately 145 feet south of the South Grade Road and Calle de Compadres intersection and is classified as a pedestrian violation, with fault assigned to the pedestrian party. The driver of the involved vehicle was found not at fault and was proceeding straight southbound at the time of the collision. The 2012 incident involved a single vehicle whose driver left the roadway and struck a wall and a utility pole; the primary collision factor was improper turning in violation of the California Vehicle Code, and no pedestrian or bicyclist was involved. Consistent with the 2016 collision and the 2021 through 2025 crash history, the 2012 fatality resulted from operator conduct rather than a geometric or design deficiency of South Grade Road. No crashes in the selected dataset were identified as resulting from a geometric feature of the roadway itself. The project does not propose any changes to the existing geometric design of South Grade Road. The project therefore does not introduce a design feature that would create or substantially increase traffic hazards along South Grade Road, and the crash history within

the project vicinity does not indicate a pattern of geometry-related collisions that would be exacerbated by the project.

Pedestrian and Bicyclist Safety

Pedestrians and bicyclists may access the project site without the use of a vehicle, either from the trails to the west of the project site or from surrounding residential areas via South Grade Road. Pedestrian and bicyclist safety at the project driveways was evaluated based on the sight distance findings above, which concluded that the available stopping sight distance on South Grade Road satisfies the standard at all four driveway approach directions. A driver traveling on South Grade Road under normal daytime conditions has sufficient sight distance to perceive a pedestrian or bicyclist near either driveway location and bring the vehicle to a complete stop before reaching the individual. Pedestrians and bicyclists, in turn, have a clear view of oncoming traffic along South Grade Road from the driveway position. This is supported by the corner sight distance findings above for three of the four driveway approach directions, and will be supported at the fourth approach (Driveway #2, northeastbound) upon completion of the vegetation clearing and grading measures identified in this analysis and confirmed through the County's standard site plan review and approval process. The project also proposes a decomposed granite pedestrian path along the west side of South Grade Road, which would provide a separate path of travel for pedestrians outside of the vehicle right of way for pedestrian safety. Additionally, under California Vehicle Code Section 21950(a), the driver of a vehicle is required to yield the right-of-way to a pedestrian crossing the roadway within any marked or unmarked crosswalk at an intersection. Pedestrians crossing South Grade Road at either project driveway are protected by this statutory right-of-way, and drivers exiting either driveway are required to yield to such pedestrians before entering the through travel lane. Thus, no pedestrian or bicycle safety hazards have been identified associated with the project and impacts related to pedestrian and bicycle safety would be less than significant, with no mitigation required.

Finally, the Addendum to the TIS (Appendix I1) includes a parking demand analysis to assess if the project's 240-space parking lot would sufficiently accommodate park visitors. The parking demand analysis uses an existing County Park to assess the parking demand for the project. Of the 76 candidate public parks screened to identify the facility most representative of the proposed project, Hilton Head County Park was selected as the primary analog facility on the basis of full alignment across five screens: park type, catchment setting and population density, amenity mix, fine demographic alignment, and scale and survey configuration. The other 75 parks considered lacked at least one of these five screens (for example, were predominantly passive or hosted primarily league-based sports games and practices instead of the mixed-use day-use pattern of a community park). Two additional East San Diego County parks, Collier County Park and Steele Canyon County park, serve as secondary references for sensitivity comparison of the community park demand. Where the Hilton Head observed rate falls within the range bracketed by the two secondary references after appropriate adjustment for demographic and amenity differences, the central forecast is considered robust. Additionally, because no East County park combines the full amenity-rich community-park program with equestrian access in a single facility, the equestrian-trip component is addressed through a supplementary sensitivity reference utilizing Oakoasis County Preserve (Lakeside) and Dos Picos County Park (Ramona) as data sources for the discrete equestrian-trip contribution, scaled to the proposed Alpine equestrian footprint.

Hilton Head County Park bears to the most resemblance to the project but is in a denser urban setting with a larger surrounding population; as such, retaining the demand rates from the Hilton Head County Park provides a conservative upper bound estimate of traffic volumes for the project. A

2.5 area-based scale factor was applied to account for the difference in active program area between Hilton Head (10 acres) and Alpine (25 acres), proportionally adjusting the observed parking demand to reflect the proposed 240-space lot; this factor is within the range supported by National Recreation and Park Association guidance for transferable trip-rate studies. On non-event days and standard weekday conditions, observed daily parking demand at the comparable park site (Hilton Head County Park) was 17 vehicles in the on-site lot; under these conditions, the proposed project's on-site 240-space parking supply would easily accommodate all park users. On organized sports event days, under conditions of single-sport practice and without simultaneous occurrence of sport activities, observed parking demand at the comparable site reached an average of 72 vehicles for baseball practice and 105 vehicles for multi-use field practice, with maximum observed demands of 119 and 131 vehicles, respectively.

To prevent parking demand from exceeding supply on the project site under concurrent multi-event conditions, where combined maximum demand could approach approximately 250 vehicles, the parking demand analysis recommends on-site measures be implemented to address organized sports programming and scheduling. The live-on volunteer, maintenance staff, and park ranger would implement and maintain the following scheduling requirements for all organized sports activities at the park to ensure the project's parking lot does not become overburdened:

- Only one sport or user group shall occupy each park field/court at any given time; overlapping or simultaneous sports activities or practices are prohibited.
- Sports Programming staff will monitor the site between consecutive sessions to confirm no vehicular spillover onto the public right-of-way. If spillover is observed more than two times in any given season, a minimum one-hour buffer shall be implemented between consecutive sessions to allow full vehicle turnover before the next group arrives. For example, if a session ends at 1:00 PM, the next session may not begin until 2:00 PM. This one-hour buffer shall increase to two hours if additional spillover continues to be observed.
- Sports Programming staff shall be responsible for scheduling all organized activities in strict accordance with these requirements.
- Parks Programming staff and the on-site volunteer shall monitor scheduling compliance on an ongoing basis to ensure these requirements are met at all times.
- Vehicular spillover onto the public right-of-way, including South Grade Road, shall be prevented through enforcement of this scheduling protocol.

Following project opening, County staff and park rangers would monitor on-site and nearby on-street parking conditions for a minimum of one year of operation. If field observations demonstrate that actual parking demand associated with organized sports practices is consistently and materially lower than the levels estimated herein, modification of the parking management program may be considered in coordination with County DPW.

With the incorporation of the sports programming features identified above, the project's parking lot would adequately accommodate park visitors, and pedestrians accessing the park by vehicle could park and walk entirely within the project site, with no need to walk along South Grade Road. Even without these features, should park visitors choose to access the site via walking or bicycling, the project's proposed pedestrian path along the west side of South Grade Road would prevent

pedestrians from walking within the roadway, and a driver traveling on South Grade Road under normal daytime conditions has sufficient sight distance to perceive a pedestrian or bicyclist near either driveway location and bring the vehicle to a complete stop before reaching the individual. Thus, no safety impacts to pedestrians or bicyclists would occur. Because impacts related to pedestrian safety would be less than significant, no mitigation is required.

In conclusion,~~Therefore,~~ the project would not substantially increase hazards because of a geometric design feature or incompatible uses. The project would not create hazardous conditions for pedestrians or bicyclists in the project vicinity.~~;~~ I~~i~~mpacts would be less than significant.

Impact Determination

The project would not substantially increase hazards because of a geometric design feature or incompatible uses. Impacts would be less than significant.

Mitigation Measures

Mitigation is not required.

Level of Significance After Mitigation

Impacts would be less than significant.

Threshold 4: The project would not result in inadequate emergency access.

County Park, Trails, and Open Space~~/Preserve~~

Impact Discussion

Construction

Construction equipment for the project would include tractors, excavators, backhoes, water truck, drill rig, bobcat, forklift, rollers, a rubber tire loader, wheel tractor scrapers, an air compressor, a generator set, a crane, and a concrete truck. Construction staging activities would occur adjacent the project site. Construction may result in temporary partially or completely blocked travel lanes along South Grade Road due to large construction equipment in the public right-of-way, construction material deliveries, or construction activities associated with the project features that are adjacent to South Grade Road. These temporary lane closures or impediments within the roadway could delay or obstruct the movement of emergency vehicles along South Grade Road. However, when construction interrupts the normal function of a roadway, a Traffic Control Permit must be obtained from ~~the~~ County ~~of San Diego Department of Public Works.~~DPW. County DPR or its contractors would be responsible for obtaining the Traffic Control Permit which requires the installation and maintenance of appropriate traffic control in accordance with a Traffic Control Plan. The traffic control methods used to maintain safe traffic flow could include barriers, signs, and flags. The implementation of the Traffic Control Plan would ensure safe passage of emergency vehicles in the public right-of-way, and adequate access to the project site by emergency vehicles. Additionally, construction activities onsite would not prevent emergency vehicles from reaching the project site. Impacts would be less than significant.

Operation

As part of standard project approval, the County Fire ~~Services~~Protection District (FPD) staff (i.e., County Fire Marshall) will review the project design to ensure the project site is accessible for emergency vehicles, and onsite utilities are sufficient for emergency response. Therefore, the project would comply with the County Fire Marshall review and approval. County DPR is preparing a Site Evacuation Plan as part of the project operational procedures that ~~will outline~~outlines the evacuation routes to be used by visitors and staff within the Alpine Park site in the event of an onsite or offsite emergency situation. The Site Evacuation Plan only addresses evacuation within the boundaries of the project site. Once visitors leave the park, evacuation ~~procedures~~ would be under the jurisdiction of Unified San Diego County Emergency Services Organization ~~(EOS), the~~, Alpine ~~Fire Department (AFD),~~FPD, and other jurisdictional agencies, depending on the ~~nature of the~~ emergency situation (i.e.~~g.~~, California Department of Forestry and Fire Protection or County ~~Fire Authority~~FPD may be involved in wildfire emergency situations). During project operation, County DPR would work with ~~AFD~~Alpine FPD and ~~OES~~the Office of Emergency Services to coordinate emergency access and evacuation procedures~~,~~ as necessary. Therefore, operation of the project would not result in inadequate emergency access. Impacts would be less than significant. The Alpine Community Park Fire Evacuation Analysis prepared for the project is included as Appendix K of the Recirculated Draft EIR. This analysis assessed the time required for evacuation from the project site under several scenarios (e.g., a wind-driven fire that results in a required evacuation, affecting the project site and surrounding community). County FPD and Alpine FPD reviewed the evacuation analysis and conclusions derived in the~~this~~ Final EIR.

Impact Determination

The project would not result in inadequate emergency access. Impacts would be less than significant.

Mitigation Measures

Mitigation is not required.

Level of Significance After Mitigation

Impacts would be less than significant.

4.17.5 Summary of Significant Impacts

There would be no significant impacts associated with transportation and circulation.

Section 4.20
Wildfire

4.20.1 Overview

This section describes the existing wildfire conditions of the project site and vicinity, identifies associated regulatory requirements, evaluates potential impacts, and identifies mitigation measures related to implementation of the project. Potential wildfire impacts resulting from construction and operation of the project were evaluated based on a review of existing resources, data, and applicable laws, regulations, guidelines, and standards. This section focuses on the effects of the project related to wildfire risk. This analysis is based on the project's Fire & Emergency Operational Assessment (FEOA) prepared by Rohde & Associates (Appendix J) and a separate addendum to the FEOA that was prepared by Dudek (Appendix J1) in June 2026 to expand and clarify the analysis of existing fire risk conditions separately from post-development fire risk conditions. Fire protection services for the project are addressed in Section 4.15, *Public Services*. Wildfire is also addressed in Section 4.9, *Hazards and Hazardous Materials*.

4.20.2 Existing Conditions

The sections below provide a brief background for wildfire risk in the ~~s~~State and the region, the existing conditions on the project site, and the official fire hazard designations for the project site.

4.20.2.1 Regional and Local Wildfire Risk

Wildfire, as defined in Public Resources Code (PRC) Sections 4103 and 4104, is any uncontrolled fire spreading through vegetative fuels that threatens to destroy life, property, or resources. Wildfires commonly originate~~can occur~~ in undeveloped areas and may spread to urban areas where the vegetation, development patterns, or structures are not designed, constructed, or maintained ~~landscape and structures are not designed and maintained~~ to be ignition resistant. Several factors, including climate, wind patterns, native vegetation, topography, and development patterns, make the unincorporated ~~county~~area susceptible to wildfires. Naturally vegetated open spaces in California often contain conditions that may be favorable to wildfire ignition and spread.

The three major components of fire environment are topography, vegetation (fuels), and climate. The condition of each of these components and their interactions with each other determine the potential characteristics and behavior of a fire at any given moment. Wildland fire may transition to urban fire if structures are receptive to ignition. Inversely, under extreme conditions, it is possible for structural fires to transition into wildland fires. This is more likely to occur when multiple structures are burning simultaneously, particularly in areas in close proximity to receptive wildland fuels. The likelihood of structure ignition depends on a variety of factors and can be prevented or minimized through a layered system of protective features including fire-resistant landscapes, application of known ignition-resistant materials and methods, and suitable infrastructure for firefighting purposes.

A vast amount of ~~the county's~~San Diego County's undeveloped lands support natural habitats such as grasslands, sage scrub, chaparral, and some coniferous forest. Extended droughts, characteristic of the region's Mediterranean climate, result in large areas of dry vegetation that provide fuel for wildland fires. In addition, climate change has contributed to soil dryness. Dry vegetation is especially vulnerable to wildfire in areas with high winds. Steep hillsides and varied topography within portions of San Diego County also contribute to the risk of wildland fire.

Fires can be ignited naturally or by human-related causes. Recent research has determined that approximately 84% of wildfires in the United States are human caused (Balch et al. 2017). ~~In Southern California, over 95% of fires are started by people (County of San Diego 2010).~~ The potential for wildland fires represents a hazard when development is adjacent to open space~~/preserve~~ lands or close to wildland fuels or designated fire severity zones. The Wildland Urban Interface (WUI) is the area where structures and other human developments meet or intermingle with undeveloped wildlands or vegetative fuels. A WUI is defined by the California Department of Forestry and Fire Protection (CAL FIRE) as a buffer around areas of residential density with more than 0.05 dwelling unit per acre. The WUI is divided into a Defense Zone (the area up to 0.25 mile from the developed area) and a Threat Zone (0.25 to 1.5 miles from developed areas) (County of San Diego 2020a). The WUI is composed of communities that border wildlands or are intermixed with wildlands where the minimum density exceeds one structure per 40 acres. WUI communities are created when the following conditions occur: (1) structures are built at densities greater than one unit per 40 acres, (2) the percentage of native vegetation is less than 50%, (3) the area is more than 75% vegetated, and (4) the area is within 1.5 miles of an area larger than a census block (1,325 acres).

The WUI creates an environment in which fire can move readily between structural and vegetation fuels. Fires that occur in WUI areas may affect natural resources, life, and property. Approximately 60,072 acres of the Alpine Community Plan area are within a WUI, which represents 88% of the community (County of San Diego 2020a).

Topography and Climate

The community of Alpine is at the foothills of the Peninsular Range, which runs through Southern California and into Baja Mexico along a northwest to southeast trajectory. This topography allows Alpine to experience strong easterly Santa Ana winds. These winds most commonly reach their peak between September and March; however, Santa Ana winds have been experienced in every month of the year. Santa Ana wind conditions occur when cooler and drier air masses form an area of high pressure in the Great Basin region of the Pacific Southwest. This causes a pressure gradient to occur with low-pressure air masses along the Southern California coastline. With this phenomenon, winds are compressed and funneled through narrow drainages formed by the mountain ranges. If the pressure gradient is large, this compression combines with gravity to cause the wind to accelerate downhill to potential hurricane speeds. The nearby Laguna and Viejas Mountains, the Sweetwater River drainage, and other significant topography within the Peninsular Range influence both winds and wildfire events, creating a historical wildfire corridor. This phenomenon also causes high wind speeds and warm, dry air that wicks moisture from the native flora, causing fuel moisture levels to lower to a critical condition. This fire hazard condition is often referred to as "red flag" levels. In addition to the Santa Ana wind threat, the predominant weather pattern for the Alpine area between March and September is onshore diurnal winds, often with a western trajectory and averaging near

20 miles per hour. Under these typical conditions, Alpine can experience high daily temperatures and low relative humidity (Rohde and Associates 2021).

Topography further influences fire risk by affecting fire spread rates. Typically, steep terrain results in faster fire spread up-slope and slower fire spread down-slope in the absence of wind. Flat terrain tends to have little effect on fire spread, resulting in fires that are driven by wind. The site for the proposed Alpine County Park is primarily flat grasslands with coastal sage in its northern-most segment. Adjacent Back Country Land Trust's Wright's Field Preserve (Wright's Field Preserve) lands are more sloping and contoured. While some areas are dominated by grass, most are mainly covered with a mix of sage scrub and chapparal with some oak woodlands. The combined 315 acres of the preserve and park lands include a range of elevation from 1900 to 2150 feet (Rohde & Associates, 2021).

From a regional perspective, the fire risk in California can be divided into three distinct "seasons" (Nichols et al. 2011; Baltar et al 2014). The first season, the most active season and covering the summer months, extends from late May to late September. This is followed by an intense fall season characterized by fewer but larger fires. This season begins in late September and continues until early November. The remaining months, November to late May cover the mostly dormant, winter season. Typically, the highest fire danger in the County coincides with Santa Ana winds. The Santa Ana wind conditions are a reversal of the prevailing winds that usually occur on a region-wide basis. They are dry, warm winds that flow from the east through the mountain passes and canyons. As they converge through the canyons, their velocities increase.

Climate Change

A rapidly warming climate is expected to impact California and the western United States from both direct and indirect effects. Based on California's Fourth Climate Change Assessment, published in 2019, the current average annual maximum daily temperature is projected to increase between 5.6 and 8.8°F by 2100 (State of California 2019). The increased temperature and increased probability of heat waves will impact electricity demand, especially in inland and Southern California. Currently, there is not a strong consensus on how California as a whole will be impacted by changes in precipitation. The general trend indicates that the northern part of California will become wetter while the southern portion of California will become drier (State of California, 2019). The changes to temperature, loss of snowpack, and earlier snowmelt are expected to cause dryer "dry" seasons and more susceptible forests (State of California, 2019).

Because wildfires can contribute to climate change via greenhouse gas emissions and be affected by climate change, the Fourth Climate Assessment also examined how climate change is expected to impact wildfires across the state. Fire frequency and intensity are expected to be impacted by the rapidly changing climate. The area burned by wildfire has been found to increase parallel to the increasing air temperatures. The average area burned may increase by 77 percent by 2100 if emissions continue to rise. The statewide maximum burn area is projected to rise by 178% and extreme wildfires are predicted to occur 50 percent more often by the end of the century. However, model projections regarding wildfire intensity, spread, and duration are limited because these factors depend on complex variables—such as specific fuel types, human ignition, and local management—that standard climate models do not simulate. Additionally, coarse model resolutions fail to capture fine-scale terrain, while unprecedented fuel conditions and non-linear climate interactions make predicting individual fire behavior difficult (Westerling, 2018). Wildfires are occurring at higher elevations and this trend is expected to be exacerbated by climate change. Late

Santa Ana winds will continue to be most frequent in December and January. However, there is a lack of consensus on how Santa Ana wind-driven wildfires will change. Additional research is needed to better understand the effect of climate change on extreme wind events and wildfires (State of California 2019).

~~The 2018 West Fire burned approximately 500 acres in the Alpine community, destroying 56 structures. The West Fire affected the project site directly. The fire line for containing this event was on the project site's northern boundary (Rohde and Associates 2021).~~

Vegetation

The project site is primarily flat grassland, with coastal sage in the northern segment of the project boundary. The adjacent Wright's Field Preserve is contoured and more sloping. Some areas are dominated by grass, but most areas are covered primarily with a mix of sage scrub and chapparal, along with some oak woodlands. The project site and Wright's Field Preserve are on contiguous parcels, forming a common wildfire compartment for the purposes of analyzing wildfire risk. They are subject to impacts from a single wildfire event and pose a wildfire risk to the adjacent WUI in the community of Alpine (Rohde and Associates 2021). The occurrence of Santa Ana winds plus the dry climate and existing natural habitat of the project site put it at high risk for wildfire.

Vegetation plays a significant role in fire behavior. 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 (bark thickness, leaf size, branching patterns), and overall fuel loading. For example, non-native grass-dominated plant communities become seasonally prone to ignition under dry conditions and produce lower intensity, higher spread rate fires. In comparison, sage scrub and chaparral vegetation communities can produce higher heat intensity and higher flame lengths under strong, dry wind patterns, but do not typically ignite or spread as quickly as light, flashy grass fuels. Unlike wildfires in shrub and forest vegetation, grass fires are generally more easily contained and require fewer resources and planning to achieve fire containment. While grassland fires may spread rapidly and are influenced heavily by wind, fires in shrub and forest vegetation involve higher intensity fire behavior, present greater risk to structures, and often more difficult control measures.

The project site is currently subject to occasional unauthorized vehicular and pedestrian public access to and within hazardous vegetation fuels, making it vulnerable to potential smoking, vehicle, or other ignition hazards that increase wildfire risk. The current occasional unauthorized use of the undeveloped land places the project area at risk for fire ignitions associated with both natural events and human behavior.

As described further in Appendix J1, a fire burning in existing vegetation conditions on or near the project site with onshore winds is expected to produce flame lengths up to 7.1 feet, have a fireline intensity of up to 402 BTU/feet/second, have a rate of spread of up to 1.2 mph, and produce ember spotting up to 0.3 miles (Appendix J1). A fire burning in existing vegetation conditions on or near the project site with offshore Santa Ana winds is expected to produce flame lengths up to 18.1 feet, have a fireline intensity of up to 3,071 BTU/feet/second, have a rate of spread of up to 6.2 mph, and produce ember spotting up to 1.1 miles (Appendix J1).

Fire History

The 2018 West Fire burned approximately 500 acres in the Alpine community, destroying 56 structures. The West Fire affected the project site directly, burning northeast of the project site. The fire line for containing the 2018 West Fire was on the project site's northern boundary (Rohde and Associates 2021). Additionally, according to the CAL FIRE FRAP database, the 1970 Laguna Fire burned a total of approximately 174,162 acres, including the northern portion of the project site. The Laguna Fire is noted in the County of San Diego Multi-Jurisdictional Hazard Mitigation Plan as the third worst wildfire in the county's history, destroying 383 homes and 1,200 other structures (County of San Diego, 2023). Limited fire history in the project vicinity in recent years can be attributed to improvement in modern code requirements, and continued development of the area.

4.20.3 Fire Hazard Designations

CAL FIRE has mapped areas of significant fire hazards in ~~the county~~San Diego County through its Fire and Resource Assessment Program. CAL FIRE defines and maps Fire Hazard Severity Zones (FHSZs) to identify the potential fire hazard severity expected in different areas within the ~~s~~State~~.~~ as required by PRC Sections 4201–4205. An FHSZ determination is based on an area's vegetation, topography (slope), weather (including winds), crown fire potential, and ember production and movement potential. FHSZs include the classifications Very High, High, or Moderate in areas where the ~~s~~State is responsible for fire protection (i.e., State Responsibility Areas [SRAs]) (CAL FIRE 2024a~~2007~~). The majority of San Diego County is included in an SRA for fire prevention and suppression. However, some areas, such as national forests, are within Federal Responsibility Areas, which are under the responsibility of the U.S. Forest Service for wildfire protection. FHSZs include the same classifications ~~Very High Fire Hazard Severity Zone (VHFHSZ)~~as SRAs in areas where local agencies are responsible for fire protection (i.e., Local Responsibility Areas) (CAL FIRE 2024a~~2009~~). In San Diego County, local fire protection is provided by fire protection districts (FPDs) and ~~county service areas~~County Service Areas in unincorporated areas, along with city fire departments and joint powers agreements within city boundaries.

On March 24, 2025, the Office of the State Fire Marshal (OSFM) released the 2025 Recommended Local Responsibility Area (LRA) Fire Hazard Severity Zone (FHSZ) Map for Southern California. All new LRA FHSZ maps were adopted by July 2025. The State Responsibility Area (SRA) maps have not been updated since their adoption in 2024.

The project site and surrounding area are located within an area identified as a VHFHSZ in an SRA (Figure 4.20-1~~).~~). Portions of land to the west and east are designated as within a High Fire Hazard Severity Zone (HFHSZ), and other land further away from the project site is Federal Responsibility Area which does not receive FHSZ designations.

The FHSZ map assesses "hazard" rather than "risk." "Hazard" refers to the physical conditions that create a likelihood of fire, whereas "risk" considers the potential damage a fire could cause to the area, including factors like fuel reduction projects, defensible space, and ignition-resistant building construction. The zones serve multiple purposes, such as designating areas where California's defensible space standards and wildland-urban interface building codes are mandatory. Similar to flood zone maps, which describe areas based on the likelihood of flooding, the FHSZ map identifies areas based on the probability of fire occurrence and expected fire behavior. This assessment does not consider strategies such as home hardening, recent wildfires, or fuel reduction efforts.

4.20.3.1 Fire and Emergency Response

The County of San Diego (County) Office of Emergency Services (OES) coordinates the overall County response to disasters. OES notifies appropriate agencies when a disaster occurs, coordinates with responding agencies, ensures that resources are available and mobilized, plans for the response to and recovery from disasters, and develops preparedness materials for the public. OES acts as the staff to the Unified Disaster Council (UDC), which was established under a joint powers agreement among all 18 incorporated cities and the County, coordinating plans and programs countywide to ensure the protection of life and property.

Fire protection services for the project site are provided by the Alpine Fire Protection District (AFPD), which covers 27.5 square miles (County of San Diego 2011a). ~~Alpine FPD~~AFPD Station 17 is at 1364 Tavern Road, approximately 2.7 miles from the project site. Station 17 has a Type 1 advanced-life-support/paramedic structure fire engine. It also cross--staffs a Type 3 wildland fire engine, has a chief officer, and houses a paramedic ambulance 24 hours a day. ~~Alpine FPD~~AFPD also has a joint agreement with neighboring fire agencies in the Central Zone of San Diego County for immediate services; it also maintains dispatch services through the Heartland regional dispatch center. Wildland fire protection for the immediate area of Alpine is provided in SRA wildlands by the CAL FIRE San Diego Unit. CAL FIRE, as the contract provider of services for the San Diego County FPD, also provides structural fire and rescue services to the unincorporated ~~areas of San Diego County.~~area. Some areas in the community of Alpine are covered by both agencies, with fire protection for Local Responsibility Area structural services provided by ~~Alpine FPD~~AFPD and wildland fire protection provided to the SRA by CAL FIRE. Nearby federal lands within the Cleveland National Forest are under the jurisdiction of the U.S. Department of Agriculture, Forest Service (USFS). The USFS, which is responsible for wildland fire protection on the National Forest, maintains a fire station in the community of Alpine. Automatic aid agreements exist between CAL FIRE, USFS, and ~~Alpine FPD~~AFPD, ensuring a response from the closest appropriate resource to a reported emergency, regardless of jurisdictional boundary.

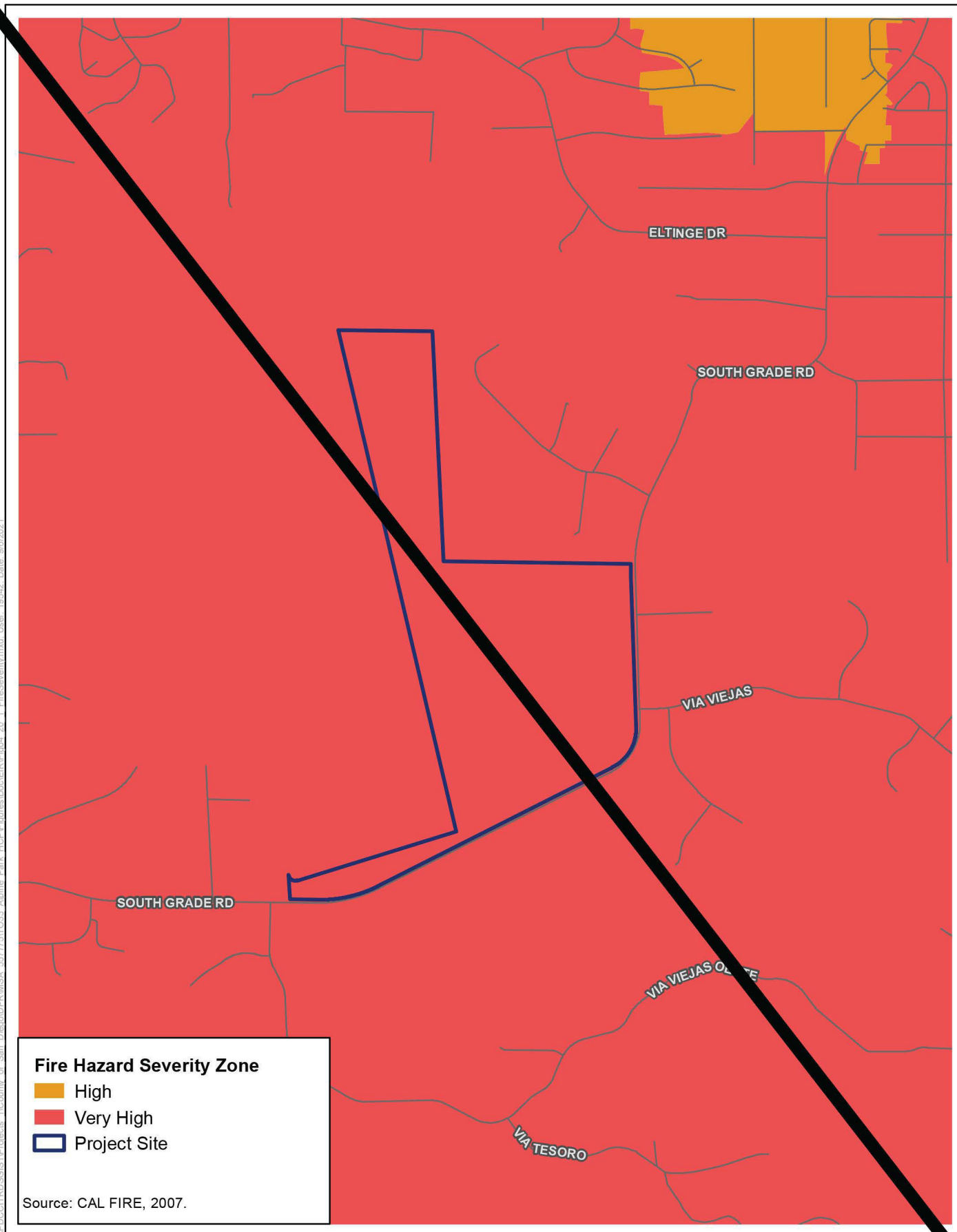


Figure 4.20-
Very High Fire Hazard Severity Zone (VHFHSZ)
Alpine Park Project

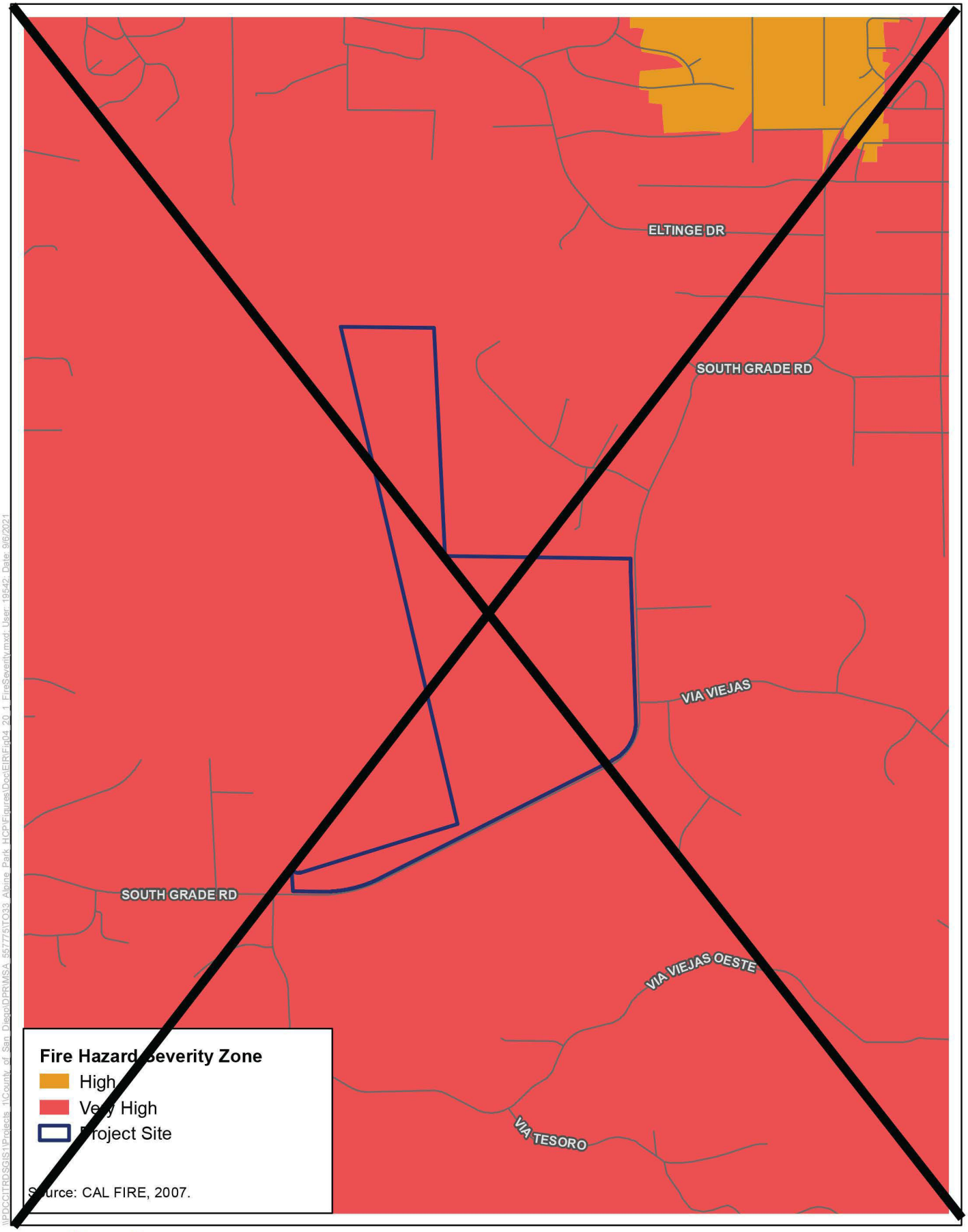
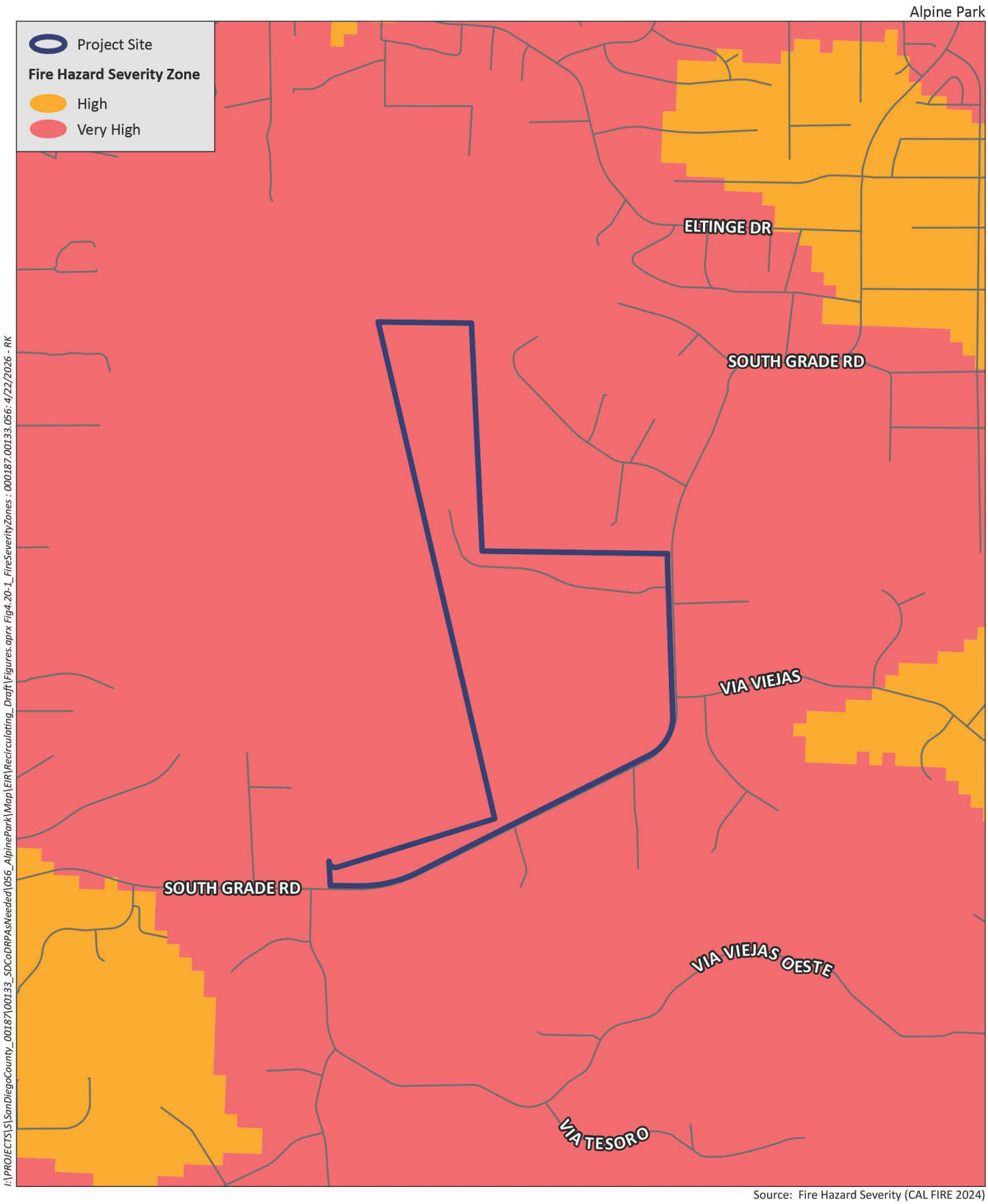


Figure 4.20-1
Very High Fire Hazard Severity Zone (VHFHSZ)
Alpine Park Project



Source: Fire Hazard Severity (CAL FIRE 2024)

HELIX Environmental Planning

N

0 500 1,000 Feet

1 in = 1,000 ft

Figure 4.20-1
Very High Fire Hazard Severity Zone (VHFHSZ)
Alpine Park Project

4.20.4 Wildfire Hazards

As referenced within Section 4.9*, Hazards and Hazardous Materials*, an ~~Fire and Emergency Operation Assessment (FEOA)~~FEOA was prepared to identify specific wildfire risks at the project site (Rohde and Associates 2021); the following information in this section is from the FEOA (Appendix J). The FEOA noted that, historically, the project site has been subject to wildfires. In 2018, the West Fire affected the proposed Alpine Park site directly. The fire line for containing the West Fire was on the proposed park's northern boundary. In 1970, the Laguna Fire also burned much of the proposed park area. The FEOA identified site-specific wildfire and ignition risks associated with the project site conditions, as stated below, and noted or proposed~~recommended~~ fire prevention measures, ~~as stated below~~which are described in Section 4.20.6:

- *Proximity to South Grade Road, a known location with increased human-related fire ignition factors*. The location of South Grade Road, on the southeast boundary of the land for Alpine Park, poses elevated ignition risks because of passing vehicles—specifically, vehicle exhaust, hot materials discarded from vehicles, vehicle accidents, off-road parking, dragging tow chains, or related hazards. ~~However, the County will continue to maintain an existing 30-foot buffer where vegetation has been cleared adjacent to the roadside along the County property, which has been historically cleared and is required by the Alpine Fire Protection District, and is not part of this project. As part of the proposed project, the County would create an additional 20-foot buffer adjacent to the existing 30-foot buffer along the park footprint, for a total of 50 feet. As part of the proposed project, the County would also create an additional 20-foot buffer adjacent to the existing 30-foot buffer approximately 100 feet south of the northeast corner of the County's parcel.~~
- *Adjacency of the site to significant human activity, including homes and ranches*. The proximity of homes and ranches to County Department of Parks and Recreation (DPR) and Back Country Land Trust (BCLT) lands poses risks from human-related fire ignition factors, extending from these properties to the site. ~~For this risk, the County will continue to maintain a historically cleared and existing 100-foot buffer where vegetation has been cleared where there are adjoining properties along the northern boundary of the County-owned parcel, which is required by the Alpine Fire Protection District and is not part of this project. As part of the project, the County would create a 100-foot buffer that would extend from the volunteer pad.~~
- *Robust public usage of the site for both dispersed and organized recreation*. Human use could increase on the site with development of the park, thereby increasing the associated human-related fire ignition factors. ~~The historical unregulated public use of these lands would now be regulated and managed by the County DPR. This includes the introduction of new and enhanced fire prevention measures. Development of the sports fields, associated parking, public facilities, and support buildings would include landscaping to isolate these facilities from the surrounding wildland, a requirement of the fire and building codes. This would reduce wildfire exposure and ignition risks. The County DPR would coordinate with the utility service provider to consider undergrounding the adjacent electric utility services. Additional fuel reduction measures would also be implemented to further isolate these uses for public safety and ignition resistance.~~
- *Location of the park site with respect to historical major wildfire corridors*. Historical wildfire corridors that experience both Santa Ana winds and onshore wind-driven conditions are within proximity of the project site. Past wildfires have traversed this corridor. ~~However, fuel modification and the placement of developed park features would aid in containing wildfire~~

~~movement within this corridor. A fire line was established in the past within the Wright's Field site for containment purposes. and will continue to be maintained by BCLT.~~

- *Heavy fuel concentrations on some County/~~BCLT~~ Wright's Field Preserve lands*. Heavier fuels, such as coastal sage or mixed chaparral plant communities with fuel loading from 20 to 40 tons per acre, could present extreme burning characteristics during critical fire weather, including high thermal outputs, rapid rates of spread, and spotting. ~~Because heavy fuel is concentrated primarily on BCLT lands, the County would coordinate with BCLT to alleviate wildfire risks and prevent fire from either entering the preserve~~open space ~~from adjacent property or moving through preserve~~open space ~~lands and affecting private properties.~~
- *Current off-road parking and occasional vehicle trespass*. Trespassing does occasionally occur, although vehicle access is currently blocked by light fencing. ~~Park development is expected to strengthen the vehicle control barriers and provide improved fire-safe parking.~~
- *Potential increase in demand for local public safety resources due to the developed park use*. The proposed park uses will introduce new sources of human activity at the site that could place increased demand on local public safety resources. ~~New demands on public safety resources resulting from the development of new park facilities is not expected to place unmitigable demands on local fire or law enforcement services. For this risk, a full review of the existing response capability and potential development impacts was conducted, as discussed in the FEOA. In addition, the project would employ an include a live-on-site volunteer, maintenance staff that would provide new security for, and a park facilities upon build-out ranger to help with maintenance and management of the property.~~

4.20.4.1 Existing Fire Prevention Measures~~Fuel Reductions and Modifications~~

~~As discussed in Section 4.20.4, *Wildfire Hazards*, and shown in Figure 4.20-2, existing and proposed long-term fuel reductions and fuel modifications will be implemented throughout the County property. Fuel reductions and modifications, which would include vegetation clearance, would be implemented to reduce wildfire intensity, thereby offering reasonable protection for adjacent structural assets, limiting landowner liability associated with wildfire damage to adjoining properties, providing protection for DPR/BCLT site development, and ensuring safe public refuge at key sites. Existing and proposed fuel reductions would occur along the northern perimeter of the Alpine Park facility and adjoining properties, as well as along the roadside, to reduce hazards associated with increases in human-related fire ignition factors. The roadside fuel clearance also reduces any extension of wildfire from the historical wildfire corridor on the east face of the site.~~

The following vegetation fuel modification and human activity fire prevention measures currently exist on the project site:

Vegetation Fuel Modification

- EXISTING: Maintenance of an existing 30-foot buffer where vegetation has been cleared adjacent to the roadside along the County property, which has been historically cleared and is required by AFPD, and is not part of this project.
- EXISTING: Maintenance of a historically cleared and existing 100-foot buffer where vegetation has been cleared where there are adjoining properties along the northern

boundary of the County-owned parcel, which is required by AFPD and is not part of this Project.

Human Activity

- EXISTING: Small swing gate as a vehicle control barrier
- EXISTING: Weekly checks of the project site by rangers

The existing vegetation fuel modification fire prevention measures adjacent to the roadside and adjoining properties provide maintenance of some hazardous vegetation fuels, but the project site remains largely dominated by unmaintained vegetation that poses a wildfire risk. The small swing gate and weekly ranger checks provide some access restriction and enforcement presence, but the project site remains subject to occasional unauthorized vehicular and pedestrian public access to and within hazardous vegetation fuels, making it vulnerable to potential smoking, vehicle, or other ignition hazards that increase wildfire risk.

4.20.5 Applicable Laws and Regulations

4.20.5.1 Federal

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 substances 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 protective measures are required to protect fire and life safety. These measures may include construction standards, separations from property lines, and specialized equipment. To ensure that these safety measures are met, the IFC employs a permit system based on hazard classification. The IFC is updated every 3 years.

International WUI Code

The International WUI Code is published by the International Code Council and is a model code addressing wildfire issues.

Federal Wildland Fire Management Policy

The 1995 Federal Wildland Fire Management Report produced the first comprehensive federal fire policy for the Departments of the Interior and Agriculture. That review was stimulated by the 1994 fire season with its 34 fatalities and growing recognition of fire problems caused by fuel accumulation. The resulting 1995 policy recognized, for the first time, the essential role of fire in maintaining natural systems. In the aftermath of the escape of the Cerro Grande prescribed fire in May of 2000, the Secretaries of the Interior and Agriculture requested a review of the 1995 policy and updated it in the 2001 review and update of the 1995 Federal Wildland Fire Management Policy. *Guidance for Implementation of Federal Wildland Fire Management Policy* (U.S. Forest Service et al.

2009) provides the following guidelines that should be used to ensure consistent implementation of federal wildland fire policy:

- 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 on the values to be protected, costs, and land and resource management objectives;
- Fire management plans and activities are based on 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; and
- Standardization of policies and procedures among federal agencies is an ongoing objective.

National Fire Protection Association Standards, Practices, Guides, and Programs

National Fire Protection Association (NFPA) 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.

The Firewise USA program administered by NFPA is a certification program for communities to gain recognition for the fire-wise design and maintenance of their community. Firewise USA began in 2019 with seven sites that were challenged to improve the fire resilience of their communities through a focused approach to active wildfire risk reduction. This is done through a collaborative framework created to empower neighbors to get organized and take action to reduce wildfire risk at a local level. The program has grown to include over 1.5 million residents living in Firewise USA communities. The insurance industry, due to California Department of Insurance Regulation #REG-2020-00015, is required to recognize the Firewise certification and consider it when it comes to determining if a community is insurable. Reductions in insurance premiums have been made based on this certification.

The geographical area that comprises the Alpine/Viejas Fire Safe Council has two communities that are certified as Firewise. The area north of I-8 is recognized as the Alpine SD North Firewise USA community and the area south of I-8 is recognized as the Alpine SD South Firewise USA community. The project would be in the Alpine SD South Firewise USA community.

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. U.S. Forest Service and the Department of the Interior are working to successfully implement the key points outlined in the plan (DOI/USDA 2000).

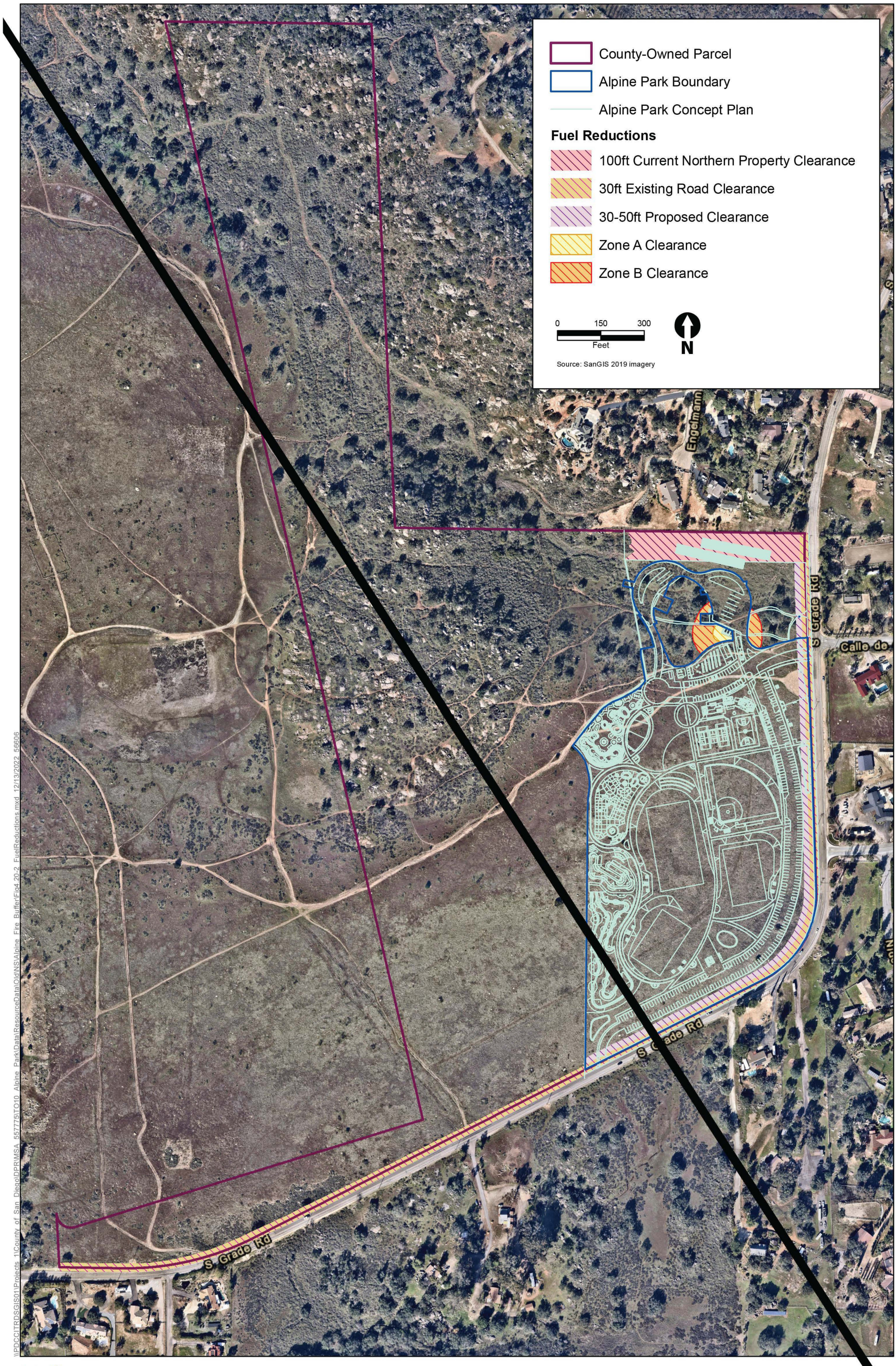
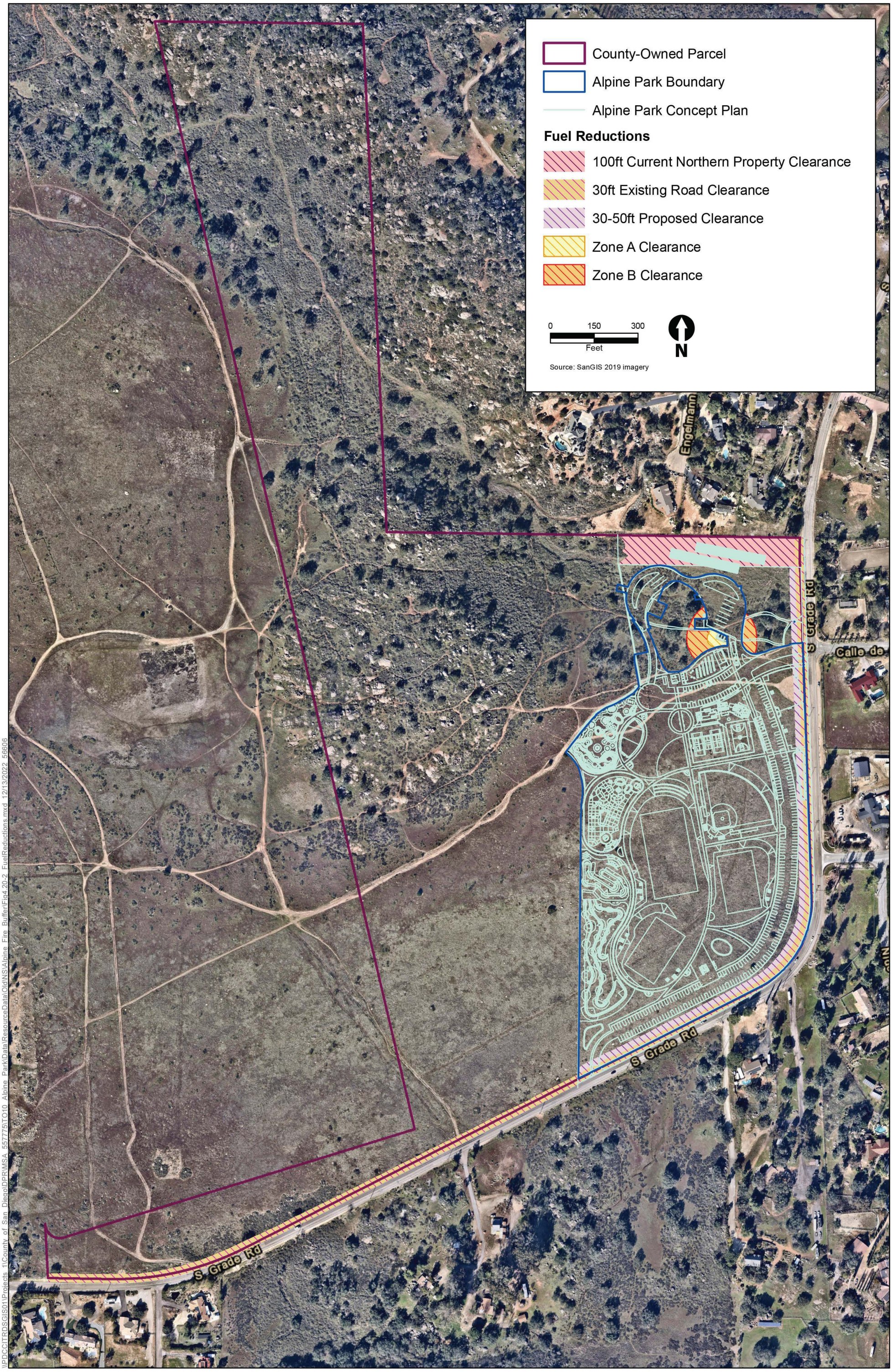


Figure 4.20-2
Fuel Reductions
Alpine County Park Project Environmental Impact Report



\\PDCCITRDSGIS01\Projects_1\County of San Diego\DPR\MSA_557715\TO10_Alpine_Park\Data\ResourceData\Old\MS\Alpine_Fire_Buffer\Fig4.20-2_FuelReductions.mxd 12/13/2022 56606

Figure 4.20-2
Fuel Reductions
Alpine County Park Project Environmental Impact Report

4.20.5.2 State

California Emergency Services Act

The California Emergency Services Act was adopted to establish the ~~s~~State's roles and responsibilities during human-caused or natural emergencies that result in disaster conditions and/or extreme peril to life, property, or resources of the ~~s~~State. This act is intended to protect health and safety by preserving the lives and property of the people of the ~~s~~State.

California Natural Disaster Assistance Act

The California Natural Disaster Assistance Act provides financial aid to local agencies assisting in the permanent restoration of public real property, other than facilities used solely for recreational purposes, when such real property has been damaged or destroyed by a natural disaster. The act is activated after a local declaration of emergency and the California Emergency Management Agency gives concurrence with the local declaration, or after the governor issues a proclamation of a ~~s~~State emergency. Once the act is activated, the local government is eligible for certain types of assistance, depending on the specific declaration or proclamation issued.

California Department of Forestry and Fire Protection

CAL FIRE protects the people of California from fires, responds to emergencies, and protects and enhances forest, range, and watershed values providing social, economic, and environmental benefits to rural and urban citizens. CAL FIRE's firefighters, fire engines, and aircraft respond to an average of more than 5,400 wildland fires each year (CAL FIRE 2016). The Office of the State Fire Marshal supports CAL FIRE's mission by focusing on fire prevention. It provides support through a wide variety of fire safety responsibilities including by regulating buildings in which people live, congregate, or are confined; controlling substances and products that may, in and of themselves or by their misuse, cause injuries, death, and destruction by fire; providing statewide direction for fire prevention in wildland areas; regulating hazardous liquid pipelines; reviewing regulations and building standards; and providing training and education in fire protection methods and responsibilities.

2018 Strategic Fire Plan for California

The 2018 Strategic Fire Plan for California (2018 Plan) is a cooperative effort between the State Board of Forestry and Fire Protection and CAL FIRE (State Board of Forestry and Fire Protection and CAL FIRE 2018).

In 2018, the Board of Forestry and Fire Protection adopted a new strategic fire plan to address fire concerns in California. The board has adopted fire plans since the 1930s and periodically updates them to reflect current and anticipated needs. Over time, as the environmental, social, and economic landscape of California's wildlands changed, the board has evolved the Strategic Fire Plan to respond to these changes and to provide CAL FIRE with appropriate guidance "for adequate statewide fire protection of state responsibility areas" (PRC Section 4130). The 2018 Plan calls 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, ~~s~~State, federal, tribal, and private partnerships.

The goals that are critical to achieving the 2018 Plan's vision revolve around fire prevention, natural resource management, and fire suppression efforts, as broadly construed. Major components are:

- Improve the availability and use of consistent, shared information on hazard and risk assessment;
- Promote the role of local planning processes, including general plans, new development, and existing developments, and recognize individual landowner/homeowner responsibilities;
- Foster a shared vision among communities and the multiple fire protection jurisdictions, including county-based plans and community-based plans such as Community Wildfire Protection Plans;
- Increase awareness and actions to improve the fire resistance of at-risk man-made assets and the fire resilience of wildland environments through natural resource management;
- Integrate implementation of fire and vegetative fuels management practices consistent with the priorities of landowners or managers;
- Determine and seek the needed level of resources for fire prevention, natural resource management, fire suppression, and related services; and
- Implement needed assessments and actions for post-fire protection and recovery.

In July 2024, CAL FIRE released the 2024 California Strategic Fire Plan (Strategic Plan; CAL FIRE 2024b). This plan outlines CAL FIRE's mission, vision, values, and goals. The strategic plan outlines a framework to guide the department and builds on the 2019 Strategic Plan. The 2024 Strategic Plan focuses on six primary goals with priorities to strengthen partnerships, enhance the workforce, and improve operational efficiency. Included in the Strategic Plan are objectives to meet each of the identified goals, as well as explanation of how successful implementation of the Strategic Plan is measured. The six primary goals of the 2024 Strategic Plan are:

1. Attract, hire, and retain quality employees.
2. Ensure all employees understand how the Department's various programs and job duties contribute towards efficiently achieving the CAL FIRE mission.
3. Promote a culture that values equitable access, embraces diverse backgrounds and experiences, and actively removes barriers to cultivate a more inclusive environment.
4. Leverage technology to modernize internal human resources processes and create efficient and effective innovative solutions to promote, support, and enhance the employee experience.
5. Strengthen the Department's physical and digital infrastructure and streamline equitable access to information across core services.
6. Identify core capabilities and strengthen operational capacity.

California Public Resources Code

Fire Hazard Severity Zones – Public Resources Code Sections 4201–4204

In 1965, PRC Sections 4201–4204 directed CAL FIRE to map areas with significant fire hazards, based on fuels, terrain, weather, and other relevant factors. These FHSZs define the application of various mitigation strategies to reduce risks associated with wildland fires.

Very High Fire Hazard Severity Zones – Government Code Sections 51175–51189

In 1992, Government Code Sections 51175–51189 established the classification for very high fire hazard severity based on fuel loading, terrain, weather, and other relevant factors identified by CAL FIRE as major causes of wildfire spread and the severity of fire hazard expected in those areas. The code established requirements for those that maintain an occupied dwelling within a designated VHFHSZ. The VHFHSZs define the application of mitigation measures to reduce risk associated with uncontrolled wildfires and require that the measures be taken. Local agencies designate the VHFHSZs within their jurisdictions as required by CAL FIRE.

Senate Bill 1241

In 2012, Senate Bill 1241 added Section 66474.02 to Title 7, Division 2, of the California Government Code, commonly known as the Subdivision Map Act. The statute prohibits subdivision of parcels designated very high fire hazard, or that are in an SRA, unless certain findings are made prior to approval of the tentative map. The statute requires that a city or county planning commission make three new findings regarding fire hazard safety before approving a subdivision proposal. The three findings are, in brief: (1) the design and location of the subdivision and its lots are consistent with defensible space regulations found in PRC Sections 4290–4291; (2) structural fire protection services will be available for the subdivision through a publicly funded entity; and (3) ingress and egress road standards for fire equipment are met per any applicable local ordinance and PRC Section 4290.

Fire Safe Development Regulations

In 1991, the Fire Safe Development Regulations were developed to implement PRC Section 4290 and stipulate minimum requirements for building construction in SRAs. These regulations address ingress and egress (e.g., road widths, turnouts), building and street sign visibility, emergency water standards, and fuel modification. In June 2012, CAL FIRE and the Board of Forestry and Fire Protection formed a workgroup to revise the Fire Safe Development Regulations. Changes to the regulations were effective January 1, 2016. This workgroup was re-engaged in 2017 to align the update timeline for the Fire Safe Development Regulations with the triennial California Fire Code (CFC) cycle. ~~The workgroup has been reviewing the existing regulations based on feedback received from the 2016 updates to reduce inconsistencies and improve clarity. These changes are anticipated to be effective with the 2020 CFC on January 1, 2020~~The most recent updates to the Fire Safe Development Regulations coincided with the adoption of the 2025 Building Standards Code.

California Building Code and Fire Code

The 2025 California Fire Code (CFC) establishes regulations to safeguard against the hazards of fire, explosion, or dangerous conditions in new and existing buildings, structures, and premises. The Fire Code also establishes requirements intended to provide safety for and assistance to firefighters and emergency responders during emergency operations. The provisions of the 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 Fire Code includes regulations regarding fire-resistance-rated construction, fire protection systems such as alarm and sprinkler systems, fire services features such as fire apparatus access roads, means of egress, fire safety during construction, and demolition.

~~The California Code of Regulations, Title 24, is a compilation of building standards, including fire safety standards for residential and commercial buildings. The California Building Code (CBC) standards serve as the basis for the design and construction of buildings in California. The CFC is a component of the CBC. Typical fire safety requirements of the CFC 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 wildfire hazard areas. The CFC applies to all occupancies in California, except where more stringent standards have been adopted by local agencies.~~

~~The CFC includes requirements for building construction and vegetation management within areas designated as WUI areas. In such areas, all new buildings must comply with the CBC, which defines construction requirements to reduce wildfire exposure. In addition, buildings within the WUI must comply with California laws and regulations that require maintenance of a "defensible space" of 100 feet from structures (PRC § 4291; CCR § 1299.03). In particular, CBC Chapter 7A applies to building materials, systems, and/or assemblies used in the exterior construction of new buildings within a WUI. Chapter 7A establishes minimum standards for the protection of life and property by increasing the ability of a building in an FHSZ and an SRA or WUI to resist the intrusion of flames or burning embers projected by a vegetation fire. Therefore, the CFC contributes to a systematic reduction in conflagration losses. New buildings in an FHSZ or any WUI, as designated by an enforcing agency, constructed after the application date shall comply with the provisions of Chapter 7A.~~, ~~shall comply with the provisions of Chapter 7A.~~ ~~County DPR will be responsible for the review of structural development within the park for fire code compliance.~~

California Wildland-Urban Interface Code

With the adoption of the 2025 codes on January 1, 2026, all wildfire protection and safety-related requirements previously found in the California Building Code (CBC), California Fire Code (CFC), and California Residential Code (CRC) have been consolidated into the California Wildland-Urban Interface Code (CWUIC). The 2025 California Wildland Urban Interface Code (CWUIC), which is codified as Part 7 of the California Building Standards Code, consolidates all wildfire-related laws, codes, and regulations into a single wildfire-specific code. This includes the former Chapter 7A in the CBC, the former Chapter 49 in the CFC, and provisions of California Code of Regulations Title 14, Government Code Section 51182, and Public Resources Code Sections 4290 and 4291. The CWUIC includes special building construction regulations for development in designated fire hazard severity zones. The special construction materials and methods include design and fire-rating standards for exterior walls, doors, and windows. The CWUIC also establishes the standards for defensible space and vegetation fuel modification. The CWUIC works as a companion to the CBC and CFC to ensure ignition-resistant construction, fire apparatus access, and adequate fire flow in designated fire hazard severity zones.

State Fire Regulations

State fire regulations are set forth in Sections 13000 et seq. of the California Health and Safety Code, which include regulations concerning building standards (as also set forth in the CBC), fire protection and notification systems, fire protection devices such as extinguishers and smoke alarms, high-rise building and childcare facility standards, and fire suppression training. The State Fire Marshal enforces these regulations and building standards in all ~~s~~State-owned buildings, ~~s~~State-occupied buildings, and ~~s~~State institutions throughout California.

4.20.5.3 Regional

County of San Diego Multi-Jurisdictional Hazard Mitigation Plan

The federal Disaster Mitigation Act of 2000 requires all local governments to create a disaster plan in order to qualify for hazard mitigation funding. The Multi-Jurisdictional Hazard Mitigation Plan (County of San Diego 2023~~2017~~) is a countywide plan that identifies risks and ways to minimize damage by natural and human-made disasters. The plan is a comprehensive resource document that serves many purposes, such as enhancing public awareness, creating a decision tool for management, promoting compliance with ~~s~~State and federal program requirements, enhancing local policies for hazard mitigation capability, and providing inter-jurisdictional coordination.

The Multi-Jurisdictional Hazard Mitigation Plan addresses wildfire risks within the San Diego region by assessing the exposure in the different jurisdictions. The assessment considers the exposure of the population, residential buildings, and commercial buildings as well as the exposure of critical facilities and infrastructure, such as airports, bridges, and electric power facilities. The plan then outlines goals, objectives, and actions for each jurisdiction within the San Diego region. Goals related to wildfire typically include reducing the possibility of damage and loss. Objectives and actions related to wildfire typically include measures such as updating evacuation plans, maintaining vegetation management policies, and maintaining an adequate emergency response capability.

San Diego County Emergency Operations Plan

OES implements the Operational Area Emergency Operations Plan (EOP) in collaboration with the Unified San Diego County Emergency Services Organization (Unified San Diego County Emergency Services Organization and County of San Diego 2022~~2018~~). The plan is used by the County and all of the cities within ~~the county~~San Diego County to respond to major emergencies and disasters. It describes the roles and responsibilities of all County departments, including many city departments, and the relationship among the County, its departments, and the jurisdictions within ~~the county.~~San Diego County. The plan contains 16 annexes, detailing specific emergency operations for different emergency situations.

The Evacuation Annex (Annex Q) of the 2022 EOP is intended to be used as a template for the development of jurisdictional evacuation plans and supports the evacuation plans prepared and maintained by each local jurisdiction. The annex outlines strategies, procedures, recommendations, and organizational structures that can be used to implement a coordinated evacuation effort in the San Diego County Operational Area (SDCOA).

San Diego County WUI Fire Emergency Response Plan

The San Diego County Fire Chiefs Association and the San Diego County Police Chiefs' and Sheriff's Association approve the San Diego County WUI Fire Emergency Response Plan, which is the County's standard emergency response and evacuation management plan format for wildfire. The San Diego County WUI Fire Emergency Response Plan was updated for the Alpine southeast area in the Rohde and Associates FEOA (2021). This document is attached to the FEOA report as Appendix J. The plan provides critical information regarding risk assessment, hazards, emergency resource necessities, and tactical evacuation. The tactical plan offers an evacuation plan and recommended strategies or tactics for combating wildfire. County DPR shall implement the project in compliance with the plan, as outlined in this chapter. Staff will become familiar with the plan and be prepared to integrate with public safety responders in response to emergencies at the site. Furthermore, staff members should consider the evacuation and "trigger point"

criteria in the plan and determine if additional time will be required to mobilize internal staff members and implement the plan. Park personnel are urged to develop additional emergency response plans consistent with this document and the means and methods necessary for emergency communications with the public.

County of San Diego ~~Municipal~~ Code of Regulatory Ordinances

The County of San Diego ~~Municipal~~ Code of Regulatory Ordinances Title 9, Division 6, Fire Protection (County Fire Code), adopts the CFC with modifications or amendments specific to the local climatic, geological, or topographical conditions of ~~the county.~~San Diego County. The County Fire Code provides definitions, requirements, and procedures for permits; and regulations for building, repair, maintenance, demolition, and equipment use and fire protection systems. The County Fire Code authorizes the County Fire Warden to be the party responsible for enforcement of the County Fire Code in the unincorporated areas ~~of the county~~ that are outside an FPD. In an FPD, the district fire chief or his/her duly authorized representative is responsible for enforcement.

County of San Diego Code of Regulatory Ordinances Sections 68.401–68.406, Defensible Space for Fire Protection Ordinance

~~This~~ The Defensible Space for Fire Protection ordinance addresses issues associated with an accumulation of weeds, rubbish, and other materials on private property that creates a fire hazard and could be injurious to the health, safety, and general welfare of the public. Under the ordinance, the presence of such weeds, rubbish, and other materials is a public nuisance that requires abatement in accordance with the provisions of Sections 68.401–68.406. The ordinance is enforced in all ~~county service areas~~County Service Areas as well as unincorporated areas ~~of the county~~ that are outside a fire protection district. All fire protection districts have a combustible vegetation abatement program, and many have adopted the County's ordinance.

Section 96.1.004 of the County of San Diego Code of Regulatory Ordinances is the Responsibility for Enforcement section. This section provides clarification on the authorized representatives responsible for enforcing the adopted code and associated provisions of the code.

~~County of San Diego Code of Regulatory Ordinances Sections 96.1.005 and 96.1.202, Removal of Fire Hazards~~

~~The San Diego County Fire Protection District~~FPD, ~~in partnership with CAL FIRE, the Bureau of Land Management, and USFS, is responsible for enforcing defensible space inspections. Inspectors from CAL FIRE are responsible for the initial inspection of properties, ensuring that an adequate defensible space has been created around structures. If violations of program requirements are noted, inspectors provide a list of required corrective measures and a reasonable timeframe for completing the task. If violations still exist upon reinspection, the local fire inspector will forward a complaint to the County for further enforcement action.~~

County of San Diego Consolidated Fire Code

The County ~~of San Diego~~, in collaboration with the local fire protection districts, created the first Consolidated Fire Code in 2001; it contains County and fire protection district amendments to the CFC. The purpose of consolidation with respect to the adoptive ordinances of the County and local fire districts is to promote consistency in the interpretation and enforcement of the CFC and protect public health and safety. This involves permit requirements for the installation, alteration, or repair of fire-protection systems and penalties for violations of the code. The Consolidated Fire Code provides minimum requirements for access,

water supply and distribution, construction, fire-protection systems, and vegetation management. In addition, it regulates hazardous material and provides associated measures to ensure that public health and safety are protected from incidents related to hazardous substance releases.

The 2026 County Consolidated Fire Code adopts the 2025 CFC, and the 2026 County WUI Code and adopts the 2025 CWUIC as amended.

4.20.5.4 ~~County Department of Planning and Land Use~~Local

Alpine Fire Protection District Ordinance

~~The Alpine FPD~~AFPD was formed in 1957 to provide fire protection for the community of Alpine. Its Board of Directors created the ~~Alpine FPD~~AFPD Ordinance (No. 2020-01), which adopted the CFC, including Appendices B, C, H, I, and K; the International Fire Code; and National Fire Protection Association Standards 13, 13-R, and 13-D, as referenced in Chapter 80 of the CFC, together with ~~Alpine FPD~~AFPD amendments. The CFC is adopted for the protection of public health and safety. The ~~Alpine FPD~~AFPD Ordinance (most recently adopted edition) includes additions, insertions, deletions, and changes to sections and chapters of the CFC.

Alpine Community Wildfire Protection Plan

The original Alpine Community Wildfire Protection Plan was developed by the Alpine Public Safety Committee, a subcommittee of Supervisor Dianne Jacob's Alpine Revitalization Committee, with guidance and support from the U.S. Forest Service, CAL FIRE, California Department of Transportation, County OES, County Planning & Development Services, County Sheriff's Department, ~~Alpine FPD~~AFPD, Viejas Fire Department, and Alpine Fire Safe Council. The intent of the plan is to optimize the use of scarce resources (i.e., money, people, equipment) to achieve the greatest overall benefit to the community (Alpine Public Safety Committee 2021). The primary goal is to prioritize projects, as follows:

- Defensible space around structures,
- Defensible space along evacuation routes, and
- Hazardous fuels reductions.

A key element of the planning strategy is to link together existing and future fuel-reduction projects so they can provide contiguous corridors of protection along a perimeter surrounding the Alpine area. The areas being linked together involve defensible space projects for community homes and evacuation routes, natural and/or human-made fuel breaks created through agency efforts, and burned areas. Priority is then given to those areas that can achieve the greatest degree of protection with the limited resources available.

Community Wildfire Protection Plans (CWPPs) provide neighborhood-level strategies that help communities organize, prioritize, and take unified action to reduce wildfire risk. The Alpine/Viejas Fire Safe Council CWPP supports regional pre-fire goals by identifying priority fuel-reduction areas, recommending effective treatments, and promoting defensible space, structural hardening, and protected evacuation routes. Further, the 2023 CWPP identifies key corridors to exit Alpine, temporary safe refuge areas, and key priorities for maintaining evacuation access for residents and visitors.

Alpine Community Plan

The *Alpine Community Plan* (County of San Diego 2020b) outlines guidelines and policies for development within the community plan area. The policies and recommendations that apply to wildfire risk are as follows:

Safety Policy 3. Encourage development with fire-preventive development practices and fire resistant plant types.

Safety Policy 4. Consider fire hazards in Alpine a serious and significant environmental impact during review of Environmental Impact Reports.

Conservation Policy 13. Encourage the continuation of support for the brush management program in conjunction with other public agencies to reduce wildfire hazards.

County Planning & Development Services Fire Prevention in Project Design Standards

Following the October 2003 wildfires, the County Department of Planning and Land Use (now Planning & Development Services) incorporated several fire prevention strategies into the discretionary project review process for ~~California Environmental Quality Act (~~CEQA~~)~~ projects. One of the more significant changes is the requirement that calls for most discretionary permits (e.g., subdivision and use permits) in WUI areas to include a fire protection plan for review and approval. A fire protection plan is a technical report that considers the topography, geology, combustible vegetation (i.e., fuel types), climatic conditions, and fire history at the project location. The plan addresses the following items (among others) in terms of compliance with applicable codes and regulations: water supply, primary and secondary access, travel time to the nearest fire station, structure setback from property lines, ignition-resistant building features, fire-protection systems and equipment, impacts on existing emergency services, defensible space, and vegetation management.

County of San Diego General Plan

The *County of San Diego General Plan* (County of San Diego 2011b) Safety Element contains policies that are applicable to wildfire, as follows:

Policy S-~~3~~4.1. Defensible Development. Require development to be located, designed, and constructed to provide adequate defensibility and minimize the risk of structural loss and life safety resulting from wildland fires.

Policy S-~~3~~4.2. Development in Hillsides and Canyons. Require development located near ridgelines, top of slopes, saddles, or other areas where the terrain or topography affect its susceptibility to wildfires to be located and designed to account for topography and reduce the increased risk from fires.

Policy S-~~3~~4.3. Minimize Flammable Vegetation. Site and design development to minimize the likelihood of a wildfire spreading to structures by minimizing pockets or peninsulas or islands of flammable vegetation within a development.

Policy S-~~3~~4.4. Service Availability. Plan for development where fire and emergency services are available or planned.

Policy S-~~3~~4.5. Access Roads. Require development to provide additional access roads when necessary to provide for safe access of emergency equipment and civilian evacuation concurrently.

Policy S-~~3~~4.6. Fire Protection ~~Measures~~ Plans. Ensure that development located within fire threat areas implement measures that reduce the risk of structural and human loss due to wildfire.

Policy S-~~3~~4.7. Fire-Resistant Construction. Require all new, remodeled, or rebuilt structures to meet current ignition-resistance construction codes and establish and enforce reasonable and prudent standards that support retrofitting existing structures in high fire-threat areas.

Policy S-~~6.3~~7.2. Funding Fire Protection Services. Require development to contribute its fair share towards funding the provision of appropriate fire and emergency medical services as determined necessary to adequately serve the project.

Policy S-~~6.4~~ 7.3. Fire Protection Services for Development. Require that new development demonstrate that fire services can be provided that meets the minimum travel times identified in Table S-1 (Travel Time Standards from Closest Fire Station).

~~4.20.5.4 Local~~

~~Alpine Fire Protection District Ordinance~~

~~The Alpine FPD was formed in 1957 to provide fire protection for the community of Alpine. Its Board of Directors created the Alpine FPD Ordinance (No. 2020-01), which adopted the CFC, including Appendices B, C, H, I, and K; the International Fire Code; and National Fire Protection Association Standards 13, 13-R, and 13-D, as referenced in Chapter 80 of the CFC, together with Alpine FPD amendments. The CFC is adopted for the protection of public health and safety. The Alpine FPD Ordinance (most recently adopted edition) includes additions, insertions, deletions, and changes to sections and chapters of the CFC.~~

~~Alpine Community Wildfire Protection Plan~~

~~The original Alpine Community Wildfire Protection Plan was developed by the Alpine Public Safety Committee, a subcommittee of Supervisor Dianne Jacob's Alpine Revitalization Committee, with guidance and support from the U.S. Forest Service, CAL FIRE, California Department of Transportation, County OES, County Department of Planning and Land Use (now Planning & Development Services), County Sheriff's Department, Alpine FPD, Viejas Fire Department, and Greater Alpine Fire Safe Council. The intent of the plan is to optimize the use of scarce resources (i.e., money, people, equipment) to achieve the greatest overall benefit to the community (Alpine Public Safety Committee 2021). The primary goal is to prioritize projects, as follows:~~

- ~~Defensible space around structures,~~
- ~~Defensible space along evacuation routes, and~~
- ~~Hazardous fuels reductions.~~

~~A key element of the planning strategy is to link together existing and future fuel-reduction projects so they can provide contiguous corridors of protection along a perimeter surrounding the Alpine area. The areas being linked together involve defensible space projects for community homes and evacuation routes, natural and/or human-made fuel breaks created through agency efforts, and burned areas. Priority is then given to those areas that can achieve the greatest degree of protection with the limited resources available.~~

~~Alpine Community Plan~~

~~The *Alpine Community Plan* (County of San Diego 2020b) outlines guidelines and policies for development within the community plan area. The policies and recommendations that apply to wildfire risk are as follows:~~

~~**Safety Policy 3.** Encourage development with fire-preventive development practices and fire resistant plant types.~~

~~**Safety Policy 4.** Consider fire hazards in Alpine a serious and significant environmental impact during review of Environmental Impact Reports.~~

~~**Conservation Policy 13.** Encourage the continuation of support for the brush management program in conjunction with other public agencies to reduce wildfire hazards.~~

4.20.6 Project Impact Analysis

4.20.6.1 Methodology

The analysis of potential impacts related to wildfire included a comprehensive review of federal, state, and local emergency response and operations plans, evacuation plans, codes, regulations, standards, topography, climate and weather, vegetation, and wildfire history. This information was reviewed and considered by subject matter experts to address the significance criteria questions posed in the CEQA Appendix G Checklist. The responses to the questions formed the basis for the determinations of impact.

The analysis considered three conditions on the project site to identify the effectiveness of the project's fire prevention measures: the existing conditions of the project site; the project with only the fire prevention measures required by applicable codes, standards, and regulations; and the project with both required and additional fire prevention measures proposed by the County, as depicted in the proposed park concept plans shown in Figure 3-2, *Proposed Active Park Concept Plan*. Being located in a Very High Fire Hazard Severity Zone, there is no scenario where the project would be built without defensible space and fuel modification as required by applicable codes.

The existing conditions of the project site—including the hazards and risks associated with those conditions and the hazard and risk reduction measures already in place along the edges of the project site—establish existing baseline conditions against which the project's required and additional components can be evaluated to determine effectiveness. The purpose of this approach is to demonstrate how both the project's required and additional fire prevention measures would effectively reduce wildfire risk compared to existing conditions.

The project's fire prevention measures fall into two categories: vegetation fuel modification measures (such as vegetation clearing) and human activity measures (such as the prohibition of smoking and open flames). Fire behavior can be quantitatively modeled, but human-related wildfire ignition locations and causes are elements of human behavior and therefore cannot be modeled like fire behavior. Because human activity related risks cannot be predicted and quantified by the modeling software, additional research was undertaken in Appendix J1 to qualitatively assess effective means of reducing human related ignition risk compared to existing conditions.

The fire behavior modeling provided in Appendix J1 and used to support the analysis below presents existing conditions by modeling wildfires that could occur at the project site with current vegetation conditions. The fire behavior modeling then presents fire behavior in the vegetation fuels that would be present after vegetation fuel modification is implemented. The modeling results provide fire behavior characteristics for the existing and proposed fuel types to facilitate a quantitative analysis of the existing baseline conditions, the project with only the fire prevention features required by code, and additional fire prevention measures proposed by the County.

The project modeling assumes the project would provide irrigated, fire-resistant landscaping common for a park that complies with the defensible space and vegetation fuel modification and management requirements of the AFPD, which is the fire agency with jurisdiction for the project site (See Figure 4.20-2, *Fuel Reductions*). Landscaping would include trees in park use areas, along circulation routes, and within developed portions of the site; drought-tolerant shrubs and groundcovers throughout planter areas, slopes, and basins; and limited turf areas in active recreation areas. Specifically managed landscaping within fuel modification Zones 0, 1, and 2 would be provided, including irrigated, low-growth, fire-resistant plantings in Zone 1 and selectively thinned native vegetation in Zone 2. Irrigation would include drip irrigation for shrubs and groundcovers and low-volume spray or rotator heads where appropriate. As described in Appendix J1, the specific existing, required, and additional fire prevention measures assumed for the project with vegetation fuel modification include:

- EXISTING: Continued maintenance of an existing 30-foot buffer where vegetation has been cleared adjacent to the roadside along the County property, which has been historically cleared and is required by AFPD, and is not part of this project.
- EXISTING: Continued maintenance of a historically cleared and existing 100-foot buffer where vegetation has been cleared where there are adjoining properties along the northern boundary of the County-owned parcel, which is required by AFPD and is not part of this Project.
- REQUIRED BY CODE: Creation of a 100-foot vegetation buffer, as part of the Project, that would extend outward in all directions from the volunteer pad.
- ADDITIONAL: An additional 20-foot buffer adjacent to the existing 30-foot buffer along the park footprint for a total of 50 feet of reduced vegetation cover.
- ADDITIONAL: An additional 20-foot buffer adjacent to the existing 30-foot buffer approximately 100 feet south of the northeast corner of the County's parcel.

In addition to the vegetation fuel modification fire prevention features described above, the project also proposes human activity fire prevention measures. The existing swing gates and weekly ranger checks described in Section 4.20.2.1 would be replaced and enhanced by a stronger vehicle control barrier and a live-on volunteer, maintenance staff, and a park ranger to help with maintenance and management of the property. The following required and additional human activity fire prevention measures are proposed for the project:

- REQUIRED BY CODE: Prohibition of smoking (County Code of Regulatory Ordinances Section 41.118.5).
- REQUIRED BY CODE: Prohibition of the use of barbecues when a Red Flag Warning has been issued (County Code of Regulatory Ordinances Section 41.118).

- REQUIRED BY CODE: Prohibition of the use, transport, carrying, firing, or discharging any fireworks, firearm, weapon, air gun, archery device, slingshot, or explosive of any kind across, in, or into the park except as authorized under Section 41.117 of the County Code of Regulatory Ordinances (County Code of Regulatory Ordinances Section 41.117).
- ADDITIONAL: Prohibition of campfires and open flames.
- ADDITIONAL: Prohibition of overnight use of the park.
- ADDITIONAL: Strengthening of the vehicle control barriers and provision of improved fire-safe parking.
- ADDITIONAL: A live-on volunteer, maintenance staff, and a park ranger to help with maintenance and management of the property who will also monitor and enforce the requirements above.

The selected scenarios used to inform the analysis model likely ignition types and locations of both the existing baseline conditions and the two project conditions, with required fire prevention measures only and with additional measures, including circumstances where an off-site wildfire burns onto the project site.

~~Analysis of potential impacts related to wildfire was based on the ability of fire personnel to adequately serve the existing and future population of the project site, as well as federal, s~~State, ~~and local regulations regarding wildfire.~~

4.20.6.2 Thresholds of Significance

Section XX in Appendix G of the CEQA Guidelines

The following significance criteria are based on Appendix G of the CEQA Guidelines and provide the basis for determining the significance of impacts associated with wildfire risk and wildfire-related hazards. ~~Impacts are considered significant if the project would be in or near SRAs or lands classified as VHFHSZs, and would result in any of the following:~~

Section XX: Wildfire, added to the Guidelines in 2018, asks additional wildfire-related questions aimed at proposals located in or near state responsibility areas or lands classified as very high fire hazard severity zones. Impacts are considered significant if the project would be in or near SRAs or lands classified as VHFHSZs, and would result in any of the following:

1. Substantially impair an adopted emergency response plan or emergency evacuation plan.
2. 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.
3. 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 risks or result in temporary or ongoing impacts on the environment.
4. 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.

In addition to the four questions above, lead agencies should consider whether a project exposes people or structures, either directly or indirectly, to wildfire-related risks. As described in the 2024 County of San Diego Fire Protection Plan Guidelines for Staff, in answering these questions, lead agencies must consider both on- and off-site impacts. Section 4.9 includes this analysis.

Section IX: Hazards and Hazardous Materials, asks whether a project would:

5. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires.

County of San Diego Guidelines for Determining Significance

The following *County of San Diego Guidelines for Determining Significance, Wildland Fire and Fire Protection* (County of San Diego 2024~~2010~~), guide the evaluation of adverse environmental effects that a proposed project may have from wildland fire. The document includes wildfire-related Appendix G threshold questions addressed in other sections of this 2026 Recirculated Draft EIR and the Final EIR, including Threshold 2 in Section 4.9, *Hazards and Hazardous Materials*; Threshold 1 in Section 4.15, *Public Services;* Threshold 4 in Section 4.17, *Transportation and Circulation*; and Threshold 2 in Section 4.19, *Utilities and Service Systems.* Please refer to the listed sections to see the applicable analysis related to the thresholds.

4.20.6.3 Project Impacts and Mitigation Measures

Threshold 1: Implementation of the project would not substantially impair an adopted emergency response plan or emergency evacuation plan.

County Park ~~and~~, Trails, and Open Space ~~/Preserve~~

Impact Discussion

The Operational Area Emergency Operations Plan is used by ~~unincorporated county areas~~the County and all cities in ~~the county~~San Diego County to respond to major emergencies and disasters. The plan establishes roles and responsibilities for County departments and the jurisdictions and outlines emergency operations for the response to different emergency situations. The plan indicates that specific evacuation routes would be determined according to the location and extent of the incident and include as many predesignated transportation routes as possible. According to Annex Q, Evacuation, primary evacuation routes identified in the plan consist of major interstates, highways, and prime arterials in San Diego County (Unified San Diego County Emergency Services Organization and County of San Diego 2018). Conflict could occur with an adopted emergency response plan or emergency evacuation plan if the project were to prevent safe evacuation during an emergency or otherwise prevent safe and timely management of an emergency situation.

Construction

~~Construction~~The following analysis was developed assuming construction would occur in one phase over 16 months ~~and is~~was ~~anticipated to begin in fall 2022~~. Construction equipment would include tractors, excavators, backhoes, a water truck, drill rig, bobcat, forklift, rollers, a rubber tire loader, wheel tractor scrapers, an air compressor, a generator set, crane, and concrete truck. Construction activities would occur between 7 a.m. and 7 p.m., in compliance with County of San Diego Noise

Ordinance. Construction staging would occur on the project site. Construction may result in partially blocked travel lanes along South Grade Road due to the use of large construction equipment, construction material deliveries, or construction of project features adjacent to South Grade Road. These temporary lane closures could delay or obstruct the movement of emergency vehicles along South Grade Road. However, when construction interrupts the normal function of a roadway, a Traffic Control Permit would be obtained from DPW. County DPR or its contractors would be responsible for obtaining the Traffic Control Permit, which requires the installation and maintenance of appropriate traffic controls, in accordance with a traffic control plan. The traffic control methods used to maintain a safe flow of traffic could include barriers, signs, or flags. Implementation of the traffic control plan would ensure the safe passage of emergency vehicles in the public right-of-way. Additionally, construction activities and the traffic control plan would not prevent emergency vehicles from reaching the project site. County ~~Fire Services~~FPD staff (i.e., County Fire Marshal) review all proposed projects to ensure onsite access is accessible for emergency vehicles and onsite utilities are adequate for emergency response. Therefore, the project would be submitted to the County Fire Marshal for review and approval. In addition, the project would comply with the applicable requirements set forth by the County of San Diego Multi-Jurisdictional Hazard Mitigation Plan and the Operational Area Emergency Operations Plan during an emergency.

Operation

Operation of the project would include passive and active recreational facilities and would introduce new staff and visitors to the project site, which currently is undeveloped. Main access to the park would be provided on the east side of the property at a new ~~four-all~~two-way stop-controlled intersection at South Grade Road and Calle de Compadres. A secondary entrance would be constructed at the south end of the park as a driveway into and out of the parking lot. The project would not include any roadway improvements to South Grade Road, beyond constructing a decomposed granite pathway in the existing right-of-way adjacent to the park. ~~The bike lanes would act as a by-pass in an emergency situation.~~ Staff members would become familiar with the San Diego County WUI Fire Emergency Response Plan for the Alpine southeast area and be prepared to integrate with public safety responders in response to emergencies at this site. Please refer to Appendix K for the Alpine Community Park Fire Evacuation Analysis prepared by Chen Ryan Associates (~~August~~October 2022). This analysis assessed the time required for evacuation from the project site under several scenarios (e.g., a wind-driven fire that results in a required evacuation, affecting the project site and surrounding community).

The traffic evacuation analysis presented in the Alpine Park Fire Evacuation Plan shows the vehicle travel times required under various evacuation events. Nine scenarios were considered. For a conservative scenario, the analysis assumes that all the households, businesses, and vehicles would leave together once an evacuation order is issued. Specifically, the evacuation analysis assumes that up to 240 vehicles would evacuate from the project site. This assumption represents full occupancy of the project site. The analysis also assumes that up to 4,029 vehicles and 4,432 vehicles would evacuate the surrounding land uses under the existing and cumulative scenarios, respectively. Key points from the analysis are provided below. Detailed results and discussions are provided under the respective sections of the analysis provided in Appendix K.

- It would take up to 2 hours and 31 minutes to evacuate existing land uses via South Grade Road and Alpine Boulevard (Scenario 1). If the two-way left-turn lane (TWLTL) along Alpine

Boulevard is used as an evacuation lane, then the time is reduced to 1 hour and 33 minutes (Scenario 2).

- Evacuating project traffic only (Scenario 3) would take up to 31 minutes.
- Evacuating all existing land uses and project traffic via South Grade Road and Alpine Boulevard would take up to 2 hours and 40 minutes (Scenario 4). If the TWLTL along Alpine Boulevard is used as an evacuation lane, then the time is reduced to 1 hour and 41 minutes (Scenario 5). Thus, the project increases the total evacuation time by 9 minutes and 8 minutes, respectively.
- Under the cumulative scenario, it would take up to 2 hours and 41 minutes to evacuate the cumulative land uses via South Grade Road and Alpine Boulevard (Scenario 6). If the TWLTL along Alpine Boulevard is used as an evacuation lane, then the time is reduced to 1 hour and 44 minutes (Scenario 7).
- Evacuating all cumulative land uses and the project via South Grade Road and Alpine Boulevard would take up to 2 hours and 53 minutes (Scenario 4). If the TWLTL along Alpine Boulevard is used as an evacuation lane, then the time is reduced to 1 hour and 50 minutes (Scenario 5). Thus, the project increases the total evacuation time by 12 minutes and 6 minutes, respectively.

The project proposes several features that would enhance evacuation operations; these are not reflected in the evacuation scenarios and average evacuation times. These features include the existing and proposed fuel modification zones within the project site as well as the fuel modification area along the project's frontage (see Figure-4.20-2). In addition, temporary areas for safe refuge would be provided. Because the project would provide a sizable area that would be ignition resistant, emulating urbanized areas where wildfire spread can be halted, emergency managers may halt evacuations at the project site at any point to move higher-priority traffic. The project may also serve as a temporary evacuation point for evacuees from other areas, given its design as a fire-resistant zone.

Neither CEQA nor the County has numerical time standards for determining whether an evacuation timeframe is appropriate. Public safety, not time, is generally the guiding consideration for evaluating impacts related to emergency evacuation. The County considers a project's impact on evacuation significant if it impairs or physically interferes with implementation of an adopted emergency response or evacuation plan, or exposes people or structures to a significant risk of loss, injury, or death from wildland fires.

The evacuation scenarios presented in the analysis found that evacuation traffic generated by the project would not increase average evacuation travel times significantly or result in unsafe evacuation timeframes. The flow of evacuation traffic would be effectively managed. In addition, structural fire, rescue, and emergency medical services in the Local Responsibility Area are provided by ~~Alpine FPD~~AFPD, which staffs its fire stations with personnel from a number of fire service agencies in the Alpine region.

Table 4.15-1, Fire Protection Facilities in the Project Vicinity, in Section 4.15, *Public Services*, indicates the locations and types of fire resources that are available for emergency response. ~~Alpine FPD~~AFPD Station 17 is 2.7 miles away from the project site. Fire service resources at Station 17 are available to the community in less than 5 minutes for an initial response and within 15 minutes for most multi-unit responses; these would be facilitated by the Heartland Dispatch Center and surrounding cooperating fire agencies (Rohde and Associates 2021). Additionally, Rohde and Associates concluded that operation of the project would result in less than one emergency response

call per day on average, which was estimated based on the number of daily park users at estimated peak visitation. ~~Alpine FPD~~AFPD Station 17 currently conducts one to three service calls per day with substantial capacity for additional service calls.

Therefore, the project would not increase demand on existing emergency response services such that it would impair an adopted emergency response plan or emergency evacuation plan.

Impact Determination

The project would not substantially impair an adopted emergency response plan or emergency evacuation plan. Impacts would be less than significant.

Mitigation Measures

Mitigation is not required.

Level of Significance After Mitigation

Impacts would be less than significant.

Threshold 2: Implementation of the project would not, due to slope, prevailing winds, and other factors, exacerbate wildfire risks of, and thereby expose project occupants to~~,~~ pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.

County Park ~~and~~, Trails, and Open Space~~/Preserve~~

Impact Discussion

The project is in an area that, due to the climate, common Santa Ana wind conditions, and topography, is prone to wildfire risk. The project site is identified as a VHFHSZ and has burned during wildland fire events before. The project site slopes to the south, with the more substantial slopes on the northern end of the project site. The highest elevation is approximately 2,030 feet at the northern site boundary and the lowest is approximately 1,970 feet at the southern boundary.

Construction

As noted, the project site is partially within a VHFHSZ, and heat or sparks from construction equipment or vehicles, as well as the use of flammable materials, have the potential to ignite adjacent vegetation and start a fire, especially during weather events that include low humidity and high wind speeds that are typically experienced in the summer and fall, but can occur year-round in the San Diego region. County DPR and its contractors would implement the following standard best management practices (BMPs) intended for the mitigation of potential ignition sources, including:

- All vehicles would be required to carry a fire extinguisher in case of accidental fire ignition,
- Vehicles would not be permitted to park or idle over dry brush, and
- Proper wildfire awareness, reporting, and suppression training will be provided to construction personnel.

As described above, the project site is primarily flat grassland, with coastal sage in the northern segment of the project boundary. The site is subject to impacts from a single wildfire event and poses a wildfire risk to the adjacent WUI in the community of Alpine (Rohde and Associates 2021). The site's fire risk is largely due to the natural dry climate and the potential for the occurrence of Santa Ana winds. However, implementation of the project will include the removal of existing hazardous vegetation fuels and provide irrigated, fire-resistant landscaping common for a park that complies with defensible space and vegetation fuel modification and management requirements.

Implementation of standard BMPs would reduce the potential for ignition and increase the ability of on-site workers and staff to control and extinguish a wildfire event. Therefore, construction of the project would not exacerbate the conditions and wildfire risk on site, thereby exposing people to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.

Operation

Operation of the project could introduce new conditions that could exacerbate wildfire risk at the project site. While development of the project would reduce the fuel load on the project site by developing natural habitat with built environment, operation of the project would introduce visitors to the project site that were not previously present. Given the high percentage of wildfires in Southern California that are ignited by human-related causes, this could exacerbate the existing wildfire risks on site.

The project would comply with ~~County Code of Regulatory Ordinances~~ Title ~~3~~9, Division ~~5, Chapter 3, and Appendix II-A~~1, of the ~~Uniform~~CFC and the County Consolidated Fire Code. Furthermore, County DPR would be required to comply with the Defensible Space for Fire Protection Ordinance (2011). The ordinance requires combustible vegetation; dead, dying, or diseased trees; green waste; rubbish; or other flammable materials to be cleared within 30 feet of the property line and within 10 feet of each side of a highway, private road, or driveway in order to maintain defensible space (County of San Diego 2011c). The project is also required to comply with the County of San Diego Fire Service Conditions stipulated by County ~~Fire Services~~FPD personnel (i.e., County Fire Marshal) upon review and approval of the project.

Access to the park has been designed in coordination with County DPR, the County Department of Public Works, and County ~~Fire Services~~FPD personnel to ensure accommodation for large pieces of fire apparatus and horse trailers as they enter and exit. In addition, as part of project operations, signs with park rules and regulations would be clearly posted, in compliance with County Code of Regulatory Ordinances Title 4, Public Property, Division 1, Parks and Recreation, Chapter 1, County Parks and Recreation. The rules, which would be enforced by park employees, would include, but not be limited to, the following:

- Smoking would be prohibited.
- Campfires and open flames would be prohibited, and barbeques would be locked on red-flag days. County DPR has procedures for the enforcement of "open flame bans," which are initiated by declaration of a red-flag warning. County DPR would integrate signage and other interpretive stations at key site entrance points, indicating red-flag conditions when announced by fire agencies. When a warning is issued, region managers would reach out to the field staff and begin the process of shutting down all barbeques by signing and banning/taping them off until the warning is lifted. Additional signage would be posted at park entrances and throughout the park. Park personnel would patrol the park to enforce the ban.

- No person would be allowed to use, transport, carry, fire, or discharge any fireworks, firearm, weapon, air gun, archery device, slingshot, or explosive of any kind across, in, or into a County ~~p~~Park.
- Parking would occur in designated staging areas.

County DPR would prepare a Site Evacuation Plan as part of operational planning for the project. The Site Evacuation Plan would include emergency contact information, evacuation routes and established meeting places, and safety protocols to ensure the safe evacuation of visitors and employees of the park. County DPR would also implement the recommendations provided in the FEOA prepared by Rohde and Associates for the project, as outlined below.

Because the project would introduce potential ignition sources to a previously undeveloped open space area, fire prevention protocols would be implemented as part of the project. The following fire prevention protocols, which were recommended in the Rohde and Associates assessment, would be implemented as fire prevention measures~~project design features~~:

- Facility Fire-Safe Design. County DPR shall design appropriate facility elements and ensure County fire and building code compliance to reduce wildfire risks for users and the area. Fire-resistive landscaping would create a fire-safe area where the two dog parks, ~~three soccer~~multi-use/open fields, and baseball diamond are proposed. In addition, the paved parking lot, basketball and pickleball courts, equestrian area, and other cleared areas would not only provide a buffer that would protect the park from wildfire but also provide a temporary safe refuge area with safe ingress and egress ~~(Rohde and Associates 2021).~~ .
- All landscape vegetation on park premises would be consistent with the guidelines of the County ~~Department of~~ Planning & Development Services as well as the County's approved fire-resistive landscape plant palette. Generally, these plants would:
  - Grow close to the ground;
  - Have a low sap or resin content;
  - Grow without accumulating dead branches, needles, or leaves;
  - Be easily maintained and pruned;
  - Be drought tolerant;
  - Be responsive to adequate irrigation to maintain a "green" state; and
  - Not present intense thermal outputs during combustion.
- Parking and equestrian areas would serve as emergency safe routes, providing broad expanses of non-combustible surfaces. These areas would be free of combustible ground cover and cleared of native vegetation whenever possible. Fuel modification within adjacent native vegetation may be used in coordination with development in these areas when necessary to achieve the minimum recommended fuel clearance widths. Because equestrians would most likely use County facilities as temporary safe refuge sites during wildfires, the equestrian facility would need to be designed to be both substantial and fire resistive so as to provide secure and safe housing for large animals and prevent accidental releases due to animal panicking during wildfires.
- Fuel Modification Program. County DPR shall implement a long-term fuel modification program. This management would be accomplished on a scale needed to alleviate identified fire behavior

potential while limiting environmental impacts from the treatment and offering the highest protection value for the expense and effort. The goals of this fuel modification program would be to reduce wildfire intensity enough to offer reasonable protection to adjacent structural assets, limit landowner liability from wildfire damage to adjoining properties, provide protection for DPR/BCLT site development, and ensure safe public refuge at key sites. Existing fuel modification maintenance includes a 30-foot buffer of vegetation clearance along the northern frontage of South Grade Road of the County property and a 100-foot buffer of vegetation clearance and defensible space at adjoining properties along the boundary of the County-owned parcel, as directed by ~~the Alpine FPD~~AFPD Defensible Space Requirements (~~Alpine FPD~~AFPD 2022). This document is attached as Appendix L. While the AFPD Defensible Space Requirements have been updated since 2022, as described below, the proposed 30-foot and 100-foot buffers remain in compliance with the most recent requirements. ~~The County will specifically implement a 100-foot buffer of vegetation clearance that extends from the volunteer pad, an additional 20-foot buffer of vegetation clearance adjoining the 30-foot buffer of vegetation clearance (total of 50-foot buffer clearance) adjacent to the roadside within the proposed park footprint, as well as a 20-foot buffer adjoining the 30-foot buffer approximately 100 feet south of the northeast corner of the County's parcel in order to reduce hazards associated with increased human-related fire ignition factors. The aggregate 50-foot vegetation clearance and 30-foot vegetation clearance also reduce an extension of wildfire from the historical wildfire corridor on the east face of the site.~~

- Fuel Reduction Zones. The project also shall achieve ~~Zone A~~ compliant fuel modification around the Alpine Park facility per fire and building code requirements, with the goal of 100 percent fire exclusion from the project site. The objective of the landscape replacement ~~in Zone A will be~~is to eliminate the potential for wildfire occurrence through establishment of a fire-resistive landscape around principal park facilities and structures at the minimum distances required by code. This has been designed through the proposed landscape around sports fields and buildings, subject to ~~Alpine~~AFPD Fire Marshal review and approval during the permitting process ~~(Rohde and Associates 2021).~~. ~~Zone B fuel reduction shall occur adjacent to Zone A along property lines, where practical, and around key public facilities such as the parking areas, equestrian staging areas, and similar locations. Fuel modification in Zone B should be designed to achieve fire prevention goals while maintaining viable habitat and preserving ecological values. The objective of fuel treatment in Zone B is to achieve at least a 75 percent reduction in fire line intensity from a wildfire moving from native fuels into a constructed fuel modification zone (Rhode and Associates 2021). The County will implement a 100-foot fuel reduction area extending from the volunteer pad under Zone A and Zone B compliance.~~ The AFPD Defensible Space requirements were recently updated to include Zone 0 Immediate Zone, Zone 1 Intermediate Zone, and Zone 2 Extended Zone. Zone 0, comprised of the first five feet extending outward from an exterior wall, is required to be maintained clear and free of all combustible materials. Zone 0 would include the removal of existing vegetation. Zone 1 begins at the end of Zone 0 and extends to 50 feet. Zone 1 does not need to be free of combustible materials, however plants and vegetation in this zone must be maintained. The AFPD includes height and diameter restrictions, as well as requires vegetation in this zone to be irrigated and maintained so that dead or dying vegetation and plants are removed. Finally, Zone 2 is an additional 50 feet, beginning at the edge of Zone 1. Zone 2 has less strict requirements than the other zones, but still requires active maintenance of vegetation, limbing trees dependent on the height of the tree, and the removal of combustible vegetation below the tree canopy.

- Fuel Modification Criteria: A–O in FEOA (Appendix J)
    - Treatment Methods. County DPR shall implement one or more of the recommended treatment method alternatives, including:
        - Mechanical treatment, including mowing or plowing, may be used to establish fuel modification in grass where terrain is within the mechanical limits of equipment to extend parking lot or equestrian staging area clearance for safe refuge.
        - Grazing for grass and lighter fueled sites such as sage scrub in the south half or northwest quarter.
        - Hand treatment by hand crews is recommended for steep sites and sites with heavy fuels such as shrub fuel and steep-sloped areas in the northwest quarter of the combined site.
        - Spot control with herbicides. Herbicides would be used to control undesired weeds or selective vegetation within fuel modification areas.

- Partner Collaboration for Fire Prevention. County DPR shall coordinate with neighboring entities, including BCLT, ~~Greater~~ Alpine Fire Safe Counsel, the ~~AlpineFPD~~AFPD, San Diego County FPD, CAL FIRE, County ~~Road~~ Department of Public Works, and San Diego Gas & Electric, on regional defensible-space initiatives, fuel modification, and structural defense initiatives, including sharing of resources, planning, and costs.
- Comply with the Regional Wildfire and Evacuation Plan ~~(see Section 4.20, *Wildfire*).~~ The San Diego County WUI Fire Emergency Response Plan has been updated for the Alpine southeast area as a part of the Rohde and Associates FEOA (Appendix J). This document, which is also approved by the San Diego County Fire Chiefs Association and San Diego County Police Chiefs' and Sheriff's Association, is the County standard emergency response and evacuation management plan format for wildfire. County DPR shall implement the project in compliance with the plan.
- Comply with Site-Specific Wildfire and Evacuation Plan. An Alpine Community Park Fire Evacuation Analysis was developed by Chen Ryan Associates (Appendix K) to assess the time required for emergency evacuation from the project site under several scenarios, assuming a wind-driven fire that results in a required evacuation affecting the project site and surrounding community. The traffic evacuation simulations presented within the analysis found that evacuation traffic generated by the project would not significantly increase the average evacuation travel time or result in unsafe evacuation timeframes. Evacuation flow would be able to be effectively managed.

As detailed in Appendix J1, four wildfire scenarios were modeled for vegetation types under three conditions: 1) the existing baseline condition, 2) the project with the fire prevention measures required by the applicable building and fire codes, and 3) the project with the additional fire prevention measures proposed by the County. The project proposes all of the fire prevention features listed in Section 4.20.6.1, but a separate analysis of the project with only the required fire prevention measures represents a "pre-mitigation" condition that can be used to assess project impacts in the absence of mitigation. Research about human behavior and ignition risk was also conducted to assess the effectiveness of the human activity fire prevention measures implemented in the three conditions above. The existing condition is described in Section 4.20.2.1 and Section 4.20.4.1 above. A discussion of the effectiveness of the project's fire prevention measures for the

project with the required fire prevention measures and for the project with the additional fire prevention measures is provided below.

Project with Required Fire Prevention Measures

The project would be required to implement certain fire prevention measures mandated by building and fire codes, which would convert existing hazardous vegetation fuels to maintained landscaping and vegetation fuel modification zones that meet code requirements. The same four wildfire scenarios were modeled for the project with these required vegetation fuel modification fire prevention measures listed in Section 4.20.6.1. The only vegetation fuel modification measures that are not required by the relevant codes is vegetation modification within two 20-foot vegetation buffer areas adjacent to the existing 30-foot buffer along the park footprint and the existing 30-foot buffer approximately 100 feet south of the northeast corner of the County's parcel. The analysis for the project condition with the required fire prevention measures assumes that the vegetation in the buffer would remain unmaintained flat-topped buckwheat and fire activity in the additional 20-foot buffer areas would remain the same as the existing condition.

Modeling results demonstrate that in the project with the required vegetation fuel modification measures condition, flame lengths in areas with vegetation modification would be reduced by approximately 4.6 feet to 12 feet depending on the location. Similarly, fire intensity in the fuel modification areas would be reduced by up to 3,008 BTU/feet/second; rate of spread would be reduced by up to 4 mph; and ember spotting distance would be reduced by up to 0.8 miles compared to the existing condition.

Regarding ignition and human activity, the project is anticipated to lead to additional human presence at the site, which could increase fire risk by introducing additional opportunities for human-caused fire ignitions. However, the project would be subject to the restrictions in the County Code of Regulatory Ordinances, which prohibits ignition sources such as smoking, or fireworks. On-site signage would inform visitors about the prohibited activities on the project site. The existing weekly ranger checks would enforce these prohibitions using clear communication and direct verbal warnings, which would also present opportunities for education about fire dangers. Ongoing enforcement, education, and signage would increase public awareness about the restrictions on the project site, minimizing ignition potential even when rangers are not present. Still, due to the lack of a daily enforcement presence, the occasional unauthorized access of the project site is not expected to be meaningfully reduced for the project with required fire prevention measures condition, meaning some ignition potential would still exist for this hypothetical condition. However, the irrigated and managed landscaping proposed for the project reduces the risk of an on-site ignition becoming an off-site wildfire by replacing a nearly continuous field of hazardous, easily ignited vegetation with ignition-resistant landscaping arranged in accordance with defensible space and fuel modification requirements. The project with required fire prevention measures would implement defensible space requirements and vegetation modification to ensure that impacts related to wildfire would be less than significant, with no mitigation required.

Project with Additional Fire Prevention Measures

The only vegetation fuel modification fire prevention measures that exceed code requirements are the additional 20-foot buffer areas. These buffer areas would further reduce fire activity on the project site by providing more area with maintained landscaping and irrigation. Compared to existing conditions, the proposed project would result in a reduction in buffer area flame lengths (3 feet compared to 18 feet without the vegetation modification), fire intensity (up to 63

BTU/feet/second compared to up to 3,037 BTU/feet/second without the vegetation modification), rate of spread (0.2 mph compared to up to 6.2 mph without the vegetation modification), and ember spotting (up to 0.3 miles compared to up to 1.1 miles without the vegetation modification).

Regarding ignition and human activity, the project includes fire prevention measures that exceed the requirements of the County Code of Regulatory Ordinances, as listed in Section 4.20.6.1 above. Additional measures include a live-on volunteer, maintenance staff, and a park ranger to help with maintenance and management of the property; strengthened vehicle control barriers and fire-safe parking; and the prohibition of campfires and overnight use of the park. As described in Appendix J1, one of the most effective means of reducing ignitions is to combine effective education with judicious enforcement. Pairing restrictions (such as the prohibition of smoking) with on-site enforcement personnel establishes a comprehensive compliance framework by providing the legal authority necessary to support enforcement actions and penalties for violations; active monitoring and enforcement capacity to identify noncompliance and request compliance or summoning assistance from law enforcement; and direct public education and outreach that promotes awareness of regulations and reduces the likelihood of future violations. With the additional vegetation fuel modification and human activity fire prevention measures, impacts related to wildfire would continue to be less than significant, with no mitigation required.

Implementation of the aforementioned ~~project design features~~fire prevention measures, compliance with applicable ordinances and regulations, and enforcement of County DPR rules and regulations would reduce the potential for the project to exacerbate wildfire risks due to slope, prevailing winds, and other factors, including risks related to pollutant concentrations as a result of a wildfire or the uncontrolled spread of a wildfire. Impacts would be less than significant.

Impact Determination

Implementation of the project would not exacerbate wildfire risks due to slope, prevailing winds, and other factors, and thereby would not expose project occupants to~~,~~ pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

Impacts would be less than significant.

Threshold 3: Implementation of the project would not 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 result in temporary or ongoing impacts on the environment.

County Park, Trails, and Open Space~~/ Preserve~~

Impact Discussion

Construction

The project would require the construction of infrastructure specific to wildfire protection (i.e., roads, fuel breaks, emergency water sources, electric or other utilities). Furthermore, the project would require infrastructure improvements as the currently vacant site is developed with an active park and passive recreational facilities. The infrastructure would include a domestic water line, an irrigation water line, a fire service line, storm drains, sewer lines, a fire hydrant, and electricity distribution lines. ~~Construction~~The following analysis was prepared assuming construction of the infrastructure improvements would occur during ~~the single~~one construction phase and would use the same construction equipment as previously listed. Construction personnel would comply with the standard construction BMPs to avoid or minimize potential wildfire risks during construction. The other potential environmental impacts that could arise from construction of the project are analyzed in Sections 4.1 through 4.19 of this 2026 Recirculated Draft EIR and the Final EIR.

Given its partial location within a VHFHSZ, the project would be required to maintain defensible space around project infrastructure, consistent with PRC Section 4291 and the Defensible Space for Fire Protection Ordinance. ~~The~~ County DPR would collaborate with the BCLT to construct fuel breaks on adjacent BCLT parcels. Furthermore, ~~the~~ County DPR and its contractors would implement BMPs related to constructing fuel breaks that reduce the risk of equipment being a potential ignition source.~~ for the mitigation of impacts associated with potential ignition sources while constructing the fuel breaks.~~

The project would also comply with all applicable CWUIC~~CBC and CFC~~ requirements for development in a VHFHSZ, including, but not limited to, specific requirements for structural hardening, water supply and flow, hydrant and standpipe spacing, signage, and fire department access. Therefore, the project would not require the installation or maintenance of associated infrastructure that may exacerbate fire risks or result in temporary or ongoing impacts on the environment.

Operation

The project would include operation of the above-mentioned utilities. Maintenance of this infrastructure would occur infrequently throughout the life of the project. Because the project would comply with PRC Section 4291, the Defensible Space for Fire Protection Ordinance, all applicable CWUIC~~CBC and CFC~~ requirements for development in a VHFHSZ, and the Operational Area Emergency Operations Plan, its potential to exacerbate wildfire risk on site would be reduced. The presence and ongoing maintenance of infrastructure on the project site would not introduce any specific conditions that would result in exacerbation of wildfire risk any more than operation of the rest of the project facilities. Additionally, the potential ongoing environmental impacts caused by

operation of the project infrastructure are analyzed in Sections 4.1 through 4.19 of this 2026 Recirculated Draft EIR and the Final EIR. Therefore, the project would not require the installation or maintenance of associated infrastructure that may exacerbate fire risk or result in temporary or ongoing impacts on the environment.

Impact Determination

The project would require the installation or maintenance of infrastructure such as roads, fuel breaks, emergency water sources, power lines, or other utilities. ~~The~~ County DPR would collaborate with the BCLT to construct fuel breaks on the adjacent BCLT parcels. Furthermore, ~~the~~ County DPR and its contractors would implement standard BMPs related to constructing fuel breaks that reduce the risk of equipment being a potential ignition source.~~for the mitigation of impacts associated with potential ignition sources while constructing the fuel breaks.~~ The project would also comply with all applicable CWUIC~~CBC and CFC~~ requirements; therefore, implementation of project would not exacerbate fire risks or result in temporary or ongoing impacts on the environment. Impacts would be less than significant.

Mitigation Measures

Mitigation is not required.

Level of Significance After Mitigation

Impacts would be less than significant.

Threshold 4: The project would not 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.

County Park~~ and~~, Trails, and Open Space~~/Preserve~~

Impact Discussion

Wildfires can greatly reduce the amount of vegetation on hillsides. Plant roots stabilize the soil, and above-ground plant parts slow water, allowing it to percolate into the soil. Removal of surface vegetation resulting from a wildfire reduces the ability of the soil surface to absorb rainwater and can allow for increased runoff that may include large amounts of debris. If hydrophobic conditions exist post-fire, the rate of surface water runoff is increased as percolation of water into the soil profile is reduced (DeGomez 2011).

Downslope or downstream flooding, mudflows, and landslides are common in areas where steep hillsides and embankments are present and such conditions would be exacerbated in a post-fire environment where vegetative cover has been removed. Additionally, increases in surface runoff and erosion are possible in a post-fire environment where surface vegetation has been removed and steep slopes can increase runoff flow velocity. As presented in Section 4.7, *Geology and Soils*, the project site is gently sloping and is underlain by erosive soils.

Construction

Construction activities for the project would involve earthwork, which would remove the ground cover and disturb surface soils, exposing loose soils and potentially increasing erosion, which could result in post-fire slope instability if a fire were to occur during construction. However, as detailed in Section 4.7, *Geology and Soils*, and Section 4.10, *Hydrology and Water Quality*, the project would be required to prepare and implement a Stormwater Pollution Prevention Plan outlining BMPs for the construction phase to prevent soil erosion and stormwater runoff, which would remove soil material from the project site and further reduce absorption. Additionally, a Stormwater Quality Management Plan would be prepared for the project site consistent with the requirements of the County of San Diego BMP Design Manual, which would contain site-specific design measures, source controls, and/or treatment control BMPs such as landscaped areas, berms, and stormwater retention basins to reduce potential pollutants, including sediment from erosion or siltation. Furthermore, development in the northernmost portion of the project site, which is the most sloped, would be minimal and would retain several groves of existing trees and areas of existing vegetation. Maintaining existing vegetation would maintain stability along the slope. Additionally, an existing dirt footpath would be protected in place and would not undergo ground-disturbing activities. The central and southern portions of the project site would involve substantial grading to support the proposed development as well as the proposed berm along the eastern side. However, the project site will still slope gradually from the north to the south. The graded areas would be revegetated with approved, native, fire-resistant species once construction is complete. Construction would alter drainage patterns on the site, but construction would also include drainage features such as culverts, storm drains, biofiltration basins, and catch basins designed to minimize stormwater runoff and erosion from the site. All of these features would reduce runoff, slope stability, and drainage changes that could potentially result in significant risks, including downslope or downstream flooding or landslides.

Operation

Operation of the project would include the development of active recreation facilities with impervious surfaces, including the equestrian staging area, parking areas, the paved walkway, courts, restrooms, and an administration building. Impervious surfaces result in more stormwater runoff than the existing natural habitat on the project site. However, the project is designed with natural vegetation surrounding the developed areas of the park and the entirety of the project site. Revegetation, as well as project design features including drainage culverts, biofiltration basins, storm drains and catch basins, would reduce runoff and erosion conditions on site. There would be no steep slopes on the project site and, where the project site consists of a gradual slope, there would be either active park facilities or vegetated open space~~/preserve~~; these features would not exacerbate conditions such as slope instability that would result in downslope or downstream flooding or landslides, or other significant risks.

Due to the relatively flat topography and adherence to the aforementioned regulatory requirements, it is not expected that a post-fire condition would result in downslope or downstream flooding or landslides, as a result of runoff, slope instability, or drainage changes.

Impact Determination

The project would not 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. Because of the gradual slope of the project site, the proposed design features, and implementation of construction BMPs, impacts would be less than significant.

Mitigation Measures

Mitigation is not required.

Level of Significance After Mitigation

Impacts would be less than significant.

4.20.7 Summary of Significant Impacts

There would be no significant impacts related to wildfire.

Chapter 9
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9.8 Chapter 8, List of Preparers and Agencies Consulted

No references cited.

Appendix D2

Addendum to the Biological Resources Report for the Alpine County Park Project

Memorandum

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Date: July 28, 2026

To: Kiran Seibel, County of San Diego, Parks and Recreation

From: Laura Moreton

Subject: Addendum to the Biological Resources Report for the Alpine County Park Project in the County of San Diego

HELIX Project: 00187.00133.056

Message:

This memo serves as an addendum to the Alpine County Park Project Biological Resources Report (BRR) (ICF 2022) to comply with a court order related to biological resources in the Peremptory Writ of Mandate issued on January 23, 2026, for CASE NO: 37-2024-00000536-CU-WM-CTL (Writ), and as further detailed in the Minute Order issued on June 9, 2025, in the same proceeding (Minute Order). The court determined that the Environmental Impact Report (EIR; State Clearinghouse #2021030196, County of San Diego [County] 2023) required further substantial evidence and reasoned analysis to adequately address the petitioners' comments related to two special-status animal species: western spadefoot (*Spea hammondii*) and pallid bat (*Antrozous pallidus*).

PROJECT BACKGROUND

The County of San Diego Department of Parks and Recreation (DPR) is proposing to construct the approximately 25-acre Alpine Park Project (project) in the community of Alpine, California. The Biological Survey Area (BSA) studied in the 2022 BRR includes the 96.6-acre project site (of which 2.4 acres is in the public right-of-way in South Grade Road).

The County acquired the 96.6-acre project site in 2019 to build a County-owned public park and establish preserve land in the area outside Alpine County Park. The County plans to manage the approximately 70-acre Alpine Park Preserve in perpetuity, as part of the preserve assembly envisioned under the Multiple Species Conservation Program (MSCP; County 1998).

The project site is in the community of Alpine, California, in south-central San Diego County, approximately 1.3 miles south of Interstate 8. Specifically, the project site is located along South Grade Road, approximately one mile east of the intersection of Tavern Road and South Grade Road. The project occurs within the U.S. Geological Survey (USGS) *Alpine, California* 7.5-minute topographical

quadrangle map. The center coordinates for the project in decimal degree format (NAD 83) are 32.82058° N and -116.75918° W. The project site is currently an undeveloped grassy field with multiple informal use trails but no permanent structures or infrastructure.

WESTERN SPADEFOOT TOAD

Writ

The language included in the Writ regarding western spadefoot is included below:

> *Western Spadefoot Toad. Respondent shall address, providing reasoned analysis supported by substantial evidence in the record, comments submitted by Petitioners' expert stating that the Spadefoot can travel up to 600 meters from their breeding pools and noting that the USGS recommended an undeveloped buffer of 300 to 400 meters around breeding pools.*

Minute Order

The language included in the Minute Order regarding western spadefoot, which provides further details regarding the Writ's directive, is included below:

> *The Western Spadefoot Toad ("Spadefoot") is a candidate for listing under the federal endangered species act. AR 1497. Petitioners argue the EIR's finding that the Project will have no impact on the surrounding Spadefoot population lacks evidence. OB at p.16. They argue their expert showed the Spadefoot can travel up to 600 meters from their breeding pools, meaning they may migrate into the development footprint and thus transmit waterborne contamination from vehicles, animal waste and landscaping, and Argentine Ants that impact Spadefoot's prey.* Id.*, citing AR 1340-1342 (also noting the USGS recommended an undeveloped buffer measuring 300 to 400 meters around breeding ponds). Petitioners argue the EIR's conclusion that the Spadefoot would only travel approximately 262 meters from pools to conclude no impact would occur ignores petitioners' expert evidence, and the EIR failed to address this in response to petitioners' comments. OB at p.17, citing* Banning Ranch Conservancy v. City of Newport Beach *(2017) 2 Cal.5th 918, 940 (The Guidelines state that an EIR should identify '[a]reas of controversy known to the lead agency including issues raised by [other] agencies." (Guidelines, § 15123, subd. (b)(2).) 'Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts." (Guidelines, § 15151.) '[M]ajor environmental issues raised when the lead agency's position is at variance with recommendations and objections raised in the comments must be addressed in detail. (Guidelines, § 15088, subd.(c)."). The County argues petitioners' comments on the recirculated Spadefoot analysis was late and, thus, the County did not have a duty to respond. Oppo. at p.16, citing AR 5369 (Nov. 7, 2023 letter) and citing* Gray v. Cnty. of Madera *(2008) 167 Cal.App.4th 1099, 1111 (under CEQA* [California Environmental Quality Act]*, lead agency is not required to respond to late comments). Petitioners argue they submitted expert comments on the edge effects in the draft EIR in 2021, and the recirculated and final EIR did not respond to those comments. Reply at p.12- 13, citing AR 1336, 1341.*

Here, the record shows petitioners submitted comments on the Spadefoot, including the need to mitigate potential adverse effects associated with the development edge to provide for buffer distances of 300 to 400 meters around breeding ponds in 2021. AR 1336, 1340-1341. The EIR does not appear to address petitioners' expert comments on this issue. The County's analysis of indirect impacts on Wright's Field biological resources -- potential impacts approximately 600 to 800 feet from the eastern edge of the field -- also does not respond to the issue.

In its briefing and at the hearing, the County argued it relied on the study cited by petitioners' own expert (the 2019 Baumberger study) to adopt the datapoint of 262 meters in the EIR. Oppo. at p.16, citing Claremont Canyon Conservancy v. Regents of Univ. of California *(2023) 92 Cal. App. 5th 474, 483 (for the proposition that an EIR does not need to analyze every permutation of the data or address all variations of the issues). Petitioner's expert review, however, explained that a more recent study – by Halstead et al. in 2021 – followed up on Baumberger's earlier study findings, and that Halstead's study found a distance of 486 meters. AR1339-1340. The expert's review also noted the USGS recommended an undeveloped buffer measuring 300 to 400 meters. AR 1340. Thus, the issue with the EIR's reliance on the 262 meters datapoint is not merely about an agency's discretion of what is ultimately included in an EIR. Rather, it is that the EIR does not address and provide a reasoned analysis as to why the smaller buffer distance would support the EIR's conclusions on the Project's impacts to Spadefoot despite the newer conflicting evidence in the record. Accordingly, petitioners have shown the County erred when it concluded the Project's impact to Spadefoot would be less than significant after mitigation.*

Technical Reports

The Draft EIR, published for public review from September 30, 2021, to November 15, 2021, did not include an analysis of western spadefoot. As a result of public comments, the 2021 Draft EIR was revised and recirculated, with a Final EIR (FEIR) completed in October 2023. The Recirculated Draft EIR included a western spadefoot analysis, including the results of a 2022 western spadefoot survey. The following information regarding western spadefoot was provided in the 2022 BRR, Recirculated Draft EIR, and in the FEIR:

Excerpt from Biological Resources Report (FEIR Appendix D) Section 4.1.13.3

The winter of 2018–2019 was an exceptionally wet winter for coastal San Diego County. During fairy shrimp surveys in 2019, a western spadefoot egg mass was observed in basin AP-7. These eggs were discovered on February 8, 2019; the basin was inundated through March 29, 2019, a total of seven weeks. It was dry after that date. No evidence of western spadefoot breeding was observed in any other basins on-site during the surveys. Larvae were never observed in basin AP-7 during weekly checks from February 8 through March 29, 2019. The single breeding attempt within AP-7 during February 2019 was very likely opportunistic in nature and indicative of the exceptionally wet winter. The basins on the County parcel appear to be too small and ephemeral in nature to allow for complete larval development during all but perhaps record rainfall years; they more often act as reproductive sinks for the species.

Based on the results of the 2022 western spadefoot survey, the seasonally inundated basins within the County's parcel are associated primarily with the trails that exist along the northern perimeter of the BSA. Approximately 48 ponded areas were surveyed within or adjacent to dirt

access roads, of which approximately 35 were mapped within the County's parcel and 13 were mapped on Wright's Field.

No western spadefoot adults, larvae, or eggs were observed during surveys of seasonally inundated basins within the County's parcels in 2022. Based on the surveys conducted in 2022, the two basins on Wright's Field (WF-6 and WF-7) are the primary breeding pools for western spadefoot within the survey area, although successful western spadefoot recruitment was not observed in 2022. Based on the survey results, it appears basins within the County's parcel are too shallow and/or do not hold water long enough to support western spadefoot breeding activities during all but the wettest rain years.

*Three adults were observed within the County's parcel during the nocturnal survey on March 4, 2022. All three were on the western side of the County's parcel, within approximately 70 to 150 meters of the basins on Wright's Field and more than 250 meters away from the closest inundation areas on the County's parcel. It appears that the County's parcel does provide upland habitat for western spadefoot; they were observed foraging only in the far western portions of the parcel. Western spadefoot were not documented foraging within the proposed Alpine Park boundary in 2022. Potential impacts on western spadefoot are addressed in Section 2.2.3, below; mitigation measure **MM-BIO-4** is proposed to reduce those impacts.*

Appendix E provides additional details on the 2022 surveys for western spadefoot conducted in the BSA.

Excerpt from Biological Resources Report (FEIR Appendix D) Section 2.2.3.2

*Western spadefoot may be affected by the project. One breeding pool of approximately 157 square feet (AP-7) was documented within the active park development footprint in 2019. This breeding pool may be utilized by western spadefoot seeking to expand from the core population on Wright's Field Preserve during exceptionally wet years, such as 2019 when an egg mass was observed in AP-7. AP-7 would be filled in during construction of the active park (**Impact-BIO-4**). Impacts on this potential breeding pool would be significant absent mitigation.*

As described in the Western Spadefoot Survey Report (Appendix E), the core breeding population of western spadefoot is located within seasonally inundated basins on Wright's Field Preserve. Three adults were observed within the County's parcel during the nocturnal survey on March 4, 2022. All three were on the western side of the County's parcel, within approximately 70 to 150 meters of the basins on Wright's Field and more than 250 meters away from the closest inundation areas on the County's parcel. It appears that the County's parcel does provide upland habitat for western spadefoot, but western spadefoot were documented foraging only in the far western portions of the parcel during the 2022 surveys.

Based on a recent study (Baumberger et al. 2019) that documented the distances from breeding pools to burrow locations, burrows and estivating adults could be expected to occur within approximately 262 meters of the known breeding pools on Wright's Field Preserve. The area within this 262-meter distance includes the western portion of the BSA but not areas within the proposed active park where grading would occur (see Figure 4.4-4).

Adult western spadefoot also emerge a few nights per year to forage and breed (San Diego Management and Monitoring Program 2022). These activities are most likely to occur within the same general area as burrowing habitat, although the presence of eggs within the basin AP-7 during 2019 demonstrate that they can migrate farther east and into the area proposed for park development during these nocturnal breeding events but very likely only during particularly wet years. Because these foraging and breeding events happen in the evening when construction equipment would not be active, it is unlikely that direct impacts on western spadefoot, such as crushing or illegal collecting, would occur during foraging and breeding events. However, there is a possibility that some estivating western spadefoots would occur within the proposed project footprint where grading would occur. If western spadefoots were estivating in areas where grading is proposed, individuals could be crushed from construction equipment. These impacts are significance, absent mitigation, as described further in Section 3.2. The County would address potential impacts with mitigation measure ***MM-BIO-4****; therefore, the impact would be less than significant.*

FEIR Comment

The comment referred to in the Minute Order (Comment 08-91 from Preserve Alpine's Heritage on November 15, 2021) is included below for reference.

Western Spadefoot Life History and Ecological Requirements
A recently published telemetry study of Western Spadefoots in southern California provides important current information on the species' life history and ecological requirements (Halstead et al. 2021), following on earlier telemetry studies in the same region (Baumberger 2013, Baumberger et al. 2019).

Movements of Adult Spadefoots Between Breeding Pools and Aestivation Sites Western Spadefoots spend large parts of the year aestivating underground, often well away from their breeding ponds. As observed by Halstead et al. (2021:1385).

The distance that western spadefoots move from breeding pools is a key metric for western spadefoot conservation. Distance from the breeding pool indicates how much terrestrial habitat around a breeding pool might be used by western spadefoots and provides a direct link to the effective reserve sizes needed to preserve western spadefoot populations.

The need for core terrestrial habitats around amphibian breeding sites is documented (Semlitsch 1998, Semlitsch and Jensen 2001, Semlitsch and Bodie 2003, Harper et al. 2008, Searcy et al. 2013), as are the negative consequences of roads separating adult habitat from breeding pools (Becker et al. 2007, Brehme et al. 2018). Ensuring that enough terrestrial habitat exists to provide the life cycle needs for western spadefoots is best measured by the predictive distribution of distance from breeding pools. The 95th percentile of the posterior predictive distribution for western spadefoot asymptotic distance from the breeding pool was 486 m at Crystal Cove. This predicted value encompassed the maximum distance from the breeding pool of all but 1 of the spadefoots at the site.

Baumberger et al. (2019:6) found the maximum distance the spadefoots were found from the pools ranged from 16 to 262 m (Table 1, S1 Table), with a mean maximum distance of 69 m

± 61.48. The spadefoots used a mean of 13 burrows (SD ± 8.5), and the mean distance between burrow locations was 18 m (SD ± 24.2). They used 4–31 unique burrow sites (mean 11 ± 7.8) during the study. Nine of the 15 spadefoots (60%) reused one or more burrows at least once after moving to a different burrow. Outside of their aestivation period, the spadefoots shifted their burrow location an average of every 8 ± 7 days, and 147 of 194 (~76%) movements between burrows were ≤ 25 m.

In order to mitigate potential adverse effects associated with development edge upon Western Spadefoots, and to accommodate the movement of the toads between breeding ponds and upland aestivation sites, the USGS (Rochester et al. 2017) recommended that the City of Santee protect an ***undeveloped buffer measuring 300 to 400 meters*** *around Western Spadefoot breeding ponds. This range is consistent with conservation recommendations for the Western Spadefoot contained in the Recovery Plan for Vernal Pool Ecosystems of California and Southern Oregon (US Fish and Wildlife Service 2005:II-231).*

Based on calculations from upland habitat use data analyzed by Semlitsch and Brodie (2003), a minimum conservation area to preserve the ecological processes required for the conservation of amphibians may fall within a distance of approximately 368 meters (1,207 feet) from suitable breeding wetlands.

Note that even the larger recommended buffer distance of 400 meters falls far short of the 602-meter movement of an adult spadefoot recorded in coastal Orange County (Halstead et al. 2021), and does not encompass the 486-meter distance that represents "the 95th percentile of the posterior predictive distribution for western spadefoot asymptotic distance from the breeding pool" in coastal Orange County. Figures 1 and 2, on the following page, show what buffer distances of 300 and 400 meters would look like on the project site.

Figure 1 (left) and Figure 2 (right) [Refer to Comment O8-91 in Volume I of the October 2023 FEIR for figures]. *The yellow circle in Figure 1 represents a 300-m buffer around Western Spadefoot breeding pool AP-007, and the yellow circle in Figure 1 represents a 400-m buffer. These are the minimum and maximum undeveloped buffer distances that the USGS recommended around spadefoot breeding ponds in Santee, San Diego County (Rochester et al. 2017). Aerial Source: Google Earth Pro.*

Response Provided in the FEIR (Volume 1, Chapter 3, Section 3.3.1)

Master Response MR-1 (Western Spadefoot Recirculation)
*Commenters noted that western spadefoot (*Spea hammondii*) is known to occur on Wright's Field and an egg mass for this species was observed during the project's 2019 fairy shrimp surveys within the proposed Alpine Park footprint. The Draft EIR did not discuss impacts on western spadefoot. Since the public comment period closed for the Draft EIR, the County of San Diego (County) has conducted focused surveys for western spadefoot within its property, as well as within the known population on the Wright's Field Preserve. The results of these surveys and a complete impact analysis have been provided in the Recirculated Sections of the Draft EIR (RS-Draft EIR). Specifically, Section 4.4 of the Draft EIR and the Biological Resources Report (BRR) were revised to include this analysis. A western spadefoot survey report was also prepared and included in the RS-Draft EIR. Because impacts on western spadefoot from the project are*

*anticipated to be significant absent mitigation, **MM-BIO-4** would reduce impacts on this species to less-than-significant levels.*

Response to Writ

The Writ directs the County to address, providing reasoned analysis supported by substantial evidence in the record, comments submitted by Petitioners' expert stating that western spadefoot can travel up to 602 meters from their breeding pools and noting that the USGS recommended an undeveloped buffer of 300 to 400 meters around breeding pools.

The County's proposed 262-meter buffer around western spadefoot breeding pools is based on a recent Orange County study (Baumberger et al. 2019) that determined that the mean distance of burrows from breeding pools was 40 meters with a range from 1 to 262 meters. The County acknowledges that western spadefoot has been documented to travel up to 602 meters from their breeding pools in one instance in a different Orange County study (Halstead et al. 2021). Although western spadefoots are capable of traveling varying distances, this is not necessarily correlated with where they spend most of their time. The Halstead study concludes that most western spadefoot home range areas, or the location where they spend the majority of their time, are less than one hectare (a linear travel range of approximately 56 meters,[1] assuming the home range area is a circle around a pool). This range of 56 meters represents the linear distance a western spadefoot individual could travel from the breeding pool at the center of its one-hectare home range area in any given direction. The 262-meter buffer proposed by the project provides far more habitat than even the largest individual home range observed during the Halstead study, which was up to 6 hectares, or approximately 138 meters (again assuming the home range area is a circle around a pool). The observation of a western spadefoot traveling up to 602 meters from its breeding pool in the Halstead study does not invalidate the County's 262-meter buffer, as the same study confirms that the largest observed home range for the species is over 100 meters smaller than the County's buffer. The intent of the mitigation measure is to protect the western spadefoot from development. The 262-meter buffer adequately protects the home range of the western spadefoot, while the design of the project allows for dispersal of the western spadefoot to the north and east for distances greater than 602 meters, into the Wright's Field Preserve and the County's Alpine Park Preserve.

Halstead et al. (2021) found variations between the distances toads were found to travel in relation to breeding pools. For example, 95 percent of the toads were found within 486 meters of their breeding pool at one site, and 95 percent of the toads were within 187 meters at another site. This shows there is a wide variation in the distances that spadefoots will travel in relation to their breeding pools. This spatial variation was found with most western spadefoot populations, and this context-dependent behavior suggests that site-specific management is necessary for western spadefoot.

Further, the commenters cited Baumberger et al. (2019) in comments on western spadefoot. Baumberger et al. (2019) found that the mean distance of burrows from the breeding pools was 40 meters, with a range of 1 to 262 meters. The maximum distance from the breeding pool ranged from 262 meters down to a minimum of 16 meters. Outside of their aestivation period, the spadefoots shifted

[1] The area of a circle is calculated as $A=\pi r^2$, where A is area; π is pi, a mathematical constant approximately equal to 3.14; and r is the radius of the circle, which is the distance from the center of the circle to any point on its circumference. Solving for the radius of circle with an area of one hectare (equivalent to 10,000 square meters) yields a distance of approximately 56 meters.

their burrow location an average of every eight days, and 147 of 194 (approximately 76 percent) movements between burrows were less than or equal to 25 meters (Baumberger et al. 2019). The average distance moved between burrow locations was 18 meters with a range of 1 to 204 meters (Baumberger et al. 2019). By using a 262-meter buffer, the County conservatively selected the outermost limit of toad movement from the Baumberger et al. study, 6.5 times the mean distance found in the study.

The County also acknowledges that the USGS recommended an undeveloped buffer of 300 to 400 meters around breeding pools for the City of Santee Subarea Plan (Rochester et al. 2017). However, this recommendation was due to site-specific characteristics where a larger buffer was necessary to connect pools to habitat outside of the Plan area. The Rochester study acknowledges Baumberger's documentation that western spadefoot travel as far as 262 meters from breeding pool sites and uses this finding to draft the buffers considered for the City of Santee Subarea Plan, as discussed on pages 5 through 7 of that study (Rochester et al. 2017). The decision to use larger buffers in the City of Santee's Subarea Plan does not invalidate the County's buffer, which was determined for the project site using the same research consulted for the City of Santee's Subarea Plan, both of which take into account the availability of adjacent habitat.

What's more, the 262-meter buffer is only the proposed distance between the breeding pools and the project's construction limits. There is a much larger buffer to the west (600 meters to the nearest development) and north (850 meters to the nearest development) of the occupied pool because of the location of Wright's Field Preserve, which provides additional western spadefoot habitat. As discussed in the BRR (Appendix D to the RS-DEIR), most of the pools occupied by western spadefoot were on the adjacent Wright's Field site, not within the project site. The distribution of western spadefoot locations shows that Wright's Field is more suitable than the project site, meaning that spadefoots would be more likely to move west and out of the project site than east toward the proposed park site. This behavior by spadefoots can be expected in existing conditions (no project) as well as future proposed conditions (developed park). Wright's Field is preserved, which adds 230 acres (or 930,000 square meters) to the western spadefoot territory identified within the 262-meter buffer on-site. This is a key site-specific difference between the project site and the City of Santee Subarea Plan; a buffer of 300 to 400 meters is not required because the project's 262-meter buffer is more than sufficient to connect breeding pools to additional western spadefoot habitat.

Finally, the County coordinated closely with the U.S. Fish and Wildlife Service (USFWS) to determine an appropriate buffer for the project site. The USFWS exercised their own expert judgement and determined a 262-meter buffer was sufficient in the Biological Opinion they issued for the project, which also concludes that any spadefoots potentially injured or killed by the project (though unlikely) would not have a meaningful effect to the population given the comparatively high density of spadefoots in adjacent, protected habitat (Attachment A, *Biological Opinion 2022-0004852-S7-F-SD*). The USFWS further concluded that the protection and management of spadefoot habitat within the Preserve, combined with restoration of breeding habitat, will fully offset impacts from construction of the recreational park such that the population trajectory will be equal to or better over time compared to a no project alternative. The following conservation measures, as required by the permit for the project (No. ESPER22013883), will be implemented to protect western spadefoot. This is in addition to the requirements of the FEIR. If any measures are in conflict, the permit requirements supersede the mitigation measures.

CM 3. Spadefoot Avoidance Measures

To minimize impacts to spadefoot within the recreation park, spadefoot exclusionary fencing will be installed around the Park. Prior to construction, at least three spadefoot surveys will be conducted within the exclusionary fence, and all spadefoot observed will be relocated outside of the fencing. Surveys will continue until no spadefoot are observed. Exclusionary fencing will remain in place surrounding the Park following construction to prevent spadefoot from entering the area and subjecting themselves to impacts. During ongoing management of the Preserve, spadefoot will be surveyed prior to trail and road maintenance when water is ponding. Work will be halted if adults, eggs, tadpoles, or juveniles are observed within the proposed impact areas.

CM 4. Spadefoot Habitat Conservation and Creation

The County will create three permanent basins encompassing at least 471 square feet to support spadefoot breeding. The basins will be within dispersal distance (860 feet) to existing breeding sites within Wright's Field, and they will be sited as far away from access roads as possible to minimize road mortality. These basins will avoid Quino habitat enhancement areas. Details of the breeding habitat creation project are in the Habitat Restoration and Enhancement Plan (HREP). Long-term management of the Preserve will include spadefoot-specific measures, including maintenance of breeding pools and monitoring.

CM 5. General Minimization Measures During Construction

a. *Employees and contractors will strictly limit their activities, vehicles, equipment, and construction materials to the Park.*

b. *No pets will be allowed in the Park during construction activities.*

c. *The Project will include watering, pursuant to a Stormwater Pollution Prevention Plan, to minimize dust generation throughout the project construction.*

d. *All equipment maintenance, staging, and dispensing of fuel, oil, or coolant will occur within the Park site.*

e. *Contractor equipment will be checked for leaks prior to operation and repaired, as necessary.*

f. *No night lighting will occur within or adjacent to the construction area at any time during construction.*

g. *Signage will be installed to prevent unauthorized access to the Preserve.*

PALLID BAT

Writ

The language included in the Writ regarding pallid bat is included below:

Pallid bat. Prior to making any finding that the 200-foot avoidance buffer from potential pallid bat roost sites, as set forth in mitigation measure MM-BIO-8, will avoid or substantially reduce a

significant impact, Respondent shall support such a finding with substantial evidence in the record.

Minute Order

The language included in the Minute Order regarding pallid bat is included below:

The pallid bat species is known to roost in San Diego County and the bats rely on grasslands for foraging. AR 2575-78. Petitioners argue the EIR's proposed mitigation measures under MM-BIO-7 to install bat boxes before removing vegetation and commencing construction, and MM-BIO-8 requiring construction occur at least 200 feet from potential roost sites, lack substantial evidence to show these measures are effective to reduce the project's impact to less than significant. OB at p.18-19.

The EIR provides substantial evidence that the bat boxes will be included with other measures to mitigate impacts to less than significant. Oppo. at p.18, citing AR 1948–49 and AR 1955 (discusses restoration of native grassland and preservation of property in addition to active management on-site for the proposed preserve land, plus implementing mitigation measures of pallid bat boxes, bat roost avoidance, native grassland restoration, preservation of sensitive habituates; and construction is expected to occur during daytime hours and it is not expected to alter bats' natural nocturnal behaviors), AR 2593–95. The EIR also contains substantial evidence to show consideration will be given regarding temperature and monitoring of the bat boxes. AR 2593 (County will work with a bat expert to design and install the bat boxes; and design and placement will be considered for how to best maintain proper roost temperature; monitoring will be conducted quarterly for first 2 years and twice-yearly for years 3 through 5 after installation).

However, as for the sound buffer distance to potential roosting sites – the County's expert recommended that mitigation "preclude[] construction activities within a minimum 500 feet of potential roost sites during the pupping season." Reply at p.13, citing AR 12249. The County does not show that mitigation efforts of requiring construction occur at least 200 feet from the nearest potential roosting spot (AR 2593) is supported by substantial evidence. Accordingly, the petitioners have shown no substantial evidence supports the EIR's proposed mitigation of only a 200-foot buffer construction zone.

At the hearing, the County argued that no known potential roost sites have been identified on the project site. This argument appears to have been raised for the first time at the hearing. The petitioners do not appear to cite to the administrative record or other authority on this point. Even assuming no pallid bats have been spotted, this does not change the analysis, as the record shows that pallid bats are very difficult to detect and the EIR identified pallid bat impacts that requires mitigation measures. AR 2578.

Technical Reports

The following information related to pallid bats (*Antrozous pallidus*) was included in the 2022 BRR (Appendix D of the FEIR) and summarized in the DEIR and the FEIR.

Excerpt from Biological Resources Report (FEIR Appendix D) Section 1.4.13.5

> *During the 2019 and 2022 surveys, 15 of the 22 known bat species in San Diego County were detected. The bats detected were big brown bat, big free-tailed bat, California myotis, canyon bat, hoary bat, Mexican free-tailed bat, pallid bat, pocketed free-tailed bat, Townsend's big-eared bat, western long-eared myotis, western mastiff bat, western red bat, western small-footed myotis, western yellow bat, and Yuma myotis.*
>
> *Seven of the observed bats are listed as California Species of Special Concern: pallid bat, Townsend's big-eared bat, western red bat, western yellow bat, western mastiff bat, pocketed free-tailed bat, and big free-tailed bat. All of these species, except western yellow bat, are also listed as San Diego County Group 2 species. Suitable roosting and foraging habitat for these species can be found on-site.*

Excerpt from Biological Resources Report (FEIR Appendix D) Section 2.2.3.4

> *During the 2019 and 2022 bat surveys, 15 of the 22 known bat species in San Diego County were detected. [Of these, t]he [special status] bats detected are big-free tailed bat, a County Group 2 species; pallid bat, a County Group 2 species; pocketed free-tailed bat, a County Group 2 species; Townsend's big-eared bat, a County Group 2 species; western long-eared myotis, western mastiff bat, a County Group 2 species; western red bat, a County Group 2 species; western small-footed myotis, a County Group 2 species; western yellow bat; and Yuma myotis, a County Group 2 species. Seven of these species are listed as California Species of Special Concern: pallid bat, Townsend's big-eared bat, western red bat, western yellow bat, western mastiff bat, pocketed free-tailed bat, and big free-tailed bat. Permanent direct and temporary indirect impacts on these species are expected to occur.*
>
> *The bat species were observed foraging over most of the native habitats in the BSA, especially within the open Engelmann oak woodland, flat-topped buckwheat, and native and non-native grasslands within the project footprint. Direct impacts on sensitive habitats would remove foraging habitat for these bat species during vegetation clearing associated with construction of Alpine County Park. However, the County is proposing restoration of native grassland and permanent preservation of a portion of the County property, in addition to active management on-site for the proposed preserve land and Alpine Park. The restoration efforts and active management of the proposed preserve portion of the project would assist in preventing the spread of invasive plants and benefit the native habitats some of these species rely on for foraging. Signs would be posted and the public would be subject to park rules within the proposed preserve land and Alpine Park to prevent impacts from domestic and horses within sensitive habitats. Ranger-led hikes would also assist the public in learning further about the resources the County proposes to protect in perpetuity and the importance of staying on designated trails and picking up after domestic animals. Impacts would potentially be significant. However, through the design measures and on-site management through implementation of the Project, in addition to implementation of mitigation measures MM-BIO-6, pallid bat boxes; MM-BIO-7, bat roost avoidance; MM-BIO-9, native grassland restoration; and MM-BIO-10, preservation of sensitive habitat types, as well as through the establishment of the Alpine Park Preserve (APM-BIO-1), which would protect the remaining habitat for these species in perpetuity, the impact would less than significant.*

Implementation of the project would not directly affect any known roosting habitat or maternal colony sites; however, roost sites are difficult to detect and can shift from year to year. It is presumed that the bats present in the Biological Study Area (BSA) are utilizing oak woodlands and/or grasslands as foraging or roosting sites, but there also may be some potential for bats to use the rock outcrops or crevices within boulders as roost sites. No large rock outcrops or trees would be removed as part of construction of the project. However, construction would occur directly adjacent to oaks and in the vicinity of rock outcrops/boulders where bats could be roosting. These construction activities have the potential to disrupt the breeding success of pregnant females and their pups, potentially causing direct mortality in some instances. These potential effects are discussed further in Section 3.2, below, and would be mitigated to less than significant through MM-BIO-8, requiring bat roost avoidance.

Indirect impacts on bat species, such as disruption of foraging behavior, could occur if construction takes place during evening hours. Because bats are nocturnal species and construction is expected to occur during daytime hours, indirect impacts on these species due to construction activities are not expected to alter natural behaviors. Maintenance of existing trails near or within oak woodlands is not expected to alter the quality of forage or affect roosting habitat for these species because these trails occur within disturbed, bare-ground areas already, and trail maintenance would occur during daytime hours.

Excerpt from Biological Resources Report (FEIR Appendix D) Section 3.2

The following state Species of Special Concern mammal species were documented within the BSA or have moderate or high potential to occur and, therefore, could be affected by the proposed Project: big free-tailed bat, Northwestern San Diego pocket mouse, pallid bat, pocketed free-tailed bat, San Diego black-tailed jackrabbit, San Diego desert (Bryant's) woodrat, Townsend's big-eared bat, western mastiff bat, western red bat, and western yellow bat. The loss of approximately 22.4 acres of habitat for these species would result in a significant impact. Impacts would be reduced to less-than-significant through the establishment of the Alpine Park Preserve (APM-BIO-1), which would protect the habitat within the County's parcel (and potentially in some off-site locations) for these species in perpetuity. Furthermore, impacts on habitat would be mitigated in accordance with MM-BIO-9, which would require compensatory mitigation be provided.

There are only two known pallid bat colony sites in San Diego County (Stokes 2018). The pallid bat individuals observed during focused bat surveys are believed to belong to the maternal colony that roosts in Viejas on a private residence. This species has very specific foraging strategy and utilizes grasslands and open oak woodlands as its main foraging habitat. In addition, this species has characteristics that affect its success with increased urbanization. This includes its tendency to fly at low altitude, its inability to fly over prolonged distances, and its specialized foraging strategies. The loss of approximately 22.4 acres of pallid bat foraging habitat would result in a significant impact that would be mitigated through the establishment of the Alpine Park Preserve (APM-BIO-1) and compensatory mitigation provided under MM-BIO-9, which would protect habitat for pallid bat within the County's parcel (and potentially in some off-site locations) for this species in perpetuity. Furthermore, impacts on pallid bat would be further reduced through implementation of MM-BIO-7, which would require the County to further support pallid bat populations through the installation of bat boxes.

Bat species are particularly vulnerable to impacts on maternal roost sites, such as within oaks or rock crevices. As mentioned in Chapter 2, impacts on maternal roost sites may occur during construction activities that occur in proximity to these sites. These impacts would cause direct impacts on California Species of Special Concern, including the potential for direct mortality, especially of pregnant females or pups. These impacts would be significant under the County's guidelines (County of San Diego 2010b), absent mitigation. Impacts on roosting special-status bat species would be reduced through implementation of ***MM-BIO-8****, which would require bat roost sites to be avoided during construction to the extent possible.*

These significant impacts would be reduced to less-than-significant levels through implementation of ***APM-BIO-1****, which would protect the species' habitat in perpetuity, in addition to* ***MM-BIO-2****, which would implement Engelmann oak tree avoidance and minimization measures;* ***MM-BIO-6****, which would install and monitor bat boxes;* ***MM-BIO-7,*** *which would avoid bat roosts;* ***MM-BIO-8****, which would restore non-native grassland to native grassland within the proposed preserve portion of the Project and a portion of Wright's Field; and* ***MM-BIO-9****, which would require habitat-based mitigation and preserve sensitive habitats in perpetuity.*

The following County Group 2 mammal species were documented within the BSA or have moderate or high potential to occur within the BSA and are already analyzed in Threshold 3.B., above: big free-tailed bat, Northwestern San Diego pocket mouse, pallid bat, pocketed free-tailed bat, Townsend's big-eared bat, San Diego black-tailed jackrabbit, San Diego desert (Bryant's) woodrat, western mastiff bat, and western red bat.

The western long-eared myotis, western small-footed myotis, and Yuma myotis are County Group II bat species not previously discussed. The impacts on these three bats would be similar to those disclosed for the bats described in Threshold 3.B. Although it is less clear that these impacts would affect the long-term local survival of these species, the loss of approximately 22.4 acres of habitat could result in a significant impact. These significant impacts would be reduced to less-than-significant levels through implementation of ***APM-BIO-1****, which would protect the species habitat in perpetuity, and* ***MM-BIO-9****, which would require habitat-based mitigation and preserve sensitive habitats in perpetuity. Impacts on maternal bat roosts of these species may occur during construction, which would be significant. Impacts on roosting special-status bat species would be reduced through implementation of* ***MM-BIO-8****, which would require bat roost sites to be avoided during construction to the extent possible.*

Implementation of the Project would have the potential to affect the nesting success of sensitive animals if vegetation clearing for initial construction of the park or any subsequent fuel modification activities are conducted during the breeding season for avian species or the roosting/pupping season for bat species. Impacts on the nesting success of sensitive animals would be a potentially significant impact. Implementation of ***MM-BIO-5*** *would reduce impacts on avian species to less-than-significant levels. Implementation of* ***MM-BIO-8*** *would reduce impacts on roosting bats.*

Response to Writ

No specific comments were raised on the buffer issue during public review, but the section below is included to comply with the Writ. Pallid bats were found nearby, but no known roost sites occur on site. However, the County is taking a conservative approach to protect pallid bats.

The Writ instructs the County—prior to making any finding that the 200-foot avoidance buffer from potential pallid bat roost sites, as set forth in mitigation measure MM-BIO-8, will avoid or substantially reduce a significant impact—to support such a finding with substantial evidence in the record.

Pallid bats were acoustically detected five times within the preserve portion of the project site during the September 2019 passive survey (ICF 2022). This is outside of the maternity season (April 1 – August 31) for the species. Therefore, the detections made were likely foraging, as opposed to roosting, individuals. Additionally, four of the five detections were in the northern portion of the preserved area more than 2,000 feet away from the proposed project impacts where the developed park will be. The closest detection of pallid bat was more than 500 feet west of proposed project impacts, also in the preserved area of the project site. The pallid bat individuals observed during focused bat surveys are believed to belong to the maternal colony that roosts in the Viejas Reservation, on a private residence. The roost is within an occupied house, indicating that pallid bats will withstand some level of disturbance and noise associated with human disturbance.

A 200-foot survey buffer around the project site is sufficient to protect roosting pallid bats, if present. Several studies have documented smaller buffers for several different species of roosting bats, some as small as 39 feet, as being effective for protecting maternity roosts of sensitive bat species in the U.S. (O'Keefe 2009). Because studies specific to pallid bats are limited and very little is known about the pallid bat, studies on North American bat species in general have been included herein to illustrate effective buffers for protecting roosting (including maternity and non-maternity roosts) bats in addition to available literature specific to pallid bats. Studies reviewed to determine adequate buffers include studies on the northern long-eared bat, Indiana bat, little brown bat, tricolored bat, and big brown bat, among others. These bat species were chosen as comparisons because in-depth scientific research has been conducted on them. However, it should be noted that none is a perfect comparison given that the others are not within the same genus as the pallid bat and there are no other bat species within the same genus as the pallid bat to use as a comparison. Therefore, species with similar size, roost locations, and habitat were chosen.

The USFWS recommends a 150-foot buffer for avoiding tree removal during the maternity season for northern long-eared bat (*Myotis septentrionalis*), a federally endangered species of bat (USFWS 2022). Although this is a different species of bat, it is a federally listed species, giving it a higher level of protection compared to the pallid bat. Like the pallid bat, this species is known to roost in trees. Additionally, both species are insectivorous medium-sized bats with large ears. These characteristics indicate a similar life cycle, diet, and roosting sensitivity level. The 4(d) Rule for Northern Long-Eared Bat is housed in 50 Code of Federal Regulations Part 17, in which the USFWS states:

> "O'Keefe (2009 p. 42) documented that a 39-foot (12-meter) buffer around a maternity roost tree during a harvest in May allowed the roost to be successfully used through late July and that one buffered tree was used 2 years in a row. We have adopted a standard for exception of take that is almost four times that which proved effective in this example, in order to better account for the

> variation in forest types used by the northern long-eared bat and a variety of slopes that might influence how large a buffer may need to be in order to prove effective."

As described above, the 150-foot distance was selected to ensure sufficient protection of the northern long-eared bat under a variety of possible development scenarios, though the USFWS acknowledges that a smaller buffer has proven effective to protect roosting sites.

Like the USFWS, the U.S. Forest Service (USFS) calls for a 150-foot primary buffer for northern long-eared bat and three additional species of forest-dwelling bats, including Indiana bat (*Myotis sodalis*), little brown bat (*M. lucifugus*), and tricolored bat (*Perimyotis subflavus*; USFS 2024). They require a 150-foot primary roost buffer centered on all known suitable roosts (including maternity and non-maternity roosts), which protects the integrity and function of the roost and avoids impacts to roosting bats. The primary 150-foot buffer around a suitable roost safeguards the roost and its current condition, characteristics, and associated microclimate from direct effects (USFWS 2016). A 150-foot buffer will protect known roosts from intentional damage or destruction (e.g., felling, burning, girdling, etc.) at all times of the year. The USFS also designates a 'secondary' species-specific buffer of variable size around a known active maternity roost. The secondary buffer typically includes multiple known and undocumented primary and alternate roost trees used by the maternity colony. These known and unknown roosts collectively comprise the core maternal roosting area (USFS 2024). The buffer determined by the bat biologist in accordance with MM-BIO-8 will be large enough to protect the primary and secondary roosts, if present.

Specific to sites occupied by pallid bats in the northwest, timber harvest has been prohibited within 250 feet of the roost site. The 250-foot buffer originates with the *Standards and Guidelines for Survey and Manage, Certain Cavity-Nesting Birds, Canada Lynx and Some Bat Roosts* (USFS 2001), which was developed under the Northwest Forest Plan (NWFP) Survey and Manage Program to protect sensitive species in Washington, Oregon, and northern California. Like the 150-foot buffer established by the USFWS, the 250-foot buffer is a conservative standard designed to ensure bat protection under a variety of development scenarios. The ultimate intent of the 250-foot buffer is to protect sites from vandalism, disturbance from road construction or blasting, and any activity that could change cave temperatures or drainage patterns, thus interfering with bat activity. The NWFP Guidelines state that "the size of the buffer, and types of activities allowed within the buffer, may be modified through the management direction developed for the specific site." (USFS 2001). The forests that are targeted for timber harvest in the northwest support tall, dense tree growth, which could result in a dramatic temperature shift when removed. The height of the trees also creates more disturbance from tree fall when they are cut. By contrast, the project site supports lower-growing, more open vegetation, reducing the potential for temperature shifts from clearing or damage from falling trees. The project site is also located in an urbanized area, such that the potential for human access and vandalism would not change dramatically with park construction. Therefore, park construction on-site requires a smaller buffer than the 250-foot buffer recommended for timber harvest.

At a city park in Santa Clara County, an acoustic monitoring study of a maternity colony of big brown bats found that there was no difference in their egress and ingress patterns on the nights after chainsaws and earthmovers were operated (H. T. Harvey & Associates 2006). The equipment was used approximately 100 feet from the roost, which was the limit of the buffer zone around the construction area, and the bat colony did not abandon their roost. The noise levels recorded during the operation of the chainsaws and earthmovers were 80 decibels (dB) and 87 dB, respectively. Bats' hearing is not as

sensitive at lower frequencies compared to human hearing, so the sound frequencies that disturb humans do not necessarily have a corresponding effect on most bat species, and vice versa. Humans may not be able to hear frequencies detected by bats. This study indicates that a buffer of 100 feet was sufficient to protect an active maternity roost for a common bat species that occurs on-site.

The California Department of Transportation (Caltrans) recommends a survey area that includes the entire project site plus a 100-foot-wide buffer for potential bat roosting habitat (H. T. Harvey & Associates 2019). Within the Caltrans report, Johnston et al. (2004) recommends a generalized buffer distance of 100 feet between work activities and active roosts. Caltrans also recommends different buffers for day and night roosts depending on the activity that will occur. For pallid bats, the following buffers are recommended by Caltrans between the active roost and the activity: construction trucks and heavy equipment, 120 feet; small vehicles, 90 feet; drilling, trenching, and small equipment, 150 feet; light source without shielding, 400 feet; pedestrian traffic, 65 feet; and stationary diesel/gasoline exhaust sources greater than 2 minutes, 250 feet. The project will comply with these buffers.

As described above, there is no agreed-upon buffer for bat maternity sites, and guidance from federal agencies acknowledges that management requirements are site-specific. The two studies discussed above (O'Keefe 2009 and H. T. Harvey & Associates 2006) indicate that buffers of 39 to 100 feet can be successful for bat roost protection. Although there are varying recommendations for buffer size around bat maternity colonies, the County has suggested a survey buffer of 200 feet, which is documented to have provided successful protection of bat maternity roosts of many bat species during a variety of projects, as described above. The County has updated mitigation measure MM-BIO-8 (below) to clarify that the pre-construction survey will cover the entire project impact area plus a 200-foot buffer if construction must occur during the maternity season. A buffer of at least 200 feet around the roost (greater for the activities in the Caltrans guidance above) will be established if any active maternity roosts are found, and it will be established according to the Bat Roost Management, Monitoring, and Mitigation Plan, as directed by an experienced bat biologist. The mitigation measure also includes monitoring to confirm the adequacy of the avoidance buffer and increasing the buffer if needed.

As shown below, mitigation measure MM-BIO-8 has been revised herein to clarify that if any maternal roost sites within the project site and a 200-foot buffer are identified, an appropriate avoidance buffer shall be established around that roost site in accordance with the requirements established in the Bat Roost Management, Monitoring, and Mitigation Plan. This language provides a buffer that a bat expert deems necessary to protect the well-being of a roosting bat during the maternity season, depending upon what work activities are proposed to occur within the buffer. For example, if the bat expert retained to complete the survey recommends a 500-foot buffer, the mitigation measure would require it to be implemented.

Mitigation

The following mitigation measures will be undertaken to protect the pallid bat. MM-BIO-7, MM-BIO-9, and APM-BIO-1 were presented in the 2023 version of Section 4.4 of the EIR as shown below. Consistent with the approach of the 2026 Recirculated Draft EIR (RDEIR), revisions to MM-BIO-8 that were made for the 2026 RDEIR are shown in double ~~strike-out~~/underline for the ease of reader review. Single ~~strike-out~~/underline indicates changes that were made to the mitigation measures between the 2022 RDEIR and the 2023 FEIR and are not new revisions made for the 2026 RDEIR.

MM-BIO-7: Support Pallid Bat. ~~The~~ County DPR shall work with a bat expert to design and install bat boxes that attract pallid bat prior to vegetation removal activities commencing on the site. These bat boxes should be designed to accommodate both solitary individuals and maternal roost sites. Bat box design should reflect the best practices at the time of installation and be specific to larger-sized bats like pallid bat with respect to roost chamber sizes, etc. Design and placement of bat boxes should also consider how to best maintain proper roost temperature. When possible, the bat boxes should be placed along the edges of the wooded areas on the site. Final design, numbers, and placement of bat boxes will be determined by the bat expert in consultation with County DPR using the best practices known at the time.

Monitoring of the bat boxes shall be conducted quarterly for the first 2 years and twice-yearly during years 3 through 5 after installation. Any problems that are noted (e.g., mortality, predation) shall be addressed in consultation with the bat expert. Occupancy status, including species, numbers, etc., shall be documented to the extent possible without disturbing the occupants. If, after the first 2 years, a bat box remains unoccupied by any bat species, ~~the~~ County DPR and bat expert will discuss if the bat box needs to be repositioned on the site or redesigned. An annual report shall be prepared by the bat expert or designee to document the findings of the monitoring visits. The County will provide copies of this annual report to the CDFW and also include updates on the bat box monitoring on the site in the County's annual report for the MSCP.

MM-BIO-8: Bat Roost Avoidance. Because of the difficulty in detecting all potentially occurring roosting bats (e.g., the western red bat within the Engelmann oaks, pallid bats within rock crevices), no construction activities that could disturb a maternal roost site will occur during the pupping season (typically April 1 through August 31). This measure specifically precludes high-frequency surveying as well as intensive noise-generating activities (e.g., jack-hammering, etc.) anywhere on the project construction footprint as well as a 200-foot buffer around the project construction footprint~~within 200 feet of any Engelmann oaks or rock outcrops~~ during the pupping season.

If construction activities must occur ~~within this 200-foot avoidance buffer~~ during the pupping season, the County will conduct definitive bat roost surveys to determine the presence or absence of maternal day-roost and/or night-roost locations~~within the 200-foot avoidance buffer that overlaps the construction footprint~~. These surveys will be conducted throughout the entirety of the project construction footprint as well as a 200-foot buffer around the project construction footprint. The bat biologist(s) who conduct these surveys shall have the appropriate education, training, and experience. The bat roost survey methodology will be described in a Bat Roost Management, Monitoring, and Mitigation Plan, which will be prepared at least 30 days prior to the start of construction and provided to CDFW.

Bat roost survey methods may include mist netting and tracking individual bats using telemetry and/or additional acoustic surveys that are timed to determine if individual Engelmann oaks or rock outcrops on or within 200 feet~~the 200-foot~~ of the project construction footprint~~avoidance buffer are~~ support~~ing~~ bat roost sites. Surveys will be conducted for at least one hour after sunset to monitor for emergence. If any maternal roost sites~~within the 200-foot avoidance buffer~~ are identified, an appropriate avoidance buffer of at least 200 feet shall be established around that roost site in accordance with the requirements established in the Bat Roost Management, Monitoring, and Mitigation Plan. Avoidance

buffer distances will account for the ability of that individual bat species to tolerate specific types of low- and high- frequency construction noise and other human disturbance associated with the project. No construction activities that could disrupt the roost site will be permitted within the established avoidance buffer. Additionally, any roost occurring on site will have at least a 400-foot buffer from light sources without shields and at least a 250-foot buffer from any stationary exhaust source present for more than two minutes.

Bat biologists will monitor construction activities occurring adjacent to the avoidance areas for the bat roost sites in accordance with the Bat Roost Management, Monitoring, and Mitigation Plan. Monitoring frequency and duration also will conform to the Bat Roost Management, Monitoring, and Mitigation Plan and be used to determine that the established bat roost avoidance buffers are large enough to prevent maternal roost site impacts, including, but not limited to, roost site abandonment. Avoidance buffers will be expanded if any stress or disturbance to the maternal roost site is observed during monitoring. In years 1, 3, and 5 following construction completion, the County will conduct bat surveys, including maternal bat roost surveys, within the areas originally surveyed prior to construction.

If the maternal bat roost sites previously observed prior to and during construction are still observed during these monitoring surveys, no additional mitigation will be required. If any maternal roost sites observed prior to or during construction are no longer present (i.e., are not observed in any of the three post-construction surveys), the County will mitigate for the loss of the maternal roost site at a 2:1 ratio using methods agreed upon in the Bat Roost Management, Monitoring, and Mitigation Plan. This may include planting additional Engelmann oaks within the proposed ~~preserve~~open space if the affected maternal roost site utilized Engelmann oak trees or by building artificial bat roosts specifically for the affected bat species.

MM-BIO-9: Provide Compensatory Habitat-Based Mitigation. To mitigate for potentially significant impacts on Tier I, Tier II, and Tier III habitats, the County will provide compensatory mitigation consistent with its BMO ~~to reduce significant impacts on sensitive vegetation communities. Mitigation will be provided within open space preserve and/or within offsite location(s), as summarized below~~mitigation ratios. Mitigation will be provided commensurate with the acres of impacts incurred during each phase of construction and will be provided through the following: 1) on-site preservation within the open space, 2) on-site restoration of non-native grassland (Tier III) to native grassland (Tier I) and 3) off-site restoration of non-native (Tier III) to native grassland (Tier I) within Wright's Field, anticipated only as a result of Phase 2 implementation and 4) off-site mitigation for non-native grasslands, anticipated only as a result of Phase 2 implementation.

Table 4.4-5~~.~~ summarizes the maximum mitigation requirements if both Phase 1 and Phase 2 are implemented.

Table 4.4-5. Maximum Mitigation Requirements

Tier[a]	Total Impacts	Mitigation Ratio	Maximum Mitigation Requirement	On-site Mitigation[b]	Off-site Mitigation (Phase 2 Only)
Tier I	14.86	2:1	29.73	17.48 acres of preservation plus 4.84 acres of restoration (see **MM-BIO-10**)	7.41 acres of restoration on Wright's Field Preserve (see **MM-BIO-10**)
Tier II	3.97	1.5:1	5.95	5.95	None
Tier III	3.57	1:1	3.57	None	3.57[b]

a. Tiers correspond to those described in the County's BMO.
b. Habitat-based mitigation for permanent direct impacts on non-native grassland during Phase 2 implementation will be satisfied through purchase of credits and/or land acquisition of a similar high-quality non-native grassland in an off-site location.

APM-BIO-1: Establishment of the Open Space Preserve: As required under the County's MSCP Subarea Plan, Alpine Park Preserve will be managed in perpetuity in accordance with an RMP. This plan will outline management activities to be carried out by the County. The activities that are likely to be included in the RMP would enhance and preserve the affected sensitive natural communities. These activities include long-term monitoring of on-site preservation areas, non-native and invasive species vegetation management, and habitat restoration in the ~~preserve~~open space, as applicable. Through these strategic measures to mitigate for impacts, the preserved sensitive natural communities will be managed to maintain high-quality and functioning habitat and ~~the~~ County DPR will demonstrate its long-term commitment to species conservation within the open space~~/preserve~~.

ATTACHMENTS

A. Biological Opinion 2022-0004852-S7-F-SD

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Attachment A

Biological Opinion
2022-0004852-S7-F-SD

United States Department of the Interior
U.S. FISH AND WILDLIFE SERVICE
Ecological Services
Carlsbad Fish and Wildlife Office
2177 Salk Avenue, Suite 250
Carlsbad, California 92008

In Reply Refer To:
2022-0004852-S7-F-SD

August 11, 2025
Sent Electronically

Memorandum

To: Field Supervisor, Carlsbad Fish and Wildlife Office
Carlsbad, California

From: Division Supervisor, Carlsbad Fish and Wildlife Office
Carlsbad, California

Subject: Intra-Service Formal Section 7 Consultation and Conference on the Issuance of a Section 10(a)(1)(B) Permit for the Incidental Take of Quino Checkerspot Butterfly and Western Spadefoot in Conjunction with the Alpine Park Project, San Diego County, California

This document provides the U.S. Fish and Wildlife Service's (Service) biological opinion in accordance with section 7 of the Endangered Species Act of 1973 (Act), as amended (16 U.S.C. 1531 *et seq.*), based on our review of the County of San Diego's (County or Applicant) July 2024, *Habitat Conservation Plan for the Alpine Park Project, San Diego County, California* (HCP). The HCP was prepared by the County in support of an application to the Service for a section 10(a)(1)(B) permit for the incidental take of the federally endangered Quino checkerspot butterfly (*Euphydryas editha quino*; Quino) and the federally proposed threatened western spadefoot (*Spea hammondii*; spadefoot). The biological opinion addresses the effects of the HCP on these species and critical habitat for the Hermes copper butterfly (*Lycaena hermes*; Hermes).

This biological opinion is based on information provided in the HCP; Quino, spadefoot, and Hermes listing documents; survey reports for Quino, spadefoot, and Hermes; the *Draft Environmental Impact Report for the Alpine County Park Project* dated September 2021; *Habitat Restoration and Enhancement Plan for the Alpine Park Project* dated July 2024; telephone conversations, in-person meetings, and email messages with the Applicant; and other sources of information available in our files. The complete project file addressing this consultation is maintained at the Service's Carlsbad Fish and Wildlife Office (CFWO).

CONSULTATION HISTORY

July 11, 2019: County presented project and discussed potential biological constraints at monthly meeting with the Service.

September 24, 2019: Site visit conducted with Back Country Land Trust, the County, the California Department of Fish and Wildlife (Department), and the Service.

October 10, 2019: The Service and the County discussed the site visit and the relevance of the site to Quino recovery.

February 13, 2020: At monthly meeting with the Service, the County presented data regarding presence of Quino and Hermes and determined that Quino should be addressed in an HCP, but that Hermes could be avoided.

May 14, 2020: At monthly meeting, the Service and County discussed covered activities and impact estimates.

August 20, 2020: The County provided the Service with the initial draft HCP.

November 30, 2021: The County published the Draft Environmental Impact Report under the California Environmental Quality Act.

May 13, 2022: The County provided the Service with a revised draft HCP.

May 27, 2022: The Service provided comments on draft HCP, including a recommendation to cover spadefoot.

November 23, 2022: The County provided the Service with an updated draft HCP.

December 8, 2022: The County and Service discussed spadefoot impacts and mitigation at the monthly meeting.

December 21, 2022: The Service provided comments on the November 23, 2022, draft HCP.

January 12, 2023: The Service and County discussed spadefoot incidental take limits at the monthly meeting.

March 9, 2023: The County submitted to the Service their approach to estimate incidental take of Quino.

March 20, 2023: The County provided a draft Habitat Restoration and Enhancement Plan to the Service describing mitigation for Quino and spadefoot.

August 21, 2023: The County presented to the Service a conceptual proposal for spadefoot mitigation.

November 22, 2023: The County announced publication of the Final Environmental Impact Report for the proposed project under the California Environmental Quality Act (CEQA).

February 29, 2024: The County provided the Service with an updated draft HCP.

March 25, 2024: The Service provided comments on the latest draft HCP to the County.

May 1, 2024: The Service provided comments on the draft HREP to the County.

June 12, 2024: The County provided an updated draft HCP and HREP to the Service.

July 31, 2024: The County provided the Service with the draft HCP used for the Federal Register notice.

January 21, 2025: A Notice of Availability (NOA) for the proposed HCP and Environmental Assessment pursuant to the National Environmental Policy Act was published in the Federal Register.

February 20, 2025: The comment period for the NOA closed. We received 23 comments from the public.

BIOLOGICAL OPINION

DESCRIPTION OF THE PROPOSED ACTION

The proposed Federal action is the issuance to the County of an incidental take permit (permit) under section 10(a)(1)(B) of the Act for a period of 25 years. The permit will authorize the incidental take of Quino and spadefoot during construction and operation of an active recreation park (Park) and incidental take associated with habitat restoration and management.

The property is adjacent to the Back Country Land Trust's Wright's Field Preserve (Wright's Field), located to the north of South Grade Road and east of Tavern Road in the unincorporated community of Alpine, San Diego County, California. The County proposes to establish the 25-acre Park with turf areas, a baseball field, an all-wheel area, a bicycle skills area, recreation courts, fitness stations, a leash-free dog area, restroom facilities, an administrative facility, an equestrian staging area, a nature play area, a community garden, a volunteer pad, picnic areas, a game table plaza, and trails. Infrastructure supporting the Park will include parking for 240 vehicles, a septic system, and stormwater retention basins. Park construction will be done in two phases. Phase 1 (8.7 acres) will include utilities and construction of the northern facilities while the remainder of the site will be constructed in Phase 2 (14.4 acres).

As mitigation for the proposed impacts, the County will establish the 67.5-acre Alpine Park Preserve (Preserve). Phase 1 of the project will include long-term protection of the Preserve, initiation of Preserve management, habitat restoration and enhancement, and fire prevention measures. Habitat restoration and enhancement will focus on Quino and spadefoot habitat and restoration and enhancement of native grasslands.

The following activities have potential to impact covered species and are addressed in the permit: vegetation clearing for the Park; indirect construction impacts such as noise and dust; operations and maintenance; trail access and road maintenance; future trail realignment; trail closures; Preserve management, restoration, and enhancement; and fire prevention.

Conservation Measures

The County will implement the following conservation measures (CM) as described in the HCP to avoid, minimize, and mitigate adverse effects to Quino and spadefoot:

CM 1. Quino Avoidance Measures

The County will minimize ground-disturbing activities during the Quino flight season, defined as February 15 to May 15. If the flight season cannot be avoided, biologists familiar with Quino will be on site during construction activities and will halt activities if a Quino adult is observed. If 5 or fewer Quino larvae are observed, they will be moved to suitable habitat nearby, and if more than 5 larvae are observed, the Service will be notified and consulted for relocation of larvae.

CM 2. Quino Habitat Conservation and Enhancement

The proposed Preserve includes 57.8 acres of occupied Quino habitat with approximately 32,542 host plants. Habitat enhancement will add Quino larval habitat to the Preserve with the goal of replacing impacts to Quino host plants at a minimum of a 1:1 ratio. A total of 3 acres of habitat will be enhanced to augment the Preserve with at least 17,695 host plants. For context, the adjacent Wright's Field MSCP Preserve has approximately 1,117,046 host plants. The details of the habitat enhancement plan are within the Habitat Restoration and Enhancement Plan (HREP) referenced in the HCP.

The County will include invasive plant control and other Quino-specific habitat management measures in the long-term management of the Preserve. In addition, Quino monitoring will be implemented within the Preserve consistent with the HCP or future regional monitoring plans.

CM 3. Spadefoot Avoidance Measures

To minimize impacts to spadefoot within the recreation park, spadefoot exclusionary fencing will be installed around the Park. Prior to construction, at least three spadefoot surveys will be conducted within the exclusionary fence, and all spadefoot observed will be relocated outside of the fencing. Surveys will continue until no spadefoot are observed. Exclusionary fencing will remain in place surrounding the Park following construction to prevent spadefoot from entering the area and subjecting themselves to impacts. During ongoing management of the Preserve, spadefoot will be surveyed prior to trail and road maintenance when water is ponding. Work will be halted if adults, eggs, tadpoles, or juveniles are observed within proposed impact areas.

CM 4. Spadefoot Habitat Conservation and Creation

The County will create three permanent basins encompassing at least 471 square feet to support spadefoot breeding. The basins will be within dispersal distance (860 feet) to existing breeding sites within Wright's Field, and they will be sited as far away from access roads as possible to minimize road mortality. These basins will avoid Quino habitat enhancement areas. Details of the breeding habitat creation project are in the HREP. Long-term management of the Preserve will include spadefoot-specific measures, including maintenance of breeding pools and monitoring.

CM 5. General Minimization Measures During Construction

a. Employees and contractors will strictly limit their activities, vehicles, equipment, and construction materials to the Park.

b. No pets will be allowed in the Park during construction activities.

c. The Project will include watering, pursuant to a Stormwater Pollution Prevention Plan to minimize dust generation throughout the project construction.

d. All equipment maintenance, staging, and dispensing of fuel, oil, or coolant will occur within the Park site.

e. Contractor equipment will be checked for leaks prior to operation and repaired as necessary.

f. No night lighting will occur within or adjacent to the construction area at any time during construction.

g. Signage will be installed to prevent unauthorized access to the Preserve.

CM 6. Habitat-Based Mitigation

The County will restore 12.25 acres of exotic annual grassland to native perennial grassland, including 4.84 acres in the Preserve and 7.41 acres in Wright's Field. Quino were observed in native grassland habitat within both the proposed Preserve site and Wright's Field, and we expect this grassland restoration will benefit Quino. Native grassland restoration details are in the HREP.

Action Area

Regulations implementing the Act (50 CFR § 402.02) describe the action area as all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action. For purposes of this consultation, we define the action area as the 67.5-acre

proposed Preserve area, the 25-acre Park, and the 7.41 acres within Wright's Field that will be subject to native grassland restoration as shown in Figure 3 of the HCP. Subsequent analyses of the environmental baseline, effects of the action, and levels of incidental take are based upon the action area as determined by the Service.

ANALYTICAL FRAMEWORK FOR THE SECTION 7(A)(2) DETERMINATIONS

Jeopardy Determination

Section 7(a)(2) of the Act requires that Federal agencies ensure that any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of listed species. "Jeopardize the continued existence of" means to engage in an action that reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution of that species (50 CFR § 402.02).

The jeopardy analysis in this biological opinion relies on four components: (1) the Status of the Species, which describes the range-wide condition of the species, the factors responsible for that condition, and their survival and recovery needs; (2) the Environmental Baseline, which analyzes the condition of the species in the action area, the factors responsible for that condition, and the relationship of the action area to the survival and recovery of the species; (3) the Effects of the Action, which are all consequences to listed species caused by the proposed action that are reasonably certain to occur; and (4) the Cumulative Effects, which evaluate the effects of future, non-Federal activities in the action area on the species.

For the section 7(a)(2) determination regarding jeopardizing the continued existence of the species, the Service begins by evaluating the effects of the proposed Federal action and the cumulative effects. The Service then examines those effects against the current status of the species to determine if implementation of the proposed action is likely to reduce appreciably the likelihood of both the survival and recovery of the species in the wild.

Adverse Modification Determination

Section 7(a)(2) of the Act requires that Federal agencies ensure that any action they authorize, fund, or carry out is not likely to destroy or to adversely modify designated critical habitat. "Destruction or adverse modification" of critical habitat means a direct or indirect alteration that appreciably diminishes the value of critical habitat as a whole for the conservation of a listed species (50 CFR § 402.02).

In accordance with policy and regulation, the adverse modification analysis in this biological opinion relies on four components: (1) the status of critical habitat, which describes the condition of all designated critical habitat in terms of its physical and biological features, the factors responsible for that condition, and the intended recovery function of the critical habitat overall; (2) the environmental baseline, which analyzes the condition of the designated critical habitat in the action area, the factors responsible for that condition, and the recovery role of the critical habitat in the action area; (3) the effects of the action, which analyze all consequences to critical

habitat caused by the proposed action that are reasonably certain to occur and their influence on the recovery role of the affected designated critical habitat units; and (4) cumulative effects, which evaluate the effects of future non-Federal activities in the action area on the physical and biological features of critical habitat and how that will influence the recovery role of affected critical habitat units.

For purposes of the adverse modification determination, the effects of the proposed Federal action on the designated critical habitat are evaluated in the context of the condition of all designated critical habitat, taking into account any cumulative effects, to determine if the consequences of the proposed action are likely to appreciably reduce the value of critical habitat as a whole for the conservation of the species.

STATUS OF THE SPECIES AND CRITICAL HABITAT

Quino Checkerspot Butterfly

The status of Quino is described in detail in the 5-year reviews for the species (Service 2009a; 2023a). More detailed information on Quino life history, threats, and conservation needs are described in the Recovery Plan for the Quino Checkerspot Butterfly (*Euphydryas editha quino*) (Service 2003) and the Amendment to the Quino Checkerspot Butterfly Recovery Plan (Service 2019). Please refer to these documents for detailed information on Quino's life history, threats, and conservation needs.

Summary of Species' Distribution and Numbers Rangewide

Quino are found in open areas and ecotones within a variety of plant communities, including grasslands, chaparral, and coastal sage scrub from western Riverside County south into Baja California, with highest remaining concentrations in southwestern Riverside County and southern San Diego County. Habitat patch suitability is determined primarily by larval host plant density, topographic diversity, nectar resource availability, and climatic conditions (Service 2003). Quino was listed as endangered in 1997 (Service 1997), and critical habitat was designated in 2002 (Service 2002) and revised in 2009 (Service 2009b). The action area is not within designated Quino critical habitat.

Status of Quino in the Vicinity of the Action Area

Although the action area is not within a Quino recovery unit, the site is located within the Alpine Occurrence Complex, which falls within the possible future Central San Diego Recovery Unit described in the recovery plan (Service 2003). Possible future recovery units are identified in the recovery plan as potentially important areas for recovery pending information unavailable at the time the plan was written. Wright's Field and the action area have most of the known Quino habitat in the Alpine Occurrence Complex and based on a 2020 habitat assessment (ICF 2020), there are 172.8 acres of Quino habitat on Wright's Field abutting the 84.4 acres of Quino habitat in the proposed Park and Preserve. As an assessment of larval habitat quality, the County mapped Quino host plants in both the action area and Wright's Field and counted 1.1 million host plants in Wright's Field and over 50,000 host plants within the proposed Park and Preserve.

The closest Quino recovery unit to the action area is the Southwest San Diego Recovery Unit, and the closest offsite core occurrence complexes are the Otay Core Occurrence Complex and West Barrett Lake Core Occurrence Complex, located approximately 10 miles to the south and southeast, respectively (Service 2003, 2009a). The closest non-core occurrence complexes are Willits Road, Sycuan Peak, and Dehesa, which are located between 2 to 5 miles to the southwest of the Alpine Park Occurrence Complex. Areas to the north of the action area, east of El Capitan Reservoir, are consistently modeled as high-quality Quino habitat, but no focused surveys have been conducted to assess occupancy in this area. Quino occupancy in this area is likely but uncertain.

Landscape connectivity among core occurrence complexes is recognized as key to the long-term persistence of the Quino within the region (Service 2003). Because connectivity among core occurrence complexes in the northern and eastern portion of the Southwest San Diego Recovery Unit and the future Central San Diego County Recovery Unit is constrained by intervening mountains, development, and agriculture (Service 2003), maintenance and long-term management of even isolated Quino occurrence complexes are important to support dispersal and connectivity among populations.

Western Spadefoot

The status of spadefoot is described in detail in the Species Status Assessment Report for Western Spadefoot (*Spea hammondii*) Version 1.1 (Service 2023b). The Service proposed to list the northern and southern distinct population segments (DPS) as threatened in 2023 (Service 2023c). No critical habitat was proposed in the listing rule. Please refer to these documents for detailed information on the spadefoot's listing status, life history, threats, and conservation needs.

Summary of Species' Distribution and Numbers Rangewide

Spadefoot are found in grasslands, scrub, or mixed woodland and grassland areas where aquatic breeding habitat is available (Stebbins and McGinnis 2012). Spadefoot eggs and larvae inhabit a variety of permanent and temporary wetlands, both natural and altered, including rivers, creeks, artificial ponds, livestock ponds, sedimentation and flood control ponds, irrigation and roadside ditches, roadside puddles, tire ruts, and borrow pits (Service 2023b). Throughout most of the year, spadefoots aestivate in underground burrows in upland areas surrounding their aquatic (breeding) habitat. Baumberger *et al*. (2019) determined that most aestivation burrows are within 860 feet of breeding ponds. The southern DPS includes areas in southern California from Santa Barbara County south through Ensenada, Baja California. The southern DPS extends east to San Bernardino, Riverside counties in California and to Tecate in Baja California (Service 2023c).

Status of the Species in the Vicinity of the Action Area

In San Diego County, spadefoots occur from the Mexican border north to Camp Pendleton along the coast and east to the mountainous areas of eastern San Diego County at approximately 4,500 feet in elevation. Known locations are fragmented by urban development with limited viable connectivity. The proposed Park and Preserve site and adjacent Wright's Field likely represent the only location of this species in the Alpine area or within common dispersal distance. Most other sites in the vicinity lack the flat topography, soils, and ponding water

needed to support the species. Other spadefoot occurrences in the vicinity include one approximately 5 miles to the northwest, near the El Capitan Reservoir Dam in the Cleveland National Forest, one approximately 7 miles to the southeast, in Horsethief Canyon in the Cleveland National Forest, and one approximately 13 miles to the southwest, near Singing Hills Golf Course (SDMMP 2022).

Hermes Copper Critical Habitat

The Service listed Hermes as threatened and designated critical habitat in December 2021 (Service 2021). The current Hermes distribution is restricted to San Diego County and northern Baja California. The range of Hermes is greatly reduced since 2003, and the species is now only known to occur on the southeastern margin of its historic range (Marschalek *et al*. 2024). The latest estimates show 26 Hermes occurrences categorized as known or presumed extant, 56 presumed extirpated, and 16 as permanently extirpated (Service 2022).

Hermes occurs in coastal sage scrub and southern mixed chaparral where its larval host plant, spiny redberry (*Rhamnus crocea*), is available. Presence of spiny redberry and California buckwheat (*Eriogonum fasciculatum*), the most common nectar plant, is the strongest predictor of the presence of Hermes. Hermes are found as adults from mid-May to mid-July with a flight season of approximately 30 days. Wildfire, drought, habitat loss, and habitat fragmentation from urbanization are the primary threats to Hermes. Wildfires in 2003 and 2007 led to the extirpation of many populations throughout the County (Service 2021).

The physical or biological features identified as essential for Hermes critical habitat are the presence of spiny redberry and nectar sources. The Park and Preserve sites are within a core area for Hermes due to historical Hermes sightings in the northwestern portion of Wright's Field and on a private parcel directly west of Wright's Field. No Hermes have been documented from the area since June 2011, when six sightings were reported by Deutschman *et al*. (2011).

The proposed Park and Preserve, Wright's Field, and adjacent habitat to the north, west, and south are within Unit 3 of designated Hermes critical habitat. Hermes critical habitat Unit 3 (Southeast San Diego) is 27,525 acres. These parcels make up one of 24 subunits within Unit 3, and the total area of the subunit is roughly 350 acres.

ENVIRONMENTAL BASELINE

The regulations implementing the Act (50 CFR § 402.02) define the environmental baseline as the condition of the listed species or its designated critical habitat in the action area, without the consequences to the listed species or designated critical habitat caused by the proposed action. The environmental baseline includes the past and present impacts of all Federal, State, or private actions and other human activities in the action area, the anticipated impacts of all proposed Federal projects in the action area that have already undergone formal or early section 7 consultation, and the impact of State or private actions which are contemporaneous with the consultation in process. The consequences to listed species or designated critical habitat from ongoing agency activities or existing agency facilities that are not within the agency's discretion to modify are part of the environmental baseline (50 CFR § 402.02).

Status of the Species in the Action Area

Quino Checkerspot Butterfly

Quino were observed in the action area during focused surveys in 2019 and 2020 as well as incidentally in 2010 (Klein 2010, pers. obs.; ICF 2019a, 2020). Quino were observed along the southern boundary of the proposed Preserve and within the Park site. Quino were also observed in a central location within Wright's Field during the 2020 focused surveys. Based on these observations, we estimate there are 84.4 acres of Quino-occupied habitat within the action area. Quino host plants were mapped within the action area and the remainder of Wright's Field in 2020, and 95 percent of the individual host plants (84,944 of 104,863) were found Wright's Field (Figure 5 in the HCP). Within the project site, 32,542 host plants were found in the proposed Preserve, and 17,695 were found in the proposed Park.

Western Spadefoot

A spadefoot egg mass was observed in basin AP-7 during focused fairy shrimp surveys within the proposed Park area in 2019 (ICF 2019b). Basin AP-7 and all other basins within the Park and Preserve sites were determined to be unsuitable for spadefoot development because they do not hold water long enough. Focused spadefoot surveys were conducted within 48 ponded areas, including 35 in the action area and 13 in Wright's Field, and no spadefoot were observed (ICF 2022). Most of the ponded areas in the action area are associated with the trail along the northern boundary of the proposed Park. The County's biologists determined that the primary spadefoot breeding area in the vicinity is located centrally within Wright's Field (Figure 7 in the HCP). We expect that spadefoot aestivation and foraging is concentrated within 860 feet of the breeding pools in Wright's Field, defined as the spadefoot use area in Figure 7 of the HCP. The entire Park and Preserve sites are suitable for spadefoot foraging and aestivating.

Status of Critical Habitat of the Species in the Action Area

Eighty-nine acres in the Park and Preserve are within designated Hermes critical habitat, and we estimate that 6 acres in the Park and 50.7 acres in the Preserve contain physical and biological features of critical habitat. We include all coastal sage scrub and chapparal vegetation in this estimate, both disturbed and intact. The remaining land within the action area is dominated by grassland or oak woodland habitat. Spiny redberry is found scattered throughout the northern portion of the proposed Preserve, and no spiny redberry is found within the proposed Park. Hermes have not been observed within or near the action area since 2011 despite focused surveys within the Park and Preserve in 2019 and in the both the action area and the remainder of Wright's Field in 2020. All recorded Hermes observations in the project vicinity have been within the western portion of Wright's Field or the adjacent property to the west, all a minimum of 2,000 feet from the proposed Park.

EFFECTS OF THE ACTION

Regulations implementing the Act (50 CFR § 402.02) define the effects of the action as all consequences to listed species or critical habitat that are caused by the proposed action, including

the consequences of other activities that are caused by the proposed action. A consequence is caused by the proposed action if it would not occur but for the proposed action and it is reasonably certain to occur. Effects of the action may occur later in time and may include consequences occurring outside the immediate area involved in the action (50 CFR § 402.02).

Quino Checkerspot Butterfly

Effects from Park Construction

We worked with the County biologists to develop the concept of a Quino adult equivalent to assess population-level impacts from loss of individual Quino. Immature Quino life history stages (eggs, larvae, and pupae) have low survivorship, meaning that the loss of an egg, larva, or pupa has less impact to the Quino population than loss of an adult female. Murphy *et al*. (1983) estimated that total egg production for bay checkerspot butterfly (*Euphydryas editha editha*), a species to closely related to Quino, was 400–800 eggs per season, and we use the upper limit of that estimate for our Quino formula. We estimate take as adult equivalents whereby females lay up to 800 eggs with 25 percent hatch rate to larvae, and 1 percent rate of survival from larva to adult. This approach assumes a 50:50 sex ratio and population stasis such that one adult female produces 1 male and 1 female (800 eggs × 0.25 × 0.01 = 2). By this logic, 100 larvae are functionally equal to 1 Quino adult equivalent.

Construction of the recreation park will impact 22.4 acres of occupied Quino habitat, including two locations where Quino adults were observed in surveys. Because plant abundance likely tracks Quino abundance in occupied habitat, we can estimate impacts based on loss of host plants. A total of 17,695 host plants were recorded within the 22.4 acres that will be impacted by construction of the recreation park. Assuming the 2 adult Quino observed in the Park site were female, the adult equivalent formula works out to four Quino adult equivalents harmed, killed, or injured with removal of habitat within the Park site (each adult female is expected to produce one male and one female). The impacts could be to any life history stage, using the conversion formula above to calculate the estimated impacts to individuals. Because of the difficulty observing and quantifying impacts to Quino, particularly in the early life history stages, the limits to impacts will be based on the amount of habitat impacted as opposed to number of individuals observed dead or injured.

The County intends to avoid the Quino flight season (February 15 to May 15) during project construction. In the unlikely event that construction must proceed during the flight season, Quino surveys will be conducted ahead of construction, and direct impacts to any adult Quino observed will be avoided. We expect that Quino adults will be able to escape direct impacts. If up to five Quino larvae are observed during construction, they will be relocated to suitable habitat within the Preserve by project biologists. If more than five Quino larvae are observed, construction will be halted, and the County will consult with the Service prior to relocating the larvae. Although CM 1 requires the County to notify and coordinate with the Service if five Quino larvae are observed during construction, additional larvae could be moved under the County's permit if the Service agrees that no additional avoidance and minimization measures are needed. As described above, the total limit for impacts to Quino is based on the amount of habitat impacted as opposed to the number of individuals captured or observed dead or injured.

Effects from Habitat Restoration and Enhancement

Direct impacts to Quino may occur in the Preserve and Wright's Field during habitat restoration and enhancement described in the HREP. The County estimates that approximately 15.3 acres will be impacted for habitat restoration and enhancement; however, we will assume that up to 17 acres in total will be impacted in order to provide flexibility for unforeseen circumstances during this process Impacts to adults will be minimized by avoiding the flight season to the extent practicable. During the initial phases of Quino habitat restoration, the Quino host plant density is expected to be too low to attract oviposition, and immature stages of Quino are unlikely to be present. With habitat restoration and enhancement, host plant density will increase over time, and Quino may begin laying eggs within the restoration and enhancement areas. At this stage, Quino habitat restoration and enhancement activities have potential to cause loss of Quino eggs, larvae, or pupae. Although it is difficult to estimate the specific number of Quino that will be impacted during habitat restoration and enhancement, as with the initial construction, we use our best professional judgement to estimate that these activities will result in the loss of up two adult equivalents based on the oviposition and survivorship rates defined above (i.e., 2 adults = 800 eggs = 200 larvae). Although the take could occur at any Quino life stage, larvae are the most likely life stage to be killed or injured because they are present most of the year and are unable to escape. As with the effects from Park construction, limits on impacts to Quino are based on the amount/location of proposed restoration and enhancement activities as opposed to number of individuals observed dead or injured.

Effects from Long-Term Management and Fuel Reduction

During long-term management, which will be described in a Resource Management Plan (RMP) for the Preserve, there may be additional loss of Quino individuals through trampling, weed control, or other management activities within the 67.5-acre Preserve. The RMP will include Quino avoidance and minimization measures, including avoidance of all areas with known Quino host plants, but some impacts may still occur. Similar to impacts from construction activities and habitat restoration and enhancement, we estimate up to two Quino adult equivalents will be impacted every 5 years from implementation of the RMP. Thus, we estimate that RMP implementation will impact a total of up to 10 Quino adult equivalents during the 25-year Permit Term, although the impacts will be limited based on the location/amount of habitat affected by proposed long-term management and fuel reduction activities.

Fuel reduction activities have potential to directly crush Quino eggs, larvae, and pupae and indirectly impact larvae by removing food resources (host plants). The County estimates that 3.1 acres will need to be mowed for fuel reduction, and we assume up to 3.5 acres will be impacted in case additional area will need to be mowed in practice. No host plants have been observed within proposed fuel reductions areas, but routine mowing and trimming may introduce Quino host plants because they are known to invade disturbed areas. There are nectar plants in these areas; however, these plants will be permanently removed as part of fire fuel-reduction activities, which will reduce habitat quality for Quino. Thus, some direct impacts would be anticipated either from mowing or crushing if eggs, larvae, or pupae are present. Because fuel reduction will affect a smaller area of lower quality habitat than the RMP, we anticipate that fewer Quino will be killed or injured by this

activity. Over the course of the 25-year permit term, we estimate that fuel reduction will affect up to two adult equivalents.

Effects from Non-Native Plant Species and Dust

Indirect effects to Quino could result from disturbance associated with construction and habitat manipulation by opening habitat for invasive plants that outcompete Quino host and nectar plants or reduce availability of basking sites. The County will avoid invasive species in their landscaping pallets and will focus on restoration, enhancement, and management of native vegetation throughout the Preserve. Based on these measures, we do not anticipate an increase in invasive plants as a result of the project. Dust from construction has potential to inhibit photosynthesis and reduce plant vigor as well as clog spiracles (breathing holes) of Quino directly. The County will water area with potential dust to minimize impacts away from the construction site. With these measures, it is unlikely that dust will have a measurable impact to Quino outside of the construction site, where direct impacts to Quino would be unavoidable. Overall, indirect effects are unlikely to result in incidental take of Quino beyond that described in the direct effects section.

Proposed Conservation

The objective of the Quino conservation strategy for this project is to maintain the ecological function of the population within Wright's Field and the action area. We assume that this population is small enough to be subject to extirpation and recolonization events through typical demographic fluctuations at a time scale of decades. This area is isolated to a degree from other populations but may serve as a steppingstone for rare but important dispersal events that support genetic and demographic connectivity. There are known populations to the southwest and likely population(s) to the north in unsurveyed areas that may be within dispersal distance.

To meet this objective, the County proposes to restore and enhance habitat within the Preserve to mitigate the loss of larval habitat within the Park. Specifically, the County will offset host plant impacts by replacing the number of individual host plants lost (17,695). The Preserve already has 56.2 acres of Quino habitat with 32,542 host plants. An equal or greater number of host plants will be added to the Preserve through habitat enhancement. In addition, 12.25 acres of grassland will be restored to promote native grasslands with native, perennial grasses and native forbs. We expect that native grassland restoration will increase nectar and basking site availability for Quino. Overall, we anticipate the carrying capacity (maximum sustainable population size) for Quino will be unchanged or increased as a result of the project, and the ecological function of the population for connectivity will be equal or better.

Effects on Recovery

As described above, the action area supports a Quino population that may periodically become extirpated and recolonized, and it may have a role in connectivity between the Southwest San Diego Recovery Unit and a future proposed recovery unit to the northwest. The possible future recovery units were identified as being potentially necessary for recovery depending on information unavailable at the time the recovery plan was written, and the importance of the possible future Central San Diego recovery unit remains uncertain. By maintaining or improving the current

ecological function for Quino in the action area, we expect that the project will have no effect or a potential positive effect on Quino recovery.

Western Spadefoot

Because breeding habitat will be removed during the dry season, there is effectively no chance immature spadefoots will be impacted directly. In the unlikely event that basins do fill during construction, ponded areas will be surveyed, and if spadefoot eggs or larvae are observed, occupied basins will be avoided until they have dried. Therefore, project construction will not directly impact spadefoot breeding within the action area.

Spadefoots can forage or aestivate in burrows within 23.1 acres of spadefoot habitat within the Park footprint. Three active spadefoots were observed during nocturnal surveys within the proposed Preserve, but none were observed in the proposed Park. While no spadefoots were observed during surveys, the presence of egg masses within the proposed Park demonstrates that they can be present in the Park site, at least part of the time. We expect that aestivating and foraging spadefoots are concentrated near suitable breeding habitat, which is primarily in a central area within Wright's Field. Given the distance to this breeding habitat, we expect low numbers of spadefoots within the Park site. Spadefoot fencing will be installed around the perimeter of the Park site, and spadefoots will be trapped and relocated to adjacent habitat prior to grading or vegetation clearing. Based on the 2022 surveys, we estimate arroyo toad density to be about 1 spadefoot per 5 acres. Thus, we anticipate no more than five spadefoot adults or juveniles to be present in the 23.1 acres of spadefoot habitat in the Park footprint. All of these individuals could be trapped and relocated, and any individuals that are not relocated will be injured or killed during Park construction. A fraction of those trapped (we estimate no more than one) may be injured or killed during trapping and relocation. Because any individuals remaining in the project footprint are likely to be buried and difficult to detect, we anticipate that only a fraction (no more than one) will be observed dead or injured during Park construction.

As described in the HCP, impacts to spadefoots during habitat restoration and trail maintenance were estimated within a 63.5-acre spadefoot use area identified using a radius of 860 feet around known breeding ponds. We assume a density of 1 spadefoot per 5 acres and estimate 4.33 acres of habitat restoration and 0.53 acre of habitat management (e.g. trail maintenance) every 5 years in the spadefoot use area. Using these assumptions, an estimated one spadefoot would be harmed during habitat restoration. Impacts from habitat restoration are only anticipated during initial project work when relatively large patches of vegetation will be impacted. Thus, we anticipate that no more than one spadefoot will be injured or killed during habitat restoration over the 25-year permit term. Given the small estimated impacts to habitat from management activities in any given year, we do not anticipate harm to more than one spadefoot over the 25-year permit. We anticipate no more than two individuals will be injured or killed over the permit term from habitat restoration and management and no more than one injured or killed individual will be observed.

Proposed Conservation

Because the spadefoot population within the action area and its surroundings is likely not within frequent dispersal distance of other populations, the goal of the spadefoot conservation is to maintain a self-sustaining population. We assume that breeding habitat is the limiting factor for spadefoot population, and the conservation proposal is to create additional breeding habitat while maintaining foraging and aestivation habitat within the proposed Preserve. As described in the HCP and in more detail within the HREP, the County will construct three basins in clay soil that total at least 471 square feet and will ensure that the basins are deep enough to hold water for the duration of typical spadefoot development in average precipitation years. This will result in a net increase of 471 square feet of spadefoot breeding habitat. These basins will be sited away from the Park and from any maintenance roads that may incur road mortality to the extent feasible.

We expect that the creation of spadefoot breeding habitat will result in a population increase and increase the likelihood that the population remains self-sustaining. Although project construction will eliminate 23.1 acres of habitat that spadefoot could use for foraging and aestivation, we do not anticipate that these habitat functions will limit the spadefoot population size given the remaining habitat within the Preserve and Wright's Field.

Hermes Copper Butterfly Critical Habitat

The fact that all Hermes observations have been on the western edge of Wright's Field, or the adjacent property suggests that the Hermes habitat quality within the critical habitat subunit is highest on the western side and declines to the east, where the Park is proposed. Park construction will impact 22.5 acres of designated Hermes critical habitat of which 6 acres have the physical and biological characteristics of critical habitat. There are no spiny redberry within the Park site, but 6 acres have California buckwheat, which is considered a physical or biological feature of Hermes critical habitat. Loss of 22.5 acres of Hermes critical habitat, including 6 acres with physical and biological features of critical habitat, represents a minor impact within the 454-acre critical habitat subunit and a smaller impact within the 27,525-acre Unit 3.

The Preserve has 50.7 acres with the physical and biological features of critical habitat including 68 spiny redberry individuals. The County will avoid impacts to any spiny redberry during project construction and through ongoing management of the Preserve. If Hermes are observed within the Preserve, the County will also avoid impacts to California buckwheat. These minimization measures will limit impacts to physical and biological features to the 6 acres lost within the Park. Despite the anticipated impacts to 6 acres of critical habitat with nectar resources, the remaining habitat, including habitat within the Preserve and Wright's Field, contain sufficient flower resources to be meet the nectar requirements of a Hermes population.

CUMULATIVE EFFECTS

Cumulative effects include the effects of future State, Tribal, local, or private actions that are reasonably certain to occur in the action area considered in this biological opinion. Future Federal actions that are unrelated to the proposed action are not considered in this section

because they require separate consultation pursuant to section 7 of the Act. We have not identified any State, Tribal, local, or private actions within the action area that should be considered in this biological opinion.

CONCLUSION

After reviewing the current status of the Quino checkerspot butterfly, western spadefoot and critical habitat for the Hermes copper butterfly; the environmental baseline for the action area; the effects of the action; and the cumulative effects, it is the Service's biological opinion that issuance of an incidental take permit for implementation of the HCP, as proposed, is not likely to jeopardize the continued existence of the Quino checkerspot butterfly or western spadefoot, and it is not likely to adversely modify Hermes copper butterfly critical habitat. We reached this conclusion by considering the following:

1. With the conservation measures proposed, no more than 22.4 acres of occupied Quino habitat will be lost, and no more than 18 Quino checkerspot butterfly adult equivalents will be killed as a direct result of project construction, Preserve management, fuel reduction, and habitat restoration and enhancement over the 25-year permit term. This amount of impact, when combined with the proposed conservation measures, is not anticipated to substantially impact the size or long-term persistence of the Quino population in the action area.

2. Protection and management of Quino habitat within the Preserve combined with enhancement of larval habitat and native grassland restoration will fully offset impacts from construction of the recreational park such that the population size and long-term persistence are likely to be similar to or greater when compared to a no project alternative.

3. The potential recovery function of the Quino population within and surrounding the action area will continue because the likelihood of a population persisting on the site to augment population connectivity will be improved or unchanged.

4. With the conservation measures proposed, including trapping and relocation within the Park site, no more than 23.1 acres of occupied spadefoot habitat and seven spadefoots will be injured or killed as a result of project construction, Preserve management, and habitat restoration. This number will not have a meaningful effect to the population given the comparatively high density of spadefoots in adjacent, protected habitat.

5. Protection and management of spadefoot habitat within the Preserve combined with restoration of breeding habitat will fully offset impacts from construction of the recreational park such that the population trajectory will be equal or better over time compared to a no project alternative.

6. Based on the acreage and physical and biological features affected, in combination with the proposed conservation measures, including the protection of 50.7 acres of Hermes critical habitat in the Preserve, the project is not anticipated to substantially affect the function of the subunit within Unit 3.

INCIDENTAL TAKE STATEMENT

Section 9 of the Act and Federal regulation pursuant to section 4(d) of the Act prohibit the take of endangered and threatened species, respectively, without special exemption. Take is defined as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or to attempt to engage in any such conduct. Harm is further defined by the Service to include significant habitat reduction or degradation that results in death or injury to listed species by significantly impairing essential behavior patterns, including breeding, feeding, or sheltering. Harass is defined by the Service as intentional or negligent actions that create the likelihood of injury to listed species to such an extent as to significantly disrupt normal behavior patterns which include, but are not limited to, breeding, feeding, or sheltering. Incidental take is defined as take that is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity. Under the terms of section 7(b)(4) and 7(o)(2), taking that is incidental to and not intended as part of the agency action is not considered to be prohibited taking under the Act provided that such taking is in compliance with the terms and conditions of this Incidental Take Statement.

The proposed HCP, its associated documents, and this biological opinion clearly identify anticipated impacts to Quino checkerspot butterfly and western spadefoot which are likely to result from the proposed taking and the measures that are necessary and appropriate to minimize those impacts. All conservation measures described in the proposed HCP, together with the terms and conditions described in any section 10(a)(1)(B) permit issued with respect to the proposed HCP, are hereby incorporated by reference as reasonable and prudent measures and terms and conditions within this Incidental Take Statement pursuant to 50 CFR 402.14(i). Such terms and conditions are non-discretionary and must be undertaken for the exemptions under section 10(a)(1)(B) and section 7(o)(2) of the Act to apply. If the permit is issued, and the permittee fails to adhere to these terms and conditions, the protective coverage of the section 10(a)(1)(B) permit and section 7(o)(2) may lapse. The amount or extent of incidental take anticipated under the proposed HCP, associated reporting requirements, and provisions for disposition of dead or injured animals are as described in the HCP and its accompanying section 10(a)(1)(B) permit.

AMOUNT OR EXTENT OF TAKE

As described in the effects of the action, we use Quino adult equivalents to account for differential impacts of loss of different life stages. Quino may be killed during project construction, Preserve maintenance, fuel reduction, and habitat restoration and enhancement.

The regulations for section 7(a)(2) clarify that the Service may use surrogates to express the amount or extent of anticipated take when “exact numerical limits on the amount of anticipated incidental take may be difficult” (80 FR 26832). The implementing regulations [50 CFR § 402.14(i)(1)(i)] require that the Service meet three conditions for the use of a surrogate. To use a surrogate, the Service must describe the causal link between the surrogate and take of the listed species, describe why it is not practical to express the amount of anticipated take or to monitor take-related impacts in terms of individuals of the listed species, and set a clear standard to determine when the proposed action has exceeded the anticipated amount or extent of the taking.

For Quino, we use impacts to habitat as a surrogate for impacts to individuals. Quino use host plants and nectar sources within the action area to support feeding of all life history stages, so the

amount of habitat impacted is correlated with the number of individuals that will be impacted. In addition, in the "Effects of the Action" section of the document, we provide our best estimate of the number of individuals (adult equivalents) that will be impacted by covered activities in the HCP. Although we have provided estimates of impacts to Quino based on anticipated impacts to adult equivalents, the observation and documentation of injury or mortality of immature Quino will be very difficult because eggs, larvae, and pupae are relatively small and cryptic. Therefore, we have set clear limits for take based on the amount of habitat impacted, as described in more detail below.

Take of Quino checkerspot butterflies is exempted as follows for the duration of the permit:

IT 1. Death or injury of an estimated four Quino checkerspot butterfly adult equivalents within 22.4 acres of habitat during project construction. The amount or extent of incidental take will be exceeded if more than 22.4 acres are impacted.

IT 2. Death or injury of an estimated two Quino checkerspot adult equivalents during habitat restoration and enhancement activities. The amount or extent of incidental take will be exceeded if more than 17 acres are impacted during restoration and enhancement activities as described in the HREP. These activities will be in both the Alpine Park Preserve and Wright's Field.

IT 3. Death or injury of an estimated 10 Quino checkerspot adult equivalents during habitat management activities. The amount or extent of incidental take will be exceeded if habitat management activities exceed the 67.5-acre Alpine Park Preserve.

IT 4. Death or injury of an estimated two Quino checkerspot adult equivalents during fuel reduction activities. The amount or extent of incidental take will be exceeded if more than 3.5 acres are impacted annually by fuel reduction activities.

IT 5. Capture, handling, and release of Quino checkerspot butterfly larvae within the 22.4-acre construction area if project construction occurs between February 15 and May 15.

Aestivating western spadefoots may be killed during project construction, habitat restoration, and Preserve maintenance but may not be observed because they are relatively small and may be concealed underground. Therefore, we anticipate that no more than two western spadefoots remaining in the construction site following pre-project trapping and relocation will be observed dead or injured.

Take of western spadefoots is exempted as follows for the duration of the permit:

IT 6. Death or injury of five western spadefoots within the 23.1 acres of habitat in the project footprint. The amount or extent of incidental take will be exceeded if more than 23.1 acres of spadefoot habitat are impacted or more than one dead or injured western spadefoot is observed as a likely result of project construction.

IT 7. Death or injury of an estimated two western spadefoots during habitat restoration and Preserve management activities combined. The amount or extent of incidental

take will be exceeded if more than one dead or injured western spadefoot is observed as a likely result of restoration or maintenance activities.

IT 8. Death or injury of one western spadefoot during trapping within the exclusion fence prior to project construction.

IT 9. Capture, handling, and release of up to five western spadefoots within the exclusionary fencing prior to project construction.

REASONABLE AND PRUDENT MEASURES

No reasonable and prudent measures beyond those included in the proposed HCP have been identified to minimize and mitigate the effects of incidental take.

TERMS AND CONDITIONS

No terms and conditions are necessary because no additional reasonable and prudent measures have been identified.

CONSERVATION RECOMMENDATIONS

Section 7(a)(1) of the Act directs Federal agencies to utilize their authorities to further the purposes of the Act by carrying out conservation programs for the benefit of endangered and threatened species. Conservation recommendations are discretionary agency activities to minimize or avoid adverse effects of a proposed action on listed species or critical habitat, to help implement recovery plans or to develop information. We have no conservation recommendations related to the proposed project.

REINITIATION NOTICE

This concludes formal consultation on the proposed issuance of the Applicant's requested incidental take permit for implementation of the Santa Maria Wastewater Treatment Plant Expansion Project. As provided in 50 CFR §402.16, reinitiation of formal consultation is required where discretionary Federal agency involvement or control over the action has been retained (or is authorized by law) and if (1) the amount or extent of incidental take is exceeded; (2) new information reveals effects of the agency action that may affect listed species or critical habitat in a manner or to an extent not considered in this opinion; (3) the agency action is subsequently modified in a manner that causes an effect to the listed species or critical habitat not considered in this opinion; or (4) a new species is listed or critical habitat designated that may be affected by the action. In instances where the amount or extent of incidental take is exceeded, any operations causing such take must cease pending reinitiation.

If you have any questions or concerns about this biological opinion, please contact Eric Porter[1] of this office at 760-431-9440.

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Appendix I1

Addendum to the Alpine Community Park Transportation Impact Study

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TO: Yara Fisher, HELIX Environmental Planning, Inc.

FROM: Phuong Nguyen, TE; CR Associates
Jorge Muradas, EIT; CR Associates

DATE: July 29, 2026

RE: Addendum to Address Vehicle Traffic Public Safety Impacts for the Alpine Community Park Project in the County of San Diego

This memo serves as an addendum to the Alpine Community Park Project Traffic Impact Analysis (TIA) to comply with a court order related to vehicle traffic public safety in the Writ of Mandate issued on January 23, 2026, for CASE NO: 37-2024-00000536-CU-WM-CTL (Writ), and as further detailed in the Minute Order issued on June 9, 2025, in the same proceeding (Minute Order). The court determined that the Environmental Impact Report (State Clearinghouse #2021030196, County of San Diego [County] 2023) (EIR) required further analysis and disclosure of traffic hazard impacts along South Grade Road, including driveway sight distance, traffic control device analysis, and pedestrian and bicyclist safety.

Project Background

The County of San Diego (County) Department of Parks and Recreation (DPR) is proposing to construct the approximately 25-acre Alpine Community Park project (project) in the community of Alpine, California. The project site encompasses 96.6 acres of undeveloped land, of which approximately 70 acres will be preserved as open space. The project is located adjacent to Back Country Land Trust (BCLT) Wright's Field Preserve, north of South Grade Road, east of Tavern Road, and south of Alpine Boulevard.

The project falls within the boundary of the Alpine Community Plan and has a land use designation of Semi-Rural Residential (SR-2) and is zoned as A70, Limited Agricultural Use, and as S80, Open Space. The property Assessor's Parcel Numbers (APNs) for the proposed park and open space are: 404-171-12 and a portion of 404-170-61.

Access to the park and its planned 240-off-street parking supply will be provided via two driveways located along South Grade Road. The primary park entrance (Driveway #1) would be located on the eastern side of the property as a new intersection leg of the South Grade Road and Calle de Compadres intersection, and it would operate as a side-street, stop-controlled intersection. The second driveway (Driveway #2) would include a new intersection at the southern end of the property that would operate as a side-street, stop-controlled intersection. Both driveways would allow full access to the project site.

Writ

The language included in the Writ regarding vehicle traffic public safety is included below:

> *Vehicle Traffic Public Safety. Respondent shall analyze and disclose the traffic hazard impacts concerning South Grade Road, in particular, whether the project will substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections). In doing so, Respondent shall not delay reasonably feasible analysis and potential impacts of the project's driveway, the driveway's traffic control device, and sight distance analysis on traffic collisions, including as to pedestrians and bicyclists.*

Minute Order

The language included in the Minute Order regarding vehicle traffic public safety, which provides further details regarding the Writ's directive, is included below:

> *The petition alleges the project is adjacent to a high-speed roadway that contains areas of low visibility and has been the location of multiple fatal accidents. The petition alleges the project would create a multi-way stop in a low visibility area, increasing traffic risks. Pet. ¶¶35, 55.*
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> *Petitioners argue the EIR does not contain any analysis of the project's potential traffic hazard impacts to pedestrians and bicyclists. MPA at pp.24–25. They argue that the project is anticipated to draw approximately 300–500 people per day on weekdays, 1,000 per day on weekends, and up to 2,000 at the same time during special events. AR 2314. They argue the visitors who park on the shoulder of South Grade Road would need to walk on the road shoulder, and that South Grade Road is known for several accidents, including some fatal. MPA at p.24, citing AR 2462 (240 parking space lot); AR 5544 (noting three crashes along South Grade Road, with two involving pedestrians and two of the three resulting in fatalities).*
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> *The County argues substantial evidence supports the EIR's determination that the project will not substantially increase hazards because the project does not conflict with the circulation system of transit, roadway, bike and pedestrian facilities. Oppo. at p.25, citing AR 75, AR 2843–44. The County also contends the project does not include any "incompatible uses" such as farm equipment that might increase congestion on the road. Id., citing AR 2846. Additionally, argues the County, the project is anticipated to generate a number of trips onto South Grade Road that will not "degrade" the road to a "substandard level of service." Id., citing AR 76. It plans to install traffic control devices at a later date for the project's driveway and South Grade Road, but the type of device has not yet been determined because the location of the driveway is not yet known. Id. at p.26.*
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> *CEQA requires that an EIR include a "detailed statement" setting forth the "significant effects on the environment of the proposed project." (Pub. Res. Code, § 21100, subd. (b)(1).) It also requires that an EIR "contain a statement briefly indicating the reasons that various possible significant effects of a project were determined not to be significant and were therefore not discussed in detail." (Guidelines, § 15128.) "[A] 'significant effect on the environment' under CEQA is a substantial or potentially substantial adverse change in the physical conditions existing within the area affected by the project. City of Maywood v. Los Angeles Unified School Dist. (2012) 208 Cal.App.4th 362, 390–391.*
>
> *Appendix G to the CEQA Guidelines recommends that, in determining whether a project will have significant traffic impacts, lead agencies consider whether it will "[s]ubstantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?" 14 Cal. Code Regs. ("Guidelines") appen. G, § XVII, subd. (c). The Guidelines also ask whether the project will "conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?" Id., subd. (b).*
>
> *Here, although evidence in the record addresses the Guidelines in Appendix G regarding incompatible uses, the EIR lacks substantial evidence to the*

potential traffic hazard impacts to pedestrians and bicyclists concerning South Grade Road. In particular, the EIR lacks substantial evidence as to the yet-to-be-determined sight distance analysis for the traffic control device at the project's driveway, and analysis as to pedestrians who would be parking and walking along South Grade Road when the 240-vehicle space parking lot is full. The Court agrees with petitioners that City of Maywood v. Los Angeles Unified School Dist. is instructive. Id. (2012) 208 Cal.App.4th 362, 392 (concluding the FEIR did not analyze pedestrian hazards associated with the project and the extent to which the presence of an active roadway would impact pedestrian safety). The County does not cite to evidence in the record showing it analyzed and disclosed the traffic hazard impacts concerning South Grade Road.

Additionally, though an EIR is not required to include information that is not "reasonably feasible" for the agency to obtain and provide, Gooden v. County of Los Angeles (2024) 106 Cal.App.5th 1, 17) the County does not provide any supported reason as to why it could not yet determine the project's driveway location to assess the sight distance analysis and appropriate intersection control device. The purpose of an EIR is to inform the public and officials of "the environmental consequences of their decisions before they are made." Citizens of Goleta Valley v. Board of Supervisors (1990) 52 Cal.3d 553, 564. Petitioners have shown the County did not proceed in the manner required by CEQA by delaying the analysis and potential impacts of the driveway, multi-way stop control, and sight distance analysis on traffic collisions, including as to pedestrians and bicyclists.

Response to Writ

The Writ directs the County to analyze and disclose the traffic hazard impacts concerning South Grade Road, in particular, whether the project will substantially increase hazards due to a design feature such as sharp curves or dangerous intersections. The County is further directed not to delay the analysis of the project's driveway, the driveway's traffic control device, and the sight distance analysis on traffic collisions, including impacts to pedestrians and bicyclists.

To comply with the Writ, the following analyses have been prepared and are described in this memo:

- Safety Review – Review of accident history in the area.
- Parking Generation to determine whether a parking overflow would potentially result in project users parking along either South Grade Road or nearby residential streets.
- Sight distance analysis to determine whether there is sufficient line of sight along South Grade Road at the two project driveways.
- Traffic Control Device Evaluation.
- Determination of Pedestrian and Bicyclist Hazard Analysis along South Grade Road.
- Assessment of Design Features that Could Increase Traffic Hazards.

Safety Review

CR Associates conducted a safety review of existing conditions along South Grade Road in the vicinity of the proposed project to evaluate whether the project would substantially increase traffic hazards due to a design feature, consistent with the directive of the Writ and the Minute Order. The safety review is organized into two components, presented in sequence below: (1) a five-year crash history review covering the South Grade Road segment in the immediate vicinity of the project site (January

1, 2021 through December 31, 2025), consistent with the standard analytical window recommended in the Federal Highway Administration (FHWA) Highway Safety Improvement Program (HSIP)[1] guidance for corridor and intersection safety analyses; and (2) a separate review of historical incidents referenced in the Court's Minute Order via AR 5544 that fall outside the geographic segment evaluated in the crash history review, or predate the standard analytical period. To support a conservative analysis aligned with the Court's directive, these historical incidents are included even though they fall outside the immediate project vicinity or predate the standard analytical period, in order to confirm that the conditions associated with each prior incident are not introduced or replicated by the proposed project.

Crash History Review (January 2021 – December 2025)

To evaluate whether the project would substantially increase hazards due to a design feature (such as sharp curves or dangerous intersections), CR Associates reviewed crash history along South Grade Road within the vicinity of the project site using data obtained from the Transportation Injury Mapping System (TIMS), maintained by the University of California, Berkeley SafeTREC program and sourced from the California Statewide Integrated Traffic Records System (SWITRS) and the San Diego Association of Governments (SANDAG) Traffic Safety Dashboard. These are included in **Attachment A**.

South Grade Road is a long corridor traversing varied terrain with differing geometric conditions along its length. To ensure the analysis was focused and relevant to the project, the crash data query was limited specifically to the segment of South Grade Road within the immediate vicinity of the project site. The study period covered January 1, 2021, through December 31, 2025, representing five years of recent crash experience, consistent with the standard analytical window recommended in the Federal Highway Administration (FHWA) Highway Safety Improvement Program (HSIP)[2] guidance for corridor and intersection safety analyses.

The query returned a total of three crashes within the study area and study period (TIMS, 2026). One of the reported crashes occurred in between the location of the two planned project driveways at the intersection of South Grade Road with Via Viejas (approximately 700 feet south of the planned location for Driveway #1). The remaining two crashes occurred north of the intersection of South Grade Road with Calle de Compadres, at approximately 1,500 to 1,900 feet north of the planned location for Driveway #1. No fatal crashes were recorded.

A review of the three (3) subject collision records retrieved from the Transportation Injury Mapping System (TIMS), bearing Case IDs 94371540, 94784761, and 94807595, and occurring along South Grade Road within unincorporated San Diego County between August 17, 2024 and July 20, 2025, establishes that each collision was attributable exclusively to operator-specific Vehicle Code violations and not to any deficiency in roadway geometry or design.

In all three (3) instances, the Primary Collision Factor (PCF) as recorded by the investigating law enforcement authority reflects volitional or impaired driver conduct: PCF Category 08 (Improper Turning) in Case ID 94371540; PCF Category 01 (Driving or Bicycling Under the Influence of Alcohol or Drug) in Case ID 94807595; and PCF Category 09 (Automobile Right of Way) in Case ID 94784761. No PCF designation in any of the subject cases references or implicates substandard roadway design elements, including but not limited to inadequate stopping sight distance, deficient horizontal or vertical alignment, non-conforming lane width, or insufficient clear recovery zone.

[1] https://highways.dot.gov/safety/hsip/hsip-noteworthy-practice-series/hsip-project-evaluation

[2] https://highways.dot.gov/safety/hsip/hsip-noteworthy-practice-series/hsip-project-evaluation

Accordingly, the subject collision history, taken in its entirety, does not support a finding or inference that the roadway geometry of South Grade Road constitutes a contributing or proximate cause of the documented injury collisions. The crash data is legally and factually consistent with the conclusion that the subject collisions resulted solely from driver behavior, including improper turning maneuvers, failure to yield the right-of-way, and operation of a motor vehicle while under the influence of alcohol or a controlled substance; these are conditions that are not correctable through geometric roadway improvements and are not attributable to any deficiency in the physical design standards of the subject roadway. The proposed project does not introduce any design feature (including new geometric elements, access configurations, or changes to the cross-section of South Grade Road) that would replicate or exacerbate the driver behavior conditions identified as the primary collision factors in any of the three subject crashes.

Historical Pedestrian Fatality (2016)

As noted above, the Court's Minute Order references a fatal pedestrian collision at the South Grade Road and Calle de Compadres intersection that occurred on June 22, 2016 (SWITRS Case ID 90262214). Although this incident falls outside the standard five-year analytical window applied to the crash history review, it is addressed in this section in response to the Court's directive and to support a conservative analysis of conditions along South Grade Road in the vicinity of the proposed project.

The 2016 incident is documented in SWITRS as a Vehicle/Pedestrian fatal collision occurring approximately 145 feet south of the South Grade Road and Calle de Compadres intersection. The Primary Collision Factor (PCF) is recorded as Violation Category 11, representing a Pedestrian Violation, with fault assigned to the pedestrian party. The driver of the involved vehicle was found not at fault and was proceeding straight southbound at the time of the collision. While the fatality is acknowledged as a serious prior incident within the project corridor, the SWITRS record indicates it was not attributable to a geometric deficiency of the roadway but rather to a pedestrian violation. The project does not introduce conditions that would replicate or exacerbate the circumstances of this incident, as the proposed driveways are located at defined, stop-controlled access points with confirmed adequate stopping sight distance on the major road approaches.

Historical Vehicle Fatality (2012)

In addition to the 2016 pedestrian collision discussed above, the Court's Minute Order references a second fatality within the South Grade Road corridor. This incident has been identified as a single-vehicle collision that occurred on December 6, 2012, at approximately 5:20 p.m., at the intersection of South Grade Road and Via Viejas Oeste, in the vicinity of the proposed project. As with the 2016 collision, this incident falls outside the standard five-year analytical window applied to the crash history review and is addressed here in response to the Court's directive and to support a conservative analysis of conditions along South Grade Road.

The collision involved a single vehicle whose driver, who was the sole occupant, left the roadway and struck a wall and a utility pole. The driver was pronounced deceased at the scene. According to the San Diego Association of Governments (SANDAG) Traffic Safety Dashboard, the primary collision factor for this incident was improper turning (PCF Category 08), a violation of the California Vehicle Code. The record does not attribute the collision to any deficiency in roadway geometry or design, and the incident did not involve a pedestrian or bicyclist.

The proposed project does not introduce or modify any geometric element, access configuration, or cross-section of South Grade Road that would replicate or exacerbate the conditions associated with this incident. The proposed driveways are located at defined, stop-controlled access points with

confirmed adequate stopping sight distance on the major road approaches, further supporting the conclusion that the project will not substantially increase traffic hazards along the corridor.

Historical Pedestrian Collision (2021)

In addition to the 2016 pedestrian fatality and 2012 vehicle fatality discussed above, CR Associates has identified a third historical incident that, based on the crash characteristics described in the Minute Order's reference to AR 5544, is likely one of the three crashes cited therein. This incident is a vehicle/pedestrian collision that occurred on February 10, 2021, at approximately 11:15 AM on South Grade Road at Kenda Way, approximately 325 feet north of that intersection (SWITRS Case ID 91412970). This incident falls within the standard five-year analytical window applied to the crash history review and is addressed here in response to the Court's directive and to support a conservative analysis of conditions along South Grade Road. This location is approximately 0.8 miles north of the proposed Driveway #1 and falls outside the geographic segment of South Grade Road evaluated in the crash history review presented above, which was limited to the immediate vicinity of the project driveways.

The collision involved a pedestrian struck by a vehicle whose driver failed to remain at the scene. The Primary Collision Factor is recorded as Violation Category 08 (Improper Turning), consistent with the PCF recorded for the 2012 collision discussed above. The pedestrian, a 19-year-old female, sustained a suspected minor injury per the SWITRS record, and the collision was non-fatal.

Considered together, the 2016 incident, the 2012 incident, and this 2021 incident account for three historical crashes along South Grade Road: two involving pedestrians (2016, 2021) and two resulting in fatalities (2016, 2012), consistent with the characterization of AR 5544 in the Minute Order. Consistent with the findings for the 2016 and 2012 collisions, this incident resulted from operator conduct, specifically an improper turning maneuver, rather than from any geometric or design deficiency of South Grade Road. The proposed project does not introduce or modify any geometric element, access configuration, or cross-section of South Grade Road that would replicate or exacerbate the conditions associated with this incident. The collision's location approximately 0.8 miles from the proposed project driveways further distinguishes it from conditions at the project site.

Parking Demand Analysis

The Minute Order identified concerns raised by petitioners that the project's parking lot, with a capacity of 240 spaces, would be insufficient to accommodate anticipated park visitation of up to 1,000 visitors per day on weekdays and up to 2,000 visitors during weekend events (AR 2314; AR 2462). Petitioners argued that when the on-site lot reaches capacity, visitors would be forced to park on the shoulder of South Grade Road and walk along the roadway, creating pedestrian safety hazards on a high-speed road with a documented history of fatal accidents (AR 5544).

To respond to this concern, CR Associates prepared a parking demand analysis using parking demand rates published in the *Institute of Transportation Engineers (ITE) Parking Generation Manual, 6th Edition*. The ITE Parking Generation Manual is the nationally accepted standard for conducting parking demand analyses. To provide a conservative analysis, the calculated ITE parking demand was compared against observed parking demand at a local comparable community park, and the higher of the two values was used to evaluate the potential for spillover and to identify recommendations where appropriate.

Table 1 summarizes the average weekday and weekend parking demand calculated for the proposed project using the ITE methodology. As a conservative assumption, the total gross site area of 96.6 acres was applied to the per-acre demand rates.

Table 1 - ITE Parking Demand for the Proposed Project

Day	ITE Weighted Average Demand Rate (vehicles per acre)	Project Size (acres)	Calculated Parking Demand (vehicles)
Weekday	0.77	96.6	74
Saturday	0.60	96.6	58
Sunday (Peak)	2.33	96.6	225

Source: ITE Parking Generation Manual, 6th Edition (Public Park land use).

As shown in Table 1, the highest average parking demand is 225 vehicles on Sundays, which is well within the project's parking supply.

To validate the calculated parking demand, observed parking demand was collected at a comparable existing community park. The project team screened 76 public parks within East San Diego County and selected Hilton Head County Park as the comparable site for the parking demand validation survey. Hilton Head County Park was selected on the basis of several comparability factors, including: (a) active recreational programming featuring multi-use sports field practice; (b) comparable facility scale, with a 10-acre developed footprint and a 56-space parking lot; and (c) the absence of tournament-level events, consistent with the day-use operational character anticipated at the Alpine Community Park. Notably, Hilton Head County Park offers a playground, splash pad area, multi-use sports field, basketball courts, exercise stations, and shaded picnic and barbecue areas. A 2.5 area-based scale factor was applied to account for the difference in active program area between Hilton Head (10 acres) and Alpine (25 acres), proportionally adjusting the observed parking demand to reflect the proposed 240-space lot; this factor is within the range supported by National Recreation and Park Association (NRPA) guidance for transferable trip-rate studies. Hilton Head County Park is located in a denser, more urbanized setting and serves a larger surrounding population than the proposed Alpine Community Park site, conditions that would be expected to generate comparatively greater parking demand. No additional adjustment factor was applied to account for these differences, making the analysis conservative and representative of an upper-bound estimate of demand at the project site. The full findings of the parking demand analysis, including the comparable park screening criteria, are documented in **Attachment B***:* Alpine Community Park Parking Demand Analysis (CR Associates, May 2026).

Hilton Head County Park Parking Demand - Non-Event and Standard Weekday Conditions

On non-event days and standard weekday conditions, observed parking demand at the analog site averaged 17 vehicles in the on-site lot; well within the project's proposed 240-space supply. Under these baseline conditions, the on-site parking supply is more than sufficient to accommodate all park users, and no spillover onto South Grade Road or adjacent streets is anticipated. Most pedestrians accessing the park under these conditions would be expected to park and walk entirely within the project site, with no need to walk along South Grade Road.

Hilton Head County Park Parking Demand - Organized Sports Event Conditions

During standard park usage and organized sports event days, under conditions of single-sport practice and without simultaneous occurrence of sport activities, the observed parking demand at the analog site reached an average of 72 vehicles for baseball practice and 105 vehicles for multi-use field practice, with maximum observed demands of 119 and 131 vehicles, respectively. Both figures remain substantially below the project's proposed on-site supply of 240 spaces. Because the on-site parking supply exceeds projected demand under all single-sport event conditions, and because the on-site

parking areas are located in close proximity to the multi-use fields, park users attending organized sports events are not expected to seek off-site parking along South Grade Road or adjacent streets.

To prevent demand from exceeding supply under concurrent multi-sport conditions, where combined maximum demand could approach approximately 250 vehicles, the parking demand analysis identifies a required project feature governing organized sports programming scheduling. With this scheduling protocol in place, on-site parking supply will remain sufficient to accommodate all event-day demand, and spillover onto South Grade Road is not anticipated. County Parks and Recreation Programming staff shall implement and maintain the following scheduling requirements for all organized sports activities at the park:

- Only one sport or user group shall occupy each park field/court at any given time; overlapping or simultaneous sports activities or practices are prohibited.
- Sports Programming staff will monitor the site between consecutive sessions to confirm no vehicular spillover onto the public right-of-way. If spillover is observed more than two times in any given season, a minimum one-hour buffer shall be implemented between consecutive sessions to allow full vehicle turnover before the next group arrives. For example, if a session ends at 1:00 PM, the next session may not begin until 2:00 PM. This one-hour buffer shall increase to two hours if additional spillover continues to be observed.
- Sports Programming staff shall be responsible for scheduling all organized activities in strict accordance with these requirements.
- Parks Programming staff and the on-site volunteer shall monitor scheduling compliance on an ongoing basis to ensure these requirements are met at all times.
- Vehicular spillover onto the public right-of-way, including South Grade Road, shall be prevented through enforcement of this scheduling protocol.

Because on-site parking is expected to accommodate all park users under both standard and event-day conditions, visitors are not expected to park on the shoulder of South Grade Road and walk along the roadway to access the park. The pedestrian safety concern identified by petitioners, that overflow parkers would be exposed to traffic hazards along South Grade Road, is therefore not substantiated under the conditions analyzed. The project, together with the recommended parking management measures, would not create a condition in which pedestrians are foreseeably required to walk along South Grade Road as a consequence of inadequate parking supply.

Driveway Location and Sight Distance

The proposed project includes two full-access driveways along South Grade Road. Driveway #1 is located at the existing South Grade Road and Calle de Compadres intersection at the northern end of the property, which will operate as a side-street stop-controlled intersection. Driveway #2 is a proposed side-street stop-controlled intersection at the southern end of the property along the northeast-southwest segment of South Grade Road.

Sight distance refers to the unobstructed line of sight available to a driver to perceive conditions ahead and respond accordingly. CR Associates conducted field observations on April 16, 2026 to measure sight distance conditions at the two proposed park access driveways on South Grade Road, referred to herein as Driveway #1 and Driveway #2. Two distinct but complementary forms of sight distance were evaluated, each governed by a separate applicable standard: (1) stopping sight distance on South Grade Road, which measures the view available to drivers *approaching* either driveway from the through road; and (2) corner sight distance at each driveway approach, which measures the view available to a driver *waiting at the driveway* before entering South Grade Road. These evaluations are described in the subsections below.

A design speed of 50 mph was applied to all approaches, reflecting the governing 85th percentile speed of 46 mph observed in the prior travel speed survey conducted as part of the Transportation Impact Study for the project (2020) and rounded up conservatively relative to the posted speed limits of 40 mph near Driveway #1 and 45 mph near Driveway #2. Speed survey data is included with the sight distance analysis included in **Attachment C.**

Stopping Sight Distance on South Grade Road

Stopping sight distance (SSD) is the distance, measured along the travel lane on South Grade Road, that a driver needs to perceive an object or vehicle ahead and bring their own vehicle to a complete stop before reaching it. In the context of a driveway intersection, SSD answers the question: *Does a driver traveling on the main road have enough distance to see a vehicle emerging from the driveway and stop before reaching it?* SSD is measured on the through road and is not affected by the physical characteristics of the driveway itself.

SSD was evaluated in accordance with the American Association of State Highway and Transportation Officials (AASHTO) *Policy on Geometric Design of Highways and Streets* (7th Edition, 2018) (hereinafter *AASHTO Green Book* or *AASHTO (2018)*). At a 50-mph design speed, the required SSD is 425 feet, as set forth in AASHTO (2018), Table 3-1, p.3-4 AASHTO (2018), Section 3.2.2.5, p.3-6, expressly provides that separate SSD criteria for trucks are not used in highway design; the passenger car standard governs all vehicle classes on the major road. Accordingly, the 425-foot requirement applies equally to passenger cars, recreational vehicles (RVs), and combination vehicles such as pickup trucks towing horse trailers.

Figure 1 shows a plan view schematic of the sight distance evaluated at the project driveway approaches: stopping sight distance (SSD), measured along South Grade Road, and corner sight distance (CSD), measured from the driveway stop position in each direction along South Grade Road. The figure is intended to illustrate the general concept of how SSD and CSD were evaluated. Existing sight distance conditions are documented separately in Attachment C. It should also be noted that construction of the site would likely require grading of the access roadways and other portions of the Project site. As part of the final site design, the required sight triangles, or clear visibility areas, would be incorporated into the site plan and maintained free of obstructions.

Figure 1 - Sight Distance Diagram for Project Driveway Approaches

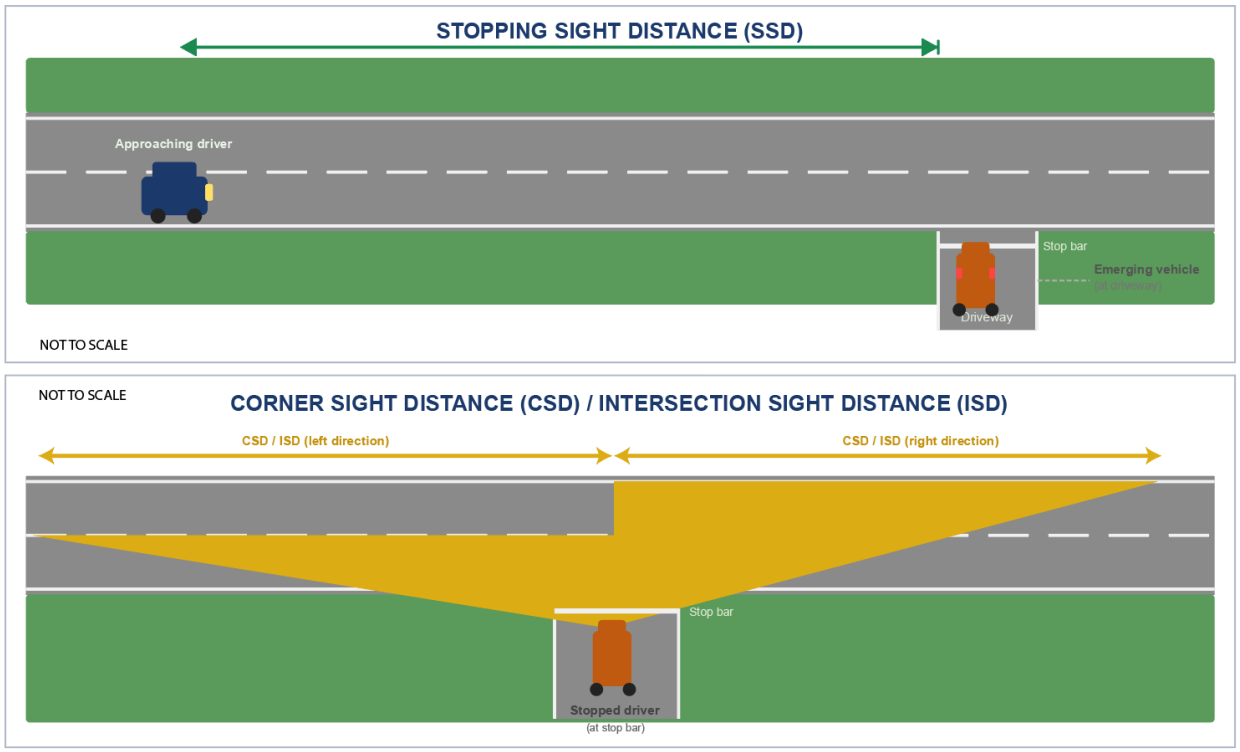


Table 2 shows the observed stopping sight distance evaluation results along South Grade Road at the project driveway approaches.

Table 2 - Stopping Sight Distance Evaluation Results along South Grade Road at the Project Driveway Approaches

Driveway	Approach Direction	Available SSD (ft)	Required SSD (ft)[1]	Compliance with SSD Standard
Driveway #1	NB	*425*	425	✓ Satisfies Standard
Driveway #1	SB	*700+*	425	✓ Satisfies Standard
Driveway #2	NEB	*700+*	425	✓ Satisfies Standard
Driveway #2	SWB	*450*	425	✓ Satisfies Standard

Sources: AASHTO (2018), CR Associates Field Observations on April 16, 2026.

Notes:
1. Required SSD = 425 ft at a 50 mph design speed. Per AASHTO (2018), Table 3-1, p.3-4. Per AASHTO (2018), Section 3.2.2.5, p.3-6, this standard governs all vehicle types on the major road.

As shown in **Table 2**, the available stopping sight distance on South Grade Road satisfies the AASHTO (2018) standard at all four driveway approach directions. This finding applies to all vehicle types, including passenger cars, RVs, and combination vehicles. Full SSD compliance at all four approach directions means that every driver traveling on South Grade Road, regardless of vehicle type, has the sight distance necessary to perceive a vehicle at either driveway approach and bring their vehicle to a complete stop before reaching it. This is the standard AASHTO designates as the applicable measure for through-road operations at driveway intersections.

Corner Sight Distance at Driveway Approaches

Corner sight distance (CSD) is the sight distance available to a driver stopped at the driveway approach, measured in each direction along South Grade Road. It addresses the question: *Does a driver waiting at the driveway have enough visibility along the main road to judge whether it is clear to enter?* CSD is distinct from SSD in an important respect: CSD measures the view from the *driveway*, whereas SSD measures the view from the *through road*. CSD conditions at the driveway do not affect the ability of drivers on South Grade Road to perceive and respond to vehicles at the intersection.

The AASHTO Green Book uses the term "intersection sight distance" (ISD) to describe this same measurement, namely the line of sight available to a driver stopped at the driveway approach, looking in each direction along South Grade Road. CSD and ISD refer to the same fundamental field condition, and the two terms are used interchangeably in this analysis. The distinction between the two applicable standards evaluated herein is not a difference in what is measured, but a difference in the required threshold: the AASHTO combination vehicle ISD threshold is higher than the County passenger car CSD threshold because a Class 8 vehicle (such as a pickup truck towing a horse trailer) accelerates more slowly and occupies the intersection longer during a turning maneuver, and therefore requires a longer observed gap in traffic to complete the movement safely.

CSD was evaluated under two applicable standards, each corresponding to a different class of vehicle anticipated to use the park driveways:

- Standard #1: Passenger Car (County CSD Standard). The County of San Diego Public Road Standards, Table 5, establishes required CSD values for standard passenger car operations at intersections and driveway approaches.
- Standard #2: Combination Vehicle (AASHTO Intersection Sight Distance). AASHTO (2018) establishes intersection sight distance (ISD) criteria for Case B turning movements, which apply to larger and more slowly accelerating vehicles. Per FHWA vehicle classification guidance (FHWA-HRT-13-091, Chapter 2, November 2014), RVs are classified as FHWA Class 5 or 6 single-unit vehicles and horse trailers towed by pickup trucks as FHWA Class 8 combination vehicles. Because both vehicle types are anticipated users of the park, the Class 8 combination vehicle standard was applied as the more conservative of the two. At a 50-mph design speed, the required ISD for a Class 8 combination vehicle is 845 feet for Case B1 (left turn from stop) and 772 feet for Case B2 (right turn from stop), per AASHTO (2018), Tables 9-6 and 9-8, p. 9-44 and 9-46 respectively.

Both evaluations use the same field-measured available sight distance at each driveway approach direction. **Table 3** presents the corner and intersection sight distance observation results.

Table 3 - Corner and Intersection Sight Distance Evaluation Results along South Grade Road at the Project Driveway Approaches

Driveway	Approach Direction	Available Sight Distance (ft)[1]	Required CSD, Passenger Car, County Standard (ft)[2]	Compliance with County CSD Standard	Required ISD, Combination Vehicle, Case B1, Left Turn (ft)[3]	Required ISD, Combination Vehicle, Case B2, Right Turn (ft)[3]	Compliance with AASHTO Combination Vehicle ISD Standard
Driveway #1	NB	*500*	*500*	✓ Satisfies Standard	845	772	Below Standard[4]
Driveway #1	SB	*700+*	*500*	✓ Satisfies Standard	845	772	Below Standard[4]
Driveway #2	NEB	*<500*	*500*	Below Standard[3]	845	772	Below Standard[4]
Driveway #2	SWB	*550+*	*500*	✓ Satisfies Standard	845	772	Below Standard[4]

Sources: AASHTO (2018), CR Associates Field Observations on April 16, 2026.

Notes

1. Available sight distance is the field-measured CSD recorded at each approach during CR Associate's field observations on April 16, 2026. The same value is applied to both the County passenger car CSD evaluation (Standard #1) and the AASHTO combination vehicle ISD evaluation (Standard #2).
2. Required CSD per County of San Diego Public Road Standards, Table 5. Design speed = 50 mph.
3. Northeastbound approach, Driveway #2: the available corner sight distance at this approach is below the County standard. This condition is attributable to pre-existing vegetation and rock outcroppings located within the sight triangle on the project site.
4. Required ISD per AASHTO (2018), Tables 9-6 and 9-8, p. 9-44 and 9-46 respectively.
5. Case B1 = left turn from stop; Case B2 = right turn from stop. Design vehicle = FHWA Class 8 combination vehicle. Design speed = 50 mph.

As shown in **Table 3**, the County of San Diego passenger car CSD standard is satisfied at both approach directions of Driveway #1 (northbound and southbound) and at the southwestbound approach of Driveway #2, three of the four approach directions evaluated. At the northeastbound approach of Driveway #2, the available corner sight distance is below the County standard. This condition is attributable to pre-existing vegetation and rock and boulder outcroppings located within the sight triangle on the project site, and is not a condition created or introduced by the proposed project.

Additionally, as shown in **Table 3,** the available sight distance at each of the four approach directions is below the AASHTO combination vehicle ISD threshold. This condition is attributable to fixed, pre-existing physical features of South Grade Road and the surrounding terrain: a vertical crest curve in the roadway near the northbound approach of Driveway #1, and the vegetation and rock outcroppings at the northeastbound approach of Driveway #2. The proposed project does not create, introduce, or alter either of these conditions.

The combination vehicle ISD finding should be understood in practical terms. The available sight distance at each approach is a fixed characteristic of the roadway and terrain; it does not change based on the type of vehicle waiting at the stop bar. What the ISD threshold reflects for a combination vehicle is that the available sight distance, while sufficient for a passenger car to enter the through-road traffic stream, falls below the distance at which AASHTO's standard allows a more slowly accelerating combination vehicle to confirm a full clear gap before completing the turn. A driver towing a horse trailer or recreational vehicle should exercise additional caution at either driveway and may need to wait for a larger gap than a passenger car driver would require. This is consistent with the level

of care expected of combination vehicle operators on rural roadways with pre-existing geometric constraints, and is not a condition created or worsened by the proposed project.

The combination vehicle ISD finding is appropriately read alongside the stopping sight distance results summarized above. SSD is met at all four approach directions for all vehicle types. A driver traveling along South Grade Road who observes a vehicle with a trailer entering from either park driveway has sufficient sight distance to bring their vehicle to a complete stop before reaching the driveway. The ISD finding therefore does not reflect an absolute safety deficiency; it identifies the extent to which pre-existing roadway geometry constrains the gap-acceptance margin for an emerging combination vehicle, while the through-road stopping sight distance remains fully compliant.

The vegetation and rock outcroppings at the northeastbound approach of Driveway #2 are located within the project site and will be addressed through vegetation clearing and grading of the sight triangle area as part of the final site plan. Sight distance compliance must be demonstrated on project improvement plans and approved by the County of San Diego Department of Public Works prior to the issuance of any grading or construction permit, consistent with the County Site Design Standards and Roadway Design Standards.

As established above, stopping sight distance on South Grade Road meets the applicable AASHTO standard at all four approach directions. Per AASHTO (2018) Section 3.2.2.5, separate SSD criteria for trucks are not applied in highway design; the passenger car standard governs and is considered adequate for all vehicle classes on the major road. Therefore, drivers on South Grade Road, including operators of recreational vehicles and horse trailers, have sufficient sight distance to perceive and stop for a vehicle emerging from either driveway.

Where the full combination vehicle ISD threshold cannot be achieved due to existing geometric constraints of the roadway, SSD compliance on the through road constitutes the applicable standard per AASHTO (2018). The sight distance conditions at Driveway #1 and Driveway #2 reflect pre-existing characteristics of South Grade Road and the adjacent terrain, not conditions introduced by the proposed project. Upon completion of the required vegetation clearing and grading at the northeastbound approach of Driveway #2, all applicable sight distance conditions will be addressed.

This sight distance analysis was conducted under normal daytime conditions during CR Associate's field observations on April 16, 2026, and does not constitute a roadway lighting study. The findings and standards applied herein are based on AASHTO and County criteria calibrated to adequate visibility during daytime hours. Sight distance conditions during dawn, dusk, or nighttime operations (including the effect of reduced ambient light and limited headlight illumination range on the effective available sight distance) were not evaluated as part of this study. The County's programming and operations plan for the park should take dawn and dusk access conditions into consideration, including whether operational measures such as restricted hours, signage, or roadway lighting are warranted to address low-light conditions at either driveway approach.

Traffic Control Device

South Grade Road is a continuous, uninterrupted two-lane roadway serving the Alpine community. Traffic control device selection for both project driveways was re-evaluated based on projected driveway volumes, crash history, available sight distance, and the operational characteristics of South Grade Road.

The 2020 TIS estimated project trip generation at 480 ADT, 20 AM peak hour trips, and 39 PM peak hour trips. The parking demand analysis found that, on non-event days, the analog site averaged 17 vehicles. On event days, maximum parking demand is projected at 131 vehicles for a single-sport

practice (including typical park use). Because vehicles can queue entirely within the on-site parking lot before entering South Grade Road, the site would buffer the through traffic stream from event-driven surges and would not require traffic control on South Grade Road to manage driveway operations.

The 2020 TIS recommended installation of all-way stop control at Driveway 1. That recommendation was based, in part, on a documented pedestrian fatality at the South Grade Road and Calle de Compadres intersection in 2016. As discussed in the crash history section of this memorandum, the SWITRS record for that incident assigns fault to the pedestrian party under PCF Violation Category 11 as a pedestrian violation. The collision was not attributable to a geometric deficiency or to the absence of all-way stop control at the intersection.

In light of the updated sight distance analysis and the detailed review of crash history along the project frontage, the prior driveway traffic control recommendation was re-evaluated using the all-way stop control warrants set forth in the 2026 California Manual on Uniform Traffic Control Devices, Sections 2B.12 through 2B.17. The evaluation was informed by the most recently available five years of crash data from 2021 through 2025 and current turning movement volumes. The evaluation considered five warrant categories, as summarized below.

Warrant A, Crash Experience, is not met. The updated crash record identifies three non-fatal crashes during the 2021 to 2025 study period, consistent with the standard analytical window recommended in the Federal Highway Administration (FHWA) Highway Safety Improvement Program (HSIP)[3] guidance for corridor and intersection safety analyses. None involved pedestrians, and none were identified as susceptible to correction through installation of all-way stop control. This falls well short of the five-crash threshold required under CA MUTCD Warrant A.

Warrant B, Sight Distance, is not met. Corner sight distance at the existing Calle de Compadres approach meets the County's 500-foot standard. For the proposed Driveway 1 approach, adequate corner sight distance is contingent on implementation of the brush management and vegetation clearing measures recommended in the companion sight distance memorandum, Alpine Community Park: Driveway Sight Distance Evaluation, prepared by CR Associates in May 2026. With those measures in place, sight distance will meet the applicable standard and Warrant B will not be triggered.

Warrant C, Transition to Signal Control, is not applicable. No traffic signal or roundabout installation is planned at this location.

Warrant D, 8-Hour Volume, is not met. Turning movement count data collected in June 2020 show peak hour volumes of 147 vehicles on South Grade Road during the AM peak hour and 248 vehicles during the PM peak hour. Calle de Compadres recorded 2 vehicles during the AM peak hour and 1 vehicle during the PM peak hour. Because the 85th percentile approach speed on South Grade Road exceeds 40 mph, the 70 percent speed adjustment to the Warrant D volume thresholds is applicable. With this adjustment, the major street threshold is 210 units per hour and the minor street threshold is 140 units per hour. While the PM peak hour volume on South Grade Road exceeds the adjusted major street threshold, the minor street volumes fall decisively below the adjusted threshold in both peak periods. Therefore, Warrant D is not met.

Warrant E, Other Factors, is not met. Turning movement count data collected in June 2020 recorded left-turn volumes from Calle de Compadres of 1 vehicle during the AM peak hour and 1 vehicle during the PM peak hour, confirming that left-turn demand from the minor street is effectively zero. Pedestrian crossing volumes observed during the same count period were 7 during the AM peak hour and 12

[3] https://highways.dot.gov/safety/hsip/hsip-noteworthy-practice-series/hsip-project-evaluation

during the PM peak hour; low absolute volumes that do not support installation of all-way stop control under the other factors criterion., Additionally, South Grade Road and Calle de Compadres do not share similar design or operating characteristics. These conditions do not support installation of all-way stop control under the other factors criterion.

Based on the CA MUTCD warrant evaluation, an all-way stop or traffic signal at either driveway is not warranted. The relatively low side-street and driveway volumes compared to South Grade Road would create substantially differing approach volumes, and all-way stop control under these conditions would impose unnecessary delay on through traffic. This conclusion is consistent with the California MUTCD 2026, which states that all-way stop control should be based on an engineering study and cautions that "all-way stop controls at intersections with substantially differing approach volumes can reduce the effectiveness of these devices for all roadway users" (California MUTCD 2026, Part 2, Chapter 2B, Section 2B.12, All-Way Stop Control, p. 11). Installing all-way stop control at an unwarranted location may also introduce operational and safety concerns, including rear-end collision potential from unexpected deceleration on a high-speed approach, queue spillback into the through traffic stream, and reduced driver compliance over time if the control device is perceived as unnecessary. Accordingly, all-way stop control is no longer considered appropriate, and the prior all-way stop recommendation from the 2020 TIS at Driveway 1 is superseded.

Based on the availability of adequate stopping sight distance and corner sight distance, side-street stop control is recommended at both Driveway 1 and Driveway 2. This treatment would require exiting park vehicles to stop and yield before entering South Grade Road while allowing through traffic on South Grade Road to remain unimpeded.

Supplemental MUTCD Signing

The County should install the following signs along South Grade Road in advance of both driveways:

- Side Road warning (W4-3) in both directions, placed per MUTCD Table 2C-4 for the applicable approach speed, to alert drivers to the intersecting park driveways ahead.
- Recreational Area Direction sign (RA1-1) with the park name and directional arrow, installed per MUTCD Part 2D from both the east and west approaches, advising drivers they are approaching the Alpine Community Park entrance.

Pedestrian and Bicyclist Safety Evaluation

Pedestrian safety at the proposed project driveways was evaluated based on the sight distance findings documented above and the right-of-way provisions of the California Vehicle Code (CVC). Under CVC Section 21950(a), the driver of a vehicle is required to yield the right-of-way to a pedestrian crossing the roadway within any marked or unmarked crosswalk at an intersection. Pedestrians crossing South Grade Road at either project driveway are protected by this statutory right-of-way, and drivers exiting either driveway are required to yield to such pedestrians before entering the through travel lane.

As established in the Stopping Sight Distance evaluation above, the available SSD on South Grade Road satisfies the AASHTO 50 mph standard at all four driveway approach directions. A driver traveling on South Grade Road at the 85th percentile operating speed of 46 mph, under normal daytime conditions, therefore has sufficient sight distance to perceive a pedestrian at either driveway location and bring the vehicle to a complete stop before reaching the pedestrian. Pedestrians, in turn, have a clear view of oncoming traffic along South Grade Road from the driveway position. This is supported by the corner sight distance findings above for three of the four driveway approach directions, and will

be supported at the fourth approach (Driveway #2, northeastbound) upon completion of the vegetation clearing and grading measures identified as a condition of project approval.

The AASHTO-compliant stopping sight distance, together with the statutory pedestrian right-of-way protection under CVC Section 21950 and the low pedestrian volumes anticipated at the driveway locations, supports a finding that the project will not substantially increase hazards to pedestrians along South Grade Road.

Public outreach conducted during the planning process for the proposed project indicated that residents currently access the project area via preserve trails on County of San Diego and Back County Land Trust (BCLT) property. This existing pedestrian access pattern is consistent with a trail-oriented mode of arrival rather than direct pedestrian crossings of South Grade Road at the proposed driveway locations, and supports the finding that pedestrian crossing volumes at the driveways are expected to remain low.

Bicyclist safety at the proposed project driveways was evaluated based on the sight distance findings documented above. The available stopping sight distance on South Grade Road satisfies the AASHTO standard at all four driveway approach directions, which means a driver traveling on South Grade Road has sufficient distance to perceive a bicyclist near either driveway and bring the vehicle to a complete stop before reaching the bicyclist. On this basis, the proposed driveway locations are considered safe for bicyclists traveling along South Grade Road.

The project will construct its South Grade Road frontage improvements consistent with County of San Diego standards, including the provision of improvements applicable to the roadway frontage as required. This is consistent with the County General Plan, which designates Class II bicycle lanes along both sides of South Grade Road. The project's frontage improvements do not preclude the County from implementing the broader bicycle network envisioned in the County Active Transportation Plan along this corridor in the future.

South Grade Road in the vicinity of the project site does not include a dedicated bicycle lane on the project frontage. Under California Vehicle Code Section 21202, bicyclists operating on a roadway without a bicycle lane may legally occupy the full travel lane. Consequently, bicyclists traveling along South Grade Road in the project vicinity may be present within the southbound or northbound travel lane rather than at the roadway edge. Drivers exiting either park driveway should therefore anticipate the potential presence of bicyclists within the travel lane, not exclusively at the roadway shoulder in current conditions. These conditions are not proposed to be changed as part of the project.

The confirmed adequacy of stopping sight distance at all four driveway approach directions further supports bicyclist safety in this context. A driver on South Grade Road approaching either driveway has sufficient sight distance to perceive and stop for a bicyclist occupying the travel lane, consistent with the SSD findings documented in Attachment C.
Park visitors arriving by bicycle are anticipated to consist primarily of teens and adults, as younger children are generally chauffeured by parents or guardians, a travel pattern accounted for in the companion Parking Generation Study. As concluded in this memorandum, the project's construction of frontage improvements to County standards combined with confirmed adequate sight distance at both proposed driveways provides a safe operating environment for bicyclists traveling along South Grade Road, with drivers exiting either driveway having sufficient sight distance to identify and yield to an approaching bicyclist.

From a bicyclist safety perspective, the project's construction of frontage improvements to County standards, combined with the confirmation of adequate sight distance at both proposed project

driveways with implementation of the recommendations identified in the companion sight distance memorandum (*Alpine Community Park: Driveway Sight Distance Evaluation*, CR Associates, May 2026), provides a safe operating environment for bicyclists traveling along South Grade Road. Drivers exiting either driveway will have sufficient sight distance to identify and yield to approaching bicyclists, consistent with the requirements evaluated and documented in the sight distance analysis.

Beyond the sight distance and parking analyses, several physical design features of the proposed project collectively support a safe operating environment for pedestrians and bicyclists. Park access is limited to two defined, stop-controlled driveways along South Grade Road, concentrating vehicle entry and exit at locations evaluated for sight distance adequacy and channeling pedestrian and bicycle crossings to predictable, manageable points. The project will construct frontage improvements along its South Grade Road frontage consistent with County of San Diego standards, providing a paved, defined edge condition along the roadway that benefits both pedestrians and bicyclists in the project vicinity. The project is also designed in conformance with ADA accessibility requirements, ensuring accessible pathways and connections within the site. Taken together, these features support a finding that the project provides a safe environment for pedestrians and bicyclists consistent with applicable standards.

In addition to the measures discussed above, CRA considered three supplemental traffic control and pedestrian crossing treatments applicable to the project driveways and South Grade Road frontage. These treatments include a traffic signal at Driveway #1, a Pedestrian Hybrid Beacon (PHB), and a Rectangular Rapid-Flashing Beacon (RRFB) with high-visibility crosswalk. Each treatment is subject to its own applicable CAMUTCD warrant criteria, which evaluate factors such as vehicular and pedestrian volumes, crossing distance, and crash experience. These treatments are identified solely in the interest of full disclosure and for the County's future consideration, consistent with the ongoing post-occupancy monitoring and engineering judgment appropriately exercised by the agency with jurisdiction over the right-of-way. These treatments, along with the applicable warrant criteria and disclosure basis for each, are documented in **Attachment D**.

Design Features that Substantially Increase Hazards

The project does not propose any changes to the existing geometric design of South Grade Road. The two proposed driveways introduce new intersection legs at locations where, as documented in the companion sight distance memorandum (*Alpine Community Park: Driveway Sight Distance Evaluation*, CR Associates, May 2026), stopping sight distance meets AASHTO requirements at all approaches and corner sight distance meets or can be brought into compliance with County of San Diego Public Road Standards through implementation of the recommended project design measures. The project therefore does not introduce a design feature that would create or substantially increase traffic hazards along South Grade Road, and the crash history within the project vicinity does not indicate a pattern of geometry-related collisions that would be exacerbated by the project.

Supporting documentation is provided in the attachments to this memorandum as follows:

- **Attachment A** (South Grade Road Crash Summary, January 2021–December 2025, TIMS/ SWITRS) documents the crash history data underlying the safety review in this Memorandum;
- **Attachment B** (Alpine Community Park – Parking Demand Analysis) documents a parking study prepared for the project;
- **Attachment C** (Alpine Community Park — Driveway Sight Distance Evaluation) presents the SSD, CSD, and combination vehicle ISD field analysis; and
- **Attachment D** (Additional Safety Treatments) describes additional safety treatments considered during the analysis.

References

California Environmental Quality Act (CEQA) Guidelines, 14 Cal. Code Regs. §§ 15000 et seq.

City of Maywood v. Los Angeles Unified School Dist. (2012) 208 Cal.App.4th 362.

Citizens of Goleta Valley v. Board of Supervisors (1990) 52 Cal.3d 553.

County of San Diego. 2023. Final Environmental Impact Report for the Alpine Community Park Project (State Clearinghouse No. 2021030196). October.

Gooden v. County of Los Angeles (2024) 106 Cal.App.5th 1.

Minute Order, Case No. 37-2024-00000536-CU-WM-CTL, Superior Court of California, County of San Diego, June 9, 2025 (ROA 68).

Peremptory Writ of Mandate, Case No. 37-2024-00000536-CU-WM-CTL, Superior Court of California, County of San Diego, January 23, 2026.

U.S. Department of Transportation, Federal Highway Administration. Manual on Uniform Traffic Control Devices (MUTCD), 11th Edition. 2023.

Caltrans. 2020. Highway Design Manual. Chapter 200 – Sight Distance.

Attachment A - South Grade Road Crash Summary, January 2021 – December 2025 (TIMS/SWITRS)

Find address or place

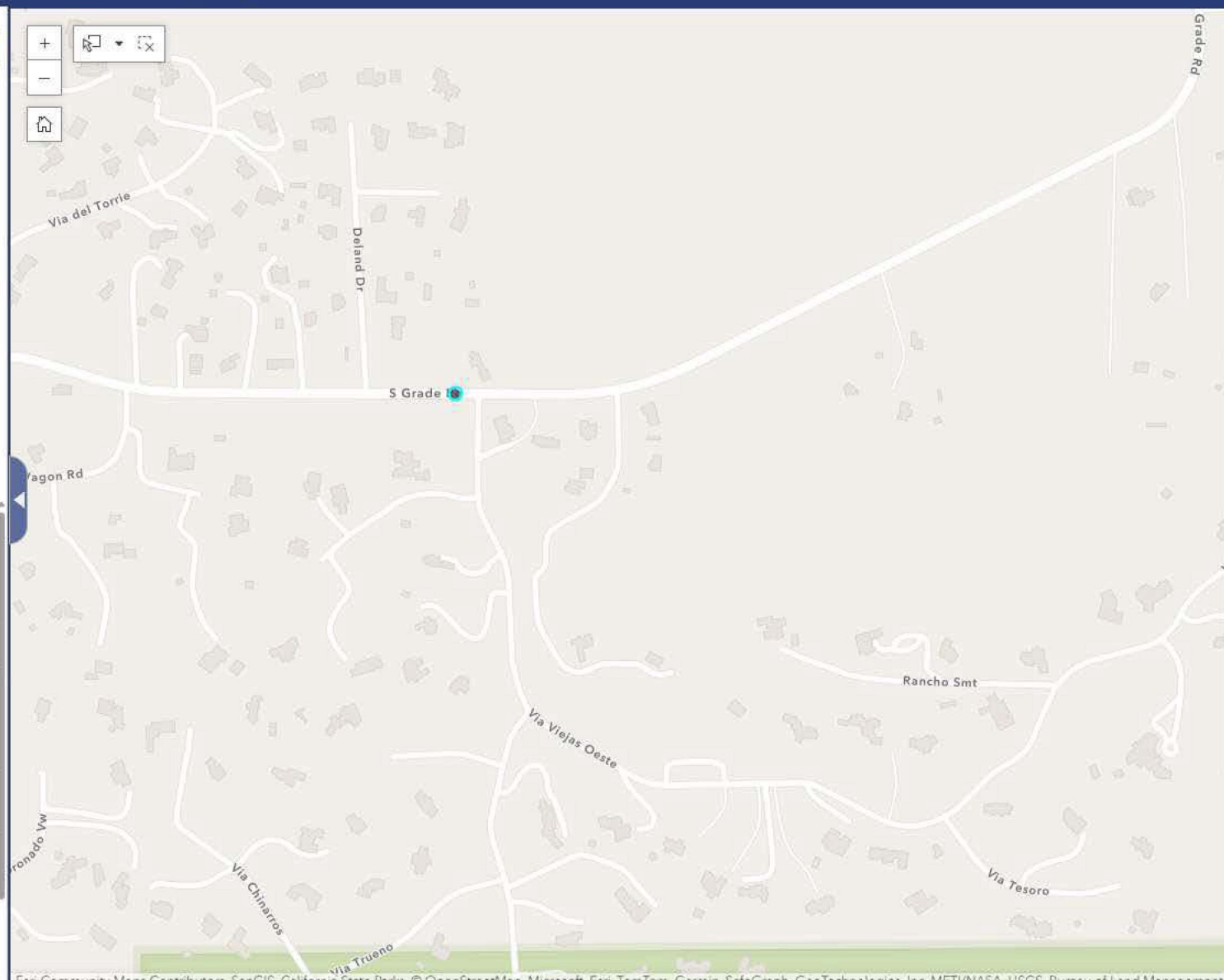
Collision year is any of
1 Selected

Collision severity is any of
1 Selected

Jurisdiction is any of
0 Selected

- Collisions (2012-2024)
- Bikeways
- Safety Focus Network
- Systemic Safety Network
- Jurisdictions

Cities



1 of 2

5639280

Zoom to

STATE_ROUTE	0
ROUTE_SUFFIX	
POSTMILE_PREFIX	
POSTMILE	0.000000
LOCATION_TYPE	No State Highway
RAMP_INTERSECTION	Not Stated
SIDE_OF_HIGHWAY	Not stated/not state highway
TOW_AWAY	Yes
COLLISION_SEVERITY	Fatal
NUMBER_KILLED	1
NUMBER_INJURED	0
PARTY_COUNT	1
PRIMARY_COLL_FACTOR	(Vehicle) Code Violation
PCF_CODE_OF_VIOL	Not Stated
PCF_VIOL_CATEGORY	Improper Turning
PCF_VIOLATION	22107
PCF_VIOL_SUBSECTION	
HIT_AND_RUN	Not Hit and Run
TYPE_OF_COLLISION	Hit Object

Selected features: 1

Esri Community Maps Contributors, SanGIS, California State Parks, © OpenStreetMap, Microsoft, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDA, USFWS | SanGIS County of Sa… Powered by Esri

Crash Diagram

Primary Street:

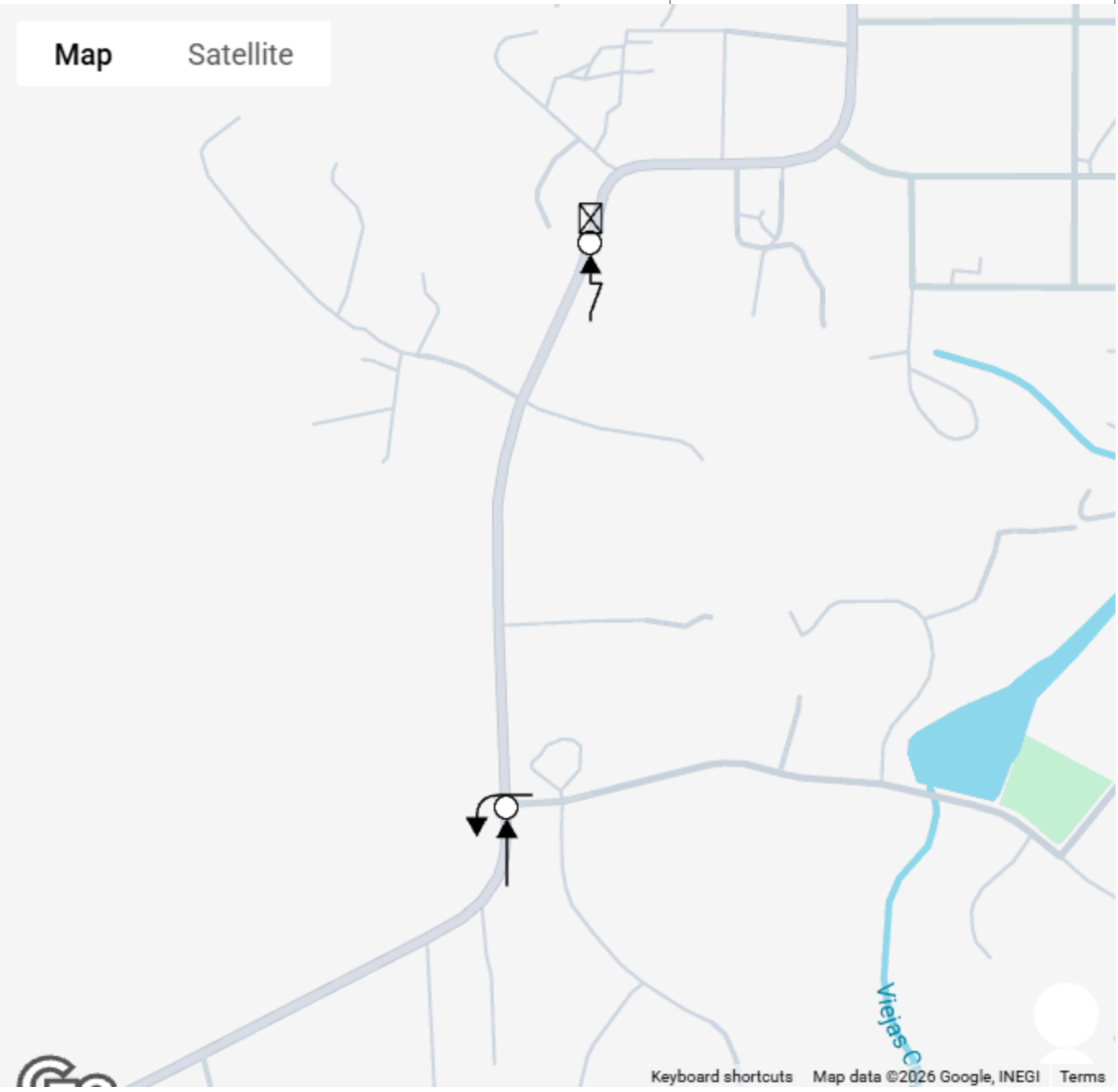
Secondary Street:

Time Period:

Agency Name:

Mapping Summary:	
Fatal Crash	0
Injury Crash	2
Mapped	2
Not Drawn	1
Total	3

- Straight
- Left Turn
- Right Turn
- U-Turn
- Overturned
- Ran Off Road
- Stopped
- Parked
- Pedestrian
- Bicycle
- Object
- Fatal Crash
- Injury Crash



Date Created: 04/19/2026

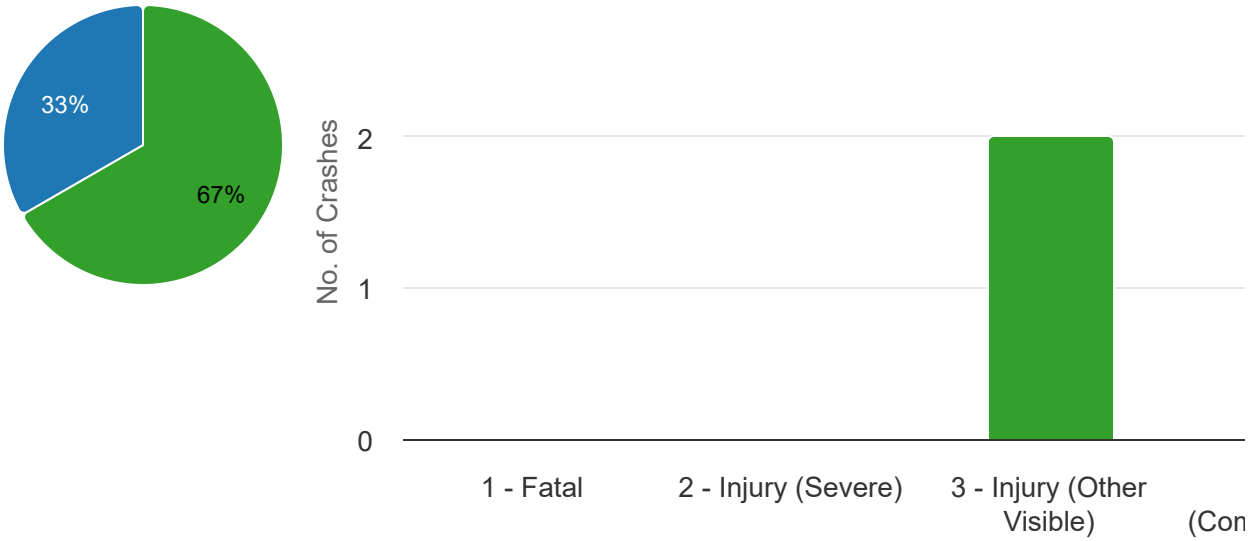
Created by TIMS (https://tims.berkeley.edu) © UC Regents, 2014-2026

Crash Summary by All Selected Crashes

Crash Summary | Victim Summary | Ped Crash Summary

Crash Summary

By Crash Severity



Show Zero

Crash Severity	Count	%
1 - Fatal	0	0.00%
2 - Injury (Severe)	0	0.00%
3 - Injury (Other Visible)	2	66.67%
4 - Injury (Complaint of Pain)	1	33.33%

By Crash Type

BerkeleySafeTREC

SWITRS Crash Details for CASE ID - 91412970

Crash Information

County	San Diego
City	Unincorporated
Date & Time (M/D/Y)	02/10/2021 11:15
Location (Intersection)	South Grade Rd & Kenda Way
Dist. & Dir. from Intersection	325.00 ft North
State Highway	No
Geocoded Location	32.8316422, -116.7534256 Location

Type of Crash	G - Vehicle/Pedestrian
Motor Vehicle Involved With	B - Pedestrian
Crash Severity	3 - Injury (Other Visible)
PCF Violation Category	08 - Improper Turning
Weather	A - Clear
Alcohol Involved	No

Pedestrian Crash	Yes	**Bicycle Crash**	No
Motorcycle Crash	No	**Truck Crash**	No

Map View



Street View



Parties: 2

Party Number	Party Type	Statewide Vehicle Type	At Fault	Party Direction	Movement Preceding Collision
1	1 - Driver (including Hit and Run)	- - Not Stated	Yes	South	M - Other Unsafe Turning
2	2 - Pedestrian	N - Pedestrian	No	South	- - Not Stated

Victims: 1

Party Number	Victim Role	Victim Gender	Victim Age	Victim Degree of Injury
2	3 - Pedestrian	F - Female	19	6 - Suspected Minor Injury

BerkeleySafeTREC

Crash Details for Case ID - 94371540

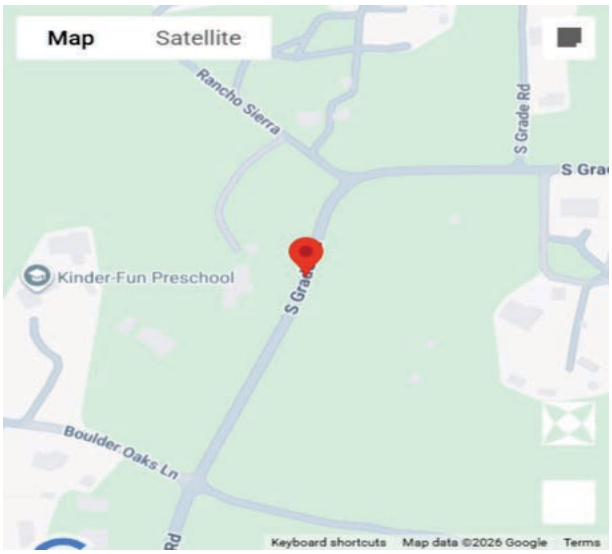
Crash Information

County	San Diego
City	Unincorporated
Date & Time (M/D/Y)	08/17/2024 22:30
Location (Intersection)	South Grade Rd & Rancho Sierra
Dist. & Dir. from Intersection	300.00 ft South
State Highway	No
Geocoded Location	32.8260269, -116.7572479

Type of Crash	E - Hit Object
Motor Vehicle Involved With	I - Fixed Object
Crash Severity	4 - Injury (Complaint of Pain)
PCF Violation Category	08 - Improper Turning
Weather	A - Clear
Alcohol Involved	No

Pedestrian Crash	No	**Bicycle Crash**	No
Motorcycle Crash	No	**Truck Crash**	No

Map View



Street View



Parties: 1

Party Number	Party Type	Statewide Vehicle Type	At Fault	Party Direction	Movement Preceding Collision
1	1 - Driver (including Hit and Run)	A - Passenger Car/Station Wagon	Yes	North	C - Ran Off Road

Victims: 1

Party Number	Victim Role	Victim Gender	Victim Age	Victim Degree of Injury
1	1 - Driver	F - Female	69	7 - Possible Injury

BerkeleySafeTREC

Crash Details for Case ID - 94784761

Crash Information

County	San Diego
City	Unincorporated
Date & Time (M/D/Y)	07/20/2025 16:55
Location (Intersection)	South Grade Rd & Via Viejas
Dist. & Dir. from Intersection	At Intersection
State Highway	No
Geocoded Location	32.8198318, -116.7583466

Type of Crash	D - Broadside
Motor Vehicle Involved With	C - Other Motor Vehicle
Crash Severity	3 - Injury (Other Visible)
PCF Violation Category	09 - Automobile Right of Way
Weather	A - Clear
Alcohol Involved	No

Pedestrian Crash	No	**Bicycle Crash**	No
Motorcycle Crash	No	**Truck Crash**	No

Map View



Street View



Parties: 2

Party Number	Party Type	Statewide Vehicle Type	At Fault	Party Direction	Movement Preceding Collision
1	1 - Driver (including Hit and Run)	A - Passenger Car/Station Wagon	Yes	West	E - Making Left Turn
2	1 - Driver (including Hit and Run)	A - Passenger Car/Station Wagon	No	North	B - Proceeding Straight

Victims: 1

Party Number	Victim Role	Victim Gender	Victim Age	Victim Degree of Injury
1	1 - Driver	F - Female	18	6 - Suspected Minor Injury

BerkeleySafeTREC

Crash Details for Case ID - 94807595

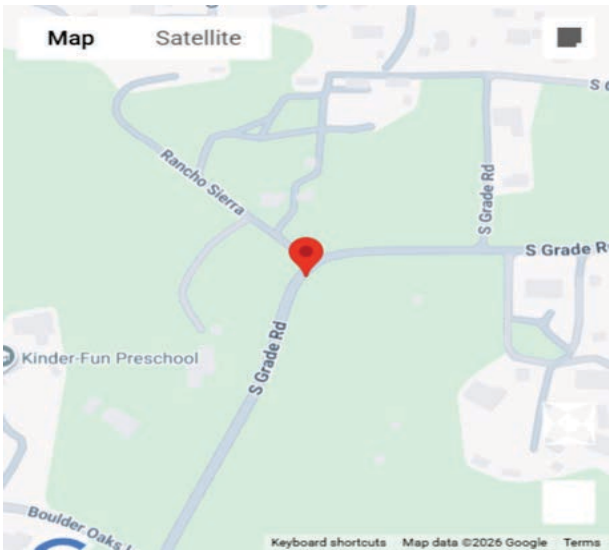
Crash Information

County	San Diego
City	Unincorporated
Date & Time (M/D/Y)	07/03/2025 22:25
Location (Intersection)	South Grade Rd & Rancho Sierra
Dist. & Dir. from Intersection	40.00 ft South
State Highway	No
Geocoded Location	32.8266907, -116.756958

Type of Crash	E - Hit Object
Motor Vehicle Involved With	I - Fixed Object
Crash Severity	3 - Injury (Other Visible)
PCF Violation Category	01 - Driving or Bicycling Under the Influence of Alcohol or Drug
Weather	A - Clear
Alcohol Involved	Yes

Pedestrian Crash	No	**Bicycle Crash**	No
Motorcycle Crash	No	**Truck Crash**	No

Map View



Street View



Parties: 1

Party Number	Party Type	Statewide Vehicle Type	At Fault	Party Direction	Movement Preceding Collision
1	1 - Driver (including Hit and Run)	A - Passenger Car/Station Wagon	Yes	South	M - Other Unsafe Turning

Victims: 1

Party Number	Victim Role	Victim Gender	Victim Age	Victim Degree of Injury
1	1 - Driver	F - Female	34	6 - Suspected Minor Injury

Attachment B - Alpine Community Park: Parking Demand Analysis

TO: Yara Fisher, HELIX Environmental Planning, Inc.

FROM: Phuong Nguyen, TE; CR Associates
Jorge Muradas, EIT; CR Associates

DATE: July 29, 2026

RE: Alpine Community Park – Parking Demand Analysis

This memorandum presents the methodology and findings of a parking demand study prepared for the Alpine Community Park project (hereinafter referred to as the "project"). The study was conducted to evaluate anticipated parking conditions associated with organized sports activities at the project site and to assess whether the proposed parking supply would be sufficient to accommodate projected demand without resulting in spillovers onto adjacent streets or neighboring residential areas.

Project Background

The County of San Diego (County) Department of Parks and Recreation (DPR) proposes to construct the Alpine Community Park project within the community of Alpine, California. The project encompasses approximately 96.6 acres of undeveloped land, of which approximately 25 acres would be developed as an active community park, and the remaining 70 acres would be preserved as permanent open space.

The project site is located adjacent to the Back County Land Trust's (BCLT) Wright's Field Preserve, north of South Grade Road, east of Tavern Road, and south of Alpine Boulevard. The active park development area would incorporate modifications to existing trails and the construction of new recreational amenities, while the remaining acreage would be conserved as undisturbed open space.

CR Associates (CRA) previously prepared a Transportation Impact Study (TIS) for the proposed project (Alpine Community Park Transportation Impact Study, July 2020). The TIS evaluated two roadway segments and five intersections along South Grade Road under Existing and Near-Term Year 2023 Base conditions. Key findings from the TIS are summarized as follows:

- Project trip generation was estimated at 480 average daily trips (ADT), including 20 AM peak hour trips and 39 PM peak hour trips, based on the SANDAG Brief Guide to Vehicular Traffic Generation Rates for the San Diego Region (April 2002) at a rate of 20 trips per acre[1] for a 24-acre regional park.
    - While Alpine Community Park is intended to be a community park, not local park, the SANDAG trip generation rates do not have a standalone "community park" category. The Regional Park rate was selected as the more appropriate rate given the project's rural, unincorporated context and comparatively smaller surrounding population relative to a typical urban city park, while also consistent with the rate applied in the previously approved 2020 TIS. This rate is considered a conservative estimate of actual demand, which is further supported by the parking demand analysis presented in this memorandum.
- Under all studied scenarios, all analyzed roadway segments and intersections were found to operate at Level of Service (LOS) C or better, and no significant traffic impacts were identified.

[1] Weekday non-event trip generation rate.

- Parking requirements of 240 spaces were confirmed per County of San Diego Ordinance No. 10251.
- While project Driveway #1 (located at the intersection of South Grade Road at Calle de Compadres) does not meet CAMUTCD peak hour volume warrants for an all-way stop-controlled intersection, conversion to all-way stop control was recommended due to documented pedestrian collisions in the vicinity of the intersection.
- A stopping sight distance at the intersection of South Grade Road at Via Viejas is not met on the southbound approach.
    - Recommendation for the installation of "STOP AHEAD" warning signs on the south leg of the intersection.

In response to the Writ of Mandate issued on January 23, 2026 (Case No. 37-2024-00000536-CU-WM-CTL), CRA conducted a parking demand analysis to evaluate the anticipated parking conditions at the proposed project. The analysis was conducted to address the following objectives:

1. Quantify the observed average and maximum parking demand associated with organized sports activities at a comparable park facility. The proposed project is intended to accommodate organized sports practices, during which organizations or leagues may reserve fields for scheduled use; however, the site is not intended to host tournaments or other formal competitive events.
2. Evaluate whether projected parking demand could exceed the available on-site parking supply and result in spillover parking onto adjacent streets or nearby properties.
3. Identify appropriate parking management strategies, as warranted, to ensure that park-generated parking demand can be accommodated on-site and that spillover into the surrounding residential neighborhood is avoided.
4. Evaluate whether the available on-site parking supply and recommended management measures would contain park-related parking demand within the project site and prevent park users from parking within the surrounding residential neighborhood or along roadway shoulders, thereby reducing the potential for conflicts between park users and vehicular traffic in the vicinity of South Grade Road.

Analog Facility Selection

To address the study objectives, a structured, criteria-based screening of 76 public parks within and around the East San Diego County region was conducted to identify the facility most representative of the proposed Alpine Community Park program for purposes of parking demand observation. The candidate inventory was compiled from County of San Diego Parks and Recreation records, municipal parks departments (Cities of Santee, El Cajon, La Mesa, and Lemon Grove), and supporting capital improvement and planning documents.

The screening applied five sequential filters. A park eliminated at any screen was not advanced to subsequent screens. The screens are summarized below; the complete screening log documenting the disposition of all 76 candidate parks is provided in **Attachment A**.

- **Screen 0 — Geographic Eligibility:** Three parks were excluded as outside the East San Diego County study area — Sweetwater Summit Regional Park (Bonita/South Bay), Sycamore Canyon/Goodan Ranch County Preserve (Poway/North Inland), and Wilderness Gardens County Preserve (Pala/North County) — leaving a candidate universe of 73 East County public parks.

- **Screen 1 — Park Type:** Eighteen parks were eliminated for incompatible trip generation patterns: 12 programmed Sports Complexes, which generate scheduled league-based

demand concentrated around game and practice times rather than the mixed-use day-use pattern of a community park; and 6 Regional/Camping Parks, which generate multi-day overnight stays with stayover dwell times incompatible with day-use trip rates.

- **Screen 2 — Catchment Setting and Population Density:** Twenty-seven parks were eliminated whose catchment contexts — urbanized, far-rural, or established mixed-suburb settings — do not transfer to Alpine's rural/semi-rural East County setting. For purposes of this screening, catchment context was assessed based on the regional setting of each candidate park relative to Alpine, considering the surrounding community plan designations, land use character, and density patterns within San Diego County. Parks serving higher-density urban catchments exhibit greater walk and transit modal share and different per-household visitation rates than those anticipated at Alpine. Operating agency was deliberately not used as a screen criterion because catchment context, not jurisdictional ownership, is the determinant of park trip-generation transferability.

- **Screen 3 — Amenity Mix:** Twenty-five parks with predominantly passive, pocket-neighborhood, preserve-trailhead, or indoor-recreation programs were eliminated. Advancement required a destination-grade family park program including at minimum a playground, picnic areas, restrooms, and active sports facilities — consistent with the proposed Alpine Community Park improvements.

- **Screen 4 — Fine Demographic Alignment:** No additional parks were eliminated. All parks that satisfied Screens 2 and 3 also met the fine demographic alignment criteria (median household income of approximately $85,000 or greater, family-dominant household composition, high homeownership), confirming that the coarse catchment screen at Screen 2 effectively captured the relevant demographic filter.

- **Screen 5 — Scale and Survey Configuration:** Two parks — Collier County Park (Ramona) and Steele Canyon County Park (Spring Valley/Jamul) — were retained through Screen 4 but not selected as the primary comparable park. Collier County Park presents multiple access points requiring coordinated multi-station counts; its older facility vintage and lower current amenity intensity would yield a low-end attraction estimate inappropriate for forecasting peak design-year conditions. Steele Canyon County Park was retained through Screen 4, but not selected as the primary comparable park. This park's catchment straddles urbanized Spring Valley and rural Jamul, producing a mixed demographic signal that complicates rate transferability. Both parks are retained as secondary sensitivity references as discussed below.

Hilton Head County Park was selected as the primary analog facility on the basis of full alignment across all five screens. The park is a 10-acre County of San Diego Community/Neighborhood Park located in Rancho San Diego/Eastern El Cajon, a planned low-density suburban community with a family-dominant, high-homeownership, single-family-dominant household profile and population density directly comparable to Alpine's East County setting. Its amenity program — children's playground, multi-use sports field, basketball court, exercise stations, shaded picnic and BBQ areas, covered pavilions, drinking fountains, and restrooms — most closely parallels the proposed Alpine improvements among the parks that advanced through screening. Hilton Head has a single primary vehicular access from Hilton Head Road enabling a methodologically clean observation with a single station, and its current design reflects County community park standards comparable to the proposed Alpine improvements. A 2.5 area-based scale factor was applied to account for the difference in active program area between Hilton Head (10 acres) and Alpine (25 acres), proportionally adjusting the observed parking demand to reflect the proposed 240-space lot; this factor is within the range supported by National Recreation and Park Association (NRPA) guidance for transferable trip-rate

studies. Hilton Head's denser urban setting and larger surrounding population relative to Alpine's rural, unincorporated context results in comparatively greater baseline parking demand. No adjustment was made for differences in population density, retaining the unadjusted demand rates from the denser Hilton Head setting as a conservative upper-bound estimate for the proposed project.

In addition to the foregoing screening process, two additional East San Diego County parks — Cactus County Park and Valley Center Community Park — were considered but determined to be unsuitable analogs due to significant differences in facility size, parking capacity, recreational programming, and geographic and demographic context relative to both the proposed project and the selected analog site.

Sensitivity References

Although Hilton Head County Park is the primary analog facility, Collier County Park and Steele Canyon County Park are documented as secondary references for sensitivity comparison of the community-park parking demand rate. Where the Hilton Head observed rate falls within the range bracketed by the two secondary references after appropriate adjustment for demographic and amenity differences, the central forecast is considered robust. Additionally, because no East County park combines the full amenity-rich community-park program with equestrian access in a single facility, the equestrian-trip component is addressed through a supplementary sensitivity reference utilizing Oakoasis County Preserve (Lakeside) and Dos Picos County Park (Ramona) as data sources for the discrete equestrian-trip contribution, scaled to the proposed Alpine equestrian footprint.

ITE Reference Rate Comparison

As a supplemental reference, trip generation rates for Land Use Code (LUC) 411 (Public Park) from the Institute of Transportation Engineers (ITE) Trip Generation Manual (12th Edition) were reviewed. The ITE LUC 411 average weekday rate of 0.78 vehicle trips per acre yields an estimated 20 daily vehicle trips for Alpine Community Park's 25-acre active program area. The Saturday rate of 1.96 vehicle trips per acre yields approximately 49 daily vehicle trips. Because the ITE LUC 411 database encompasses a wide range of park types and sizes — including predominantly passive and trail-oriented facilities substantially larger than the proposed project, with an average study-site size of 612 acres — the resulting rates understate the parking demand that would be expected at a smaller, actively programmed sports park during organized practice conditions. As noted in the ITE data source, caution should be used when applying the acreage-based rate, as the percentage of park area used most intensively varies considerably across the study sites. The parks eliminated at earlier screens — particularly the passive, preserve-trailhead, and trail-corridor facilities eliminated at Screens 2 and 3 — more closely resemble the large passive facilities that anchor the lower end of the ITE LUC 411 rate distribution, confirming their inapplicability as analogs for an actively programmed community park.
The observed peak parking demand at Hilton Head County Park during organized practice days — averaging 72 vehicles for baseball and 105 vehicles for multi-use field practices — substantially exceeds the implied demand from ITE's generalized public park rates. This confirms that the Hilton Head analog captures peak active programming demand more accurately and conservatively than the ITE composite rate would suggest, and further reinforces the appropriateness of its selection as the primary analog facility.

Parking Demand Study

Parking demand was evaluated using Nearmap, a high-resolution aerial imagery platform that provides geo-referenced, time-stamped overhead imagery at recurring intervals throughout the year. Nearmap allows for systematic vehicle counts within defined parking areas and adjacent on-street segments and provides a non-intrusive, repeatable basis for evaluating parking utilization over time. Nearmap

imagery is typically collected near midday to minimize shadowing and optimize image clarity. Accordingly, the observed vehicle counts are assumed to be generally representative of peak daytime parking conditions, particularly for weekend observations when park visitation and associated parking demand are typically greatest.

A total of 14 survey dates spanning from February 2022 through January 2026 were reviewed. For each survey date, the aerial imagery was examined to identify the activity occurring at the site at the time of image capture. Survey observations were categorized into the following activity types:

- Baseball practice days
- Multi-use field practice days[2]
- Non-event days with no organized sports activity

Hilton Head County Park is served by a 56-space on-site parking lot. When on-site parking supply is fully utilized, overflow parking occurs along adjacent on-street segments along Hilton Head Road. Therefore, total parking demand at the analog site was defined as the combined utilization of the on-site parking lot and adjacent on-street parking supply.

Because the on-site parking lot and adjacent on-street parking are shared by organized sports participants, general park users, and residents of nearby multi-family residential uses, multiple survey observations were necessary to distinguish sports-related parking demand from baseline parking activity. To isolate the parking demand attributable to organized sports practices, the following assumptions and analytical procedures were applied:

- Vehicles observed in the same on-street locations across multiple non-event survey dates were assumed to represent residential spillover from adjacent properties.
- The average on-street occupancy observed on non-event days, equal to 16 vehicles, was established as the residential spillover baseline.
- For sports activity days, this 16-vehicle baseline was subtracted from total observed on-street occupancy to estimate the incremental on-street parking demand attributable to organized sports practices.

Parking demand observed at Hilton Head County Park during sports activity days reflects the types of active programming that may occur at the proposed project, including organized sports activities and concurrent general recreational use by non-sports visitors. Hilton Head County Park is also located in a denser and more urbanized setting, which likely results in a higher regular park usage rate than would be expected at the proposed project. Therefore, applying the Hilton Head regular park usage rate to the proposed project provides a conservative assumption for estimating total parking demand during active programming conditions, while excluding recurring background parking not associated with park activities to avoid overstating park-generated demand.

Table 1 summarizes the observed average and maximum parking demand by activity type. Supporting calculations are provided in **Attachment B**.

[2] Note: The organized field-sport activity observed at Hilton Head County Park, which included soccer practice, is considered representative of the parking demand anticipated during scheduled multi-use field use at Alpine Community Park. Multi-use fields accommodate a similar range of organized team sports, and the associated parking demand is expected to be comparable regardless of the specific sport being played.

Table 1: Observed Parking Demand by Activity Type – Hilton Head County Park

Activity Type	Observations (n)	Park Lot (vehicles)	Multi-Use Field Practice (vehicles)	Total Parking Demand (vehicles)
Baseball Game	5	Avg: 41 / Max: 50	Avg: 31 / Max: 69	**Avg: 72 / Max: 119**
Multi-Use Field Practice	2	Avg: 54 / Max: 59	Avg: 51 / Max: 72	**Avg: 105 / Max: 131**

Source: CR Associates (2026)

Notes:
1. Game On-Street Demand = Observed On-Street Parking minus Residential Spillover Baseline (16 vehicles).
2. See **Attachment B** for detailed calculations.

As presented in **Table 1**, the average total parking demand on baseball practice days was 72 vehicles, with a maximum observed demand of 119 vehicles. For multi-use field practice days, the average total demand was 105 vehicles, with a maximum of 131 vehicles. In both cases, total parking demand reflects the combined utilization of the on-site park lot and the adjacent on-street supply, net of the 16-vehicle residential spillover baseline.

Conclusion

The parking demand analysis indicates that parking demand associated with a single organized sports practice would remain within the proposed project's on-site parking supply of 240 spaces. Specifically, the average total parking demand observed at the analog site was 72 vehicles for baseball practices and 105 vehicles for multi-use field practices, while the maximum observed demands were 119 vehicles and 131 vehicles, respectively. Each of these demand levels is below the proposed on-site parking supply. On this basis, parking demand generated by a single organized sports practice at any given time is not expected to exceed available on-site parking at the project site.

Potential exceedance of parking supply would occur only under conditions in which multiple organized sports practices overlap. For example, if baseball and multi-use field practices were to occur concurrently, the combined parking demand could be as follows:

- Combined average parking demand: approximately 177 vehicles
- Combined maximum parking demand: approximately 250 vehicles

Under the maximum concurrent condition, total parking demand could exceed the proposed 240-space parking supply, which could result in spillover parking onto adjacent streets, roadway shoulders, or into the surrounding residential neighborhood.

To prevent demand from exceeding supply under concurrent multi-sport conditions, where combined maximum demand could approach approximately 250 vehicles, The following scheduling requirements shall apply to all organized sports activities at the park. With this scheduling protocol in place, on-site parking supply will remain sufficient to accommodate all event-day demand, and spillover onto South Grade Road is not anticipated. County Parks and Recreation Programming staff shall implement and maintain these requirements:

- Only one sport or user group shall occupy each park field/court at any given time; overlapping or simultaneous sports activities or practices are prohibited.

- Sports Programming staff will monitor the site between consecutive sessions to confirm no vehicular spillover onto the public right-of-way. If spillover is observed more than two times in any given season, a minimum one-hour buffer shall be implemented between consecutive sessions to allow full vehicle turnover before the next group arrives. For example, if a session ends at 1:00 PM, the next session may not begin until 2:00 PM. This one-hour buffer shall increase to two hours if additional spillover continues to be observed.
- Sports Programming staff shall be responsible for scheduling all organized activities in strict accordance with these requirements.
- Parks Programming staff and the on-site volunteer shall monitor scheduling compliance on an ongoing basis to ensure these requirements are met at all times.
- Vehicular spillover onto the public right-of-way, including South Grade Road, shall be prevented through enforcement of this scheduling protocol.

Implementation of these measures would reduce the potential for overlapping parking demand and help ensure that park-generated parking remains fully accommodated on-site.

It should also be recognized that actual parking demand at the proposed project site may be lower than the demand observed at Hilton Head County Park. As discussed previously, Hilton Head County Park is located in a denser and more urbanized setting and serves a larger surrounding population than the proposed project site. Accordingly, the parking demand rates applied in this analysis are considered conservative and likely represent an upper-bound estimate of parking demand that could occur at the project site.

Following project opening, County staff and park rangers will monitor on-site and nearby on-street parking conditions for a minimum of one year of operation. If field observations demonstrate that actual parking demand associated with organized sports practices is consistently and materially lower than the levels estimated herein, modification of the parking management program may be considered. Any such modification, including potential relaxation of the single-sport restriction, should occur only following review of observed parking data and in coordination with the County Traffic Engineer

Attachment A - Comparable Park Screening Log

The table below documents the disposition of all 76 parks evaluated in the structured screening process. Rows are sorted with the selected comparable park first (green-highlighted), runner-up parks retained for sensitivity reference second (yellow-highlighted), then remaining parks grouped by the screen at which they were eliminated. Geographic exclusions at Screen 0 are highlighted in gray. The Score column (0–5) indicates how far through the screening process the park advanced.

Park / Facility	Community / Area	Primary Category	Setting	Median HHI	Screen	Score	Rationale / Disposition
Hilton Head County Park	Rancho San Diego / El Cajon	Community / Neighborhood Park	Suburban (planned)	~$100k+	SELECTED	5	Selected as primary comparable park.
Collier County Park	Ramona	Community / Neighborhood Park	Rural / semi-rural	~$90-105k	Screen 5	4	Runner-up; multiple access points; older vintage.
Steele Canyon County Park	Spring Valley / Jamul	Community / Neighborhood Park	Suburban / urbanized	~$70-80k	Screen 5	4	Runner-up; mixed catchment; multiple entries.
Barnett Ranch County Preserve	Ramona	Open-Space Preserve	Rural / semi-rural	~$90-105k	Screen 3	2	Eliminated: insufficient amenity mix (passive/preserve).
Big Rock Park	Santee	Community / Neighborhood Park	Suburban	~$95-110k	Screen 3	2	Eliminated: insufficient amenity mix (missing restrooms, active sports).
Boulder Oaks County Preserve	Lakeside / Alpine area	Open-Space Preserve	Suburban / rural edge	~$85-95k	Screen 3	2	Eliminated: passive/preserve program.
Deputy Ken Collier Park	Santee	Community / Neighborhood Park	Suburban	~$95-110k	Screen 3	2	Eliminated: insufficient amenity mix.
Forester Creek Trail	Santee	Trail Corridor	Suburban	~$95-110k	Screen 3	2	Eliminated: trail corridor, no active sports.
Lakeside Linkage County Preserve	Lakeside	Open-Space Preserve	Suburban / rural edge	~$85-95k	Screen 3	2	Eliminated: passive/preserve program.
Louis A. Stelzer County Park	Lakeside	Day-Use / Picnic Park	Suburban / rural edge	~$85-95k	Screen 3	2	Eliminated: no playground or active sports.
Luelf Pond County Preserve	Ramona	Open-Space Preserve	Rural / semi-rural	~$90-105k	Screen 3	2	Eliminated: passive/preserve program.
Marine Memorial Trails	Santee	Trail Corridor	Suburban	~$95-110k	Screen 3	2	Eliminated: trail corridor.
Mast Park	Santee	Community / Neighborhood Park	Suburban	~$95-110k	Screen 3	2	Eliminated: missing playground and restrooms.
Mast Park West Trail	Santee	Trail Corridor	Suburban	~$95-110k	Screen 3	2	Eliminated: trail corridor.

Park / Facility	Community / Area	Primary Category	Setting	Median HHI	Screen	Score	Rationale / Disposition
Mission Creek Trail	Santee	Trail Corridor	Suburban	~$95-110k	Screen 3	2	Eliminated: trail corridor.
Mt. Gower County Preserve	Ramona	Open-Space Preserve	Rural / semi-rural	~$90-105k	Screen 3	2	Eliminated: passive/preserve program.
Oakoasis County Preserve	Lakeside	Open-Space Preserve	Suburban / rural edge	~$85-95k	Screen 3	2	Eliminated: passive/preserve; retained as equestrian sensitivity reference.
Ramona Grasslands / Santa Maria Creek	Ramona	Open-Space Preserve	Rural / semi-rural	~$90-105k	Screen 3	2	Eliminated: passive/preserve program.
Shadow Hill Park	Santee	Community / Neighborhood Park	Suburban	~$95-110k	Screen 3	2	Eliminated: insufficient amenity mix.
Simon County Preserve	Ramona	Open-Space Preserve	Rural / semi-rural	~$90-105k	Screen 3	2	Eliminated: passive/preserve program.
Sky Ranch Park	Santee	Community / Neighborhood Park	Suburban	~$95-110k	Screen 3	2	Eliminated: insufficient amenity mix.
Town Center Community Park East	Santee	Community / Neighborhood Park	Suburban	~$95-110k	Screen 3	2	Eliminated: insufficient amenity mix.
Town Center Community Park West	Santee	Community / Neighborhood Park	Suburban	~$95-110k	Screen 3	2	Eliminated: insufficient amenity mix.
Walker Preserve Trail	Santee	Open-Space Preserve	Suburban	~$95-110k	Screen 3	2	Eliminated: trail/preserve.
West Hills Park	Santee	Community / Neighborhood Park	Suburban	~$95-110k	Screen 3	2	Eliminated: missing restrooms.
Weston Park	Santee	Community / Neighborhood Park	Suburban	~$95-110k	Screen 3	2	Eliminated: insufficient amenity mix.
Weston Trail	Santee	Trail Corridor	Suburban	~$95-110k	Screen 3	2	Eliminated: trail corridor.
Woodglen Vista Park	Santee	Community / Neighborhood Park	Suburban	~$95-110k	Screen 3	2	Eliminated: missing picnic and restrooms.
Aztec Park	La Mesa	Community / Neighborhood Park	Established suburb	~$80-90k	Screen 2	1	Eliminated: established mixed suburb, lower HHI, mixed tenure.

Park / Facility	Community / Area	Primary Category	Setting	Median HHI	Screen	Score	Rationale / Disposition
Berry Street Park	Lemon Grove	Community / Neighborhood Park	Urbanized	~$65-75k	Screen 2	1	Eliminated: urbanized catchment, lower HHI.
Bill Beck Park	El Cajon	Community / Neighborhood Park	Urbanized	~$60-70k	Screen 2	1	Eliminated: urbanized catchment.
Bostonia Park / Bostonia Recreation Center	El Cajon	Civic / Recreation Facility	Urbanized	~$60-70k	Screen 2	1	Eliminated: urbanized catchment.
Briercrest Park	La Mesa	Day-Use / Picnic Park	Established suburb	~$80-90k	Screen 2	1	Eliminated: established suburb.
Collier Park	La Mesa	Day-Use / Picnic Park	Established suburb	~$80-90k	Screen 2	1	Eliminated: established suburb.
Dictionary Hill Open Space Preserve	Spring Valley	Open-Space Preserve	Suburban / urbanized	~$70-80k	Screen 2	1	Eliminated: suburban/urbanized catchment.
El Capitan County Preserve	Lakeside / El Cajon Mtn	Open-Space Preserve	Urbanized	~$60-70k	Screen 2	1	Eliminated: urbanized catchment.
Estrella County Park	Spring Valley	Community / Neighborhood Park	Suburban / urbanized	~$70-80k	Screen 2	1	Eliminated: suburban/urbanized catchment.
Eucalyptus County Park	La Mesa / Spring Valley	Community / Neighborhood Park	Suburban / urbanized	~$70-80k	Screen 2	1	Eliminated: suburban/urbanized catchment.
Fletcher Hills Center & Pool	El Cajon	Community / Neighborhood Park	Urbanized	~$60-70k	Screen 2	1	Eliminated: urbanized catchment.
Goodland Acres County Park	Spring Valley	Community / Neighborhood Park	Suburban / urbanized	~$70-80k	Screen 2	1	Eliminated: suburban/urbanized catchment.
Highwood Park	La Mesa	Community / Neighborhood Park	Established suburb	~$80-90k	Screen 2	1	Eliminated: established suburb.
Hillside Park	El Cajon	Day-Use / Picnic Park	Urbanized	~$60-70k	Screen 2	1	Eliminated: urbanized catchment.
Ildica Street County Park	Spring Valley	Community / Neighborhood Park	Suburban / urbanized	~$70-80k	Screen 2	1	Eliminated: suburban/urbanized catchment.
In-Ko-Pah County Park	Jacumba / East County	Open-Space Preserve	Far rural / desert	~$45-55k	Screen 2	1	Eliminated: far-rural/desert, insufficient density.
Judson Park	El Cajon	Day-Use / Picnic Park	Urbanized	~$60-70k	Screen 2	1	Eliminated: urbanized catchment.

Park / Facility	Community / Area	Primary Category	Setting	Median HHI	Screen	Score	Rationale / Disposition
Kennedy Recreation Center / JFK Park	El Cajon	Civic / Recreation Facility	Urbanized	~$60-70k	Screen 2	1	Eliminated: urbanized catchment.
Lamar County Park	Spring Valley	Community / Neighborhood Park	Suburban / urbanized	~$70-80k	Screen 2	1	Eliminated: suburban/urbanized catchment.
Lemon Grove Park	Lemon Grove	Civic / Recreation Facility	Urbanized	~$65-75k	Screen 2	1	Eliminated: urbanized catchment.
MacArthur Park	La Mesa	Civic / Recreation Facility	Established suburb	~$80-90k	Screen 2	1	Eliminated: established suburb.
Monterey Heights Park	Lemon Grove	Community / Neighborhood Park	Urbanized	~$65-75k	Screen 2	1	Eliminated: urbanized catchment.
Renette Park	El Cajon	Civic / Recreation Facility	Urbanized	~$60-70k	Screen 2	1	Eliminated: urbanized catchment.
Santa Ysabel County Preserves	Santa Ysabel / Julian	Open-Space Preserve	Far rural	~$70-85k	Screen 2	1	Eliminated: far-rural, insufficient density.
Spring Valley County Park	Spring Valley	Community / Neighborhood Park	Suburban / urbanized	~$70-80k	Screen 2	1	Eliminated: suburban/urbanized catchment.
Sweetwater Place County Park	Spring Valley	Community / Neighborhood Park	Suburban / urbanized	~$70-80k	Screen 2	1	Eliminated: suburban/urbanized catchment.
Volcan Mountain Wilderness Preserve	Julian	Open-Space Preserve	Far rural	~$70-85k	Screen 2	1	Eliminated: far-rural, insufficient density.
Agua Caliente County Park	East County desert	Regional / Camping Park	Mixed East County	~$70-90k	Screen 1	0	Eliminated: overnight destination park, incompatible trip pattern.
Cajon Valley Middle School Park	El Cajon	Sports Complex	Urbanized	~$60-70k	Screen 1	0	Eliminated: programmed sports complex, event-driven trip pattern.
Dos Picos County Park	Ramona	Regional / Camping Park	Rural / semi-rural	~$90-105k	Screen 1	0	Eliminated: overnight destination park; retained as equestrian sensitivity reference.
El Monte County Park	Lakeside	Sports Complex	Suburban / rural edge	~$85-95k	Screen 1	0	Eliminated: programmed sports complex.
Flinn Springs County Park	El Cajon / Lakeside	Sports Complex	Urbanized	~$60-70k	Screen 1	0	Eliminated: programmed sports complex.

Park / Facility	Community / Area	Primary Category	Setting	Median HHI	Screen	Score	Rationale / Disposition
Karl Tuttle Park	El Cajon	Sports Complex	Urbanized	~$60-70k	Screen 1	0	Eliminated: programmed sports complex.
La Mesita Park / Junior Seau Sports Complex	La Mesa	Sports Complex	Established suburb	~$80-90k	Screen 1	0	Eliminated: programmed sports complex.
Lake Morena County Park	Campo	Regional / Camping Park	Far rural	~$60-75k	Screen 1	0	Eliminated: overnight destination park.
Lakeside Baseball Park	Lakeside	Sports Complex	Suburban / rural edge	~$85-95k	Screen 1	0	Eliminated: programmed sports complex.
Lindo Lake County Park	Lakeside	Sports Complex	Suburban / rural edge	~$85-95k	Screen 1	0	Eliminated: programmed sports complex, event-driven trip pattern.
Pine Valley County Park	Pine Valley	Sports Complex	Far rural	~$75-85k	Screen 1	0	Eliminated: programmed sports complex.
Potrero County Park	Potrero	Regional / Camping Park	Far rural	~$60-75k	Screen 1	0	Eliminated: overnight destination park.
Sportsplex USA Santee	Santee	Sports Complex	Suburban	~$95-110k	Screen 1	0	Eliminated: programmed sports complex.
Sunset Park	La Mesa	Sports Complex	Established suburb	~$80-90k	Screen 1	0	Eliminated: programmed sports complex.
Sweetwater Lane County Park	Spring Valley	Sports Complex	Suburban / urbanized	~$70-80k	Screen 1	0	Eliminated: programmed sports complex.
Vallecito County Park	East County desert	Regional / Camping Park	Mixed East County	~$70-90k	Screen 1	0	Eliminated: overnight destination park.
Wells Park	El Cajon	Sports Complex	Urbanized	~$60-70k	Screen 1	0	Eliminated: programmed sports complex.
William Heise County Park	Julian	Regional / Camping Park	Far rural	~$70-85k	Screen 1	0	Eliminated: overnight destination park.
Sweetwater Summit Regional Park	Bonita / South Bay	Regional / Camping Park	Suburban / urbanized	~$70-80k	Screen 0	0	Eliminated: outside East County study area (South Bay).
Sycamore Canyon / Goodan Ranch Preserve	Santee / Poway edge	Open-Space Preserve	Suburban	~$95-110k	Screen 0	0	Eliminated: outside East County study area (North Inland/Poway).
Wilderness Gardens County Preserve	Pala / North County edge	Open-Space Preserve	Mixed East County	~$70-90k	Screen 0	0	Eliminated: outside East County study area (North County/Pala).

Source: CR Associates (2026). Screening log based on review of County of San Diego Parks and Recreation records, municipal parks departments, and supporting planning documents.

Notes: Green highlight = selected primary analog. Yellow highlight = runner-up/sensitivity reference. Gray highlight = excluded at Screen 0 (geographic eligibility).
HHI = Median Household Income

Attachment B - Count Observation Data & ITE Parking Generation

HILTON HEAD COUNTY PARK – PARKING SURVEY SUMMARY					
Survey Date	Day of Week	Activity Observed	Park Lot (vehicles)	Adjacent Street (vehicles)	Total Observed (vehicles)
1/16/2026	Friday	Baseball Game	49	45	94
9/23/2025	Tuesday	None	11	25	36
5/14/2025	Wednesday	None	37	20	57
4/24/2025	Thursday	None	14	14	28
1/19/2025	Sunday	None	15	12	27
10/26/2024	Saturday	Soccer Game	50	46	96
5/12/2024	Sunday	None	15	8	23
1/15/2024	Monday	Baseball Game	50	34	84
9/14/2023	Thursday	Soccer Game	59	88	147
5/7/2023	Sunday	Baseball Game	50	85	135
1/13/82023	Friday	None	9	12	21
8/28/2022	Sunday	None	16	23	39
4/23/2022	Saturday	Baseball Game	19	43	62
2/2/2022	Sunday	Baseball Game	37	29	66

NO-ACTIVITY DAYS – RESIDENTIAL SPILLOVER ESTIMATE (ON-STREET)			
Metric	Park Lot (vehicles)	Adjacent Street (vehicles)	Residential Spillover Baseline (vehicles)
Observations (n)	7	7	**16**
Average (vehicles)	17	16	
Maximum (vehicles)	37	25	
Minimum (vehicles)	9	8	

Note:

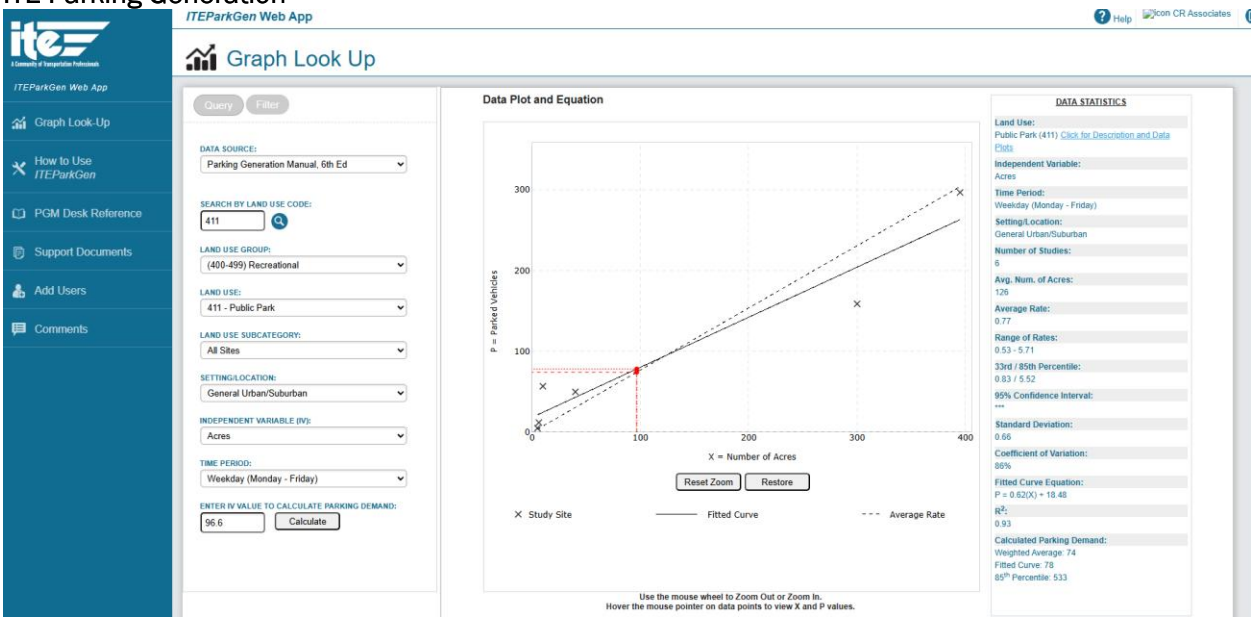
1. Interpretation: On days with no organized events, park lot occupancy reflects background/passive use. The adjacent on-street occupancy is attributed to residential spillover (cell I2), establishing a baseline residential parking demand.

PARKING DEMAND BY ACTIVITY TYPE					
Activity Type	Observations (n)	Average Total Observed Vehicles	Residential Spillover Credit	Average Parking Demand (Vehicles)	Max Total Observed Vehicles
Baseball Game	5	88	-16	72	119
Multi-Use Field Practice	2	122	-16	106	131
No Activity	7	17	0	17	37

Note:

1. Game On-Street Demand = Observed Adjacent Street Parking − Residential Spillover Baseline.

ITE Parking Generation



ITEParkGen Web App

Help | Icon CR Associates

Graph Look Up

Query | Filter

DATA SOURCE: Parking Generation Manual, 6th Ed

SEARCH BY LAND USE CODE: 411

LAND USE GROUP: (400-499) Recreational

LAND USE: 411 - Public Park

LAND USE SUBCATEGORY: All Sites

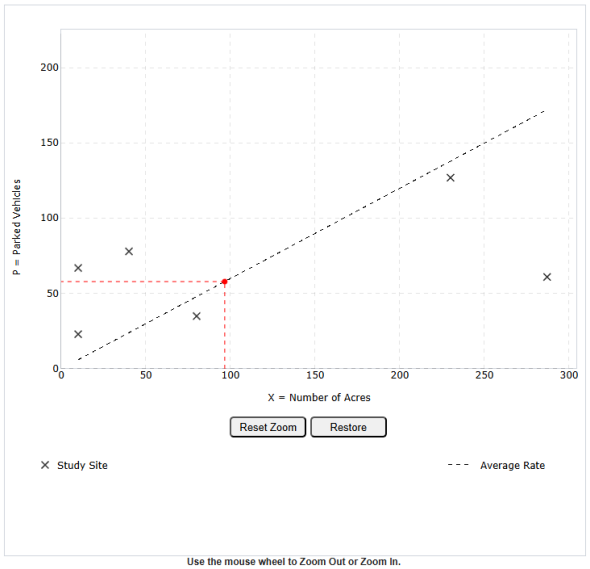
SETTING/LOCATION: General Urban/Suburban

INDEPENDENT VARIABLE (IV): Acres

TIME PERIOD: Saturday

ENTER IV VALUE TO CALCULATE PARKING DEMAND: 96.6 Calculate

Data Plot and Equation



Use the mouse wheel to Zoom Out or Zoom In.
Hover the mouse pointer on data points to view X and P values.

DATA STATISTICS

Land Use: Public Park (411) Click for Description and Data Plots
Independent Variable: Acres
Time Period: Saturday
Setting/Location: General Urban/Suburban
Number of Studies: 6
Avg. Num. of Acres: 110
Average Rate: 0.60
Range of Rates: 0.21 - 6.71
33rd / 85th Percentile: 0.47 / 6.49
95% Confidence Interval: ***
Standard Deviation: 0.98
Coefficient of Variation: 163%
Fitted Curve Equation: ***
R^2: ***
Calculated Parking Demand:
Weighted Average: 58
Fitted Curve: Not Available
85th Percentile: 627

ITEParkGen Web App

Help | Icon CR Associates

Graph Look Up

Query | Filter

DATA SOURCE: Parking Generation Manual, 6th Ed

SEARCH BY LAND USE CODE: 411

LAND USE GROUP: (400-499) Recreational

LAND USE: 411 - Public Park

LAND USE SUBCATEGORY: All Sites

SETTING/LOCATION: General Urban/Suburban

INDEPENDENT VARIABLE (IV): Acres

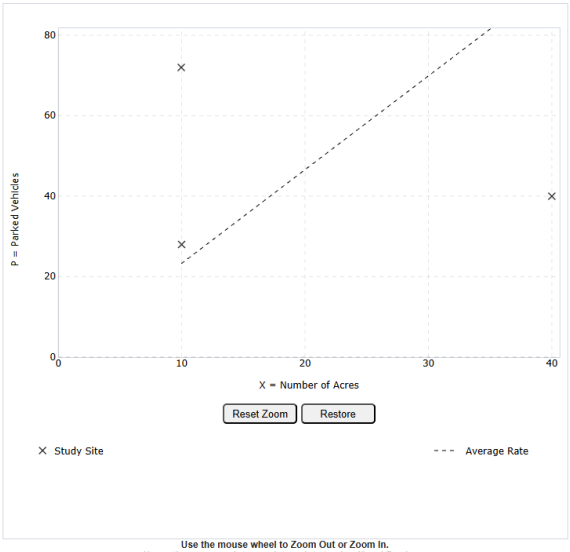
TIME PERIOD: Sunday

ENTER IV VALUE TO CALCULATE PARKING DEMAND: 96.6 Calculate

Data Range: 9.98 - 40.00

Data Plot and Equation

Caution – Small Sample Size



Use the mouse wheel to Zoom Out or Zoom In.
Hover the mouse pointer on data points to view X and P values.

DATA STATISTICS

Land Use: Public Park (411) Click for Description and Data Plots
Independent Variable: Acres
Time Period: Sunday
Setting/Location: General Urban/Suburban
Number of Studies: 3
Avg. Num. of Acres: 20
Average Rate: 2.33
Range of Rates: 1.00 - 7.21
33rd / 85th Percentile: 1.58 / 7.21
95% Confidence Interval: ***
Standard Deviation: 2.79
Coefficient of Variation: 120%
Fitted Curve Equation: ***
R^2: ***
Calculated Parking Demand:
Weighted Average: 225
Fitted Curve: Not Available
85th Percentile: 696

Hilton Head County Park – Study Area



Attachment C - Alpine Community Park: Driveway Sight Distance Evaluation

TO: Yara Fisher, HELIX Environmental Planning, Inc.

FROM: Phuong Nguyen, TE; CR Associates
Jorge Muradas, EIT; CR Associates

DATE: July 29, 2026

RE: Alpine Community Park – Driveway Sight Distance Evaluation – Technical Memorandum

---

This memorandum documents field observations of stopping sight distance (SSD) and corner sight distance (CSD) conducted on April 16, 2026, at the two (2) proposed project driveways along South Grade Road for the Alpine Community Park project (the "project"). This analysis is prepared as a supplemental technical deliverable in response to the Writ of Mandate issued on January 23, 2026, for CASE NO: 37-2024-00000536-CU-WM-CTL (Writ), and as further detailed in the Minute Order issued on June 9, 2025, in the same proceeding (Minute Order), which identified a deficiency in the prior Environmental Impact Report (EIR) regarding the deferred driveway sight distance analysis.

Project Background

The County of San Diego Department of Parks and Recreation proposes the Alpine Community Park project on a 96.6-acre undeveloped site in Alpine, with about 25 acres developed as an active community park and the remaining roughly 70 acres preserved as permanent open space. The site is adjacent to the Back Country Land Trust's (BCLT) Wright's Field Preserve, north of South Grade Road, east of Tavern Road, and south of Alpine Boulevard. Access to the park is proposed from two full-access driveways on South Grade Road: one at the existing all-way stop-controlled intersection with Calle de Compadres and a second at a new side-street stop-controlled intersection near the southern end of the property. Site plan is provided in **Figure 1**.

South Grade Road is a two-lane undivided Light Collector with posted speeds of 40 mph near the northern driveway and 45 mph near the southern driveway. CRA previously prepared a Transportation Impact Study for the project in July 2020, which included a speed study conducted by Elite Traffic Dynamics along South Grade Road. Using that speed study, CRA then performed field observations at both proposed driveway locations to evaluate stopping sight distance against AASHTO standards, assess corner sight distance relative to County standards, identify physical or visual obstructions, and recommend measures where substandard sight conditions were identified.

Methodology

The following methodology was applied to evaluate stopping sight distance (SSD) and corner sight distance (CSD) at the two proposed project driveways. SSD criteria are based on AASHTO's A Policy on Geometric Design of Highways and Streets (2018), and CSD criteria are based on the County of San Diego Public Road Standards (March 2012) – Table 5 – Standard Corner Sight Distance at Intersections. Both are evaluated using a design speed derived from the 85th percentile speed observed along South Grade Road, consistent with standard engineering practice. For each driveway approach, the observer was positioned on the minor road at a setback of 10 feet from the edge of the major road pavement, with an eye height of 3.5 feet above the roadway surface. Corner sight distance was measured along the direction of travel on the major road to an object height of 4.25 feet, identifying the most restrictive sight-limiting feature within the sight triangle. Where the available sight

distance did not meet the corner sight distance standard, the nature and location of the obstruction were documented and photographic evidence was collected.

Design Speed

The speed study collected 24-hour speed data in both directions, yielding 85th percentile speeds of 44 mph northbound and 46 mph southbound from a combined sample of 950 vehicles. The higher southbound value of 46 mph governs and was rounded up to 50 mph per standard engineering practice. Data collected as part of the speed survey is provided as **Attachment A**.

Figure 1 - Site Plan



SITE ELEMENT KEY

1. MULTI-USE TRAIL
2. ADMIN/RESTROOM
3. RESTROOM
4. SHADE PAVILION
5. SHADE SHELTER
6. SHADE SAIL
7. ADA PARKING
8. ALL-WHEEL PARK GATEWAY
9. COMMUNITY GARDEN
10. GARDEN STORAGE
11. NATURE PLAY AREA
12. 2-5 PLAY AREA
13. VOLUNTEER PAD
14. PICKLEBALL COURTS
15. BASKETBALL COURT
16. GAME TABLE PLAZA
17. PICNIC AREA
18. CORRAL
19. EQUESTRIAN STAGING
20. DROP-OFF/PICK-UP
21. BIKE PARK
22. ALL-WHEEL PARK
23. BASEBALL FIELD
24. MULTI-USE TURF AREA
25. SECONDARY PARK ENTRANCE
26. PRIMARY PARK ENTRANCE
27. PARKING
28. DOG PARK
29. EXISTING TRAIL
30. EXISTING TREES
31. BERMED LANDSCAPE SCREEN
32. PARK MONUMENT SIGN
33. NATIVE PLANTS
34. FITNESS STATIONS
35. ENGINEERED WOOD FIBER
36. TRASH ENCLOSURE
37. RETENTION BASIN
38. EXISTING LANDSCAPE/TERRAIN
39. EXISTING FENCE

PARKING SUMMARY

240 SPACES (including standard, ADA, trailers)

DPR DIRECTOR SIGNATURE/APPROVAL DATE

NORTH

Stopping Sight Distance Criteria

Required SSD values were determined per AASHTO (2018) Exhibits 3-1 and 3-2, using the 50-mph design speed established in Section 3.1. SSD is measured along the road from a driver's eye height of 3.5 feet to an object height of 2.0 feet on the roadway surface, representing the distance required to perceive a hazard and brake to a complete stop. Grade adjustments were applied where applicable; for uphill approaches, the unadjusted level-grade requirement was conservatively retained. Required SSD values by approach are summarized in Table 1 below.

Table 1 - AASHTO – Stopping Sight Distance Standard

Location	Approach	Grade (%)	Required SSD (ft)	AASHTO Reference
Driveway #1 (S. Grade Rd at Calle de Compadres)	NB	+5.3%	425	Exhibit 3-1 (level grade, conservative)
Driveway #1 (S. Grade Rd at Calle de Compadres)	SB	−3.9%	446	Exhibit 3-2 (grade-adjusted, downgrade)
Driveway #2 (S. Grade Rd, south driveway)	NEB	+2.7%	425	Exhibit 3-1 (level grade)
Driveway #2 (S. Grade Rd, south driveway)	SWB	Level	425	Exhibit 3-1 (level grade)

Note:
1. Design speed = 50 mph for all approaches. Grade-adjusted SSD applied on the SB downgrade per Exhibit 3-2; level-grade SSD conservatively retained on all uphill approaches.
2. NB = Northbound; SB = Southbound; NEB = Northeastbound; SWB = Southwestbound

Corner Sight Distance

CSD represents the sight distance available to a driver on the minor road (driveway) when deciding whether to enter the major road traffic stream. It is measured from a setback position 10 feet from the edge of the major road pavement, using a height of eye of 3.5 feet on the minor road and an object height of 4.25 feet on the major road, consistent with County of San Diego guidelines. Required CSD values by approach are summarized in Table 2 below.

Table 2 - County of San Diego Corner Sight Distance Standard

Location	Approach	Setback (ft)	Required CSD (ft)	Standard
Driveway #1 (S. Grade Rd at Calle de Compadres)	NB	10	500	County of San Diego (50 mph)
Driveway #1 (S. Grade Rd at Calle de Compadres)	SB	10	500	County of San Diego (50 mph)
Driveway #2 (S. Grade Rd, south driveway)	NEB	10	500	County of San Diego (50 mph)
Driveway #2 (S. Grade Rd, south driveway)	SWB	10	500	County of San Diego (50 mph)

Note:
1. NB = Northbound; SB = Southbound; NEB = Northeastbound; SWB = Southwestbound

Field Observations

Field observations were conducted on April 16, 2026, at the two (2) proposed project driveway locations along South Grade Road. At each driveway, available SSD was measured in the field for each approach direction by identifying the most restrictive sight-limiting feature along the roadway, such as vertical crest curves, horizontal curvature, roadside vegetation, terrain, or existing structures, and measuring the distance from that feature to the anticipated stop bar location at the driveway. SSD

measurements were taken from a height of eye of 3.5 feet above the roadway surface to an object height of 2.0 feet, consistent with AASHTO criteria for passenger vehicle sight distance evaluation. Roadway grade conditions were observed in the field at each approach and factored into the required SSD determination as described in Section 3.2. Available SSD was stress tested at distances greater than the minimum required values, up to approximately 700 feet, to characterize the extent of available sight lines beyond the minimum standard.

CSD observations were conducted from a setback of 10 feet from the edge of the major road pavement at each proposed driveway, with measurements taken from a height of eye of 3.5 feet on the minor road to an object height of 4.25 feet on the major road, consistent with County of San Diego Public Road Standards (*March* 2012). At locations where the CSD standard was not met, the nature and extent of sight obstructions were documented in the field and photographic evidence was collected. Observed obstructions include overgrown brush and vegetation, differential in elevation between the roadway surface and the project site, existing wooden utility poles and signage, and rock and boulder outcroppings, as documented in the Findings section and supporting field observation photographs.

Findings

This section presents the results of the stopping sight distance and corner sight distance field observations at the two proposed project driveways along South Grade Road. The results of the SSD and CSD field observations are summarized in **Table 3** below.

Field observation photographs documenting sight conditions at each approach are provided in **Attachments B** through **E** of this memorandum.

Attachment F includes CSD triangle exhibits for the two proposed project driveways.

Table 3 - Sight Distance Summary – Alpine Community Park Driveways

Location	Approach	Grade (%)	SSD (ft)		CSD (ft)		SSD Met?	CSD Met?
			Required	Available	Required	Available		
Driveway #1 (S. Grade Rd at Calle de Compadres)	NB	+5.3%[1]	425’	425’	500’	500’[2]	Yes	Yes[2]
Driveway #1 (S. Grade Rd at Calle de Compadres)	SB	−3.9%	446’[3]	700’+	500’	700’+	Yes	Yes
Driveway #2 (S. Grade Rd, south driveway)	NEB	+2.7%[1]	425’	700’+	500’	<500[4]	Yes	No[4]
Driveway #2 (S. Grade Rd, south driveway)	SWB	Level	425’	450’+	500’	550’+	Yes	Yes

Sources: CR Associates Field Observations on April 16, 2026.

Notes:

1. Positive grade present; approach evaluated conservatively using level-grade SSD requirement of 425 feet per AASHTO (2018) Exhibit 3-1.
2. CSD met at 500 feet; partial visibility obstructions (overgrown vegetation, utility poles, sign pole) observed from both major and minor street approaches. Stress test at 520 feet yielded similar results.
3. Grade-adjusted required SSD at 50 mph design speed for a 3.9% downgrade, per AASHTO (2018) Exhibit 3-2. Available SSD stress tested at 700 feet and met. Grade of 4.2% observed at CSD setback location; not directly incorporated into CSD calculation consistent with County of San Diego methodology, but stress tested at 700’ and met.
4. CSD not met for NEB approach at Driveway #2 due to overgrown vegetation and rock/boulder outcroppings obstructing sightlines.

As shown in **Table 3**, available SSD meets or exceeds AASHTO-required values at all four approach directions at both proposed driveways, and the CSD is met for three out of the four approaches. A detailed discussion of findings for each approach follows.

Driveway #1 – South Grade Road at Calle de Compadres

Stopping Sight Distance (NB Approach) – The northbound approach is situated on a 5.3% positive grade and was evaluated conservatively using the level-grade SSD requirement of 425 feet. Available SSD was measured at 425 feet, meeting the requirement at the minimum threshold. The limited margin is attributable to a vertical crest curve near the proposed driveway location, which creates a geometric constraint on vertical sight lines; stress testing confirmed 425 feet as the effective maximum available SSD on this approach. Sensitivity checks at 3% and 6% grade adjustments (405 feet and 388 feet required, respectively) confirm compliance under either assumption.

Corner Sight Distance (NB Approach) – The northbound approach meets the 500-foot County standard; however, partial obstructions including overgrown vegetation, a utility pole, and a sign pole were observed within the sight triangle from both the major and minor street approaches. A stress test at 520 feet yielded similar conditions. Field observation photographs are included in **Attachment B**.

Stopping Sight Distance (SB Approach) – The southbound approach is situated on a 3.9% downgrade, yielding a grade-adjusted required SSD of 446 feet per AASHTO (2018) Exhibit 3-2. Available SSD substantially exceeds this value, confirmed at 700 feet and beyond during stress testing. Field observation photographs are included in **Attachment C**.

Corner Sight Distance (SB Approach) – The southbound approach meets the 500-foot County standard. A downgrade of 4.2% was observed along South Grade Road at the CSD setback location. Available CSD was confirmed at 700 feet during stress testing, providing a substantial margin above the 500-foot standard. No significant obstructions were identified. Field observation photographs are included in **Attachment C**.

Driveway #2 – South Grade Road, South Driveway

Stopping Sight Distance (NEB) – The northeast bound approach is situated on a 2.7% positive grade and was evaluated conservatively using the level-grade SSD requirement of 425 feet. Available SSD substantially exceeds the minimum requirement, confirmed at 700 feet and beyond during stress testing. Field observation photographs are included in **Attachment D**.

Corner Sight Distance (NEB) – The northeast bound approach does not meet the County of San Diego 500-foot CSD standard. Overgrown vegetation and rock and boulder outcroppings within the sight triangle physically limit the available sight line from the minor street setback position, constituting a confirmed deficiency attributable to existing site conditions and is not a condition created or introduced by the proposed project. Field observation photographs are included in **Attachment D**.

Stopping Sight Distance (SWB) – The southwest bound approach is on a level grade. Available SSD was confirmed at 425 feet, with a stress test at 450 feet also confirming compliance. Field observation photographs are included in **Attachment E**.

Corner Sight Distance (SWB) – The southwest bound approach meets the 500-foot County standard, with a stress test at 550 feet confirming continued compliance. No significant obstructions were identified. Field observation photographs are included in **Attachment E**.

Sight Distance Evaluation for Larger Vehicles

This section evaluates sight distance conditions at the proposed project driveways with respect to larger vehicle types anticipated to use the facility, specifically recreational vehicles (RVs) and horse trailers.

Vehicle Classification

Per the Federal Highway Administration's vehicle classification guidance (FHWA-HRT-13-091, Chapter 2, November 2014), the vehicle types considered in this supplemental evaluation fall within the following FHWA classification categories:

- **Recreational Vehicles (RVs/Motorhomes):** Self-propelled recreational vehicles, including motorhomes and campers, are classified as FHWA Class 5 (Two-Axle, Six-Tire, Single-Unit Trucks) or Class 6 (Three-Axle Single-Unit Trucks), depending on configuration. These vehicles are analogous to the Single-Unit Truck (SU) or Recreational Vehicle (RV) design vehicle classes defined in AASHTO (2018).
- **Horse Trailers:** A pickup truck towing a horse trailer constitutes a two-unit combination vehicle, classified under FHWA Class 8 (Four or Fewer Axle Single-Trailer Combination Truck). This vehicle type is analogous to the Combination Vehicle (WB-12) design vehicle class defined in AASHTO (2018).

Because both vehicle types are anticipated users of the park driveways, and because horse trailers (FHWA Class 8, AASHTO combination vehicle) represent the more demanding design vehicle with respect to intersection sight distance time gap requirements, the combination-truck vehicle standard is applied as the conservative governing design vehicle for the ISD evaluation presented below.

Intersection Sight Distance — Combination Vehicle

Intersection sight distance (ISD) represents the sight distance required for a driver on the minor road to safely enter or cross the major road traffic stream. ISD was evaluated per AASHTO (2018) for two stop-controlled cases applicable to exiting park vehicles: Case B1 (left turn from stop), requiring the driver at the minor street approach to identify and enter an acceptable gap in traffic from both directions; and Case B2 (right turn from stop), requiring the driver at the minor street approach to identify an acceptable gap from the left. Required ISD values are computed using the following formula:

$$ISD = 1.47 \times V \times t_g,$$

Where: V is the major road design speed (50 mph)

t_g is the design time gap

Time gap values for a combination-truck vehicle were obtained from AASHTO (2018), where t_g is 11.5 seconds for Case B1 and 10.5 seconds for Case B2. Applying the formula, the required ISD for Case B1 is 845 feet, and for Case B2 is 772 feet. No minor road grade adjustment was applied, as the proposed driveways are yet to be constructed and a flat grade at the stop bar is assumed. Available ISD at each approach is taken as the available CSD observed during field observations, consistent with the measurement methodology applied in the passenger car analysis."

Table 4 shows the intersection sight distance and stopping sight distance summary results for larger vehicles at the proposed project driveways.

Table 4 - Intersection Sight Distance and Stopping Sight Distance Summary — Combination Vehicle — Alpine Community Park Driveways

Location	Approach	Available ISD/CSD (ft)	ISD Case B1 Met? (Req. 845 ft)	ISD Case B2 Met? (Req. 772 ft)	SSD Met? (Req. varies[1])
Driveway #1 (S. Grade Rd at Calle de Compadres)	NB	500’	No	No	Yes
Driveway #1 (S. Grade Rd at Calle de Compadres)	SB	700’+	No	No	Yes
Driveway #2 (S. Grade Rd, south driveway)	NEB	<500’[4]	No	No	Yes
Driveway #2 (S. Grade Rd, south driveway)	SWB	550’+	No	No	Yes

Sources: CR Associates Field Observations (April 16, 2026); AASHTO (2018)

Notes:

1. SSD required values per AASHTO (2018) Exhibits 3-1 and 3-2 at 50 mph design speed: 425 ft for NB, NEB, and SWB approaches (level/uphill grade); 446 ft for SB approach (3.9% downgrade, grade-adjusted). Per AASHTO (2018) Section 3.2.2.5, the passenger car SSD standard governs design for all vehicle types. ISD = 1.47 × V × t_g per AASHTO (2018) Exhibit 9-54; combination vehicle t_g = 11.5 sec (Case B1, required 845 ft) and 10.5 sec (Case B2, required 772 ft) at V = 50 mph. Available ISD taken as available CSD from field observations; no minor road grade adjustment applied (driveways yet to be constructed, flat grade assumed).
2. NB = Northbound; SB = Southbound; NEB = Northeastbound; SWB = Southwestbound.
3. Grade-adjusted SSD at 50 mph for a 3.9% downgrade per AASHTO (2018) Exhibit 3-2.
4. CSD not met for NEB approach at Driveway #2 due to overgrown vegetation and rock/boulder outcroppings; available CSD is less than 500 feet.

As shown in **Table 4**, the available ISD does not meet the required combination-truck vehicle standard at any approach under either Case B1 or Case B2. Required ISD values of 845 feet (Case B1) and 772 feet (Case B2) exceed the available sight distance at all four driveway approaches. The basis for this finding, the applicable safety standard under these conditions, and the significance of the deficiency are discussed in the paragraphs below.

Per AASHTO (2018) Section 3.2.2.5, separate stopping sight distances for trucks and passenger cars are not generally used in highway design. The longer braking distances required by trucks are largely offset by the higher eye position of the truck driver, which provides a comparatively greater available sight line. Consequently, the passenger car SSD standard governs design at all approaches and is considered adequate for major road vehicles of all types, including trucks. As documented in the Findings section and summarized in **Table 3**, available SSD meets or exceeds AASHTO requirements at all four approach directions at both proposed driveways. Major road drivers including truck operators traveling along South Grade Road, have sufficient sight distance to perceive and brake to a stop for a vehicle emerging from either driveway, regardless of the emerging vehicle type.

The ISD evaluation demonstrates that available sight distance at the proposed project driveways is insufficient to satisfy the AASHTO combination-truck vehicle standard under either Case B1 (left turn from stop) or Case B2 (right turn from stop). This deficiency is attributable to existing geometric and physical constraints along South Grade Road; specifically, the vertical crest curve near the NB approach of Driveway #1 and the overgrown vegetation and rock and boulder outcroppings at the NEB approach of Driveway #2.

Notwithstanding the ISD deficiency, available SSD is met at all four approaches for major road traffic in both directions. SSD compliance establishes that drivers traveling along South Grade Road have sufficient sight distance to perceive and brake to a stop for a vehicle emerging from either driveway

under any combination of design vehicle conditions. This provides a meaningful and quantifiable safety margin even where full ISD cannot be achieved.

It is acknowledged that SSD compliance represents the lower end of the sight distance safety spectrum. ISD is the preferred standard because it provides the emerging driver with the time needed to complete an entry maneuver without requiring the major road driver to brake. Where ISD cannot be met due to existing geometric constraints that are not correctable within the project footprint, SSD compliance on the major road establishes that the corridor retains a baseline level of safety for major road traffic. The corrective measures identified in this memorandum (vegetation clearing at both driveways and removal or grading of the rock and boulder outcroppings at the NEB approach of Driveway #2) will improve available CSD and partially reduce the ISD deficiency where physically achievable, further strengthening the safety posture of both driveway locations.

ISD deficiencies at existing rural driveways are not uncommon where roadway geometry such as vertical crest curves, cut slopes, or natural terrain features constrain available sight lines beyond what project-level improvements can correct. The AASHTO (2018) combination-truck ISD standard is a design objective applied during facility planning and does not, in and of itself, characterize a location as unsafe where SSD on the major road is confirmed. When existing geometric constraints preclude full ISD compliance, SSD confirmation at the major road approach is the applicable safety benchmark, and its satisfaction at all four approaches demonstrates that South Grade Road retains a functional safety margin at both driveway locations. Operators of combination vehicles are expected to exercise appropriate gap judgment and, where necessary, wait for a larger gap in traffic than a passenger car driver would require a behavioral expectation consistent with standard rural driving practice.

Conclusions and Recommendations

SSD meets or exceeds AASHTO requirements at all four approach directions at both driveways. The following recommendations address CSD conditions where obstructions were identified.

At Driveway #1, CSD is met on all approaches; however, partial obstructions including overgrown vegetation were observed within the sight triangle on the northbound approach, resulting in a degraded quality of the available line of sight. Brush management and vegetation clearing within the sight triangle are recommended to improve the quality of the available sight line beyond the minimum CSD 500-foot threshold to provide additional margin above the County standard, thereby enhancing safety for vehicles exiting the driveway.

An existing CSD deficiency at Driveway #2 northeast bound approach is attributed to overgrown vegetation and rock/boulder outcroppings within the sight triangle that limit the available sight line below the County's 500-foot threshold at this location. Corrective measures, including vegetation clearing and removal or grading of the rock/boulder outcroppings shall be adequately addressed through the site plan review and improvement plan approval process pursuant to the County of San Diego Site Design Standards and Roadway Design Standards, which require that sight distance requirements be satisfied and shown on project plans prior to approval by the County of San Diego Department of Public Works. Compliance with these standards shall be verified and approved before final design approval and issuance of a grading or construction permit.

The sight distance triangles for both proposed driveways, including the constrained NEB approach at Driveway #2, are depicted in **Attachment F** and illustrate the general sight lines evaluated for this analysis. These exhibits shall serve as a reference during the site plan review and improvement plan approval process, at which time the precise dimensions of the required clear zone, along with any associated height restrictions, will be established and confirmed.

Additionally, a driver towing a horse trailer or recreational vehicle should exercise additional caution at either driveway and may need to wait for a larger gap than a passenger car driver would require. This is consistent with the level of care expected of combination vehicle operators on rural roadways with pre-existing geometric constraints, and is not a condition created or worsened by the proposed project.

Attachment A - Speed Survey Data

S GRADE RD - VIA VIEJAS TO CALLE DE COMPADRES

ETD20-0619-01

NORTHBOUND

Wednesday, July 8, 2020

PREPARED BY: ELITE TRAFFIC DYNAMICS, LLC

Time	1 - 10	11 - 15	16 - 20	21 - 25	26 - 30	31 - 35	36 - 40	41- 45	46 - 50	51 - 55	56 - 60	61 - 65	66 +	TOTAL	%VEHICLES
12:00:00 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0.08%
12:15:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%
12:30:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0.08%
12:45:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0.08%
1:00:00 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0.08%
1:15:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%
1:30:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%
1:45:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%
2:00:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%
2:15:00 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0.08%
2:30:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%
2:45:00 AM	0	0	0	0	0	0	0	1	1	0	0	0	0	2	0.15%
3:00:00 AM	0	0	0	0	2	0	0	0	1	0	0	0	0	3	0.23%
3:15:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0.08%
3:30:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%
3:45:00 AM	0	0	0	0	0	0	1	1	0	0	0	0	0	2	0.15%
4:00:00 AM	0	0	0	0	0	0	2	1	0	0	0	0	0	3	0.23%
4:15:00 AM	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0.08%
4:30:00 AM	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0.08%
4:45:00 AM	0	0	0	0	1	0	0	0	0	0	0	1	0	2	0.15%
5:00:00 AM	0	0	0	0	1	1	0	1	0	0	0	0	0	3	0.23%
5:15:00 AM	0	0	0	0	1	0	0	1	0	0	0	0	0	2	0.15%
5:30:00 AM	0	0	0	1	2	0	0	0	1	0	0	0	0	4	0.31%
5:45:00 AM	0	0	0	0	3	2	0	2	1	0	0	0	0	8	0.62%
6:00:00 AM	0	0	0	2	2	0	3	3	0	0	0	0	0	10	0.77%
6:15:00 AM	0	0	0	0	1	1	0	4	4	0	0	0	0	10	0.77%
6:30:00 AM	0	0	0	2	4	2	3	0	1	0	0	0	0	12	0.92%
6:45:00 AM	0	0	0	0	2	2	0	2	3	0	0	0	0	9	0.69%
7:00:00 AM	0	0	0	1	3	2	1	2	1	1	0	0	0	11	0.85%
7:15:00 AM	0	1	0	1	3	5	3	3	3	0	0	0	0	19	1.46%
7:30:00 AM	0	0	0	0	7	1	3	3	3	0	0	0	0	17	1.31%
7:45:00 AM	0	0	0	0	2	4	4	7	1	0	0	0	0	18	1.39%
8:00:00 AM	0	0	0	2	7	4	7	4	1	0	0	0	0	25	1.93%
8:15:00 AM	0	0	0	3	8	3	6	2	2	0	0	0	0	24	1.85%
8:30:00 AM	0	0	1	2	5	4	6	3	1	1	0	0	0	23	1.77%
8:45:00 AM	0	0	0	1	5	4	9	7	2	0	0	0	0	28	2.16%
9:00:00 AM	0	0	0	2	4	3	4	6	3	0	0	0	0	22	1.69%
9:15:00 AM	0	0	0	0	9	6	8	5	0	0	0	0	0	28	2.16%
9:30:00 AM	0	0	1	0	6	4	7	4	0	0	0	0	0	22	1.69%
9:45:00 AM	0	0	1	0	7	4	4	4	1	1	0	0	0	22	1.69%
10:00:00 AM	0	0	0	0	1	4	3	4	3	0	0	0	0	15	1.16%
10:15:00 AM	0	0	0	0	2	3	4	1	2	0	0	0	0	12	0.92%
10:30:00 AM	0	0	0	1	9	6	8	3	0	0	0	0	0	27	2.08%
10:45:00 AM	0	0	1	1	5	7	7	5	3	0	0	0	0	29	2.23%
11:00:00 AM	0	0	0	2	6	6	4	6	2	0	0	0	0	26	2.00%
11:15:00 AM	0	0	0	1	3	4	7	2	2	1	0	0	0	20	1.54%
11:30:00 AM	0	0	0	2	2	3	9	6	0	1	0	0	0	23	1.77%
11:45:00 AM	0	0	0	0	2	3	3	4	2	0	0	0	0	14	1.08%
AM TOTAL	0	1	4	25	115	89	118	99	46	5	0	1	0	503	38.75%
PERCENTAGE	0.0%	0.2%	0.8%	5.0%	22.9%	17.7%	23.5%	19.7%	9.1%	1.0%	0.0%	0.2%	0.0%		
CUMULATIVE	0	1	5	30	145	234	352	451	497	502	502	503	503		
PERCENTAGE	0.0%	0.2%	1.0%	6.0%	28.8%	46.5%	70.0%	89.7%	98.8%	99.8%	99.8%	100.0%	100.0%		

15th Percentile	28	Mean Speed Average	36
50th Percentile	36	10 MPH Pace Speed	34-43
85th Percentile	44	Number in Pace	233
95th Percentile	47	Percent in Pace	46%

S GRADE RD - VIA VIEJAS TO CALLE DE COMPADRES
NORTHBOUND

ETD20-0619-01

Wednesday, July 8, 2020

PREPARED BY: ELITE TRAFFIC DYNAMICS, LLC

Time	1 - 10	11 - 15	16 - 20	21 - 25	26 - 30	31 - 35	36 - 40	41- 45	46 - 50	51 - 55	56 - 60	61 - 65	66 +	TOTAL	%VEHICLES
12:00:00 PM	0	0	0	1	6	6	6	6	0	0	0	0	0	25	1.93%
12:15:00 PM	0	0	1	1	8	2	3	2	1	0	0	0	0	18	1.39%
12:30:00 PM	0	0	0	0	2	6	8	4	0	0	0	0	0	20	1.54%
12:45:00 PM	0	0	0	5	4	1	1	6	0	0	0	0	0	17	1.31%
1:00:00 PM	0	0	0	0	3	3	8	8	0	1	0	0	0	23	1.77%
1:15:00 PM	0	0	0	1	5	3	4	5	2	1	0	0	0	21	1.62%
1:30:00 PM	0	0	1	2	8	5	8	4	3	0	1	0	0	32	2.47%
1:45:00 PM	0	0	0	1	3	3	4	10	2	0	0	0	0	23	1.77%
2:00:00 PM	0	0	0	1	3	5	5	3	0	0	0	0	0	17	1.31%
2:15:00 PM	0	0	0	1	3	3	3	1	1	0	0	0	0	12	0.92%
2:30:00 PM	0	0	0	1	0	5	3	2	1	1	0	0	0	13	1.00%
2:45:00 PM	0	0	1	0	5	6	4	6	2	1	0	0	0	25	1.93%
3:00:00 PM	0	0	0	2	7	8	6	3	4	0	0	0	0	30	2.31%
3:15:00 PM	0	0	0	3	7	3	4	5	4	0	0	0	0	26	2.00%
3:30:00 PM	0	0	0	0	3	2	3	9	0	0	0	0	0	17	1.31%
3:45:00 PM	0	0	0	1	3	7	4	5	0	1	0	0	1	22	1.69%
4:00:00 PM	0	0	1	1	4	4	1	7	1	1	0	0	0	20	1.54%
4:15:00 PM	0	0	0	1	1	6	4	7	3	0	0	0	0	22	1.69%
4:30:00 PM	0	0	0	0	4	3	3	7	1	1	1	0	0	20	1.54%
4:45:00 PM	0	0	0	1	7	9	6	10	4	2	0	0	0	39	3.00%
5:00:00 PM	0	0	0	3	5	1	8	3	4	0	0	0	0	24	1.85%
5:15:00 PM	0	0	0	0	4	4	5	12	4	1	0	0	0	30	2.31%
5:30:00 PM	0	0	0	2	7	7	4	8	2	1	1	0	0	32	2.47%
5:45:00 PM	0	0	0	0	1	5	4	3	4	1	0	0	0	18	1.39%
6:00:00 PM	0	0	0	0	3	9	7	8	5	0	0	0	0	32	2.47%
6:15:00 PM	0	0	1	1	3	3	5	5	5	0	0	0	0	23	1.77%
6:30:00 PM	0	0	0	0	0	4	3	7	5	0	0	0	0	19	1.46%
6:45:00 PM	0	0	0	1	5	3	1	2	2	0	0	0	0	14	1.08%
7:00:00 PM	0	0	0	2	5	4	3	6	1	0	0	0	0	21	1.62%
7:15:00 PM	0	0	0	1	2	1	6	10	2	1	0	0	0	23	1.77%
7:30:00 PM	0	0	0	1	6	2	6	4	2	0	0	0	0	21	1.62%
7:45:00 PM	0	0	0	0	3	1	2	2	4	0	0	0	0	12	0.92%
8:00:00 PM	0	0	0	1	3	2	1	2	4	1	0	1	0	15	1.16%
8:15:00 PM	0	0	0	1	3	1	5	2	0	0	0	0	1	13	1.00%
8:30:00 PM	0	0	0	0	0	0	4	4	2	0	0	0	0	10	0.77%
8:45:00 PM	0	0	0	0	0	1	1	1	1	0	1	0	0	5	0.39%
9:00:00 PM	0	0	0	0	1	0	0	0	1	1	0	0	0	3	0.23%
9:15:00 PM	0	0	0	0	1	1	2	0	0	0	0	0	0	4	0.31%
9:30:00 PM	0	0	0	0	1	1	0	2	0	0	1	0	0	5	0.39%
9:45:00 PM	0	0	0	0	1	0	1	2	0	0	0	0	0	4	0.31%
10:00:00 PM	0	0	0	0	0	1	0	0	1	0	1	0	0	3	0.23%
10:15:00 PM	0	0	0	0	3	0	1	0	1	0	0	0	0	5	0.39%
10:30:00 PM	0	0	0	0	0	0	1	1	0	0	0	0	0	2	0.15%
10:45:00 PM	0	0	0	0	0	1	3	1	1	0	1	0	0	7	0.54%
11:00:00 PM	0	0	0	0	0	1	1	0	0	0	0	0	0	2	0.15%
11:15:00 PM	0	0	0	0	0	1	1	0	0	0	0	0	0	2	0.15%
11:30:00 PM	0	0	0	0	1	1	0	0	0	0	0	0	0	2	0.15%
11:45:00 PM	0	0	0	0	0	1	0	0	1	0	0	0	0	2	0.15%
PM TOTAL	0	0	5	36	144	146	163	195	81	15	7	1	2	795	61.25%
PERCENTAGE	0.0%	0.0%	0.6%	4.5%	18.1%	18.4%	20.5%	24.5%	10.2%	1.9%	0.9%	0.1%	0.3%		
CUMULATIVE	0	0	5	41	185	331	494	689	770	785	792	793	795		
PERCENTAGE	0.0%	0.0%	0.6%	5.2%	23.3%	41.6%	62.1%	86.7%	96.9%	98.7%	99.6%	99.7%	100.0%		

15th Percentile	29	Mean Speed Average	37
50th Percentile	38	10 MPH Pace Speed	36-45
85th Percentile	45	Number in Pace	374
95th Percentile	48	Percent in Pace	47%

DAY TOTAL	0	1	9	61	259	235	281	294	127	20	7	2	2	1,298	100.00%
PERCENTAGE	0.0%	0.1%	0.7%	4.7%	20.0%	18.1%	21.6%	22.7%	9.8%	1.5%	0.5%	0.2%	0.2%	1,298	100.00%
	0.0%	0.1%	0.8%	5.5%	25.4%	43.5%	65.2%	87.8%	97.6%	99.2%	99.7%	99.8%	100.0%		

S GRADE RD - VIA VIEJAS TO CALLE DE COMPADRES SOUTHBOUND

ETD20-0619-01

Wednesday, July 8, 2020

PREPARED BY: ELITE TRAFFIC DYNAMICS, LLC

Time	1 - 10	11 - 15	16 - 20	21 - 25	26 - 30	31 - 35	36 - 40	41- 45	46 - 50	51 - 55	56 - 60	61 - 65	66 +	TOTAL	%VEHICLES
12:00:00 AM	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0.07%
12:15:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0.07%
12:30:00 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0.07%
12:45:00 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0.07%
1:00:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%
1:15:00 AM	0	0	0	0	0	0	1	0	1	1	0	0	0	3	0.22%
1:30:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%
1:45:00 AM	0	0	0	0	0	0	0	1	0	1	0	0	0	2	0.15%
2:00:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0.07%
2:15:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%
2:30:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%
2:45:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%
3:00:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%
3:15:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%
3:30:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%
3:45:00 AM	0	0	0	0	0	2	0	0	0	0	0	0	0	2	0.15%
4:00:00 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0.07%
4:15:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%
4:30:00 AM	0	0	0	0	0	0	0	0	1	0	1	0	0	2	0.15%
4:45:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0.07%
5:00:00 AM	0	0	0	0	0	0	0	1	1	0	0	0	0	2	0.15%
5:15:00 AM	0	0	0	0	0	2	1	0	0	0	0	0	0	3	0.22%
5:30:00 AM	0	0	0	0	0	1	0	4	1	0	0	0	0	6	0.44%
5:45:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0.07%
6:00:00 AM	0	0	0	0	1	2	3	4	2	0	0	0	0	12	0.89%
6:15:00 AM	0	0	0	0	0	1	1	3	2	0	0	0	0	7	0.52%
6:30:00 AM	0	0	0	0	1	0	2	4	1	0	1	0	0	9	0.66%
6:45:00 AM	0	0	0	0	1	3	1	2	1	0	0	0	0	8	0.59%
7:00:00 AM	0	0	0	0	0	1	9	8	1	1	0	0	0	20	1.48%
7:15:00 AM	0	0	0	0	0	4	5	7	1	0	0	0	0	17	1.25%
7:30:00 AM	0	0	1	1	2	2	1	5	3	2	0	0	0	17	1.25%
7:45:00 AM	0	0	0	0	1	3	2	7	2	0	0	0	0	15	1.11%
8:00:00 AM	0	0	0	0	2	2	4	2	5	1	0	0	0	16	1.18%
8:15:00 AM	0	0	0	0	1	2	3	5	2	0	0	0	0	13	0.96%
8:30:00 AM	0	0	0	0	0	2	6	10	1	0	0	0	0	19	1.40%
8:45:00 AM	0	0	0	0	1	8	6	3	3	1	0	0	0	22	1.62%
9:00:00 AM	0	0	0	0	1	6	6	10	2	0	0	0	0	25	1.85%
9:15:00 AM	1	0	0	1	0	7	5	11	0	0	0	0	0	25	1.85%
9:30:00 AM	0	0	0	1	1	4	4	3	2	2	0	0	0	17	1.25%
9:45:00 AM	0	0	0	1	2	2	8	8	0	0	0	0	0	21	1.55%
10:00:00 AM	0	0	0	0	1	3	2	5	3	1	0	0	0	15	1.11%
10:15:00 AM	0	0	0	0	1	2	7	6	5	1	1	0	0	23	1.70%
10:30:00 AM	0	0	0	0	0	7	5	4	1	0	0	0	0	17	1.25%
10:45:00 AM	0	0	0	0	2	3	10	3	4	1	0	0	0	23	1.70%
11:00:00 AM	0	0	0	1	2	3	12	3	3	0	0	0	0	24	1.77%
11:15:00 AM	0	0	0	1	4	4	6	5	3	0	0	0	0	23	1.70%
11:30:00 AM	0	0	0	0	0	1	4	6	7	0	0	0	0	18	1.33%
11:45:00 AM	0	0	0	1	2	0	2	3	4	1	0	0	0	13	0.96%
AM TOTAL	1	0	1	7	26	77	117	137	63	15	3	0	0	447	32.99%
PERCENTAGE	0.2%	0.0%	0.2%	1.6%	5.8%	17.2%	26.2%	30.6%	14.1%	3.4%	0.7%	0.0%	0.0%		
CUMULATIVE	1	1	2	9	35	112	229	366	429	444	447	447	447		
PERCENTAGE	0.2%	0.2%	0.4%	2.0%	7.8%	25.1%	51.2%	81.9%	96.0%	99.3%	100.0%	100.0%	100.0%		

15th Percentile	33	Mean Speed Average	40
50th Percentile	40	10 MPH Pace Speed	36-45
85th Percentile	46	Number in Pace	276
95th Percentile	49	Percent in Pace	62%

S GRADE RD - VIA VIEJAS TO CALLE DE COMPADRES
SOUTHBOUND

ETD20-0619-01

Wednesday, July 8, 2020

PREPARED BY: ELITE TRAFFIC DYNAMICS, LLC

Time	1 - 10	11 - 15	16 - 20	21 - 25	26 - 30	31 - 35	36 - 40	41- 45	46 - 50	51 - 55	56 - 60	61 - 65	66 +	TOTAL	%VEHICLES
12:00:00 PM	0	0	0	0	0	2	9	5	3	0	0	0	0	19	1.40%
12:15:00 PM	0	0	0	0	1	3	7	7	3	1	0	0	0	22	1.62%
12:30:00 PM	0	0	0	0	0	7	9	4	4	2	0	0	0	26	1.92%
12:45:00 PM	0	0	0	0	0	10	3	7	6	0	0	0	0	26	1.92%
1:00:00 PM	0	0	0	0	2	3	5	3	7	0	1	0	0	21	1.55%
1:15:00 PM	0	0	0	1	0	1	11	7	5	2	0	0	1	28	2.07%
1:30:00 PM	0	0	0	0	0	6	3	9	2	2	1	0	0	23	1.70%
1:45:00 PM	0	0	0	0	1	5	5	3	3	1	0	0	0	18	1.33%
2:00:00 PM	0	0	0	0	0	3	10	10	3	0	0	0	0	26	1.92%
2:15:00 PM	0	0	0	0	2	5	7	10	1	0	0	0	0	25	1.85%
2:30:00 PM	0	0	1	0	1	3	7	5	2	1	0	0	0	20	1.48%
2:45:00 PM	0	0	0	1	0	6	11	6	4	2	0	0	0	30	2.21%
3:00:00 PM	0	0	0	0	0	6	9	14	4	2	0	0	0	35	2.58%
3:15:00 PM	0	0	0	0	3	9	8	7	5	1	0	0	0	33	2.44%
3:30:00 PM	0	0	0	1	3	7	10	9	5	0	0	0	0	35	2.58%
3:45:00 PM	0	0	0	0	1	4	3	7	2	1	0	0	0	18	1.33%
4:00:00 PM	0	0	0	0	2	4	3	8	2	0	0	0	0	19	1.40%
4:15:00 PM	0	0	0	0	1	7	6	12	3	0	0	0	0	29	2.14%
4:30:00 PM	0	0	0	1	1	0	10	8	4	1	0	0	0	25	1.85%
4:45:00 PM	0	0	0	1	3	4	9	6	1	1	0	0	0	25	1.85%
5:00:00 PM	0	0	0	3	0	2	12	7	1	1	0	0	0	26	1.92%
5:15:00 PM	0	0	0	0	0	9	9	4	3	0	1	0	0	26	1.92%
5:30:00 PM	0	0	0	0	2	8	12	8	3	2	0	0	0	35	2.58%
5:45:00 PM	0	0	0	0	1	13	8	5	4	1	0	0	0	32	2.36%
6:00:00 PM	0	0	0	0	0	7	3	6	3	0	0	0	0	19	1.40%
6:15:00 PM	0	0	0	0	1	3	5	9	2	0	0	0	0	20	1.48%
6:30:00 PM	0	0	0	0	3	2	5	8	2	1	1	0	0	22	1.62%
6:45:00 PM	0	0	0	0	0	1	6	4	4	3	1	0	0	19	1.40%
7:00:00 PM	0	0	0	0	0	4	2	5	2	0	0	0	0	13	0.96%
7:15:00 PM	0	0	0	0	1	9	12	1	3	0	0	0	0	26	1.92%
7:30:00 PM	0	0	0	0	2	6	6	5	4	1	0	0	0	24	1.77%
7:45:00 PM	0	0	0	0	1	4	9	3	3	1	0	0	0	21	1.55%
8:00:00 PM	0	0	0	0	1	3	7	2	1	1	0	0	0	15	1.11%
8:15:00 PM	0	0	0	0	3	6	2	6	0	1	0	0	0	18	1.33%
8:30:00 PM	0	0	0	0	2	3	2	1	1	2	0	0	0	11	0.81%
8:45:00 PM	0	0	0	0	2	3	2	5	2	1	0	0	0	15	1.11%
9:00:00 PM	0	0	0	0	0	4	5	1	2	0	0	0	0	12	0.89%
9:15:00 PM	0	0	0	1	1	1	2	3	0	0	0	0	0	8	0.59%
9:30:00 PM	0	0	0	0	1	0	1	0	1	0	0	0	0	3	0.22%
9:45:00 PM	0	0	0	0	0	3	2	1	2	0	0	0	0	8	0.59%
10:00:00 PM	0	0	0	0	0	0	4	3	1	1	1	0	0	10	0.74%
10:15:00 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0.07%
10:30:00 PM	0	0	0	0	0	0	2	1	2	1	0	0	0	6	0.44%
10:45:00 PM	0	0	0	0	0	1	0	3	0	0	0	0	0	4	0.30%
11:00:00 PM	0	0	0	0	0	1	3	1	0	0	0	0	0	5	0.37%
11:15:00 PM	0	0	1	0	0	0	1	0	1	1	0	1	0	5	0.37%
11:30:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0.07%
11:45:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%
PM TOTAL	0	0	2	9	42	188	267	240	117	35	6	1	1	908	67.01%
PERCENTAGE	0.0%	0.0%	0.2%	1.0%	4.6%	20.7%	29.4%	26.4%	12.9%	3.9%	0.7%	0.1%	0.1%		
CUMULATIVE	0	0	2	11	53	241	508	748	865	900	906	907	908		
PERCENTAGE	0.0%	0.0%	0.2%	1.2%	5.8%	26.5%	55.9%	82.4%	95.3%	99.1%	99.8%	99.9%	100.0%		

15th Percentile	34	Mean Speed Average	40
50th Percentile	40	10 MPH Pace Speed	36-45
85th Percentile	46	Number in Pace	563
95th Percentile	49	Percent in Pace	62%

DAY TOTAL	1	0	3	16	68	265	384	377	180	50	9	1	1	1,355	100.00%
PERCENTAGE	0.1%	0.0%	0.2%	1.2%	5.0%	19.6%	28.3%	27.8%	13.3%	3.7%	0.7%	0.1%	0.1%	1,355	100.00%
	0.1%	0.1%	0.3%	1.5%	6.5%	26.1%	54.4%	82.2%	95.5%	99.2%	99.9%	99.9%	100.0%		

Attachment B - Stopping & Corner Sight Distance Field Observations – Driveway #1 – NB Approach



SSD at 425’



CSD at 500’ from Major Roadway



CSD at 500’ from Minor Roadway

Attachment C - Stopping & Corner Sight Distance Field Observations – Driveway #1 – SB Approach



SSD at 446’



CSD at 500’ from Major Roadway



CSD at 500’ from Minor Roadway



CSD at 700’ from Major Roadway



CSD at 700’ from Minor Roadway

Attachment D - Stopping & Corner Sight Distance Field Observations – Driveway #2 – NEB Approach



SSD at 425’



CSD at 500’ from Major Roadway



CSD at 500’ from Minor Roadway

Attachment E - Stopping & Corner Sight Distance Field Observations – Driveway #2 – SWB Approach



SSD at 425’



CSD at 500’ from Major Roadway



CSD at 500’ from Minor Roadway

Attachment F - CSD Triangle Exhibits



CSD Triangles for Driveway #1



CSD Triangles for Driveway #2

Attachment D - Additional Safety Treatments

TO: Yara Fisher, HELIX Environmental Planning, Inc.

FROM: Phuong Nguyen, TE; CR Associates

Jorge Muradas, EIT; CR Associates

DATE: July 29, 2026

RE: Additional Safety Treatments for the access driveways of the Alpine Community Park Project in the County of San Diego

---

This memorandum documents the consistency of the Alpine Community Park's project frontage improvements at the two driveway access points along South Grade Road with the County of San Diego General Plan and Alpine Community Plan Mobility Element classification, and it clarifies that corridor-scale improvements beyond the project frontage remain the responsibility of the County of San Diego Department of Public Works. This memorandum further documents additional traffic control and pedestrian crossing treatments that CR Associates considered during the analysis, identified for the County's information and future consideration, but are not recommended at this time. These topics are addressed in the subsections that follow.

General Plan Consistency

South Grade Road is identified in the County of San Diego General Plan Mobility Element and the Alpine Community Plan Mobility Element as a public road serving the semi-rural community of Alpine. The applicable Mobility Element classification establishes the ultimate roadway design as a two-lane facility with intermittent left-turn lanes at appropriate locations along the corridor. The two-lane configuration with intermittent left-turn pockets is consistent with the rural and semi-rural community character of Alpine and with the operational and design objectives set forth in the County of San Diego Public Road Standards for roadways serving this community.

The project's frontage improvements along South Grade Road have been designed in a manner consistent with the applicable Mobility Element classification described above. The project's two driveway access points have been located, designed, and reviewed for sight distance, traffic control device selection, and pedestrian and bicyclist accommodation in accordance with the applicable County of San Diego, AASHTO, and California Manual on Uniform Traffic Control Devices (CA MUTCD) standards, as documented in the preceding sections of this memorandum.

It is acknowledged that the project is not constructing South Grade Road to its ultimate Mobility Element classification. Roadway widening to add intermittent left-turn pockets at locations beyond the project's frontage, corridor-wide pavement reconstruction, alignment correction, drainage improvements, and similar corridor-scale capital improvements remain the responsibility of the County of San Diego Department of Public Works (DPW) and are subject to the County's capital improvement programming, environmental review, and funding processes. The project, as a single-parcel

development, is responsible only for the frontage improvements applicable to the project's portion of the South Grade Road right-of-way, in accordance with the County of San Diego Public Road Standards and the conditions of project approval. The project's frontage improvements do not preclude the County from implementing additional corridor-scale improvements at or in the vicinity of the project site at any time in the future, and the project's driveway design has been coordinated to remain compatible with such future corridor improvements should they be undertaken.

Additional Safety Treatments Considered

In the course of preparing this analysis, CR Associates considered additional traffic control and pedestrian crossing treatments that could provide further enhancement to operating and crossing conditions in the immediate vicinity of the project's driveways and along the broader South Grade Road corridor. These treatments are identified and described below for the County's information, awareness, and future consideration. Nothing in this memorandum, and no omission of any treatment from the current project scope, shall be construed as an engineering determination that such treatments are or will be unnecessary in perpetuity, or as a representation by the engineer of record regarding the post-occupancy operating conditions that may exist at this location following project construction. The engineer of record's analysis is limited to the conditions and data evaluated as set forth in this memorandum and the accompanying attachments. Future field conditions, vehicular and pedestrian volumes, driver behavior, and crash experience may differ from those evaluated, and any subsequent determination regarding the installation of an additional traffic control or pedestrian crossing treatment along South Grade Road is reserved to the County and other agencies with jurisdiction.

1. Traffic Signal with Advance Warning Signage. A conventional traffic signal at the South Grade Road / Calle de Compadres / Driveway #1 intersection, accompanied by advance warning signage on the South Grade Road approaches, could enhance vehicular operational control and pedestrian crossing protection at this location if and when actual traffic volumes, pedestrian volumes, and crash experience warrant such control. Traffic signal warrants under the CA MUTCD (Sections 4C.01 through 4C.09) are determined on the basis of field-observed operating conditions, including eight-hour and four-hour vehicular volumes, peak-hour delay, pedestrian volumes, school crossings, coordinated signal systems, and crash experience. These conditions are inherently post-occupancy in nature and cannot be definitively measured or warranted prior to project construction and the establishment of stable operating conditions at the project site. For this reason, a traffic signal is not recommended for installation as part of the present project scope.

2. Pedestrian Hybrid Beacon (PHB). A Pedestrian Hybrid Beacon (formerly known as a HAWK beacon), installed at a designated pedestrian crossing of South Grade Road in the vicinity of the project, could enhance pedestrian crossing safety by providing a positive driver indication (steady red signal phase) of an active pedestrian crossing demand on a high-speed roadway. PHB installation is governed by CA MUTCD Section 4F.02, which establishes a warrant matrix based on the major-street posted or 85th percentile operating speed, the major-street vehicular volume, the pedestrian crossing volume, and the length of the crossing. The applicability of a PHB at this location is therefore a function of field-observed, post-occupancy pedestrian crossing volume at any designated crossing of South Grade

Road in the project vicinity, which cannot be definitively forecast prior to project construction and occupancy. For this reason, a PHB is not recommended for installation as part of the present project scope.

3. Rectangular Rapid-Flashing Beacon (RRFB) with High-Visibility Crosswalk and Advance Warning Signage. A Rectangular Rapid-Flashing Beacon installed in conjunction with a high-visibility (continental or ladder-style) crosswalk treatment and W11-2 pedestrian advance warning signage on the South Grade Road approaches could enhance pedestrian crossing conditions at a designated mid-block or driveway crossing location. RRFBs are recognized by the Federal Highway Administration (FHWA) under Interim Approval 21 (IA-21) and are addressed under CA MUTCD Section 4L.03 as a permissible pedestrian crossing treatment for uncontrolled crossing locations on roadways with elevated operating speeds. Like the PHB, the appropriateness of an RRFB at this location is a function of post-occupancy field conditions, including observed pedestrian crossing demand, driver yielding compliance, and the proximity of existing or planned designated crossing locations along the corridor. These conditions cannot be definitively forecast prior to project construction and the establishment of stable operating conditions at the project site. For this reason, an RRFB with high-visibility crosswalk and advance warning signage is not recommended for installation as part of the present project scope.

The treatments identified in this subsection are not necessary, and are not required, in order for the project to satisfy the applicable CEQA, AASHTO, County of San Diego, and CA MUTCD standards as documented in the preceding sections of this memorandum, and the non-inclusion of any such treatment in the present project scope does not constitute, and shall not be construed as, an engineering finding that the project will substantially increase hazards to vehicular traffic, pedestrians, or bicyclists along South Grade Road. The treatments are identified solely in the interest of full disclosure and for the County's future consideration, in recognition of the fact that traffic safety treatments along a public roadway are, by their nature, appropriately the subject of ongoing post-occupancy monitoring and engineering judgment by the agency with jurisdiction over the right-of-way. The engineer of record makes no representation as to the appropriateness of any specific treatment at this location under field conditions that have not been measured or observed at the time of this analysis, and reserves to the County and other agencies with jurisdiction the determination of whether, when, and how any such treatment is to be designed, funded, installed, operated, and maintained.

Appendix J1

Alpine County Park Project Fire Protection Memorandum

Fire Protection Memorandum

Alpine County Park Project

JULY 2026

Prepared for:

HELIX ENVIRONMENTAL PLANNING, INC.

Prepared by:

DUDEK

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1 Fire Behavior Modeling Summary
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1 Introduction

Dudek was retained by HELIX Environmental Planning, Inc. to respond to and provide additional analysis pursuant to a court order regarding the Alpine County Park Project (project) in the Community of Alpine in San Diego County. This technical memorandum serves as an addendum to the 2021 Fire and Emergency Operation Assessment report (FEOA) prepared for the project by Rohde & Associates to comply with a court order related to Wildfire impacts in the Writ of Mandate issued on January 23, 2026, for CASE NO: 37-2024-00000536-CU-WM-CTL (Writ), and as further detailed in the Minute Order issued on June 9, 2025 in the same proceeding (Minute Order). The court determined that the Environmental Impact Report (State Clearinghouse #2021030196, County of San Diego [County] 2023) (EIR) required further analysis related to Wildfire impacts to separately analyze the significant impact of the fire risk and its baseline conditions before proposing mitigation measures. To address the court order, this technical memorandum provides fire behavior modeling that separately establishes fire risk for baseline existing conditions and two project conditions: the project with an active park, including only the fire prevention measures required by code, and 2) the project with an active park, including both the required measures and additional fire protection measures selected by the County. The three conditions provide an analysis of the effectiveness of the project's proposed fire prevention measures in reducing fire behavior intensity and fire ignitions. Additionally, this technical memorandum provides an analysis of the project's alignment with the Attorney General's Guidance for Best Practices for Analyzing and Mitigating Wildfire Impacts of Development Projects Under the California Environmental Quality Act, which had not been issued when the EIR and associated technical reports were originally prepared.

The intent of this technical memorandum is to provide the information necessary to update the appropriate sections of the Recirculated Draft EIR, including updates to the existing conditions and regulatory setting, methodology, and wildfire impact analyses presented in Sections 4.09 Hazards and 4.20 Wildfire.

2 Project Description

The project proposes the development of an approximately 25-acre active park within 96.6 acres of undeveloped land within the unincorporated community of Alpine. The project would conserve approximately 70 acres of the property as open space and/or preserve. The project is located adjacent to the Back Country Land Trust's Wright's Field Preserve, north of South Grade Road, east of Tavern Road, and south of Alpine Boulevard. The project would develop an active park with amenities that include multi-use turf areas, a baseball field, an all-wheel area, bike skills area, recreational courts (i.e., basketball, pickleball, game table plaza), fitness stations, leash-free dog area, restroom facilities, an administrative facility/ranger station, equestrian staging and a corral, nature play area, community garden, a volunteer pad, picnic areas with shade structures, picnic tables, and multi-use trails. A parking area would accommodate up to 240 single vehicle spaces. The parking lots along the eastern portion of the project site would be built with an earthen berm between the parking lots and South Grade Road. By developing the park, the project will remove existing hazardous vegetation fuels and provide irrigated, fire-resistant landscaping common for a park that will result in creating defensible space and vegetation fuel modification and management required by the Alpine Fire Protection District (AFPD), the fire agency with jurisdiction for the project site, for projects in a State Responsibility Area Very High Fire Hazard Severity Zone.

3 Court Order

3.1 Writ

The language in the Writ regarding Wildfire is included below:

> *Wildfire Impacts: Respondent shall separately analyze the significant impacts of the fire risk and its baseline existing conditions before proposing mitigation measures, and shall provide information on how it analyzed the effectiveness of the proposed measures.*

3.2 Minute Order

The language in the Minute Order regarding Wildfire, which provides further background regarding the Writ's directive, is included below:

> *Petitioners argue the EIR does not contain analysis of the significance of the Project's wildfire impacts without the mitigation measures. OB at p.22. They argue that instead, the EIR improperly treated mitigation measures as Project components, which impermissibility treats the analysis of impacts and mitigation measures as one issue. OB at p.21, citing Lotus v. Department of Transportation (2014) 223 Cal.App.4th 645, 653; People ex rel. Bonta v. County of Lake (2024) 105 Cal.App.5th at 1235-36 ("[F]ailure to separately identify and analyze the significant impacts of the fire risk to the Project area and its baseline existing conditions before proposing mitigation measures violates CEQA.)"*
>
> *The County argues the EIR includes a wildfire impact analysis in Section 4.9, section 4.20, and Appendix J, K, and L. Oppo. at p.21 citing AR 2695 et seq. (Fire and Emergency Operation Assessment prepared that identified wildfire risks at the Project site, including ignition risks), 2881 et seq. (Project site is in a "Very High Fire Hazard Severity Zone;" and discussing together the ignition risks and recommended fire prevention measures such as creating buffer zones along the parcel, developing the land and considering undergrounding electric utility services, placing developed park features to contain wildfire, providing improved fire-safe parking, adding on-site volunteer, maintenance staff and a park ranger, and clearing vegetation), 2310 et seq. (discussing expected wildfire behavior, site development risk factors, and discussing risks and measures together); 2340 et seq. (fire evacuation analysis and assumptions), and 2374 et seq. (defensible space requirements letter).*
>
> *Here, the EIR states the measures will reduce wildfire risk to less than significant levels. Importantly, though, the EIR is missing information on how it analyzed the effectiveness of the proposed measures. There is no analysis of how ignition rates will be reduced by the proposed wildfire measures. Reply at p.18, citing Bonta, supra,105 Cal.App.5th at 1233 (an adequate analysis may include the number of ignitions that occur and how that rate has reduced with the proposed wildfire safety measures). Because the EIR does not separately analyze the significant impacts of the fire risk and its baseline existing conditions before it proposed mitigation measures but instead treats the impacts analysis and mitigation measures as one issue, the EIR's wildfire analysis is deficient under CEQA.*

4 Response to the Court's Order

To respond to the Court's order, this technical memorandum has been prepared to provide:

1. A summary of the prior analysis and additional details on consistency analysis with applicable fire regulations
2. Additional analysis to respond to the Court's order, including:
   - A description of the existing baseline wildfire risks at the project site under existing environmental conditions;
   - An analysis of the wildfire risks associated with implementation of the project in the absence of mitigation, assuming the project complies with all applicable provisions of the San Diego County Code of Regulatory Ordinance and the 2025 California Building Standards Code, including wildland-urban interface, building, and fire code requirements for construction and fire prevention and protection[1]; and
   - An analysis of the wildfire risks associated with implementation of the project, when additional fire prevention measures are included.

4.1 Summary of Prior Analysis and Additional Details on Consistency Analysis with Applicable Fire Regulations

4.1.1 Review of the Fire and Emergency Operation Assessment Technical Report

The first step to determine the type of additional analysis needed to respond to the Court's order was to review the existing Fire and Emergency Operation Assessment (FEOA) for consistency and compliance with the requirements for such assessments. A commonly used term for the FEOA prepared for the project is fire protection plan (FPP). The San Diego County Fire Protection District (SDCFD) in cooperation with the County of San Diego Land Use and Environmental Group, Planning and Development Services (County of San Diego 2024) has developed Fire Protection Plan Guidelines for Consultants (Guidelines). These guidelines inform approved consultants as to the type, scope, and contents of the fire protection plan needed for a project based on established criteria. The guidelines note that a fire protection plan "is a document that describes the level of fire hazard that would affect or be caused by a proposed development and the methods proposed to minimize or mitigate that hazard" (Guidelines pg. 114). The guidelines further note that a fire protection plan "is also required by County Policy found in the Safety Element, Chapter 7 and is used to demonstrate fire safety compliance in accordance with requirements of the California Environmental Quality Act" (Guidelines pg. 114).

[1] This project is in a Very High Fire Hazard Severity Zone, so there is no scenario where the project could be legally built without building and fire code requirements in place. As such, it is not possible to separate the project from these code requirements, some of which also function as fire prevention measures. Because these compliance requirements are legally required and cannot be removed from the project design, they are not mitigation measures, and an analysis of the project's "pre-mitigation" wildfire risks therefore includes mandatory fire prevention measures. Additional fire prevention measures beyond code compliance would only be considered mitigation measures if they were necessary to reduce impacts to a less than significant level (i.e. if the impact would be significant in their absence).

An FPP can be one of two formats approved by SDCFD depending on the level of hazard of the project site. A Full Report FPP is required for projects located within areas designated by the State Fire Marshal as a High Fire Hazard Severity Zone (HFHSZ) or a Very High Fire Hazard Severity Zone (VHFHSZ). Projects with an occupant load of 100 or more and projects where the site has topographic, geographic, and/or combustible vegetation conditions that require detailed review and analysis, regardless of a fire hazard severity designation, also require a Full Report FPP. A Letter Report FPP is typically required "for infill projects with no wildlands in the immediate vicinity or low hazard commercial projects in Moderate Fire Hazard Severity Zones" (Guidelines pg. 115). In accordance with these guidelines and requirements, a Full Report FPP was prepared for the project in 2021 by Rhode & Associates.

A Full Report FPP is required by SDCFD to follow prescribed formatting and address all the following elements:

- Wildfire hazard and risk assessment
- Siting of development
- Housing density considerations
- Construction
- Access, egress, and evacuation planning
- Water sources for firefighting
- Subdivision landscaping and vegetation management
- Protection of critical infrastructure
- Emergency Services - Availability and Travel Time

A critical aspect of conducting a wildfire hazard and risk assessment, according to the guidelines, is completing a fire fuel assessment using a recognized fire behavior model to provide a wildfire behavior assessment (Guidelines pgs. 115 and 127). A wildfire behavior assessment is a "summary narrative of wildfire behavior [that] includes discussion of wind, spotting potential, fire trajectory, fuel beds, topographical influences, and major fire history for the site and nearby areas" (Guidelines pg. 155). The guidelines state that "modeling origins and trajectories must be specific to the development site, reflect average-worst-case wildfire behavior, [and include] results that report: fireline intensity, average and maximum rate of spread, ember spotting distance, wind direction, fuel type, slope, and fuel moisture" (Guidelines pgs. 155-156).

In reviewing the Full Report FPP prepared for the project, referenced herein as FEOA, Dudek determined that the FEOA contains all required elements, including a wildfire behavior assessment using a recognized fire behavior model. Therefore, it was determined that the FEOA does not need to be wholly updated. Rather, an analysis of the project's baseline existing conditions compared to the project with and without additional fire prevention measures that exceed code requirements is needed as a supplement to the FEOA to provide evidence of the effectiveness of the project's proposed fire prevention measures. This technical memorandum serves that purpose.

4.1.2 Review of the 2023 FEIR

Section 4.9, *Hazards and Hazardous Materials* of the 2023 FEIR addressed risk of loss, injury, or death due to wildfire under Threshold 7. The discussion was based on the FEOA prepared for the project, which identified wildfire and ignition risks at the project site and rules and project design features that would minimize those risks. Similarly, FEIR Section 4.20, *Wildfire*, analyzed wildfire risks under Threshold 2. The analysis described best management practices, rules, and project design features intended to manage potential ignition sources and fire spread. Several

commenters on the Draft and Recirculated Draft EIRs (including the California Department of Fish and Wildlife [Letter A4]; the San Diego Chapter of the California Native Plant Society, Sierra Club San Diego Chapter, and Environmental Center of San Diego [Letter O2]; Preserve Alpine's Heritage [Letter O8], and various individuals) expressed concerns about wildfire risk, including the project's proposed fuel modification, ignition potential, and analysis of project design features. The County concluded that the project's design features and wildfire controls would prevent significant wildfire impacts and no substantive revisions to the wildfire risk impact analysis or conclusions were made.

4.1.3 Review of California Office of the Attorney General Guidance

In 2022, the California Office of the Attorney General issued guidance outlining best practices for analyzing and mitigating wildfire impacts of development projects under the California Environmental Quality Act (CEQA). The guidance is not regulatory in nature and does not impose additional legal requirements on local governments, nor does it alter any applicable laws or regulations. Rather, it is intended to provide guidance on some of the issues, alternatives, and mitigation measures that should be considered during the environmental review process. This guidance is based on the Office of the Attorney General's experience reviewing, commenting on, and litigating CEQA documents for projects in high wildfire prone areas, and is intended to assist lead agencies with their planning and approval of future projects. Specifically, the Attorney General's guidance requires a description of baseline conditions; encourages an EIR to qualitatively assess wildfire hazard and risk variables through modeling, to the extent feasible; and provides potential project measures to reduce wildfire risk.

The Attorney General had not yet issued the guidance when the FEOA and EIR sections were originally prepared. Attachment 3, Analysis of Attorney General's Guidance, provides a summary of the guidance and an analysis of the EIR's compliance with the applicable points of guidance. It is included in this technical memorandum to further demonstrate that the EIR and its supporting technical documents have considered all potential impacts related to wildfire.

4.2 Additional Analysis to Respond to Court's Order

4.2.1 Methodology

This technical memorandum provides a supplemental analysis to demonstrate the effectiveness of the project's proposed fire prevention measures by comparing the project site's baseline existing conditions to two project conditions: 1) the project with an active park, including only the fire prevention measures required by code, and 2) the project with an active park, including both the required measures and additional measures selected by the County. In other words, this analysis explains why the project, including its proposed fire prevention measures, would effectively reduce wildfire hazards compared to the existing baseline condition.

As described in the following sections, the project includes vegetation fuel modification fire prevention measures (such as vegetation clearing) and human activity fire prevention measures (such as the prohibition of smoking and open flames) to reduce the risk of wildfire ignition and spread. This two-pronged approach to fire prevention requires a two-pronged analysis, as fire behavior can be quantitatively predicted and modeled, while human behavior cannot. The resulting approach to the quantitative and qualitative analyses are described further below.

4.2.1.1 Vegetation Fuel Modification

The three major components of fire environment are topography, vegetation (fuels), and climate. The condition of each of these components and their interactions with each other determine the potential characteristics and behavior of a fire at any given moment. Wildland fire may transition to urban fire if structures are receptive to ignition. Inversely, under extreme conditions, it is possible for structure fires to transition into wildland fires. This is more likely to occur when multiple structures are burning simultaneously and in close proximity to receptive wildland fuels.

- Regarding topography, the proposed project site is primarily flat, while adjacent Wright's Field Preserve lands are more sloping and contoured. The proposed project would not change the topography of the site, which would remain primarily flat and similar to existing conditions in all three project analysis sections (Sections 4.2.2 through 4.2.4): existing baseline condition, project with required fire prevention measures, and project with additional fire prevention measures.
- Regarding vegetation (fuels), 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 (bark thickness, leaf size, branching patterns), and overall fuel loading. For example, non-native grass-dominated plant communities become seasonally prone to ignition under dry conditions and produce lower intensity, higher spread rate fires. In comparison, sage scrub and chaparral vegetation communities can produce higher heat intensity and higher flame lengths under strong, dry wind patterns, but do not typically ignite or spread as quickly as light, flashy grass fuels. Unlike wildfires in shrub and forest vegetation, grass fires are generally more easily contained and require fewer resources and planning to achieve fire containment. While grassland fires may spread rapidly and are influenced heavily by wind, fires in shrub and forest vegetation involve higher intensity fire behavior, present greater risk to structures, and often more difficult control measures. Vegetation hazards are analyzed quantitatively in the three project analysis sections below: existing baseline condition, project with required fire prevention measures, and project with additional fire prevention measures.
- A rapidly warming climate is expected to impact California and the western United States directly and indirectly. The project is a park that would not result in significant climate emissions, so climate conditions in all three project analysis sections (existing baseline condition, project with required fire prevention measures, and project with additional fire prevention measures) remain relatively consistent.

As indicated above, there would be no change in topography or climate change as a result of the project, and vegetation is the only fire environment component that differs among the three project analysis scenarios. Therefore, each section includes an analysis of vegetation (fuels). An overview of research related to the effectiveness of vegetation fuel modification is provided below.

4.2.1.1.1 Vegetation Fuel Modification Research

While the original intent of implementing vegetation fuel modification was to protect natural resources from fires originating in developed areas, vegetation fuel modification has since evolved to protect communities and structures from wildfire post-ignition. Vegetation fuel modification, like that proposed by the project, reduces the fire risk on a landscape by altering the interaction between fire, fuels, and weather (Cochrane et al. 2012). Vegetation fuel modification typically targets surface fires but can also reduce the likelihood of canopy fires, lower ember cast, and have an ancillary effect on the untreated landscape by lowering the probability of burning and the potential fire size (Cochrane et al. 2012) if ignited. Project-specific vegetation fuel modification zones are crucial as the strategic design and placement of fuels treatments can disrupt or slow fire spread, reduce fire intensity, and facilitate fire suppression (Braziunas et al. 2021). When fuel modification zones are designed properly, they protect homes as well as the surrounding environment.

For example, when the Tahoe Basin experienced the Angora Fire in 2007, fuel treatments had the dual effect of saving homes and increasing forest survival (Safford et al. 2009). In areas where fuel management had been conducted prior to the Angora Fire, home loss was substantially reduced in the adjacent community and 85% of the trees survived, as compared to the 22% tree survival rate in untreated areas (Safford et al. 2009). More recently, the Insurance Institute for Business and Home Safety (IBHS) conducted a post-event damage investigation into the 2025 Palisades and Eaton fires in Los Angeles County. The research found that reducing hazardous vegetation through the use of fuel modification zones helps limit fire spread (IBHS 2025).

However, converting natural vegetation to managed landscaping and defensible space does not entirely reduce the potential for ignitions. Instead, defensible space landscaping reduces the risk and likelihood of an on-site ignition becoming an off-site wildfire by reducing the fire intensity and rate of spread by replacing dense, fire-prone, volatile natural vegetation with managed landscaping and vegetation fuel modification zones. Therefore, the risk of a wildfire resulting from an on-site ignition can also be reduced by a landscaping plan that converts hazardous, more easily ignited vegetation fuels to irrigated landscaping that consists of fire- and ignition-resistant plants strategically located to reduce fire spread.

4.2.1.1.2 Vegetation Fuel Modification Code Requirements

The FEOA documents the requirements for vegetation fuel reduction and the establishment of fuel modification zones, which are identified in the FEOA as Fuel Modification Zone A and Fuel Modification Zone B. The requirements for Zone A and Zone B at the time the FEOA was prepared were:

> Fuel Modification Zone A – Code-compliant fuel modification around the Alpine Park facility per fire and building code requirements, with the goal of 100 percent fire exclusion from the project site. The objective of landscape replacement in Zone A will be to eliminate the potential for wildfire occurrence through establishment of a fire-resistive landscape around principal park facilities and structures at the minimum distances required by code. This has been designed through the proposed landscape around sports fields and buildings, subject to AFPD Fire Marshal review and approval during the permitting process (Rohde and Associates 2021).
>
> Fuel Modification Zone B – Fuel reduction shall occur adjacent to Zone A along property lines, where practical, and around key public facilities such as the parking areas, equestrian staging areas, and similar locations. Fuel modification in Zone B should be designed to achieve fire

> prevention goals while maintaining viable habitat and preserving ecological values. The objective of fuel treatment in Zone B is to achieve at least a 75 percent reduction in fire-line intensity from a wildfire moving from native fuels into a constructed fuel modification zone. The County will implement a 100-foot fuel reduction area extending from the volunteer pad under Zone A and Zone B compliance (Rhode and Associates 2021).

Subsequent to the approval of the FEOA, San Diego County adopted and amended the 2025 California Wildland-Urban Interface Code that designates fuel modification Zones 0, 1, and 2, which are the fuel modification zones currently required. The requirements for those fuel modification zones include:

> Zone 0 “Immediate Zone” 0-5 feet - Meaning from exterior wall surface or patio, deck or attachment to building or structure extending 5 feet on a horizontal plane. This zone shall be constructed of continuous hardscape or non-combustible materials. Removal of combustible materials surrounding the exterior wall area and maintaining area free and clear of combustible materials. The use of mulch and other combustible materials shall be prohibited.
>
> Zone 1 “Intermediate Zone” from Zone 0 to 50 feet - Meaning from the immediate edge of Zone 0 extending out in a horizontal plane. This zone shall consist of planting of low growth, drought tolerant and fire resistive plant species. The height of the plants in this zone starts at 6” adjacent to Zone 0 and extending in a linear fashion up to a maximum of 18” at intersection with Zone 2. Vegetation in this zone shall be irrigated and not exceed 6’ in height and shall be moderate in nature as per Sec. 603.4. Firewood inside this zone shall be piled a minimum of 30’ away from all buildings and structures. Cords of firewood shall also be maintained at least 10’ from property lines and not stacked under tree canopies drip lines.
>
> Zone 2 “Extended Zone” from Zone 1 to 100 feet - Meaning from the immediate edge of Zone 1 extending out in a horizontal plane for 50’. This zone consists of planting of drought tolerant and fire resistive plant species of moderate height. Brush and plants shall be limbed up off the ground, so the lowest branches are 1/3 height of bush/tree/plant or up to 6’ off the ground on mature trees. This area would be considered selective clearing of natural vegetation and dense chaparral by removing a minimum of 50% of the square footage of this area.

4.2.1.1.3 Vegetation Fuel Modification Analysis Approach

The below analysis is presented in three sections: existing site conditions and management strategies already in place that would remain with or without the project (Existing Baseline Condition); project with fire prevention/ management strategies required per building and fire code requirements, which are mandatory features that the project cannot legally exclude (Project With Required Fire Prevention Measures), and project with additional fire prevention measures proposed by the County (Project With Additional Fire Prevention Measures).

The fire behavior analysis for this project used the BEHAVE fire behavior modeling software, which was developed by the U. S. Government (USDA Forest Service, Rocky Mountain Research Station) and has been in use since 1984. The BEHAVE fire behavior modeling software has become the most widely used and industry-standard model for predicting fire behavior on a given landscape. Since its inception, the model has undergone continued research, improvements, and refinement. BehavePlus the current iteration of the software, was used to model fire behavior for this project.

Dudek modeled four fire behavior scenarios for the existing baseline condition, as discussed in Section 4.2.2. While the modeling software does not predict future wildfire ignition locations or causes, the selected scenarios model likely ignition types and locations under specific circumstances, which are the model inputs, where an off-site wildfire burns onto the project site. Likely ignition types/causes and locations relevant to the project site were determined by analyzing data collected via fire investigation reports. The project site was then surveyed to determine the types of vegetation fuels that exist in those locations. Statistically significant ignition causes and locations were used to determine where a fire could start in or near the project site. BehavePlus then analyzes fuels along with weather inputs to predict fire behavior after an ignition.

Fire behavior was analyzed using the inputs required by SDCFD and AFPD. The previously referenced Guidelines state that users of the BehavePlus prediction system must be careful to input accurate data into the system so that accurate fire behavior forecasting is created. To ensure accuracy and consistency, SDCFD created charts that aggregated 20 years of average monthly weather data for San Diego County. The charts include temperature, relative humidity, and wind speed inputs that appropriate for fire behavior modeling in San Diego County using BehavePlus (Guidelines pgs. 159-163).

In addition to the existing baseline condition, fire behavior modeling of the four scenarios was also conducted with vegetation fuel modification and analyzed for two conditions in Sections 4.2.3 and 4.2.4, respectively: 1) the project if it were to include only the fire prevention measures required by the building and fire codes, including SDCFD and AFPD requirements and 2) the proposed project with the required measures and two additional measures, including a 20-foot vegetation buffer area adjacent to the existing 30-foot buffer along the park footprint and a 20-foot vegetation buffer area adjacent to the existing 30-foot buffer approximately 100 feet south of the northeast corner of the County's parcel. This analysis provides the information necessary to compare existing baseline and with-project wildfire behavior conditions and determine whether the two additional buffers not required by existing regulations are necessary to support the less-than-significant wildfire impact conclusion (i.e. if the buffers are mitigation measures, or if they are simply features of the project that would further reduce wildfire risk but are not mandatory to achieve a less-than-significant determination under CEQA). All of the fire prevention measures, including the code requirements and the additional buffers, are proposed components of the project's design.

The BehavePlus modeling software determines fire behavior given a specific vegetation fuel under specific weather conditions. For example, it can calculate expected flame lengths in non-native grassland in winds of 10 miles per hour. However, BehavePlus does not analyze fire progression over time and across various vegetation fuels; for example, it does not calculate how the fire would change if it moved from non-native grassland to oak woodland. The project's proposed buffers involve vegetation modification that would trim or thin existing vegetation but would not remove the vegetation entirely (i.e. the vegetation fuel type within the buffer is the same with or without the fuel modification). The analysis of the vegetation modification within the additional buffer areas (which exceeds code requirements) compares fire behavior in the existing buffer vegetation to fire behavior in vegetation that is trimmed, thinned, or removed/replaced through management as a buffer zone fire prevention measure as proposed for the project. This allows for a comparison of wildfire hazard and risk for both conditions, which are described in Section 4.2.3 (implementing only the fire prevention measures required by code and leaving the existing natural vegetation cover within the additional buffer areas as it currently exists) and Section 4.2.4 (exceeding code requirements to modify the vegetation fuels in the additional buffer areas as proposed for the project).

4.2.1.2 Human Activity

As described under the Vegetation Fuel Modification section above, Dudek modeled four fire behavior scenarios for both existing conditions and vegetation modification conditions. Statistically significant ignition causes and locations were used to determine where a fire could start in or near the project site. However, as with other fire behavior modeling programs, BehavePlus does not *predict* wildfire ignition locations or causes, which are elements of human behavior. Therefore, the scenarios modeled cannot predict fire ignition caused by human activity. Because human activity related risks cannot be predicted and quantified by the modeling software, additional research was undertaken to assess effective means of reducing human related ignition risk. Proposed project fire prevention measures were then analyzed qualitatively to demonstrate effectiveness of the measures.

4.2.1.2.1 Human Activity Research

Humans and human-related activities are responsible for the majority of California wildfires (Syphard et al. 2007, 2008; Romero-Calcerrada et al. 2008). Recent research has determined that approximately 84% of wildfires in the United States are human caused (Balch et al. 2017). Urban interfaces with shrubland-dominated vegetation were found to be more fire-prone than those with grasslands or other natural spaces (Elia et al., 2019). Common ignition sources in Southern California are related to powerlines and vehicles (Keeley & Syphard 2018). Powerline-based ignitions are a concern with respect to off-site ignitions that could result in a wildfire progressing onto the project site. Certain everyday human activities often result in sparks, flames, or heat that may ignite vegetative fuels without proper prevention measures in place. These ignitions predominantly occur as accidents, but may also be purposeful, such as in the case of arson. While there is a relationship between population and fire ignitions, there is not a direct per capita correlation between population and fire ignitions. Research by Bistinas, et. al. (2013) shows that overall, the relationship between population density and wildfires does not have a consistent increase or decrease. Burned area initially increases with population density and then decreases when population density exceeds a threshold.

The US Forest Service asserts that the prevalence of human-caused ignitions, combined with the percentage of ignitions arising from discretionary behaviors such as recreational fires, use of open flames for outdoor cooking or ceremonial purposes, and smoking, point to opportunities for wildfire prevention and education efforts to reduce the risk of wildfires resulting from discretionary ignitions (USFS 2025). Research conducted by Edgeley, et al (2025) supports the position of the US Forest Service by documenting best practices that have resulted in fewer fire ignitions. Edgeley summarizes the research by finding that, “Effective interventions to prevent human-caused ignitions on public lands play a critical role in social and ecological adaption to wildfire.”

According to the research, one of the most effective means of reducing ignitions is to combine effective education with judicious enforcement (Edgeley, et al 2025). The research found that “scientists consistently underscore the interconnectivity between enforcement and education, often suggesting that enforcement should be a last resort in instances where education may resolve unwanted behaviors.” Among the recommended best practices for the use of education and enforcement in reducing fire ignitions are:

- Prioritizing educational outreach over enforcement to address illegal activities that result from a lack of knowledge or understanding.
- Increasing strategic patrolling, especially during periods of high fire risk, as patrolling is often connected to a meaningful decrease in illegal ignitions.

- Leveraging enforcement interactions as educational opportunities when issuing tickets, fines, or otherwise making contact with members of the public engaged in prohibited activities that can result in unwanted ignitions.
- Communicating the difference between law enforcement officers and park rangers to improve public relationships with residents and park patrons.
- Providing explicit messaging about what is and is not allowed to reduce confusion that may arise from public agency terminology.

4.2.1.2.2 Human Activity Code Requirements

In addition to the vegetation fuel modification code requirements described above, the project would be required to comply with the requirements in the San Diego County Code of Regulatory Ordinances, which contains enforceable regulations governing activities within the County's jurisdiction. The following sections regulate human activity that could result in fire ignition:

SEC. 41.117. WEAPONS AND FIREWORKS.

(a) It shall be unlawful for a person to possess any of the following in a County park: "explosives," as defined in Health and Safety Code section 12000, "fireworks," as defined in Health and Safety Code section 12511, a "firearm" as defined in Penal Code section 12001, an air gun, bow or crossbow, slingshot, paintball gun, blowgun or throwing knife.

(b) The Department may, however, grant written authorization:

(1) To a group to practice archery in a designated area of a County park.

(2) To allow bows and arrows to be carried during an historical reenactment.

(3) To allow "antique firearms," as defined in 18 U.S.C. section 921(a)(16), to be carried and discharged using blank ammunition, during an historical reenactment, upon satisfactory proof that all State and federal firearms regulations have been and will be complied with.

(4) To allow a mentored, juniors-only turkey hunt for up to 20 juniors and their mentors, using shotguns or bows and arrows, at Santa Ysabel East Preserve for a maximum of two days per year during a State-established juniors-only turkey hunting season, subject to all applicable State and federal laws and regulations.

(5) To allow the possession and use of a firearm or any other weapon listed in subsection (a) above to control any invasive, non-native animal in a County park that the Director determines is causing significant damage to the environment including, but not limited to, native plants and/or animals, provided the authorization complies with all applicable federal and state law. The authorization may include conditions to ensure the safety of the public, including, but not limited to a limit on the time when and/or the area where the person may possess and use the firearm, and specification of the type of firearm or weapon that may be used. Before granting an authorization, the department shall consider the environmental resources in the area where the animal is likely to be found. The authorization shall include conditions to protect any significant environmental resources, including sensitive plants or animals, in that area.

(c) The prohibition on the possession and use of a firearm in subdivision (a) above does not apply to the following persons when acting in the course and scope of their employment: any peace officer as defined

by state law, any federal law enforcement officer including, but not limited to, an employee of U.S. Customs and Border Patrol, or any other governmental employee or his or her agent who is authorized to carry a firearm.

SEC. 41.118. FIRE HAZARDS.

It shall be unlawful for any person in a County park to:

(a) Ignite a fire, except in a designated campfire ring or barbecue provided by the County when campfires or cooking are allowed by park rules or as specifically authorized by a park ranger.

(b) Ignite a fire when the County has given the person notice that the geographic area in which the park is located is subject to a red flag warning issued by the National Weather Service or the Director of Parks and Recreation has determined that it is not safe to start a fire.

(c) Discard any lighted tobacco product or any burning or combustible material or other thing that could set fire to grass, shrubs, buildings or any other combustible substance.

SEC. 41.118.5. SMOKING.

It shall be unlawful for any person in a County park to carry a lighted pipe, cigar, or cigarette; to use an electronic smoking device or other smoking device, containing tobacco or any other substance; or to light, smoke, activate, or in any way use a pipe, cigar, cigarette, or electronic smoking device or other smoking device, containing tobacco or any other substance.

4.2.1.2.3 Human Activity Analysis Approach

Along with the vegetation fuel modification analysis, an analysis of fire risks associated with human activity is presented in the three sections below: existing management strategies already in place that would remain with or without the project (Existing Baseline Condition; Section 4.2.2); project with fire prevention/management strategies required per code requirements, which are mandatory features that the project cannot legally exclude (Project With Required Fire Prevention Measures; Section 4.2.3), and project with additional fire prevention measures proposed by the County (Project With Additional Fire Prevention Measures; Section 4.2.4).

In Sections 4.2.2 through 4.2.4 below, the effectiveness of the human activity fire prevention measures is assessed qualitatively based on site-specific conditions, code requirements, and the research presented above. The analysis in Section 4.2.2 below considers the existing human activity measures in place on the project site. The analysis in Section 4.2.3 assumes the implementation of the code requirements listed above, while the analysis in Section 4.2.4 also includes additional site-specific human activity measures selected by the County.

4.2.2 Existing Baseline Condition

This section establishes the existing conditions on the project site to provide a baseline for comparison with the analyses presented in Sections 4.2.3 (project with required fire prevention measures) and 4.2.4 (project with additional fire prevention measures).

4.2.2.1 Fire Prevention Measures

This analysis considers the following vegetation fuel modification and human activity related activities currently occurring on site to monitor and minimize wildfire risks.

4.2.2.1.1 Vegetation Fuel Modification Measures

- EXISTING: Continued maintenance of an existing 30-foot buffer where vegetation has been cleared adjacent to the roadside along the County property, which has been historically cleared and is required by AFPD, and is not part of this project.
- EXISTING: Continued maintenance of a historically cleared and existing 100-foot buffer where vegetation has been cleared where there are adjoining properties along the northern boundary of the County-owned parcel, which is required by AFPD and is not part of this project.

4.2.2.1.2 Human Activity Measures

- EXISTING: Small swing gate as a vehicle control barrier.
- EXISTING: Weekly checks of the project site by rangers.

4.2.2.2 Analysis

4.2.2.2.1 Vegetation Fuel Modification Measures

Per the Court order and Attorney General Guidance, the following analysis addresses existing fire behavior in the project vicinity in the baseline condition. Four wildfire scenarios were modeled to analyze fire behavior in existing conditions, as described in Section 4.2.1 above. Table 1, Existing Vegetation Baseline Conditions Fuel Model Characteristics, describes the fuel types currently existing on the project site, which are used in the analysis below. A full analysis of the modeling is included in the Fire Behavior Modeling Summary in Attachment 1. Below is a summary of the results of each scenario.

Table 1. Existing Vegetation Baseline Conditions Fuel Model Characteristics

Fuel Model Assignment	Vegetation Description	Location	Fuel Bed Depth (Feet) [1]
GR2	Short, sparse dry climate grass	Represents the annual grasslands on and off the project site	0.4 ft
GS1	Low load dry climate grass- shrub	Represents the grass and sparse shrubs on the hillside in the off-site run to the west.	0.9 ft
GS2	Moderate load dry climate grass- shrub	Represents the vegetation in the areas in the northern portion of the project site.	1.5 ft
SH2	Moderate load dry climate shrub	Represents the shrub-brush in the northern portion of the project site and on the hillside in the off-site run to the west.	1 ft

Note:
[1] Listed fuel bed depths reflect the fuel models that best depict the vegetation in and around the project site and not an exact measure of local vegetation (Anderson 1982; Scott & Burgan 2005).

Scenario 1. Fire flaming front started by a possible roadside ignition on South Grade Road, burning through the annual grasslands from the northeastern boundary to the southwestern boundary of the project site during an extreme offshore Santa Ana wind event with 28 mph sustained winds and 41 mph wind gusts.

Results: Expected to produce flame lengths up to 14.9 feet, have a fireline intensity of up to 2,029 BTU/feet/second, have a rate of spread of up to 4.1 mph, and produce ember spotting up to 1.0 mile.

Scenario 2. Fire flaming front started by a possible roadside ignition on South Grade Road, burning through the annual grasslands from the southwestern boundary to the northeastern boundary of the project site during an average summer onshore wind event with 19 mph sustained winds.

Results: Expected to produce flame lengths up to 5.9 feet, have a fireline intensity of up to 266 BTU/feet/second, have a rate of spread of up to 0.8 mph, and produce ember spotting up to 0.3 miles.

Scenario 3. Fire flaming front burning through grass-shrubs in the wash in the northeastern portion of the project site during an extreme offshore Santa Ana wind event with 28 mph sustained winds and 41 mph gusting winds advancing the fire in a southwesterly direction.

Results: Expected to produce flame lengths up to 18.1 feet, have a fireline intensity of up to 3,071 BTU/feet/second, have a rate of spread of up to 6.2 mph, and produce ember spotting up to 1.1 miles.

Scenario 4. Fire flaming front approaching the project site from the west, burning through grass-shrubs in the off-site open space west of the project site during an average onshore summer wind event with 19 mph sustained winds.

Results: Expected to produce flame lengths up to 7.1 feet, have a fireline intensity of up to 402 BTU/feet/second, have a rate of spread of up to 1.2 mph, and produce ember spotting up to 0.3 miles.

4.2.2.2.2 Human Activity Measures

The small swing gate currently restricts vehicle access to the project site at that location, reducing the potential for ignitions resulting from vehicle activity in vegetation fuels. However, there is no daily on-site enforcement presence to ensure that unrestricted pedestrian or vehicle access to the site is not occurring elsewhere. As described in Section 4.2.1, vehicles and associated human presence are a common ignition source in vegetation fuels. Vehicle malfunctions that result in sparks and/or exhaust system components contacting vegetation can result in vegetation fires.

As described in Section 4.2.1, patrolling is known to reduce illegal activities and presents an opportunity for education about wildfire risk and reduction. It can be concluded that weekly ranger checks currently reduce illegal activity, such as smoking, that has potential to cause ignitions. However, as described above, there is no daily on-site educational or enforcement presence to ensure that illegal activities are not conducted on the project site when rangers are not patrolling.

4.2.2.3 Conclusion

Under existing conditions, the project site and adjacent off-site areas consist primarily of annual grasslands and grass-shrub vegetation, which are highly receptive to ignition and rapid fire spread, particularly during offshore Santa Ana wind events. As described above, four wildfire scenarios were modeled, including on-site and off-site ignitions under both extreme offshore and average onshore wind conditions. Modeling results demonstrate that, under existing conditions, wildfire behavior could be severe.

During average onshore summer weather with 19-mph sustained winds, fires are expected to produce flame lengths of up to approximately 7.1 feet, fireline intensities of up to 402 BTU/feet/second, rates of spread of up to 1.2 miles per hour, and ember spotting distances of up to 0.3 miles. During extreme offshore Santa Ana wind events with 28-mph sustained winds and 41-mph wind gusts, fire behavior is substantially more extreme, with modeled flame lengths of up to approximately 18.1 feet, fireline intensities up to 3,071 BTU/feet/second, rates of spread up to 6.2 miles per hour, and ember spotting distances of up to 1.1 miles.

As noted in the FEOA, the project site is currently subject to occasional unauthorized vehicular and pedestrian public access to and within hazardous vegetation fuels, making it vulnerable to potential smoking, vehicle, or other ignition hazards that increase wildfire risk. The current use of the undeveloped land, including occasional unauthorized access, places the project area at risk for fire ignitions associated with both natural events and human activities.

4.2.3 Project with Required Fire Prevention Measures

This section analyzes wildfire impacts of building the project with only the fire prevention measures required by the relevant codes, including applicable wildfire, building, and fire codes and the County Code of Regulatory Ordinances. Each of these code requirements is described in detail in Section 4.2.1. These are the minimum requirements to obtain approvals to build that the project cannot legally exclude. There is no scenario where the project could be built without incorporating these mandatory fire prevention measures.

4.2.3.1 Fire Prevention Measures

This analysis considers the following vegetation fuel modification and human activity related activities currently occurring on site to monitor and minimize wildfire risks as well as the measures that would be implemented to meet minimum code requirements:

4.2.3.1.1 Vegetation Fuel Modification Measures

- REQUIRED BY CODE: Creating a 100-foot vegetation buffer, as part of the project, that would extend outward in all directions from the volunteer pad.
- EXISTING: Continued maintenance of an existing 30-foot buffer where vegetation has been cleared adjacent to the roadside along the County property, which has been historically cleared and is required by AFPD, and is not part of this project.
- EXISTING: Continued maintenance of a historically cleared and existing 100-foot buffer where vegetation has been cleared where there are adjoining properties along the northern boundary of the County-owned parcel, which is required by AFPD and is not part of this project.

4.2.3.1.2 Human Activity Measures

The project site is currently open space owned by the County but is not a designated park, preserve, or other public amenity with authorized public access. The project would turn the project site into a park, implementing and enforcing applicable County Code of Regulatory Ordinances on the project site.

- REQUIRED BY CODE: Prohibit the use of barbecues when a Red Flag Warning has been issued (County Code of Regulatory Ordinances Section 41.118).
- REQUIRED BY CODE: Prohibit smoking (County Code of Regulatory Ordinances Section 41.118.5).
- REQUIRED BY CODE: Prohibit the use, transport, carrying, firing, or discharging any fireworks, firearm, weapon, air gun, archery device, slingshot, or explosive of any kind across, in, or into the park except as authorized under Section 41.117 of the County Code of Regulatory Ordinances (County Code of Regulatory Ordinances Section 41.117).
- EXISTING: Small swing gate as a vehicle control barrier.
- EXISTING: Weekly checks of the project site by rangers.

4.2.3.2 Analysis

4.2.3.2.1 Vegetation Fuel Modification Measures

The same four wildfire scenarios were re-analyzed for the project with vegetation fuel modification applied as required by SDCFD and AFPD. The vegetation fuel modification in the additional 20-foot buffer areas proposed by the County is excluded from this analysis by assuming the vegetation in the buffers remains unmaintained flat-topped buckwheat (GR2) in Table 2, Project Vegetation with Required Fire Prevention Measures Fuel Model Characteristics. The below results are for a hypothetical situation in which the project is developed with only the required fire prevention measures, which do not include the project's proposed vegetation fuel modification in the additional 20-foot buffer areas.

Table 2 presents the fuel modification assignments assumed in the analysis. A full analysis of the modeling is included in the Fire Behavior Modeling Summary in Attachment 1. Below is a summary of the results of each scenario.

Table 2. Project Vegetation with Required Fire Prevention Measures Fuel Model Characteristics

Fuel Model Assignment	Vegetation Description	Location	Fuel Bed Depth (Feet)[1]
GR2	Short, sparse dry climate grass	Represents the annual grasslands on and off the project site	0.4 ft
FM8	Compact Litter	On-site Zone 1 and 2 fuel modification	0.2 ft.
NB	Non-burnable	Paved areas throughout the proposed project site.	0 ft

Note:
[1] Listed fuel bed depths reflect the fuel models that best depict the vegetation in and around the project site and not an exact measure of local vegetation (Anderson 1982; Scott & Burgan 2005).

Scenario 1. Fire flaming front started by a possible roadside ignition on South Grade Road, burning through the irrigated, maintained vegetation in the on-site fuel modification zones from the northeastern boundary to the southwestern boundary of the project site during an extreme offshore Santa Ana wind event with 28 mph sustained winds and 41 mph wind gusts.

Results: Expected to produce flame lengths up to 2.9 feet, have a fire intensity of up to 57 BTU/feet/second, have a rate of spread of up to 0.1 mph, and produce ember spotting up to 0.3 miles.

Scenario 2. Fire flaming front started by a possible roadside ignition on South Grade Road, burning through the annual grasslands until it reaches the irrigated, maintained vegetation in the on-site fuel modification zones and hardscaped areas on the project site from the southwestern boundary to the northeastern boundary of the project site during an average onshore summer wind event with 19 mph sustained winds.

Results: Expected to produce flame lengths up to 1.3 feet, have a fire intensity of up to 9 BTU/feet/second, have a rate of spread of up to 0.1 mph, and produce ember spotting up to 0.1 miles.

Scenario 3. Fire flaming front burning through irrigated, maintained vegetation and low-load, dry climate grass in the additional 20-foot buffer areas in the on-site fuel modification zones in the northeastern portion of the project site during an extreme offshore Santa Ana wind event with 28 mph sustained winds and 41 mph gusting winds.

Results: Expected to produce flame lengths up to 18 feet, have a fire intensity of up to 3,037 BTU/feet/second, have a rate of spread of up to 6.2 mph, and produce ember spotting up to 1.1 miles.

Scenario 4. The vegetation in this scenario will not change with development of the project with the required fire prevention measures because it is an off-site scenario and not subject to vegetation fuel modification. The scenario would produce the same fire behavior modeling outputs as modeled in the existing conditions Scenario 4.

Results: Expected to produce flame lengths up to 7.1 feet, have a fire intensity of up to 402 BTU/feet/second, have a rate of spread of up to 1.2 mph, and produce ember spotting up to 0.3 miles.

The scenarios above model a condition in which existing hazardous vegetation fuels are converted to maintained landscaping and vegetation fuel modification zones that meet code requirements. As described above, this condition does not include vegetation modification in the 20-foot buffer areas, which is not required by code. The fire behavior modeling for this section shows a reduction in expected flame length, fire intensity, spread rate, and ember spotting within the project site when compared to the existing conditions fire behavior modeling. Flame lengths, fire intensity, rate of spread, and ember spotting distance in the additional buffer areas (included in Scenario 3) would remain 18 feet; 3,037 BTU/feet/second; 6.2 mph; and 1.1 miles, respectively, the same as the existing condition. Flame lengths in areas with vegetation modification would be reduced by approximately 4.6 to 12 feet depending on the location. Similarly, fire intensity in the fuel modification areas would be reduced by up to 3,008 BTU/feet/second; rate of spread would be reduced by up to 4 mph; and ember spotting distance would be reduced by up to 0.8 miles. Therefore, the modeled vegetation fuel modification scenarios show the project with required fire prevention measures reduce flame length, fireline intensity, spread rate, and ember spotting distance when compared to existing baseline conditions.

4.2.3.2.2 Human Activity Measures

As described above, the project would turn the project site into a park introducing more human activity at the site but also implementing and enforcing applicable County Code of Regulatory Ordinances on the project site. The project is estimated to have 300-500 visitors per day at full facility build-out. This usage could increase to 1,000 visitors per day on weekends and up to 2,000 per day during special events.

With the required vegetation fuel modification measures proposed to be in place prior to increasing human activity to the area, less fuel would be available for human activity related ignition risks. Additionally, the code required measures, including prohibition of smoking (County Code of Regulatory Ordinances Section 41.118.5), barbecues during Red Flag Warnings (County Code of Regulatory Ordinances Section 41.118), and fireworks, firearm, weapon, air gun, archery device, slingshot, or explosive of any kind (County Code of Regulatory Ordinances Section 41.117), would reduce the potential for human caused ignitions on the project site. Enforcement would be supported by the weekly ranger visits already occurring on the project site and on-site signage, which provide opportunities for visitor education about wildfire risk. However, weekly visits are not expected to be able to prevent occasional unauthorized public use. While the project proposes live-on staff, it is assumed that under this hypothetical analysis condition, there would be no daily on-site enforcement presence to ensure that education and enforcement of rules regarding smoking and barbecues would be consistently implemented. This is an unlikely condition and not consistent with management practices for typical County parks. However, the condition is provided to disclose the project's fire risks prior to proposing additional fire prevention measures.

As described in Section 4.2.1, one of the most effective means of reducing ignitions is to combine effective education with judicious enforcement. On-site signage would inform visitors about the prohibited activities on the project site, and continued weekly ranger visits would result in interactions with an increased number of visitors, creating opportunities for rangers to educate more visitors about the fire dangers associated with prohibited activities. The effectiveness of these continued and code required human activity measures is corroborated by the research conducted in Section 4.2.1 above.

4.2.3.3 Conclusion

Overall, the modeling results above show that building the project results in a reduction of potential fire activity and fire risk within the project site compared to existing baseline conditions. This is primarily because the existing baseline conditions include more fire prone grassland habitat compared to this project with required fire prevention measures condition, which will change the habitat type from fire prone vegetation to developed areas.

While the potential wildfire activity within the project site is reduced with the project compared to existing baseline conditions, the project is anticipated to lead to additional human presence at the site, which could increase fire risk by introducing additional opportunities for human-caused fire ignitions. However, the project would be subject to the restrictions in the County Code of Regulatory Ordinances, which prohibits ignition sources such as smoking or fireworks. On-site signage would inform visitors about the prohibited activities on the project site. The existing weekly ranger checks would enforce these prohibitions using clear communication and direct verbal warnings, which would also present opportunities for education about fire dangers. Ongoing enforcement, education, and signage would increase public awareness about the restrictions on the project site, minimizing ignition potential even when rangers are not present.

Through the combined vegetation fuel modification conditions and human activity measures required to implement the project, the project will reduce the risk of ignition for the nearby homes and provide an area of decreased fire behavior that will make fire containment and suppression more manageable for firefighters than the existing baseline conditions. The project would implement all defensible space and vegetation fuel modification required by the applicable codes and regulations, and the project's impact with regard to wildfire risk would be less than significant with no mitigation required.

4.2.4 Project with Additional Fire Prevention Measures

This section analyzes wildfire impacts of building the project with additional vegetation fuel modification and human activity fire prevention measures proposed by the County that exceed code requirements. Like Section 4.2.3 above, this analysis assumes the project complies with all applicable wildfire, building, and fire code requirements that would be needed to obtain approvals to build.

4.2.4.1 Fire Prevention Measures

This analysis considers the following vegetation fuel modification and human activity related activities currently occurring on site to monitor and minimize wildfire risks, measures that would need to be implemented to meet minimum code requirements, and additional vegetation fuel modification and human activity measures proposed by the County to minimize fire risk and management.

4.2.4.1.1 Vegetation Fuel Modification Measures

- ADDITIONAL MEASURE: An additional 20-foot buffer adjacent to the existing 30-foot buffer along the park footprint for a total of 50 feet of reduced vegetation cover.
- ADDITIONAL MEASURE: An additional 20-foot buffer adjacent to the existing 30-foot buffer approximately 100 feet south of the northeast corner of the County's parcel.
- REQUIRED BY CODE: Creating a 100-foot vegetation buffer, as part of the project, that would extend outward in all directions from the volunteer pad.
- EXISTING: Continued maintenance of an existing 30-foot buffer where vegetation has been cleared adjacent to the roadside along the County property, which has been historically cleared and is required by AFPD, and is not part of this project.
- EXISTING: Continued maintenance of a historically cleared and existing 100-foot buffer where vegetation has been cleared where there are adjoining properties along the northern boundary of the County-owned parcel, which is required by AFPD and is not part of this project.

4.2.4.1.2 Human Activity Measures

The existing human activity measures (small swing gate and weekly ranger checks) would be replaced by the additional measures below, which provide enhanced vehicle control barriers and a more regular enforcement presence.

- ADDITIONAL MEASURE FOR PROJECT: Strengthening the vehicle control barriers and providing improved fire-safe parking.

- ADDITIONAL MEASURE FOR PROJECT: A live-on volunteer, maintenance staff, and a park ranger to help with maintenance and management of the property.
- ADDITIONAL MEASURE FOR PROJECT: Prohibit campfires and open flames.
- ADDITIONAL MEASURE FOR PROJECT: Prohibit overnight use of the park.
- REQUIRED BY CODE: Prohibit the use of barbecues when a Red Flag Warning has been issued (County Code of Regulatory Ordinances Section 41.118).
- REQUIRED BY CODE: Prohibit smoking (County Code of Regulatory Ordinances Section 41.118.5).
- REQUIRED BY CODE: Prohibit the use, transport, carrying, firing, or discharging any fireworks, firearm, weapon, air gun, archery device, slingshot, or explosive of any kind across, in, or into the park except as authorized under Section 41.117 of the County Code of Regulatory Ordinances (County Code of Regulatory Ordinances Section 41.117).

4.2.4.2 Analysis

4.2.4.2.1 Vegetation Fuel Modification Measures

The same four existing condition fire scenarios were re-analyzed for the project with the code-required fire prevention measures *and* the additional measures proposed by the County, including a 20-foot vegetation buffer area adjacent to the existing 30-foot buffer along the park footprint and a 20-foot vegetation buffer area adjacent to the existing 30-foot buffer approximately 100 feet south of the northeast corner of the County's parcel. As shown in Table 3, Project Vegetation with Additional Fire Prevention Measures Fuel Model Characteristics, the GR2 fuels associated with the buffer area have been converted to code-compliant vegetation fuel modification. A full analysis of the modeling is included in the Fire Behavior Modeling Summary in Attachment 1. Below is a summary of the results of each scenario associated with the project as proposed.

Table 3. Project Vegetation with Additional Fire Prevention Measures Fuel Model Characteristics

Fuel Model Assignment	Vegetation Description	Location	Fuel Bed Depth (Feet)[1]
FM8	Compact Litter	On-site Zone 1 and 2 fuel modification	0.2 ft.
NB	Non-burnable	Paved areas throughout the proposed project site.	0 ft

Note:
[1] Listed fuel bed depths reflect the fuel models that best depict the vegetation in and around the project site and not an exact measure of local vegetation (Anderson 1982; Scott & Burgan 2005).

Scenario 1. Fire flaming front started by a possible roadside ignition on South Grade Road, burning through the irrigated, maintained vegetation in the on-site fuel modification zones from the northeastern boundary to the southwestern boundary of the project site during an extreme offshore Santa Ana wind event with 28 mph sustained winds and 41 mph wind gusts.

Results: Expected to produce flame lengths up to 2.9 feet, have a fire intensity of up to 57 BTU/feet/second, have a rate of spread of up to 0.1 mph, and produce ember spotting up to 0.3 miles.

Scenario 2. Fire flaming front started by a possible roadside ignition on South Grade Road, burning through the annual grasslands until it reaches the irrigated, maintained vegetation in the on-site fuel modification zones and hardscaped areas on the project site from the southwestern boundary to the northeastern boundary of the project site during an average onshore summer wind event with 19 mph sustained winds.

Results: Expected to produce flame lengths up to 1.3 feet, have a fire intensity of up to 9 BTU/feet/second, have a rate of spread of up to 0.1 mph, and produce ember spotting up to 0.1 miles.

Scenario 3. Fire flaming front burning through irrigated, maintained vegetation in the on-site fuel modification zones in the northeastern portion of the project site during an extreme offshore Santa Ana wind event with 28 mph sustained winds and 41 mph gusting winds.

Results: Expected to produce flame lengths up to 3 feet, have a fire intensity of up to 63 BTU/feet/second, have a rate of spread of up to 0.2 mph, and produce ember spotting up to 0.3 miles.

Scenario 4. The vegetation in this scenario will not change with development of the project with the additional fire prevention measures because it is an off-site scenario and not subject to vegetation fuel modification. The scenario would produce the same fire behavior modeling outputs as modeled in the existing conditions Scenario 4.

Results: Expected to produce flame lengths up to 7.1 feet, have a fire intensity of up to 402 BTU/feet/second, have a rate of spread of up to 1.2 mph, and produce ember spotting up to 0.3 miles.

In addition to the vegetation fuel modification required by code, the modeling above includes vegetation fuel modification within the additional 20-foot buffer areas (included in Scenario 3) that exceeds code requirements. Consistent with Section 4.2.3, the fire behavior modeling in this section shows a reduction in expected flame length, fire intensity, spread rate, and ember spotting within the project site when compared to the existing conditions fire behavior modeling. Additionally, as shown under Scenario 3 above, modifying the vegetation within the additional 20-foot buffers would further reduce wildfire risk beyond the risk reduction achieved by incorporating only the required fuel prevention measures. The proposed project would result in a reduction in buffer area flame lengths (3 feet compared to 18 feet in Section 4.2.3), fire intensity (up to 63 BTU/feet/second compared to up to 3,037 BTU/feet/second in Section 4.2.3), rate of spread (0.2 mph compared to up to 6.2 mph in Section 4.2.3), and ember spotting (up to 0.3 miles compared to up to 1.1 miles in Section 4.2.3).

As described in Section 4.2.3, vegetation fuel modification within the additional 20-foot buffers is not required to achieve a less than significant wildfire risk impact. As described in Section 4.2.1, vegetation fuel modification has been demonstrated to limit fire spread. Defensible space landscaping reduces the risk and likelihood of an on-site ignition becoming an off-site wildfire by reducing the fire intensity and rate of spread by replacing dense, fire-prone, volatile natural vegetation with managed landscaping and vegetation fuel modification zones. The required vegetation fuel modification would reduce flame lengths, fire intensity, rate of spread, and ember spotting compared to existing conditions. As demonstrated through the research and modeling above, additional vegetation fuel modification within the 20-foot buffer areas would further reduce potential fire activity on the project site. The additional vegetation fuel modification features are not required to reduce impacts to less than significant and are therefore not mitigation measures.

4.2.4.2.2 Human Activity Measures

The project proposes additional human activity fire prevention measures beyond what is included in Sections 4.2.2 and 4.2.3.

Strengthening the vehicle control barriers and providing improved fire-safe parking would more comprehensively minimize the occasional unauthorized vehicle access to the site, preventing vehicle-caused ignition in vegetation fuels. Improved fire-safe parking would minimize ignition risk in designated parking areas by using non-burnable materials compared to existing conditions which include fire prone vegetation. As described in Section 4.2.1, vehicles are a common ignition source in vegetation fuels. Vehicle malfunctions that result in sparks and/or exhaust system components contacting vegetation can result in vegetation fires.

A live-on volunteer, maintenance staff, and a park ranger to help with maintenance and management of the property would play a key role in enforcement and education, the benefits of which are described in Section 4.2.1 above. A more active enforcement presence would ensure that visitors comply with the other human activity measures through verbal warnings or request removal of individuals who do not comply with park regulations. Additional site presence also presents opportunities for rangers to educate visitors about the fire risks associated with prohibited activities. Having multiple individuals on-site and responsible for enforcement ensures a higher level of enforcement.

Prohibiting campfires and open flames would directly reduce opportunities for ignition within the park, especially during high wind events. The enforcement and education conducted by the live-on staff, maintenance workers, and park rangers would reinforce the effectiveness of this measure. This enforcement would be supplemented with signage on site clarifying prohibited activities.

Prohibiting overnight use of the park would minimize opportunities for visitors to cause ignitions within the park through illegal activities such as lighting campfires or smoking. The enforcement and education conducted by the live-on staff, maintenance works, and park rangers would reinforce the effectiveness of this measure. This enforcement would be supplemented with signage on site clarifying prohibited activities.

4.2.4.3 Conclusion

As shown above, converting the fuels within the additional 20-foot buffer to code-compliant vegetation fuel modification would further reduce fire behavior within the project site. Consistent with Section 4.2.3, the fire behavior modeling in this section shows a reduction in expected flame length, fire intensity, spread rate, and ember spotting within the project site when compared to the existing conditions fire behavior modeling.

The fire prevention measures proposed for the park implement the applicable sections of the San Diego County Code of Regulatory Ordinances and additional human activity measures that closely align with the best practices found in fire prevention literature described in Section 4.2.1 above. These fire prevention measures will be enforced through on-site signage, a live-on volunteer, and additional staffing to increase ranger patrols to the area compared to existing conditions. Overnight use will be prohibited through these enforcement mechanisms in addition to a gate at the access point of the park which will only allow access during park hours (sunrise to sunset). As a code requirement, roadside vegetation management would further reduce the risk of vehicle-related ignitions relative to existing unmanaged roadside conditions. By implementing the proposed fire prevention measures, the project would reduce ignition risk associated with increased human use of the site through active site management,

regulated public use, and implementation of defensible space principles. Further, vegetation fuel modification implemented as a project fire prevention measure would reduce hazardous fuels within the project site and alter the interaction between fuels, weather, and fire behavior. Adopting and enforcing the applicable San Diego County Code of Regulatory Ordinances section policies governing the use of the project site through the proposed fire prevention measures would reduce the likelihood of fires being ignited by known human causes. Impacts would be less than significant without mitigation.

5 Impact Summary and Conclusion

As described in Section 3 above, the purpose of this document is to address the deficiencies in the EIR's wildfire analysis as identified by the Court's Writ (Section 3.1) and Minute Order (Section 3.2). To respond to the Court's order, a review of the previous FEOA, the 2023 FEIR, and the California Office of the Attorney General Guidance was conducted to determine the scope of the analysis required in this document. It was determined that as a supplement to the prior analyses, an analysis of the project's baseline existing conditions compared to the project with only those fire prevention measures required by code and a separate analysis with the proposed additional fire prevention measures that exceed code requirements is needed. Specifically, the analysis presented above addresses the effectiveness of the project's fire prevention measures by analyzing the project with required measures only (i.e., "pre-mitigation" per the Court's Writ and Minute Order) then analyzing the project with the additional fire prevention measures proposed by the project. Fire prevention measures beyond code compliance would only be considered mitigation measures if they were necessary to reduce impacts to a less than significant level (i.e., if the impact would be significant in their absence).

The project includes two categories of fire prevention measures: vegetation fuel modification fire prevention measures and human activity fire prevention measures. Fire activity in various vegetation types can be quantitatively modeled and analyzed, while human activity is unpredictable and cannot be quantitatively modeled. As such, the analysis relies on both quantitative fire behavior modeling using the BehavePlus program and qualitative research from industry experts to assess the effectiveness of the project's vegetation fuel modification fire prevention measures (such as vegetation clearing) and human activity fire prevention measures (such as the prohibition of smoking and open flames) for the following three conditions:

- The existing baseline wildfire risks at the project site under existing environmental conditions (Section 4.2.2);
- The wildfire risks associated with implementation of the project in the absence of mitigation, assuming the project complies with all applicable provisions of the San Diego County Code of Regulatory Ordinance and the 2025 California Building Standards Code, including wildland-urban interface, building, and fire code requirements for construction and fire prevention and protection (Section 4.2.3) without which the project could not be permitted or built; and
- The wildfire risks associated with implementation of the project, when additional fire prevention measures are included, beyond those required by code (Section 4.2.4).

Existing Baseline Condition

As described in Section 4.2.2, under existing conditions, the project site and adjacent off-site areas consist primarily of annual grasslands and grass-shrub vegetation, which are highly receptive to ignition and rapid fire spread, particularly during offshore Santa Ana wind events. Four wildfire scenarios were modeled, including on-site and off-

site ignitions under both extreme offshore and average onshore wind conditions. Modeling results demonstrate that, during a Santa Ana wind event, wildfire behavior in existing vegetation could be severe, with 28-mph sustained winds and 41-mph wind gusts, modeled flame lengths of up to approximately 18.1 feet, fireline intensities up to 3,071 BTU/feet/second, rates of spread up to 6.2 miles per hour, and ember spotting distances of up to 1.1 miles. Regarding human activity and ignition, the project site is currently subject to occasional unauthorized vehicular and pedestrian public access to and within hazardous vegetation fuels, making it vulnerable to potential smoking, vehicle, or other ignition hazards that increase wildfire risk. The current use of the undeveloped land, including occasional unauthorized access, places the project area at risk for fire ignitions associated with both natural events and human activities.

Project with Required Fire Prevention Measures

As described in Section 4.2.3, the project would be required to implement certain fire prevention measures mandated by building and fire codes, which would convert existing hazardous vegetation fuels to maintained landscaping and vegetation fuel modification zones that meet code requirements. There is no scenario in which the project could be constructed without these required fire prevention measures in place, as these features are legally required and cannot be removed from the project design. An analysis of the project with the required fire prevention measures thus represents a “pre-mitigation” condition that can be used to assess project impacts in the absence of mitigation. The same four wildfire scenarios were modeled for the project with the required vegetation fuel modification fire prevention measures listed in Section 4.2.3.1. The only vegetation fuel modification measure that is not required by the relevant codes is vegetation modification within two 20-foot additional buffer areas adjacent to two existing 30-foot buffer areas maintained by the County. The analysis for the project condition with the required fire prevention measures assumes that the vegetation (and fire activity) in the additional 20-foot buffer areas would remain the same as the existing condition.

Modeling results demonstrate that in the project with the required vegetation fuel modification measures condition, flame lengths in areas with vegetation modification would be reduced by approximately 4.6 feet to 12 feet depending on the location, compared to the existing condition. Similarly, fire intensity in the fuel modification areas would be reduced by up to 3,008 BTU/feet/second; rate of spread would be reduced by up to 4 mph; and ember spotting distanced would be reduced by up to 0.8 miles compared to the existing condition.

Regarding ignition and human activity, the project is anticipated to lead to additional human presence at the site, which could increase fire risk by introducing additional opportunities for human-caused fire ignitions. However, the project would be subject to the restrictions in the County Code of Regulatory Ordinances, which prohibits ignition sources such as smoking or fireworks. On-site signage would inform visitors about the prohibited activities on the project site. The existing weekly ranger checks would enforce these prohibitions using clear communication and direct verbal warnings, which would also present opportunities for education about fire dangers. Ongoing enforcement, education, and signage would increase public awareness about the restrictions on the project site, minimizing ignition potential even when rangers are not present. Still, due to the lack of a daily enforcement presence, the occasional unauthorized access of the project site is not expected to be meaningfully reduced for the project with required fire prevention measures condition, meaning some ignition potential would still exist for this hypothetical condition. However, the irrigated and managed landscaping proposed for the project reduces the risk of an on-site ignition becoming an off-site wildfire by replacing a nearly continuous field of hazardous, easily ignited vegetation with ignition-resistant landscaping arranged in accordance with defensible space and fuel modification requirements. Through the combined vegetation fuel modification conditions and human activity measures required

to implement the project, the project will reduce the risk of ignition for the nearby homes and provide an area of decreased fire behavior that will make fire containment and suppression more manageable for firefighters than the existing baseline conditions. The project would implement all defensible space and vegetation fuel modification required by the applicable codes and regulations, and the project's impact with regard to wildfire risk would be less than significant with no mitigation required.

Project with Additional Fire Prevention Measures

As described in Section 4.2.4, the only vegetation fuel modification fire prevention measure that exceeds code requirements are the additional 20-foot buffer areas. These buffer areas would further reduce fire activity on the project site by providing more area with maintained landscaping and irrigation. The proposed project would result in a reduction in buffer area flame lengths (3 feet compared to 18 feet in Section 4.2.3), fire intensity (up to 63 BTU/feet/second compared to up to 3,037 BTU/feet/second in Section 4.2.3), rate of spread 0.2 mph compared to up to 6.2 mph in Section 4.2.3), and ember spotting (up to 0.3 miles compared to up to 1.1 miles in Section 4.2.3) compared to existing conditions.

Regarding ignition and human activity, the project includes fire prevention measures that exceed the requirements of the County Code of Regulatory Ordinances; the proposed human activity measures are listed in Section 4.2.4.1. Additional measures include a live-on volunteer, maintenance staff, and a park ranger to help with maintenance and management of the property; strengthened vehicle control barriers and fire-safe parking; and the prohibition of campfires and overnight use of the park. As described in Section 4.2.1 above, one of the most effective means of reducing ignitions is to combine effective education with judicious enforcement. Pairing restrictions (such as the prohibition of smoking) with on-site enforcement personnel establishes a comprehensive compliance framework by providing the legal authority necessary to support enforcement actions and penalties for violations; active monitoring and enforcement capacity to identify noncompliance and request compliance or summoning assistance from law enforcement; and direct public education and outreach that promotes awareness of regulations and reduces the likelihood of future violations. With the additional vegetation fuel modification and human activity fire prevention measures, impacts related to wildfire would continue to be less than significant. As impacts were less than significant without the additional measures, and the additional measures would further minimize wildfire risk, the additional fire prevention measures proposed by the County are not mitigation measures necessary to reduce impacts to a less than significant level.

As described in Sections 4.2.2 through 4.2.4, the modeling demonstrates that building the project, both with required fire prevention measures only and with the additional fire prevention measures as proposed, would substantially reduce wildfire behavior within the project site compared to existing baseline conditions, with the proposed project (Section 4.2.4) providing the greatest reduction in wildfire risk. Based on the results of the fire behavior modeling, the proposed vegetation fuel management and operational control fire prevention measures, and accepted research into human activity and behavior, the project (with or without the additional fire prevention measures) would not exacerbate wildfire hazards. Instead, it would result in a net reduction in wildfire intensity, spread, and suppression difficulty compared to existing conditions. The project would reduce the risk of wildfire impacts to nearby residences, create a safer area for public use, and provide ancillary benefits by improving fire containment opportunities for emergency responders. Accordingly, the project will have a less than significant impact and would not substantially impair an adopted emergency response plan or emergency evacuation plan; exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire due to slope, prevailing winds, and other factors; 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 risks or result in temporary or ongoing impacts on the environment; or 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. **Impacts related to wildfire hazards would be less than significant with no mitigation required. Compared to existing conditions, the project would result in an overall reduction in wildfire risk.**

6 References

Includes references in the Fire Behavior Modeling Summary attachment.

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Attachment 1

Fire Behavior Modeling Summary

1 BehavePlus Fire Behavior Modeling History

Fire behavior modeling has been used by researchers for approximately 50+ years to predict how a fire will move through a given landscape (Linn 2003). The models have had varied complexities and applications throughout the years. One model has become the most widely used as the industry standard for predicting fire behavior on a given landscape. That model, known as "BEHAVE", was developed by the U. S. Government (USDA Forest Service, Rocky Mountain Research Station) and has been in use since 1984. Since that time, it has undergone continued research, improvements, and refinement. Numerous studies have been completed testing the validity of the fire behavior models' ability to predict fire behavior given site specific inputs. One of the most successful ways the model has been improved has been through post-wildfire modeling (Brown 1972, Lawson 1972, Sneeuwjagt and Frandsen 1977, Andrews 1980, Brown 1982, Rothermel and Rinehart 1983, Bushey 1985, McAlpine and Xanthopoulos 1989, Marsden-Smedley and Catchpole 1995, Grabner et. al. 1997, Alexander 1998, Grabner et al. 2001, Arca et al. 2007). In this type of study, Behave is used to model fire behavior based on pre-fire conditions in an area that recently burned. Real-world fire behavior, documented during the wildfire, can then be compared to the prediction results of Behave and refinements to the fuel models incorporated, retested, and so on.

Fire behavior modeling conducted on this site includes a relatively high-level of detail and analysis which results in reasonably accurate representations of how wildfire may move through available fuels on and adjacent to the property. Fire behavior calculations are based on site-specific fuel characteristics supported by fire science research that analyzes heat transfer related to specific fire behavior. To objectively predict flame lengths, spread rates, and fireline intensities, this analysis incorporated predominant fuel characteristics, slope percentages, and representative fuel models observed on site. The BehavePlus fire behavior modeling system was used to analyze anticipated fire behavior in key areas within and adjacent to the proposed project site. Predicting wildland fire behavior is not an exact science. As such, the movement of a fire will likely never be fully predictable, especially considering the variations in weather and the limits of weather forecasting. Nevertheless, practiced and experienced judgment, coupled with a validated fire behavior modeling system, results in useful and accurate fire prevention planning information.

To be used effectively, the basic assumptions and limitations of BehavePlus must be understood. First, it must be realized that the fire model describes fire behavior only in the flaming front. The primary driving force in the predictive calculations is dead fuels less than one-quarter inch in diameter. These are the fine fuels that carry fire. Fuels greater than one inch have little effect while fuels greater than three inches have no effect on fire behavior. Second, the model bases calculations and descriptions on a wildfire spreading through surface fuels that are within six feet of the ground and contiguous to the ground. Surface fuels are often classified as grass, brush, litter, or slash. Third, the software assumes that weather and topography are uniform. However, because wildfires almost always burn under non-uniform conditions, length of projection period and choice of fuel model must be carefully considered to obtain useful predictions. Fourth, the BehavePlus fire behavior computer modeling system was not intended for determining sufficient fuel modification zone/defensible space widths. However, it does provide the average length of the flames, which is a key element for determining "defensible space" distances for minimizing structure ignition.

Although BehavePlus has some limitations, it can still provide valuable fire behavior predictions which can be used as a tool in the decision-making process. In order to make reliable estimates of fire behavior, one must understand

the relationship of fuels to the fire environment and be able to recognize the variations in these fuels. Natural fuels are made up of the various components of vegetation, both live and dead, that occur on a site. The type and quantity will depend upon the soil, climate, geographic features, and the fire or other disturbance history of the site. The major fuel groups of grass, shrub, trees, and slash are defined by their constituent types and quantities of litter and duff layers, dead woody material, grasses and forbs, shrubs, regeneration, and trees. Fire behavior can be predicted largely by analyzing the characteristics of these fuels. Fire behavior is affected by seven principal fuel characteristics: fuel loading, size and shape, compactness, horizontal continuity, vertical arrangement, moisture content, and chemical properties.

It is important to note that BehavePlus models fire behavior after ignition in specific vegetation fuels and under specific weather conditions. BehavePlus was not intended to, nor is it capable of, predicting ignition locations and causes of ignitions. Locations and causes of ignition are generally associated with human behavior, which is the underlying cause of the majority of California wildfires (Syphard et al. 2007; Romero-Calcerrada et al. 2008). Common locations and causes of ignition are determined from data obtained from fire investigation reports. A background knowledge of locations and causes of fire ignitions, and the associated human behavior, assists with informing the locations within and adjacent to a project site that potential fires should be modeled.

2 Modeling Inputs

Dudek utilized the BehavePlus software package to analyze fire behavior potential for the proposed development site in Alpine, San Diego County, California. For this analysis, four existing conditions scenarios were evaluated, including two average summer weather conditions (on-site and in the open space to the west of the project site) and two extreme weather offshore wind conditions (both on-site). Additionally, all of the on-site scenarios were modeled for vegetation modification conditions (one average and two extreme weather conditions respectively). The project site currently is undeveloped, largely vegetated by grassland, some native shrubs and oak trees on the project site. The majority of the on-site topography is relatively flat, with a hill in the northeast portion of the project site, and a drainage/wash running east-west along the northern border of the site. With that said, fuels and terrain in proximity to the development area could produce embers that may affect the project, but the majority of the site will be irrigated vegetation or paved hardscapes, and defenses will be built into the limited on-site structures to reduce the risk of ember penetration and to contain fires that may result from ember penetration. It is the fuels to the west and northwest of the project site that could have the potential to affect the project's structures from a radiant and convective heat perspective; however, the ignition-resistant structures would be surrounded by irrigated landscape and hardscape areas.

BehavePlus software requires site-specific variables for surface fire spread analysis, including fuel type, fuel moisture, wind speed, and slope data. The outputs produced by this analysis include flame length measured in feet, rate of spread measured in miles/hour, fireline intensity measured in BTU/feet/second, and ember spotting distance measured in miles. The following provides a description of the input variables used in processing the BehavePlus models for the project site. In addition, data sources are cited and any assumptions made during the modeling process are described.

2.1 Vegetation (Fuels)

The seven fuel characteristics help define the 13 standard fire behavior fuel models and the five custom fuel models developed for Southern California (Anderson 1982; Weise & Regelbrugge 1997). According to the model classifications, fuel models used in BehavePlus have been classified into four groups, based upon fuel loading (tons/acre), fuel height, and surface to volume ratio. Observation of the fuels in the field at the project site determines which fuel models should be applied in BehavePlus. The following describes the distribution of fuel models among general vegetation types for the standard 13 fuel models and the custom Southern California fuel models:

- Grasses Fuel Models 1 through 3
- Brush Fuel Models 4 through 7, SCAL 14 through 18
- Timber Fuel Models 8 through 10
- Logging Slash Fuel Models 11 through 13

In addition, the aforementioned fuel characteristics were utilized in the development of 40 more fire behavior fuel models developed for use in BehavePlus modeling efforts (Scott & Burgan 2005). These new models attempt to improve the accuracy of the standard 13 fuel models outside of severe fire season conditions, and to allow for the simulation of fuel treatment prescriptions. The following describes the distribution of fuel models among general vegetation types for the new 40 fuel models:

- Grass Models GR1 through GR9
- Grass-shrub Models GS1 through GS4
- Shrub Models SH1 through SH9
- Timber-understory Models TU1 through TU5
- Timber litter Models TL1 through TL9
- Slash blowdown Models SB1 through SB4

To support the fire behavior modeling efforts conducted for the project, a Dudek Fire Protection Planner analyzed the different vegetation types observed on and adjacent to the site and they were subsequently classified into the aforementioned fuel models. As is customary for this type of analysis, the terrain and fuels directly adjacent to the site and proposed fuel modification zones (FMZ) are used for determining flame lengths and fire spread. Fuel model attributes are summarized in Table 1, Existing Baseline Conditions Fuel Model Characteristics; Table 2, Project Vegetation with Required Fire Prevention Measures Fuel Model Characteristics; and Table 3, Project Vegetation with Additional Fire Prevention Measures Fuel Model Characteristics.

Continued

Table 1. Existing Vegetation Baseline Conditions Fuel Model Characteristics

Fuel Model Assignment	Vegetation Description	Location	Fuel Bed Depth (Feet) [1]
GR2	Short, sparse dry climate grass	Represents the annual grasslands on and off the project site	0.4 ft
GS1	Low load dry climate grass- shrub	Represents the grass and sparse shrubs on the hillside in the off-site run to the west.	0.9 ft
GS2	Moderate load dry climate grass- shrub	Represents the vegetation in the areas in the northern portion of the project site.	1.5 ft
SH2	Moderate load dry climate shrub	Represents the shrub-brush in the northern portion of the project site and on the hillside in the off-site run to the west.	1 ft

Note:
[1] Listed fuel bed depths reflect the fuel models that best depict the vegetation in and around the project site and not an exact measure of local vegetation (Anderson 1982; Scott & Burgan 2005).

Table 2. Project Vegetation with Required Fire Prevention Measures Fuel Model Characteristics

Fuel Model Assignment	Vegetation Description	Location	Fuel Bed Depth (Feet)[1]
GR2	Short, sparse dry climate grass	Represents the annual grasslands on and off the project site	0.4 ft
FM8	Compact Litter	On-site Zone 1 and 2 fuel modification	0.2 ft.
NB	Non-burnable	Paved areas throughout the proposed project site.	0 ft

Note:
[1] Listed fuel bed depths reflect the fuel models that best depict the vegetation in and around the project site and not an exact measure of local vegetation (Anderson 1982; Scott & Burgan 2005

Table 3. Project Vegetation with Additional Fire Prevention Measures Fuel Model Characteristics

Fuel Model Assignment	Vegetation Description	Location	Fuel Bed Depth (Feet)[1]
FM8	Compact Litter	On-site Zone 1 and 2 fuel modification	0.2 ft.
NB	Non-burnable	Paved areas throughout the proposed project site.	0 ft

Note:
[1] Listed fuel bed depths reflect the fuel models that best depict the vegetation in and around the project site and not an exact measure of local vegetation (Anderson 1982; Scott & Burgan 2005

2.2 Topography

Topography influences fire risk by affecting fire spread rates. Typically, steep terrain results in faster fire spread up-slope and slower fire spread down-slope in the absence of wind. Flat terrain tends to have little effect on fire spread, resulting in fires that are driven by wind. The site for the proposed Alpine County Park is primarily flat grasslands

with coastal sage in its northern-most segment. Adjacent Back Country Land Trust preserve lands are more sloping and contoured. While some areas are dominated by grass, most are mainly covered with a mix of sage scrub and chapparal with some oak woodlands. The combined 315 acres of the preserve and park lands include a range of elevation from 1900 to 2150 feet (Rhode & Associates, 2021).

2.3 Weather Analysis

An analysis utilizing the BehavePlus software package was conducted to evaluate fire behavior variables and to objectively predict flame lengths (feet), fireline intensities (BTU/feet/second), rate of spread (feet/minute), and spotting distance (miles) for four modeling scenarios. Modeling scenario locations were selected to better understand different fire behavior that may be experienced on or adjacent the site. These fire scenarios incorporated observed fuel types representing the dominant on-site and off-site vegetation to the west, and in addition to measured slope gradients, and wind and fuel moisture values derived from Remote Automated Weather Stations (RAWS) weather data sets for both the 50th percentile weather (summer, on-shore winds) and the 97th percentile weather (fall, off-shore winds). Weather and wind inputs for fire behavior modeling conducted in support of this FPP utilized the guidelines and standards presented by the County of San Diego, Department of Planning and Land Use (County of San Diego 2022a). These guidelines identify acceptable fire weather inputs for fire conditions during summer months and Santa Ana fire weather patterns. The County analyzed and processed 44 years of fire weather data from fire stations and Remote Automated Weather Stations (RAWS) between April 15 to December 31 in order to represent the general limits of the fire season. Data provided by the County's analysis included temperature, relative humidity, and sustained wind speed and is categorized by weather zone, including Maritime, Coastal, Transitional, Interior, and Desert.

As identified in the County's guidelines, Dudek utilized the Fine Dead Fuel Moisture (FDFM) tool within BehavePlus fire behavior modeling software package to determine fuel moisture. The temperature, relative humidity, and wind speed data for the Transitional weather zone were utilized based on the project's location. Reference fuel moistures were calculated in the FDFM tool and were based on site-specific topographic data inputs. Table 4, BehavePlus Fine Dead Fuel Moisture Calculation, summarizes the FDFM inputs and the resulting fine dead fuel moisture values. Table 5, Fuel Moisture and Wind Inputs, presents the fuel moisture and wind speed inputs for the fire behavior modeling efforts conducted for this analysis.

Table 4. BehavePlus Fine Dead Fuel Moisture Calculation

Variable	50th Percentile Summer Weather	97th Percentile Peak Weather (Santa Ana)
Dry Bulb Temperature	90–109 deg. F	90–109 deg. F
Relative Humidity	10–14 %	0–4 %
Reference Fuel Moisture	2 %	1 %
Month	May June July	May June July
Time of Day	12:00–13:59	12:00–13:59
Elevation Difference	Level (within 1,000 ft.)	Level (within 1,000 ft.)
Slope	0–30%	0–30%
Aspect	South/East	South/East
Fuel Shading	Exposed (< 50% shading)	Exposed (< 50% shading)
Fuel Moisture Correction	0%	0%
Fine Dead Fuel Moisture	2%	1%

Historical weather data for Alpine was utilized in determining appropriate fire behavior modeling inputs for the project area. Average, onshore weather conditions were derived from Remote Automated Weather Stations (RAWS) and utilized in the fire behavior modeling efforts conducted in support of this report. The Sweetwater RAWS Station (RAWS ID 045744) was utilized to find average and extreme weather values for the project area. The station is approximately 5 miles east of the project site and adequately approximates project site weather conditions. Data from fire seasons dating back to 2005 and up through 2025 were included in the analysis.

RAWS fuel moisture and wind speed data were processed utilizing the Fire Family Plus software package to determine atypical (97th percentile) and typical (50th percentile) weather conditions. Data from the RAWS was evaluated from August 1 through December 31 for each year between 2005 and 2025 for 97th percentile weather conditions and from June 1 through September 30 for each year between 2005 and 2025 for 50th percentile weather conditions.

Following analysis in Fire Family Plus, fuel moisture information was incorporated into the Initial Fuel Moisture file used as an input in BehavePlus. Wind speed data resulting from the Fire Family Plus analysis was also determined. Initial wind direction and wind speed values for the five BehavePlus runs were manually entered during the data input phase. The input wind speed and direction are an average surface wind at 20 feet above the vegetation over the analysis area.

Table 5. Fuel Moisture and Wind Inputs

Model Variable	Summer Weather (50th Percentile) Onshore Wind	Peak Weather (97th Percentile) Offshore Wind
Fuel Models	GR2, GS1, SH2	GR2, GS2, SH2
1 h fuel moisture	5%	1%
10 h fuel moisture	6%	2%
100 h fuel moisture	9%	4%
Live herbaceous moisture	33%	30%
Live woody moisture	75%	59%
20 ft. wind speed	19 mph (sustained winds)	28 mph (sustained winds) wind gusts of 41 mph
Wind Directions from north (degrees)	240	95
Wind adjustment factor	0.4	0.4
Slope	3-20%	3-7%

Note: Wind speed was obtained from Table 1, County of San Diego Fire Protection Plan Guidelines for Staff

3 Fire Behavior Modeling Scenarios

Four focused scenarios were completed for existing fuels conditions, and three scenarios were completed for the post-development conditions. The results of the modeling include anticipated values for surface fires, which include flame length, rate of spread, fireline intensity, and ember spotting distance. The aforementioned fire behavior variables are an important component in understanding fire risk and fire agency response capabilities. Flame length, the length of the flame of a spreading surface fire within the flaming front, is measured from midway in the

active flaming combustion zone to the average tip of the flames (Andrews, Bevins, and Seli 2008). Fireline intensity is a measure of heat output from the flaming front and also affects the potential for a surface fire to transition to a crown fire. Fire spread rate represents the speed at which the fire progresses through surface fuels and is another important variable in initial attack and fire suppression efforts (Rothermel and Rinehart 1983). Spotting distance is the distance a firebrand or ember can travel down wind and ignite receptive fuel beds. Four existing conditions and three post-development fire modeling scenario locations were selected to better understand the different fire behaviors that may be experienced on or adjacent to the site based on slope and fuel conditions; these fire scenarios are explained in more detail below.

Fire Scenario Locations and Descriptions:

Existing Conditions On-Site and Off-Site Scenarios

Scenario 1. Fire flaming front started by a possible roadside ignition on South Grade Road, burning through the annual grasslands from the northeastern boundary to the southwestern boundary of the project site during an extreme offshore Santa Ana wind event with 28 mph sustained winds and 41 mph wind gusts.

Scenario 2. Fire flaming front started by a possible roadside ignition on South Grade Road, burning through the annual grasslands from the southwestern boundary to the northeastern boundary of the project site during an average summer onshore wind event with 19 mph sustained winds.

Scenario 3. Fire flaming front burning through grass-shrubs in the wash in the northeastern portion of the project site during an extreme offshore Santa Ana wind event with 28 mph sustained winds and 41 mph gusting winds advancing the fire in a southwesterly direction.

Scenario 4. Fire flaming front approaching the project site from the west, burning through grass-shrubs in the off-site open space west of the project site during an average onshore summer wind event with 19 mph sustained winds.

Project with Required Fire Prevention Measures On-Site and Off-Site Scenarios

Scenario 1. Fire flaming front started by a possible roadside ignition on South Grade Road, burning through the irrigated, maintained vegetation in the on-site fuel modification zones from the northeastern boundary to the southwestern boundary of the project site during an extreme offshore Santa Ana wind event with 28 mph sustained winds and 41 mph wind gusts.

Scenario 2. Fire flaming front started by a possible roadside ignition on South Grade Road, burning through the annual grasslands until it reaches the irrigated, maintained vegetation in the on-site fuel modification zones and hardscaped areas on the project site from the southwestern boundary to the northeastern boundary of the project site during an average onshore summer wind event with 19 mph sustained winds.

Scenario 3. Fire flaming front burning through irrigated, maintained vegetation and low-load, dry climate grass in the additional 20-foot-wide buffer areas in the on-site fuel modification zones in the northeastern portion of the project site during an extreme offshore Santa Ana wind event with 28 mph sustained winds and 41 mph gusting winds.

Scenario 4. The vegetation in this scenario will not change with development of the project with the required fire prevention measures because it is an off-site scenario and not subject to vegetation fuel modification. The scenario would produce the same fire behavior modeling outputs as modeled in the existing conditions Scenario 4.

Project with Additional Fire Prevention Measures On-Site and Off-Site Scenarios

Scenario 1. Fire flaming front started by a possible roadside ignition on South Grade Road, burning through the irrigated, maintained vegetation in the on-site fuel modification zones from the northeastern boundary to the southwestern boundary of the project site during an extreme offshore Santa Ana wind event with 28 mph sustained winds and 41 mph wind gusts.

Scenario 2. Fire flaming front started by a possible roadside ignition on South Grade Road, burning through the annual grasslands until it reaches the irrigated, maintained vegetation in the on-site fuel modification zones and hardscaped areas on the project site from the southwestern boundary to the northeastern boundary of the project site during an average onshore summer wind event with 19 mph sustained winds.

Scenario 3. Fire flaming front burning through irrigated, maintained vegetation in the on-site fuel modification zones in the northeastern portion of the project site during an extreme offshore Santa Ana wind event with 28 mph sustained winds and 41 mph gusting winds.

Scenario 4. The vegetation in this scenario will not change with development of the project with the additional fire prevention measures because it is an off-site scenario and not subject to vegetation fuel modification. The scenario would produce the same fire behavior modeling outputs as modeled in the existing conditions Scenario 4.

4 Fire Behavior Modeling Results

The fire behavior modeling results presented herein depict values based on inputs to the BehavePlus software and are not intended to capture changing fire behavior as it moves across a landscape. Changes in slope, weather, or pockets of different fuel types are not accounted for in this analysis; rather, the models provide a worst-case wildfire behavior condition as part of a conservative approach. For planning purposes, the averaged worst-case fire behavior is the most useful information for conservative fuel modification design. Model results should be used as a basis for planning only, as actual fire behavior for a given location will be affected by many factors, including unique weather patterns, small-scale topographic variations, or changing vegetation patterns.

Existing Conditions On-Site and Off-Site Scenarios

Scenario 1. Fire flaming front started by a possible roadside ignition on South Grade Road, burning through the annual grasslands from the northeastern boundary to the southwestern boundary of the project site during an extreme offshore Santa Ana wind event with 28 mph sustained winds and 41 mph wind gusts.

> **Results:** Expected to produce flame lengths up to 14.9 feet, have a fireline intensity of up to 2,029 BTU/feet/second, have a rate of spread of up to 4.1 mph, and produce ember spotting up to 1.0 mile.

Scenario 2. Fire flaming front started by a possible roadside ignition on South Grade Road, burning through the annual grasslands from the southwestern boundary to the northeastern boundary of the project site during an average summer onshore wind event with 19 mph sustained winds.

Results: Expected to produce flame lengths up to 5.9 feet, have a fireline intensity of up to 266 BTU/feet/second, have a rate of spread of up to 0.8 mph, and produce ember spotting up to 0.3 miles.

Scenario 3. Fire flaming front burning through grass-shrubs in the wash in the northeastern portion of the project site during an extreme offshore Santa Ana wind event with 28 mph sustained winds and 41 mph gusting winds advancing the fire in a southwesterly direction.

Results: Expected to produce flame lengths up to 18.1 feet, have a fireline intensity of up to 3,071 BTU/feet/second, have a rate of spread of up to 6.2 mph, and produce ember spotting up to 1.1 miles.

Scenario 4. Fire flaming front approaching the project site from the west, burning through grass-shrubs in the off-site open space west of the project site during an average onshore summer wind event with 19 mph sustained winds.

Results: Expected to produce flame lengths up to 7.1 feet, have a fireline intensity of up to 402 BTU/feet/second, have a rate of spread of up to 1.2 mph, and produce ember spotting up to 0.3 miles.

Project with Required Fire Prevention Measures On-Site and Off-Site Scenarios

Scenario 1. Fire flaming front started by a possible roadside ignition on South Grade Road, burning through the irrigated, maintained vegetation in the on-site fuel modification zones from the northeastern boundary to the southwestern boundary of the project site during an extreme offshore Santa Ana wind event with 28 mph sustained winds and 41 mph wind gusts.

Results: Expected to produce flame lengths up to 2.9 feet, have a fire intensity of up to 57 BTU/feet/second, have a rate of spread of up to 0.1 mph, and produce ember spotting up to 0.3 miles.

Scenario 2. Fire flaming front started by a possible roadside ignition on South Grade Road, burning through the annual grasslands until it reaches the irrigated, maintained vegetation in the on-site fuel modification zones and hardscaped areas on the project site from the southwestern boundary to the northeastern boundary of the project site during an average onshore summer wind event with 19 mph sustained winds.

Results: Expected to produce flame lengths up to 1.3 feet, have a fire intensity of up to 9 BTU/feet/second, have a rate of spread of up to 0.1 mph, and produce ember spotting up to 0.1 miles.

Scenario 3. Fire flaming front burning through irrigated, maintained vegetation and low-load, dry climate grass in the additional 20-foot-wide buffer areas in the on-site fuel modification zones in the northeastern portion of the project site during an extreme offshore Santa Ana wind event with 28 mph sustained winds and 41 mph gusting winds.

Results: Expected to produce flame lengths up to 18 feet, have a fire intensity of up to 3,037 BTU/feet/second, have a rate of spread of up to 6.2 mph, and produce ember spotting up to 1.1 miles.

Scenario 4. The vegetation in this scenario will not change with development of the project with the required fire prevention measures because it is an off-site scenario and not subject to vegetation fuel modification. The scenario would produce the same fire behavior modeling outputs as modeled in the existing conditions Scenario 4.

Results: Expected to produce flame lengths up to 7.1 feet, have a fire intensity of up to 402 BTU/feet/second, have a rate of spread of up to 1.2 mph, and produce ember spotting up to 0.3 miles.

Project with Additional Fire Prevention Measures On-Site and Off-Site Scenarios

Scenario 1. Fire flaming front started by a possible roadside ignition on South Grade Road, burning through the irrigated, maintained vegetation in the on-site fuel modification zones from the northeastern boundary to the southwestern boundary of the project site during an extreme offshore Santa Ana wind event with 28 mph sustained winds and 41 mph wind gusts.

Results: Expected to produce flame lengths up to 2.9 feet, have a fire intensity of up to 57 BTU/feet/second, have a rate of spread of up to 0.1 mph, and produce ember spotting up to 0.3 miles.

Scenario 2. Fire flaming front started by a possible roadside ignition on South Grade Road, burning through the annual grasslands until it reaches the irrigated, maintained vegetation in the on-site fuel modification zones and hardscaped areas on the project site from the southwestern boundary to the northeastern boundary of the project site during an average onshore summer wind event with 19 mph sustained winds.

Results: Expected to produce flame lengths up to 1.3 feet, have a fire intensity of up to 9 BTU/feet/second, have a rate of spread of up to 0.1 mph, and produce ember spotting up to 0.1 miles.

Scenario 3. Fire flaming front burning through irrigated, maintained vegetation in the on-site fuel modification zones in the northeastern portion of the project site during an extreme offshore Santa Ana wind event with 28 mph sustained winds and 41 mph gusting winds.

Results: Expected to produce flame lengths up to 3 feet, have a fire intensity of up to 63 BTU/feet/second, have a rate of spread of up to 0.2 mph, and produce ember spotting up to 0.3 miles.

Scenario 4. The vegetation in this scenario will not change with development of the project with the additional fire prevention measures because it is an off-site scenario and not subject to vegetation fuel modification. The scenario would produce the same fire behavior modeling outputs as modeled in the existing conditions Scenario 4.

Results: Expected to produce flame lengths up to 7.1 feet, have a fire intensity of up to 402 BTU/feet/second, have a rate of spread of up to 1.2 mph, and produce ember spotting up to 0.3 miles.

The results of fire behavior modeling for vegetation characteristics under existing conditions, project with required fire prevention measures, and project with additional fire prevention measures are presented in Table 6, Fire Behavior Model Results – Existing Conditions, Table 7, Fire Behavior Model Results – Project with Required Fire Prevention Measures, and Table 8, Fire Behavior Model Results – Project with Additional Fire Prevention Measures. The following describes the fire behavior outputs (Heisch and Andrews 2010) presented in the tables:

Surface Fire:

Flame Length (feet): The flame length of a spreading surface fire within the flaming front is measured from midway in the active flaming combustion zone to the average tip of the flames.

Fireline Intensity (Btu/ft/s): Fireline intensity is the heat energy release per unit time from a one-foot wide section of the fuel bed extending from the front to the rear of the flaming zone. Fireline intensity is a function of rate of

spread and heat per unit area and is directly related to flame length. Fireline intensity and the flame length are related to the heat felt by a person standing next to the flames.

Surface Rate of Spread (mph): Surface rate of spread is the "speed" the fire travels through the surface fuels. Surface fuels include the litter, grass, brush, and other dead and live vegetation within about 6 feet of the ground.

Spotting Distance (mi): Spotting distance is the maximum distance at which potential spot fires may occur based on fire brands from a spreading wind-driven surface fire.

Table 6. Fire Behavior Model Results – Existing Conditions

Fire Scenarios	Flame Length[1,2] (feet)	Fireline Intensity[1,2] (BTU/feet/ second)	Spread Rate[1,2] (mph)	Spotting Distance[1, 2] (miles)
Scenario 1: 6% slope; Extreme Santa Ana winds (97th percentile offshore), sustained 28 mph wind (41 mph gusts), on site.				
Low load, dry climate grass (GR2) (On-site)	11.6 (14.9)	1,175 (2,029)	2.4 (4.1)	0.6 (1.0)
Scenario 2: 12% slope; Average summer winds (50th percentile onshore), sustained 19 mph wind, on site.				
Low load, dry climate grass (GR2) (On-site)	5.9	266	0.8	0.3
Scenario 3: 7% slope; Extreme Santa Ana winds (97th percentile offshore), sustained 28 mph wind (41 mph gusts), on site, northeast portion of the site				
Low load, dry climate grass (GR2) (On-site)	14.0 (18.0)	1,773 (3,037)	3.6 (6.2)	0.7 (1.1)
Moderate load dry climate grass- shrub (GS2) (On-site)	14.0 (18.1)	1,772 (3,071)	1.8 (3.2)	0.7 (1.1)
Moderate load dry climate shrub (SH2) (On-site)	11.2 (14.2)	1,075 (1,805)	0.5 (0.8)	0.6 (1.0)
Scenario 4: 8% slope; Average summer winds (50th percentile onshore), sustained 19 mph wind, off site to the west.				
Low load, dry climate grass (GR2) (Off-site)	7.1	402	1.2	0.3
Low load dry climate grass- shrub (GS1) (Off-site)	5.3	211	0.5	0.3
Moderate load dry climate shrub (SH2) (Off-site)	6.5	335	0.2	0.3

Note:
1 Wind-driven surface fire.
2 Values in parentheses represent the respective output in the presence of 41 mph gusts.

Table 7. Fire Behavior Model Results – Project with Required Fire Prevention Measures

Fire Scenarios	Flame Length[1,2] (feet)	Fireline Intensity[1,2] (BTU/feet/ second)	Spread Rate[1,2] (mph)	Spotting Distance[1,2] (miles)
Scenario 1: 6% slope; Extreme Santa Ana winds (97th percentile offshore), sustained 28 mph wind (41 mph gusts), on-site.				
Compact Litter (FM8) (On-site)	2.3 (2.9)	33 (57)	0.1 (0.1)	0.2 (0.3)
Non-Burnable (NB) (On-site)	N/A	N/A	N/A	N/A
Scenario 2: 12% slope; Average summer winds (50th percentile onshore), sustained 19 mph wind, on-site.				
Compact Litter (FM8) (On-site)	1.3	9	0.1	0.1
Non-Burnable (NB) (On-site)	N/A	N/A	N/A	N/A
Scenario 3: 7% slope; Extreme Santa Ana winds (97th percentile offshore), sustained 28 mph wind (41 mph gusts), on site, northeast portion of the site				
Low load, dry climate grass (GR2) (On-site)	14.0 (18.0)	1,773 (3,037)	3.6 (6.2)	0.7 (1.1)
Compact Litter (FM8) (On-site)	2.7 (3.0)	50 (63)	0.1 (0.2)	0.2 (0.3)
Non-Burnable (NB) (On-site)	N/A	N/A	N/A	N/A
Scenario 4: 8% slope; Average summer winds (50th percentile onshore), sustained 19 mph wind, off site to the west.				
Low load, dry climate grass (GR2) (Off-site)	7.1	402	1.2	0.3
Low load dry climate grass- shrub (GS1) (Off-site)	5.3	211	0.5	0.3
Moderate load dry climate shrub (SH2) (Off-site)	6.5	335	0.2	0.3

Note:
1 Wind-driven surface fire.
2 Values in parentheses represent the respective output in the presence of 41 mph gusts.

Table 8. Fire Behavior Model Results – Project with Additional Fire Prevention Measures

Fire Scenarios	Flame Length[1,2] (feet)	Fireline Intensity[1,2] (BTU/feet/ second)	Spread Rate[1,2] (mph)	Spotting Distance[1,2] (miles)
Scenario 1: 6% slope; Extreme Santa Ana winds (97th percentile offshore), sustained 28 mph wind (41 mph gusts), on-site.				
Compact Litter (FM8) (On-site)	2.3 (2.9)	33 (57)	0.1 (0.1)	0.2 (0.3)
Non-Burnable (NB) (On-site)	N/A	N/A	N/A	N/A

Table 8. Fire Behavior Model Results – Project with Additional Fire Prevention Measures

Fire Scenarios	Flame Length[1,2] (feet)	Fireline Intensity[1,2] (BTU/feet/ second)	Spread Rate[1,2] (mph)	Spotting Distance[1,2] (miles)
Scenario 2: 12% slope; Average summer winds (50th percentile onshore), sustained 19 mph wind, on-site.				
Compact Litter (FM8) (On-site)	1.3	9	0.1	0.1
Non-Burnable (NB) (On-site)	N/A	N/A	N/A	N/A
Scenario 3: 7% slope; Extreme Santa Ana winds (97th percentile offshore), sustained 28 mph wind (41 mph gusts), on site, northeast portion of the site				
Compact Litter (FM8) (On-site)	2.7 (3.0)	50 (63)	0.1 (0.2)	0.2 (0.3)
Non-Burnable (NB) (On-site)	N/A	N/A	N/A	N/A
Scenario 4: 8% slope; Average summer winds (50th percentile onshore), sustained 19 mph wind, off site to the west.				
Low load, dry climate grass (GR2) (Off-site)	7.1	402	1.2	0.3
Low load dry climate grass- shrub (GS1) (Off-site)	5.3	211	0.5	0.3
Moderate load dry climate shrub (SH2) (Off-site)	6.5	335	0.2	0.3

Note:
1 Wind-driven surface fire.
2 Values in parentheses represent the respective output in the presence of 41 mph gusts.

The information in Table 9, Fire Suppression Interpretation, presents an interpretation of the flame length and fireline intensity outputs as related to fire suppression efforts. Identification of modeling run locations is presented graphically in Figure 4 of the FPP.

Table 9. Fire Suppression Interpretation

Flame Length (ft)	Fireline Intensity (Btu/ft/s)	Interpretations
Under 4 feet	Under 100 BTU/ft/s	Fires can generally be attacked at the head or flanks with hand tools. Hand line should hold the fire.
4 to 8 feet	100-500 BTU/ft/s	Fires are too intense for direct attack on the head with hand tools. Hand line cannot be relied on to hold the fire. Equipment such as dozers, pumpers, and aircraft can be effective.
8 to 11 feet	500-1000 BTU/ft/s	Fires may present serious control problems -- torching out, crowning, and spotting. Control efforts at the fire head will probably be ineffective.
Over 11 feet	Over 1000 BTU/ft/s	Crowning, spotting, and major fire runs are probable. Control efforts at head of fire are ineffective.

5 Project Area Fire Risk Assessment

Wildfires are a common natural hazard in most of Southern California with a long and extensive history (Keeley & Syphard 2021). Southern California landscapes include a diverse range of plant communities, including vast tracts of shrublands and grasslands, like those found on and/or adjacent to the project development site. Wildfire in this Mediterranean-type ecosystem ultimately affects the structure and functions of vegetation communities (Keeley 1984) and will continue to have a substantial and recurring role (Keeley & Fotheringham 2003). Supporting this are the facts that native landscapes, from forest to grasslands, become highly flammable each fall. The climate of Southern California has been characterized by fire climatologists as the worst fire climate in the United States (Keeley 2004) with high winds occurring during autumn after a six-month drought period each year. Based on this research, the anticipated growing population expanding into WUI areas, and the regions' fire history, it can be anticipated that periodic wildfires may start on, burn onto, or spot into the site. The most common type of fire anticipated in the vicinity of the development area is a wind-driven fire from the northeast or southwest moving through the natural vegetation found on the adjacent lands.

With the conversion of the landscape to ignition-resistant development, wildfires may still encroach upon and drop embers on the site but would not be expected to burn through the development site or produce sustainable spot fires due to the lack of available fuels post-development. Vegetation fuel modification zones designed in accordance with California Wildland-Urban Interface Code are known to protect structures, landscaping, and the adjacent environment from the harmful effects of wildfire.

For example, when the Tahoe Basin experienced the Angora Fire in 2007, fuel treatments had the dual effect of saving homes and increasing forest survival (Safford et al. 2009). In areas where fuel management had been conducted prior to the Angora Fire, home loss was significantly reduced in the adjacent community and 85% of the trees survived, as compared to a 22% tree survival rate in untreated areas (Safford et al. 2009). Fuel management treatments also facilitated the ecological benefit of reduced fire severity, including higher post-fire soil litter cover, higher herbaceous plant cover, higher diversity, and lower levels of invasive beetles (Safford et al. 2009). At a minimum, managing defensible space can reduce the risk and impact of fire (Braziunas et al. 2021).

More recently, the Insurance Institute for Business and Home Safety (IBHS) conducted a post-event damage investigation into the 2025 Palisades and Eaton fires in Los Angeles County. The research found that "reducing combustible connective fuels between structures helps limit fire spread and ensures building materials serve as the last line of defense against ignition" (IBHS 2025). The IBHS analysis of the 5-foot-wide Zone 0 fuel modification zone around the perimeter of a structure showed the value of reducing or eliminating combustible materials adjacent to and near structures. IBHS reported that when Zone 0 fuel coverage exceeded 25% of the ground area, the likelihood of a structure being damaged or destroyed during a wildfire event was 87% to 100%. IBHS concluded that "Home hardening and a non-combustible Zone 0 are essential to remove the weak links fire looks to exploit" (IBHS 2025).

Studies indicate that wildfires declined steadily over time after development (Syphard, et. al. 2007 and 2013) and further, the acreage burned remained relatively constant, even though the number of ignitions temporarily increased. This is due to the conversion of landscapes to ignition-resistant, maintained areas, more people monitoring areas resulting in early fire detection and discouragement of arson, and more timely notification of the fire suppression resources that are located within these developing areas.

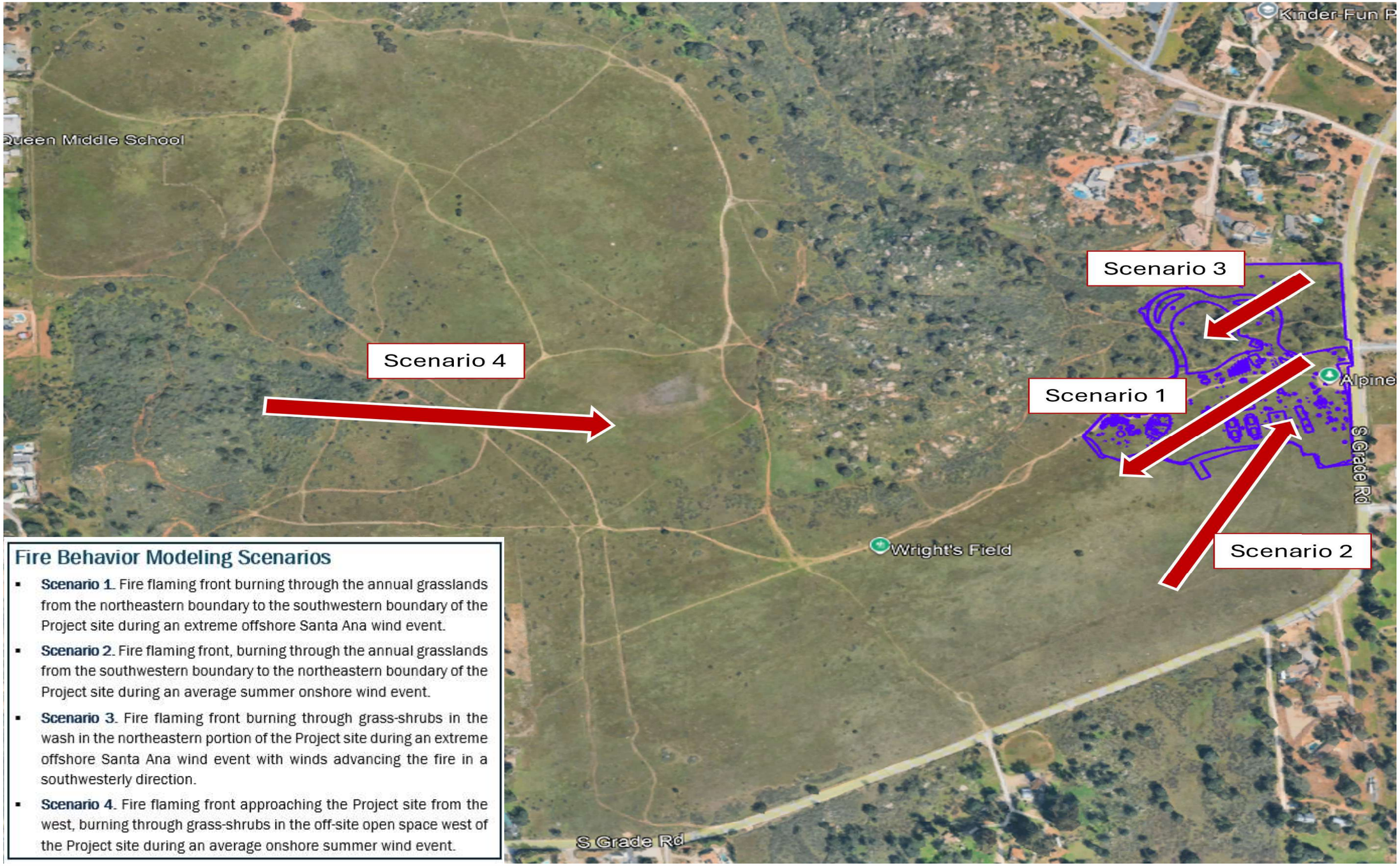
Therefore, it will be important that the latest fire protection technologies, developed through intensive research, real-world wildfire observations, and findings by fire professionals, for both ignition-resistant construction and for creating defensible space in the ever-expanding WUI areas, are implemented and enforced. The project, once developed, would not facilitate wildfire spread and would reduce projected flame lengths within the proposed fuel modification zones to levels that would be manageable by firefighting resources, especially given the ignition resistance of the structures and the planned ongoing maintenance of the landscaping throughout the project site. In addition, the project's FMZs are substantially wider than the longest calculated flame length for grass-shrub vegetation adjacent to the project site.

Given the climatic, vegetative, and topographic characteristics, along with the local fire history of the area, the project site, once developed, is anticipated to experience periodic wildfires that may start nearby and burn towards or spot into the development. The potential for off-site wildfire encroaching onto or showering embers into the site is considered low and the risk of ignition from such encroachments or ember showers is considered low given the ignition-resistant construction and landscaping, along with fire protection features that will be provided for the structures.

While it is true that humans are the cause of most fires in California, and it is anticipated that the project would increase the number of people using the project site, there is no data available that links increases in wildfires with the development of ignition-resistant communities or projects like the proposed project. The project will include fire prevention measures and policies that both reduce the risk of ignitions and prevent on-site fire from spreading to off-site vegetation.

Attachment 2

Fire Behavior Analysis Scenarios Figure



Fire Behavior Modeling Scenarios

- **Scenario 1.** Fire flaming front burning through the annual grasslands from the northeastern boundary to the southwestern boundary of the Project site during an extreme offshore Santa Ana wind event.
- **Scenario 2.** Fire flaming front, burning through the annual grasslands from the southwestern boundary to the northeastern boundary of the Project site during an average summer onshore wind event.
- **Scenario 3.** Fire flaming front burning through grass-shrubs in the wash in the northeastern portion of the Project site during an extreme offshore Santa Ana wind event with winds advancing the fire in a southwesterly direction.
- **Scenario 4.** Fire flaming front approaching the Project site from the west, burning through grass-shrubs in the off-site open space west of the Project site during an average onshore summer wind event.

Attachment 3

Analysis of Attorney General's Guidance

1 Background for Attorney General's Guidance on Best Practices for Analyzing and Mitigating Wildfire Impacts of Development Projects Under the California Environmental Quality Act

In 2022, the California Office of the Attorney General issued guidance outlining best practices for analyzing and mitigating wildfire impacts of development projects under the California Environmental Quality Act (CEQA). The guidance is not regulatory in nature and does not impose additional legal requirements on local governments, nor does it alter any applicable laws or regulations. Rather, it is intended to provide guidance on some of the issues, alternatives, and mitigation measures that should be considered during the environmental review process. This guidance is based on the Office of the Attorney General's experience reviewing, commenting on, and litigating CEQA documents for projects in high wildfire prone areas, and is intended to assist lead agencies with their planning and approval of future projects.

2 Summary and Analysis of Attorney General's Guidance Relevant to the Alpine Park Project

The following provides a summary of the guidance and an analysis of the project's compliance with the applicable points of guidance.

Attorney General Guidance for Analyzing Project's Impacts on Wildfire Risks

Baseline Conditions – The guidance states that an environmental impact report (EIR) is required to include a description of the physical environmental conditions in the vicinity of the project, at the time the notice of preparation is published, or if no notice of preparation is published, at the time environmental analysis is commenced. This description establishes the baseline of existing environmental conditions and should include information about open space areas and habitats within the project area that may be fire prone, as well as a discussion of fire history and fuels on the project site. Including a discussion of existing available water supplies for firefighting is also critical. Providing details about existing environmental conditions at the project site that may exacerbate or minimize wildfire impacts will help ensure that the EIR fully considers the project's impacts on wildfire risk.

Project Analysis for Guidance on Baseline Conditions– Baseline conditions of the project site have been provided in the Alpine County Park Project Fire Protection Memorandum. The project description includes information about the existing use of the site, the existing wildfire hazards and risks, the existing vegetation cover, and the existing vegetation fuel modification required by AFPD and maintained by the County. Section 4.9.2.5 of the Hazards section and Section 4.20.2 of the Wildfire section also include a description of the baseline conditions relevant to wildfires.

Modeling – The guidance encourages an EIR to qualitatively assess wildfire hazard and risk variables and use fire behavior modeling and other spatial and statistical analyses to quantify the risks to the extent feasible. Modeling should include extreme weather conditions that exacerbate fire spread and should consist of a variety of different fire scenarios and include scenarios for fires that start in, near, and far from the project site. Modeling should include baseline conditions as well as post-development conditions with an analysis that provides lead agencies with sufficient data to quantify increased or decreased wildfire risks resulting from a project adding more people to wildfire prone areas and to assess the risks according to the threshold of significance.

Project Analysis for Guidance on Modeling– Fire behavior modeling has been completed for the project using the BehavePlus fire behavior modeling software, a state-of-the-art model originally developed in cooperation with the US Department of Agriculture. BehavePlus has become the industry standard and the most widely used model for predicting fire behavior on a given landscape. Fire behavior modeling for the project has been provided in the Alpine County Park Project Fire Protection Memorandum and includes modeling for baseline conditions and post-development conditions, which provides a clear comparison of the effectiveness of code-compliant vegetation fuel modification prescribed to reduce wildfire risks associated with development projects. The modeling for the project showed that vegetation fuel management and landscaping proposed for the project results in reductions in flame lengths, energy outputs, and ember spotting distances.

Project Density – The guidance notes that development density influences how likely a fire is to start or spread, and how likely it is that the development and its occupants will be in danger when a fire starts. Fire spread and structure loss is more likely to occur in low- to intermediate-density developments. The guidance encourages projects to utilize more concentrated, higher density development patterns that disrupt fire spread by removing or substantially fragmenting wildland vegetation.

Project Analysis for Guidance on Project Density – This general guidance is not applicable to the project because it is a park project and not a project that proposes to construct multiple buildings where development density and structure location are determining factors in wildfire risk reduction.

Location in the Landscape – The guidance reminds reviewing agencies that project placement in the landscape relative to fire history, topography and wind patterns also influences wildfire risk, and how a development project is planned within the landscape determines to what extent it will influence fire risk.

Project Analysis for Location in the Landscape – The project proposes a structure for use by volunteers who provide services to patrons of the park site. The structure is located well away from the edges of the project boundary and the adjacent natural vegetation fuels. The structure is located within the project boundary such that the required 100 feet of defensible space vegetation fuel medication can be provided on all sides of the structure.

Water Supply and Infrastructure – As part of evaluating a project's wildfire risk impacts, the guidance notes that an EIR should analyze the adequacy of water supplies and infrastructure to address firefighting within the project site.

This analysis should consider the potential loss of water pressure during a fire, which may decrease available water supply and the potential loss of power, which may eliminate the supply.

> Project Analysis for Water Supply and Infrastructure – As demonstrated in sections 4.15.4.3 and 4.19.4.3 of the FEIR, the project will be required to meet all code requirements related to fire flow and prove that the existing public water system is capable of providing water supply, including sufficient fire flow to control fires that might occur within the project site.

Evacuation – For projects located in high wildfire risk areas that present an increased risk of ignition and/or evacuation impacts, the guidance recommends that evacuation modeling and planning should be considered and developed at the time of project review and approval when there is greater flexibility to modify a project's design, density, siting, and configuration to address wildfire considerations rather than deferred to a later stage of the development process. The ultimate objective is to allow for informed decision-making that minimizes the environmental and public safety hazards associated with new developments that increase the risk of ignition and impede evacuation in high wildfire prone areas.

> Project Analysis for Evacuation – The project's original Fire and Emergency Operational Assessment (FEOA) noted that the San Diego County Wildland-Urban Interface Fire Emergency Response Plan has been updated for the Alpine South-East area as a part of the initial study for the project. It was noted that South Grade Road, which is adjacent to the project site, currently serves as a regional evacuation route. The FEOA encourages the County to plan for the project's special evacuation needs, which includes a plan to relocate large animals from the project's equestrian facilities and the presence of larger vehicles and livestock trailers on the evacuation routes.

Mitigating Wildfire Risk – Potential Measures

The guidance identifies "potential mitigation measures and design alternatives" (pg. 12) that may reduce a project's wildfire risk impacts, such as:

- Avoiding and minimizing low-density development patterns or leapfrog-type developments with undeveloped wildland between developed areas.
- Decreasing the extent and amount of "edge" or wildland interface area where development is adjacent to undeveloped wildlands.
- Creating buffer zones and defensible space measures within and adjacent to the project.
- Siting projects to maximize the role of low-flammability landscape features that may buffer the development from fire spread.
- Undergrounding power lines.
- Limiting development along steep slopes and amidst rugged terrain, so as to decrease exposure to rapid fire spread and increase accessibility for firefighting.
- Placement of development close to existing or planned ingress/egress and designated evacuation routes to efficiently evacuate the project population and the existing community population, consistent with evacuation plans, while simultaneously allowing emergency access.
- Providing additional points of ingress and egress and modification of evacuation routes to minimize or avoid increasing evacuation times or emergency access response times.

- Hardening structures and homes against fire by upgrading building materials and installation techniques to increase a structure's resistance to heat, flames, and embers.
- Requiring a water supply capable of meeting fire flow demand during a wildfire.
- Limiting on-street parking to ensure access and egress roads are not obstructed by parked vehicles.

Analysis – Most of the potential mitigation measures and design alternatives suggested by the Attorney General's guidance are focused on projects that include the construction of buildings and associated infrastructure. This project consists of converting previously undeveloped and undisturbed land into a multi-use community park. However, the Project has incorporated several of the Attorney General's recommendations, including:

- Creating buffer zones and defensible space measures within and adjacent to the project.
- Consideration of undergrounding power lines
- Placement of development close to existing or planned ingress/egress and designated evacuation routes to efficiently evacuate the project population and the existing community population, consistent with evacuation plans, while simultaneously allowing emergency access.
- Requiring a water supply capable of meeting fire flow demand during a wildfire.
- Planning the project design to decrease the extent and amount of "edge" or wildland interface area where development is adjacent to undeveloped wildlands.
- Limiting development along steep slopes and amidst rugged terrain, so as to decrease exposure to rapid fire spread and increase accessibility for firefighting. The project parcel contains areas of steep slopes, however, development of the project site was limited to areas with fewer slopes for greater accessibility.
- Limiting on-street parking to ensure access and egress roads are not obstructed by parked vehicles by providing dedicated parking for Park patrons.

3 Conclusion

A thorough analysis of the project finds that it would align with the Attorney General's guidance for reducing or mitigating impacts associated with wildfire and will provide code-compliant defensible space vegetation fuel modification and fire prevention measures that will reduce the impacts of locating the project in a fire hazard severity zone to less than significant.

Appendix M

Project Court Documents

SUPERIOR COURT OF CALIFORNIA,
COUNTY OF SAN DIEGO
CENTRAL

MINUTE ORDER

DATE: 06/09/2025 TIME: 5:00 PM DEPT: C-63

JUDICIAL OFFICER: KATHERINE A. BACAL
CLERK: Annie Yim
REPORTER/ERM: Not Reported
BAILIFF/COURT ATTENDANT: N/A

CASE NO: **37-2024-00000536-CU-WM-CTL** CASE INIT.DATE: 01/05/2024
CASE TITLE: **California National Forest Foundation vs County of San Diego [IMAGED]**
CASE CATEGORY: Civil CASE TYPE: (U)Writ of Mandate: Writ of Mandamus - Other

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HEARING TYPE: Ex Parte
MOVING PARTY:

The Court having taken this matter under submission on 05/16/2025, now rules as follows:

The petition for writ of mandate is **GRANTED** as to the first cause of action for violation of CEQA**.** The Court intends to address setting a hearing for the remaining causes of action at the upcoming status conference.

Preliminary Matters

Petitioners' unopposed request for judicial notice (ROA # 46) of exhibits 1 and 2 is granted. Evid. Code § 452(b)&(h).

Discussion

This action challenges the County's decision to approve the Alpine Community Park project (the "Project"). Pet. (ROA # 1) ¶ 1. The Project's proposed 25-acre park is within 96.6 acres of undeveloped land; the remaining approximately 70 acres of the property will be preserved for open space. AR 62, 2401, 2463 (proposed active park concept plan map). The Project plans to build a sports complex including several amenities such as a baseball field, all-wheel and bike skills areas, a fitness station, recreational courts, leash free dog area, equestrian staging with corral, a community garden, and picnic areas. *Id.* ¶ 2.

The verified petition for writ of mandate and complaint for declaratory and injunctive relief alleges four causes of action: (1) violations of the California Environmental Quality Act ("CEQA"); (2) violation of California Planning and Zoning Law; (3) violation of the County Biological Mitigation Ordinance; and (4) declaratory relief. ROA # 1. Respondent County of San Diego and its Board of Supervisors and

Department of Parks and Recreation ("County") filed its answer (ROA # 40), and the matter is fully briefed. Opening Brief ("OB"), ROA # 45; Opposition Brief ("Oppo."), ROA # 48; Reply Brief, ROA # 53.

A. CEQA

Review of a public agency's decision under the CEQA is done in accordance with CCP section 1094.5. Pub. Res. Code § 21168. In reviewing an agency's compliance with CEQA the Court's inquiry extends "only to whether there was a prejudicial abuse of discretion." *Sierra Club v. County of Fresno* (2018) 6 Cal.5th 502, 512. "[A]n agency may abuse its discretion under CEQA either by failing to proceed in the manner CEQA provides or by reaching factual conclusions unsupported by substantial evidence." *Id.*, citing Pub. Res. Code § 21168.5. Whether the agency employed correct procedures is reviewed *de novo*, whereas the agency's substantive factual conclusions are accorded "greater deference." *Id*.

Mitigation Measures

1. **Quino Checkerspot Butterfly**

The Quino Checkerspot Butterfly ("Quino") is classified as a federally endangered species. AR 5485. Petitioners argue the EIR acknowledges the significant impacts to the Quino's habitat loss and its population, and that the EIR's claimed mitigation plans to reduce the impacts to less than significant levels are unsupported by evidence. MPA at p.12. Petitioners argue that the mitigation plan to enhance, restore, and monitor the habitat is flawed because under the plan the County need only show at least one Quino on the site or adjacent parcel, and that the measure could be deemed "successful" even if the project causes a net loss of occupied habitat. *Id.* at pp.12-14.

Respondents argue petitioners' claim fails because substantial evidence in the record supports the mitigation measures. First, that under the EIR the County will be required to meet the Endangered Species Act and obtain approval from U.S. Fish and Wildlife Service for an incidental take permit ("ITP"), under which that federal agency will review and approve a habitat conservation plan's measure, monitoring requirements, and implementation. Oppo. at p.11, citing AR 2589. Second, even setting aside the ITP, "[i]mpacts would be mitigated to less-than-significant levels through implementation of MM-BIO-3, which would ensure no net loss of host plants through restoration and enhancement of habitat, provide permanent protection of [Quino] habitat within the proposed preserve portion of the Project, and ensure ongoing monitoring by the County." AR1953. At the hearing, respondents also cited to the special-status wildlife Alpine Park Project map, which shows much of the Quino occurrence sightings from 2019-2020 were within the Project site, but outside the planned park. AR 2555 (figure 4.4-3).

Petitioners argue the ITP evidence is not sufficient because it is essentially a future restoration or conservation plan that constitutes improperly deferred mitigation. OB at p.14-15, citing *Preserve Wild Santee v. City of Santee* (2012) 210 Cal.App.4th 260, 281(holding future habitat management plan inadequate to mitigate impacts on Quino checkerspot butterfly); Reply at p.8. The Court agrees on this point. *Preserve Wild*, *supra* at p.281 (the fact that the City and wildlife agencies must ultimately approve a habitat plan does not cure informational defects).

However, as to the second point, the biological resources report found that MM-BIO-3 specifies the performance standard (i.e., no net loss of Quino host plants) and includes onsite mitigation and monitoring standards. AR 73. Petitioners argue the report does not actually contain any facts to support the County's expert's opinion and thus does not constitute substantial evidence. Reply at p.10. Here, the report states that "regardless of the conservation measures required under the ITP, the County will mitigate for impacts on occupied [Quino] habitat (as further described in MM-BIO-3). MM-BIO-3 also states that "construction activities shall not occur until the ITP is secured. The performance standard is specified (i.e., no net loss of [Quino] host plants), and compensatory onsite mitigation and monitoring standards are also included in MM-BIO-3. MM-BIO-3 was revised slightly in the RS-Draft EIR to make it clear that the County intends to provide compensatory mitigation and habitat restoration as well as monitoring regardless of the status of the ITP." AR 73. MM-BIO-03 also provides that regardless of the ITP conservation measures, the County will mitigate for impacts on occupied [Quino] habitat by providing, at a minimum, on-site preservation of occupied habitat for [Quino] within the open space and ensure that no net loss of [Quino] host plants will occur because of the project. The County DPR shall ensure that there is no net loss of [Quino] host plants by performing on-site enhancement and restoration activities within [Quino] habitat, including planting dot-seed plantain, removing thatch to support healthy populations of dot-seed plantain, and maintaining and monitoring these enhancement areas for a minimum of 5 years." AR2589. Additionally, the County will demonstrate that [Quino] persists on the Project site at the end of the 5-year restoration and enhancement period. If [Quino] can no longer be found on either the County's preserve or within the adjacent Wright's Field in a normal flight-year at the end of the 5-year restoration period, the County will secure a specific off-site parcel that will contribute meaningfully to the species' long-term conservation." *Id.* In light of this, the report contains substantial evidence showing the County is not impermissibly deferring mitigation measures. Unlike in *Preserve Wild Santee,* the EIR here set performance standards and explained how the impact can be mitigated in a specified way via vegetation management and timing for assessment. Accordingly, the petition is denied as to this issue.

2. **Western Spadefoot Toad**

The Western Spadefoot Toad ("Spadefoot") is a candidate for listing under the federal endangered species act. AR 1497. Petitioners argue the EIR's finding that the Project will have no impact on the surrounding Spadefoot population lacks evidence. OB at p.16. They argue their expert showed the Spadefoot can travel up to 600 meters from their breeding pools, meaning they may migrate into the development footprint and thus transmit waterborne contamination from vehicles, animal waste and landscaping, and Argentine Ants that impact Spadefoot's prey. *Id*., citing AR 1340-1342 (also noting the USGS recommended an undeveloped buffer measuring 300 to 400 meters around breeding ponds). Petitioners argue the EIR's conclusion that the Spadefoot would only travel approximately 262 meters from pools to conclude no impact would occur ignores petitioners' expert evidence, and the EIR failed to address this in response to petitioners' comments. OB at p.17, citing *Banning Ranch Conservancy v. City of Newport Beach* (2017) 2 Cal.5th 918, 940 (The Guidelines state that an EIR should identify '[a]reas of controversy known to the lead agency including issues raised by [other] agencies." (Guidelines, § 15123, subd. (b)(2).) 'Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts." (Guidelines, § 15151.) '[M]ajor environmental issues raised when the lead agency's position is at variance with recommendations and objections raised in the comments must be addressed in detail. (Guidelines, § 15088, subd.(c).").

The County argues petitioners' comments on the recirculated Spadefoot analysis was late and, thus, the County did not have a duty to respond. Oppo. at p.16, citing AR 5369 (Nov. 7, 2023 letter) and citing *Gray v. Cnty. of Madera* (2008) 167 Cal.App.4th 1099, 1111 (under CEQA, lead agency is not required to respond to late comments). Petitioners argue they submitted expert comments on the edge effects in the draft EIR in 2021, and the recirculated and final EIR did not respond to those comments. Reply at p.12-13, citing AR 1336, 1341.

Here, the record shows petitioners submitted comments on the Spadefoot, including the need to mitigate potential adverse effects associated with the development edge to provide for buffer distances of 300 to 400 meters around breeding ponds in 2021. AR 1336, 1340-1341. The EIR does not appear to address petitioners' expert comments on this issue. The County's analysis of indirect impacts on Wright's Field biological resources -- potential impacts approximately 600 to 800 feet from the eastern edge of the field -- also does not respond to the issue.

In its briefing and at the hearing, the County argued it relied on the study cited by petitioners' own expert (the 2019 Baumberger study) to adopt the datapoint of 262 meters in the EIR. Oppo. at p.16, citing *Claremont Canyon Conservancy v. Regents of Univ. of California* (2023) 92 Cal. App. 5th 474, 483 (for the proposition that an EIR does not need to analyze every permutation of the data or address all variations of the issues). Petitioner's expert review, however, explained that a more recent study – by Halstead et al. in 2021 – followed up on Baumberger's earlier study findings, and that Halstead's study found a distance of 486 meters. AR1339-1340. The expert's review also noted the USGS recommended an undeveloped buffer measuring 300 to 400 meters. AR 1340. Thus, the issue with the EIR's reliance on the 262 meters datapoint is not merely about an agency's discretion of what is ultimately included in an EIR. Rather, it is that the EIR does not address and provide a reasoned analysis as to why the smaller buffer distance would support the EIR's conclusions on the Project's impacts to Spadefoot despite the newer conflicting evidence in the record. Accordingly, petitioners have shown the County erred when it concluded the Project's impact to Spadefoot would be less than significant after mitigation.

3. **Pallid Bat**

The Pallid Bat species is known to roost in San Diego County and the bats rely on grasslands for foraging. AR 2575-78. Petitioners argue the EIR's proposed mitigation measures under MM-BIO-7 to install bat boxes before removing vegetation and commencing construction, and MM-BIO-8 requiring construction occur at least 200 feet from potential roost sites, lack substantial evidence to show these measures are effective to reduce the Project's impact to less than significant. OB at p.18-19.

The EIR provides substantial evidence that the bat boxes will be included with other measures to mitigate impacts to less than significant. Oppo. at p.18, citing AR 1948–49 and AR 1955 (discusses restoration of native grassland and preservation of property in addition to active management on-site for the proposed preserve land, plus implementing mitigation measures of pallid bat boxes, bat roost avoidance, native grassland restoration, preservation of sensitive habituates; and construction is expected to occur during daytime hours and it is not expected to alter bats' natural nocturnal behaviors), AR 2593–95. The EIR also contains substantial evidence to show consideration will be given regarding

temperature and monitoring of the bat boxes. AR 2593 (County will work with bat expert to design and install the bat boxes; and design and placement will be considered for how to best maintain proper roost temperature; monitoring will be conducted quarterly for first 2 years and twice-yearly for years 3 through 5 after installation).

However, as for the sound buffer distance to potential roosting sites – the County's expert recommended that mitigation "preclude[] construction activities within a minimum 500 feet of potential roost sites during the pupping season." Reply at p.13, citing AR 12249. The County does not show that mitigation efforts of requiring construction occur at least 200 feet from the nearest potential roosting spot (AR 2593) is supported by substantial evidence. Accordingly, the petitioners have shown no substantial evidence supports the EIR's proposed mitigation of only a 200-foot buffer construction zone.

At the hearing, the County argued that no Pallid bats have been identified on the Project site. This argument appears to have been raised for the first time at the hearing. The County's opposition does not appear to cite to the administrative record or other authority on this point. Even assuming no Pallid bats have been spotted, this does not change the analysis, as the record shows that Pallid bats are very difficult to detect and the EIR identified Pallid bat impacts that requires mitigation measures. AR 2578.

Wildfire Impacts

Petitioners argue the EIR does not contain analysis of the significance of the Project's wildfire impacts without the mitigation measures. OB at p.22. They argue that instead, the EIR improperly treated mitigation measures as Project components, which impermissibility treats the analysis of impacts and mitigation measures as one issue. OB at p.21, citing *Lotus v. Department of Transportation* (2014) 223 Cal.App.4th 645, 653; *People ex rel. Bonta v. County of Lake* (2024) 105 Cal.App.5th at 1235-36 ("[F]ailure to separately identify and analyze the significant impacts of the fire risk to the Project area and its baseline existing conditions before proposing mitigation measures violates CEQA.)"

The County argues the EIR includes a wildfire impact analysis in Section 4.9, section 4.20, and Appendix J, K, and L. Oppo. at p.21 citing AR 2695 *et seq*. (Fire and Emergency Operation Assessment prepared that identified wildfire risks at the Project site, including ignition risks), 2881 *et seq*. (Project site is in a "Very High Fire Hazard Severity Zone;" and discussing together the ignition risks and recommended fire prevention measures such as creating buffer zones along the parcel, developing the land and considering undergrounding electric utility services, placing developed park features to contain wildfire, providing improved fire-safe parking, adding on-site volunteer, maintenance staff and a park ranger, and clearing vegetation), 2310 *et seq*. (discussing expected wildfire behavior, site development risk factors, and discussing risks and measures together); 2340 *et seq*. (fire evacuation analysis and assumptions), and 2374 *et seq*. (defensible space requirements letter).

Here, the EIR states the measures will reduce wildfire risk to less than significant levels. Importantly, though, the EIR is missing information on *how* it analyzed the effectiveness of the proposed measures. There is no analysis of how ignition rates will be reduced by the proposed wildfire measures. Reply at p.18, citing *Bonta*, *supra,*105 Cal.App.5th at 1233 (an adequate analysis may include the number of ignitions that occur and how that rate has reduced with the proposed wildfire safety measures). Because

the EIR does not separately analyze the significant impacts of the fire risk and its baseline existing conditions before it proposed mitigation measures but instead treats the impacts analysis and mitigation measures as one issue, the EIR's wildfire analysis is deficient under CEQA.

Vehicle Traffic Public Safety Impacts

The petition alleges the Project is adjacent to a high-speed roadway that contains areas of low visibility and has been the location of multiple fatal accidents. The petition alleges the Project would create a multi-way stop in a low visibility area, increasing traffic risks. Pet. ¶¶ 35, 55.

Petitioners argue the EIR does not contain any analysis of the Project's potential traffic hazard impacts to pedestrians and bicyclists. MPA at pp.24-25. They argue that the Project is anticipated to draw approximately 300-500 people per day on weekdays, 1,000 per day on weekends, and up to 2,000 at the same time during special events. AR 2314. They argue the visitors who park on the shoulder of South Grade Road would need to walk on the road shoulder, and that South Grade Road is known for several accidents, including some fatal. MPA at p.24, citing AR 2462 (240 parking space lot); AR 5544 (noting three crashes along South Grade Road, with two involving pedestrians and two of the three resulting in fatalities).

The County argues substantial evidence supports the EIR's determination that the Project will not substantially increase hazards because the Project does not conflict with the circulation system of transit, roadway, bike and pedestrian facilities. Oppo. at p.25, citing AR 75, AR 2843-44. The County also contends the Project does not include any "incompatible uses" such as farm equipment that might increase congestion on the road. *Id.,* citing AR 2846. Additionally, argues the County, the Project is anticipated to generate a number of trips onto South Grade Road that will not "degrade" the road to a "substandard level of service." *Id.,* citing AR 76. It plans to install traffic control devices at a later date for the Project's driveway and South Grade Road, but the type of device has not yet been determined because the location of the driveway is not yet known. *Id.* at p.26.

> CEQA requires that an EIR include a "detailed statement" setting forth the "significant effects on the environment of the proposed Project." (Pub. Res. Code, § 21100, subd. (b)(1).) It also requires that an EIR "contain a statement briefly indicating the reasons that various possible significant effects of a project were determined not to be significant and were therefore not discussed in detail." (Guidelines, § 15128.) "[A] 'significant effect on the environment' under CEQA is a substantial or potentially substantial adverse change in the physical conditions existing within the area affected by the project.

City of Maywood v. Los Angeles Unified School Dist. (2012) 208 Cal.App.4th 362, 390–391.

Appendix G to the CEQA Guidelines recommends that, in determining whether a project will have significant traffic impacts, lead agencies consider whether it will "[s]ubstantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?" 14 Cal. Code Regs. ("Guidelines") appen. G, § XVII, subd. (c). The Guidelines also ask whether the project will "conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?" *Id.*, subd. (b).

Here, although evidence in the record addresses the Guidelines in Appendix G regarding incompatible uses, the EIR lacks substantial evidence to the potential traffic hazard impacts to pedestrians and bicyclists concerning South Grade Road. In particular, the EIR lacks substantial evidence as to the yet to-be-determined sight distance analysis for the traffic control device at the project's driveway, and analysis as to pedestrians who would be parking and walking along South Grade Road when the 240-vehicle space parking lot is full. The Court agrees with petitioners that *City of Maywood v. Los Angeles Unified School Dist*. is instructive. *Id.* (2012) 208 Cal.App.4th 362, 392 (concluding the FEIR did not analyze pedestrian hazards associated with the project and the extent to which the presence of an active roadway would impact pedestrian safety). The County does not cite to evidence in the record showing it analyzed and disclosed the traffic hazard impacts concerning South Grade Road.

Additionally, though an EIR is not required to include information that is "not 'reasonably feasible' for the agency to obtain and provide," *Gooden v. County of Los Angeles* (2024) 106 Cal.App.5th 1, 17) the County does not provide any supported reason as to why it could not yet determine the project's driveway location to assess the sight distance analysis and appropriate intersection control device. The purpose of an EIR is to inform the public and officials of "the environmental consequences of their decisions before they are made." *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, 564; see also Pub. Res. Code § 21061 ("The purpose of an environmental impact report is to provide public agencies and the public in general with detailed information about the effect which a proposed project is likely to have on the environment; to list ways in which the significant effects of such a project might be minimized; and to indicate alternatives to such a project"). Petitioners have shown the County did not proceed in the manner required by CEQA by delaying the analysis and potential impacts of the driveway, multi-way stop control, and sight distance analysis on traffic collisions, including as to pedestrians and bicyclists.

At the hearing, the County made a "reverse CEQA" argument. This argument was made for the first time at the hearing, does not apply here, and does not lead to a different result. The California Supreme Court has also noted that it finds the term "reverse CEQA" to be "misleading and inapt. Because CEQA does sometimes require analysis of the effect of existing conditions on a project's future residents or users, such analysis is not the 'reverse' of what CEQA mandates." *California Building Industry Assn. v. Bay Area Air Quality Management Dist*. (2015) 62 Cal.4th 369, 386, fn. 11.

Off-Site Alternatives

Petitioners argue the EIR should have considered an off-site alternative. They argue the County's reasoning for concluding off-site alternatives would not meet many of the project objections is unsupported – the County did not provide any information on the properties it supposedly vetted and rejected, and the document to which the County cited that supposedly contained details of the sites (i.e., the Master Response document) does not actually contain any such information. MPA at p.28, citing AR 167 (referencing MR-12 (Parks Master Plan) for details related to the sites the County considered prior to purchasing the property), AR 85 (no details in the Parks Master Plan included). The County counters that the EIR analyzed five alternatives for consideration: No Project (Alternative 1); Sports Complex (Alternative 2); Reconfigured Project (Alternative 3); Reduced Project (Alternative 4); and Passive Park (Alternative 5). AR 2955-2957.

The Guidelines require that an EIR "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 decisionmaking and public participation. An EIR is not required to consider alternatives which are infeasible." Guidelines, § 15126.6(a). The Guidelines define "feasible" 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." Guidelines, § 15364. "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." Guidelines, § 15126.6, subd. (f)(1).

Petitioners fault the County for failing to analyze an off-site alternative. Reply at p.21. However, the County was not obligated to consider that type of alterative. "CEQA Guidelines section 15126.6, subdivision (a), which prescribes the scope of an alternative analysis, states that an agency must 'describe a range of reasonable alternatives to the project, *or* to the location of the project." (Italics added.) The guideline anticipates that a different location can constitute one of a range of reasonable alternatives, but it does not require such an alternative." *Yerba Buena Neighborhood Consortium, LLC v. Regents of University of California* (2023) 95 Cal.App.5th 779, 797. Petitioners also argue the County's citation to documents in the administrative record to support its alternatives analysis was inadequate because the documents were not included in the EIR. Reply at pp.22-23. Yet the Guidelines allow for additional information explaining the choice of alternatives to be included in the administrative record. Guidelines § 15126.6(c). Accordingly, no abuse of discretion has been shown regarding failing to provide a reasonable range of alternatives or dismissing viable alternatives without substantial evidence.

Conclusion

For the reasons stated, petitioners' first cause of action for violation of the CEQA is **GRANTED**.

Parties to meet and confer to prepare the proposed writ in accordance with this ruling.

The minute order is the order of the Court.

The Clerk to serve notice.

IT IS SO ORDERED.

Katherine A. Bacal

Judge Katherine A. Bacal

JOSEPH D. PETTA (State Bar No. 286665)
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Attorneys for Petitioners
CLEVELAND NATIONAL FOREST FOUNDATION and CALIFORNIA NATIVE PLANT SOCIETY

SUPERIOR COURT OF THE STATE OF CALIFORNIA

COUNTY OF SAN DIEGO – CENTRAL DIVISION

CLEVELAND NATIONAL FOREST FOUNDATION and CALIFORNIA NATIVE PLANT SOCIETY

Petitioners,

v.

COUNTY OF SAN DIEGO; SAN DIEGO COUNTY BOARD OF SUPERVISORS; and DOES 1 through 20 inclusive,

Respondents,

SAN DIEGO COUNTY DEPARTMENT OF PARKS AND RECREATION; and DOES 21 through 40, inclusive,

Real Party in Interest.

Case No. 37-2024-00000536-CU-WM-CTL
Hon. Katherine A. Bacal, Dept. 63

(California Environmental Quality Act)

[Code Civ. Proc. § 1094.5 (alternatively, § 1085; California Environmental Quality Act, Pub. Resources Code, §§ 21000 et seq.; California Planning and Zoning Law, Gov. Code § 65300, et seq.; County of San Diego Code of Regulatory Ordinances § 86.501 et seq.]

NOTICE OF ENTRY OF AMENDED JUDGMENT GRANTING PEREMPTORY WRIT OF MANDATE

Action Filed: January 5, 2024
Trial Date: May 16, 2025; August 1, 2025

TO ALL PARTIES AND THEIR ATTORNEYS OF RECORD:

PLEASE TAKE NOTICE that on January 20, 2026, the Court in the above-captioned action, entered the Amended Judgment Granting Peremptory Writ of Mandate. A true and correct copy of the Amended Judgment is attached hereto as **Exhibit A**.

DATED: February 5, 2026

SHUTE, MIHALY & WEINBERGER LLP

By: _____

JOSEPH D. PETTA
SHASTA M. FIELDS

Attorneys for Petitioners
CLEVELAND NATIONAL FOREST FOUNDATION and CALIFORNIA NATIVE PLANT SOCIETY

Exhibit A

FILED
San Diego Superior Court
Central Division

JAN 20 2026

Clerk of the Superior Court
By: A. Yim, Deputy

SUPERIOR COURT OF THE STATE OF CALIFORNIA

COUNTY OF SAN DIEGO

CLEVELAND NATIONAL FOREST FOUNDATION and CALIFORNIA NATIVE PLANT SOCIETY,

Petitioners,

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COUNTY OF SAN DIEGO; SAN DIEGO COUNTY BOARD OF SUPERVISORS; and DOES 1 through 20, inclusive,

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SAN DIEGO COUNTY DEPARTMENT OF PARKS AND RECREATION; and DOES 21 through 40, inclusive,

Real Party in Interest

No. 37-2024-00000536-CU-WM-CTL
Action Filed: January 5, 2024

[~~PROPOSED~~] JUDGMENT

Dept: C-63
Judge: Hon. Katherine A. Bacal
Trial Dates: May 16, 2025; August 1, 2025

[IMAGED FILE]

The above-captioned action came on for regular hearing in Department C-63 of the above-entitled court, the Honorable Katherine A. Bacal presiding. Petitioners Cleveland National Forest Foundation and California Native Plant Society (collectively, "Petitioners") were represented by Shute, Mihaly & Weinberger LLP, Joseph D. Petta and Shasta M. Fields. Respondent County of San Diego (also sued as the San Diego County Board of Supervisors, and also sued as Real Party in Interest San Diego County Department of Parks and Recreation) ("Respondent" or "County") were represented by Office of County Counsel, Michael P. Masterson.

Petitioners' Petition for Writ of Mandate and Complaint for Declaratory and Injunctive Relief alleges four causes of action: (1) violations of the California Environmental Quality Act ("CEQA"); (2) violation of California Planning and Zoning Law; (3) violation of County Ordinance; and (4) Declaratory Relief. (ROA 1.)

On May 15, 2025, this Court issued a tentative ruling bifurcating the matter to hear arguments only as to the alleged violations of CEQA at the May 16, 2025 merits hearing, and for the remaining causes of action to be heard at a later date. (ROA 62.) On May 16, 2025, the Court heard argument from counsel on the CEQA cause of action, and issued a Minute Order taking the matter under submission and setting a Status Conference for June 13, 2025. (ROA 65.) On June 9, 2025, the Court issued a Minute Order granting in part the petition for writ of mandate as to the first cause of action for violation of CEQA. (ROA 68; Attached hereto as Exhibit A.)

At the June 13, 2025 status conference, Petitioners dismissed the petition's second and third causes of action. (ROA 70.) The Court also set the hearing on the remaining cause of action, declaratory relief regarding the County's Biological Mitigation Ordinance (BMO), for August 1, 2025. (ROA 70.) On July 31, 2025, the County submitted a statement of decision request, asking the Court to address identified factual and legal issues. (ROA 77–78.) At the August 1, 2025 hearing, the Court found in favor of the County on the fourth cause of action for declaratory relief regarding the BMO, ordered the County to prepare a proposed statement of decision on this issue, and set a status conference for August 7, 2025. (ROA 76.) At the August

7, 2025 status conference, the Court found the County's request for a statement of decision on the CEQA issue to be untimely.

IT IS HEREBY ORDERED, ADJUDGED AND DECREED that judgment be entered as follows:

1. As to the first cause of action for violation of CEQA, the petition for writ of mandate is granted in part and denied in part, for the reasons stated in the Court's June 9, 2025 Minute Order. (ROA 68; Attached hereto as Exhibit A.) A peremptory writ of mandate shall issue directing Respondent to take the steps needed to comply with the June 9, 2025 Minute Order.

2. The second and third causes of action, for violations of the Planning and Zoning Law and County Ordinance, are dismissed with prejudice.

3. The fourth cause of action, for declaratory relief regarding the County's BMO, is dismissed with prejudice for the reasons stated in the Statement of Decision. (Attached hereto as Exhibit B.)

4. Pursuant to Public Resources Code section 21168.9(b), the Court retains jurisdiction over Respondent's proceedings by way of a return to the peremptory writ of mandate until the Court has determined that Respondent has complied with the provisions of the writ of mandate.

5. Awards of costs and attorneys' fees, if any, will be provided by the Court per subsequent memorandum of costs and/or motions. Following said memorandum and/or motions and rulings by the Court in response thereto, the clerk of the Court is to insert the award of such fees and costs, if any, in this judgment in the space provided below. Costs and attorneys' fees are awarded to Petitioners and against Respondent in the amount of $_____.

DATED: 1/20/26

Honorable Katherine A. Bacal
Judge of the Superior Court

2015268.1

PROOF OF SERVICE

Cleveland National Forest Foundation, et al. v. County of San Diego, et al.
Case No. 37-2024-00000536-CU-WM-CTL
San Diego Superior Court

At the time of service, I was over 18 years of age and **not a party to this action**. I am employed in the County of San Francisco, State of California. My business address is 396 Hayes Street, San Francisco, CA 94102.

On January 20, 2026, I served true copies of the following document(s) described as:

[PROPOSED] JUDGMENT

on the parties in this action as follows:

Claudia G. Silva, County Counsel
By: Joshua M. Heinlein, Chief Deputy
Michael P. Masterson, Senior Deputy
OFFICE OF COUNTY COUNSEL, COUNTY OF SAN DIEGO
1600 Pacific Highway, Room 355
San Diego, CA 92101-2469
Tel: (619) 531-5850
Fax: (619) 531-6005
Email: joshua.heinlein@sdcounty.ca.gov
michael.masterson@sdcounty.ca.gov

Attorneys for Respondents:
COUNTY OF SAN DIEGO; SAN DIEGO COUNTY BOARD OF SUPERVISORS; and SAN DIEGO COUNTY DEPARTMENT OF PARKS AND RECREATION

BY E-MAIL OR ELECTRONIC TRANSMISSION: I caused a copy of the document(s) to be sent from e-mail address tsanchez@smwlaw.com to the persons at the e-mail addresses listed in the Service List. I did not receive, within a reasonable time after the transmission, any electronic message or other indication that the transmission was unsuccessful.

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

Executed on January 20, 2026, at San Francisco, California.

Tuloa Sanchez

PROOF OF SERVICE

Cleveland National Forest Foundation, et al. v. County of San Diego, et al.
Case No. 37-2024-00000536-CU-WM-CTL
San Diego Superior Court

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NOTICE OF ENTRY OF AMENDED JUDGMENT GRANTING PEREMPTORY WRIT OF MANDATE

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Michael P. Masterson, Senior Deputy
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Attorneys for Respondents:
COUNTY OF SAN DIEGO; SAN DIEGO COUNTY BOARD OF SUPERVISORS; and SAN DIEGO COUNTY DEPARTMENT OF PARKS AND RECREATION

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

Executed on February 5, 2026, at San Francisco, California.



Tuloa Sanchez

2023235.1

FILED
San Diego Superior Court
Central Division

JAN 23 2026

Clerk of the Superior Court
By: A. Yim, Deputy

SUPERIOR COURT OF THE STATE OF CALIFORNIA

COUNTY OF SAN DIEGO – CENTRAL DIVISION

CLEVELAND NATIONAL FOREST FOUNDATION and CALIFORNIA NATIVE PLANT SOCIETY

Petitioners,

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COUNTY OF SAN DIEGO; SAN DIEGO COUNTY BOARD OF SUPERVISORS; and DOES 1 through 20 inclusive,

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SAN DIEGO COUNTY DEPARTMENT OF PARKS AND RECREATION; and DOES 21 through 40, inclusive,

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Case No. 37-2024-00000536-CU-WM-CTL
Hon. Katherine A. Bacal, Dept. 63

(California Environmental Quality Act)

~~[PROPOSED]~~ PEREMPTORY WRIT OF MANDATE

[Code Civ. Proc. § 1094.5 (alternatively, § 1085; California Environmental Quality Act, Pub. Resources Code, §§ 21000 et seq.]

Action Filed: January 5, 2024
Trial Dates: May 16, 2025; August 1, 2025

TO RESPONDENT COUNTY OF SAN DIEGO, ITS BOARD OF SUPERVISORS, AND DEPARTMENT OF PARKS AND RECREATION:

Judgment having been entered in this proceeding, ordering that a peremptory writ of mandate be issued from this Court,

YOU ARE SO ORDERED, upon receiving service of this writ, to:

1. Set aside the San Diego County Board of Supervisors' December 6, 2023 certification of the Environmental Impact Report ("EIR") for the Alpine County Park Project ("Project") (State Clearinghouse No. 2021030196) and rescind all Project approvals, including but not limited to the County's adoption of Environmental Findings and Mitigation Monitoring and Reporting Program.

2. File and serve an initial return to the writ no later than 75 days after service of the writ. The return shall specify the actions taken to comply with the terms of the peremptory writ of mandate.

3. Any objections to the return to the writ shall be filed with the Court and served on Respondent no later than 30 days after service of the applicable return to the writ. Any reply to those objections shall be filed with the Court and served on the objecting party no later than 20 days after service of the objections.

4. Under Public Resources Code section 21168.9, subdivision (b), this Court reserves jurisdiction over Respondent's proceedings by way of a return to this peremptory writ of mandate until the Court has determined that Respondent has complied with the provisions of this writ of mandate.

5. To the extent that Respondent revises the EIR for the Project, the revised environmental analysis must address only the CEQA deficiencies identified in the Court's June 9, 2025 Minute Order (ROA 68). Having found in Respondent's favor on the issues raised in the petition, except for those matters described below, the Court finds that the following action is necessary under Public Resources Code section 21168.9(b) to comply with the provisions of CEQA:

a. Western Spadefoot Toad. Respondent shall address, providing reasoned analysis supported by substantial evidence in the record, comments submitted by Petitioners' expert stating that the Spadefoot can travel up to 600 meters from their breeding pools and noting that the USGS recommended an undeveloped buffer of 300 to 400 meters around breeding pools.

b. Pallid Bat. Prior to making any finding that the 200-foot avoidance buffer from potential pallid bat roost sites, as set forth in mitigation measure MM-BIO-8, will avoid or substantially reduce a significant impact, Respondent shall support such a finding with substantial evidence in the record.

c. Wildfire Impacts. Respondent shall separately analyze the significant impacts of the fire risk and its baseline existing conditions before proposing mitigation measures, and shall provide information on *how* it analyzed the effectiveness of the proposed measures.

d. Vehicle Traffic Public Safety. Respondent shall analyze and disclose the traffic hazard impacts concerning South Grade Road, in particular, whether the Project will substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections). In doing so, Respondent shall not delay reasonably feasible analysis and potential impacts of the Project's driveway, the driveway's traffic control device, and sight distance analysis on traffic collisions, including as to pedestrians and bicyclists.

6. Respondent is further ordered to suspend all ministerial approvals in furtherance of the Project that could result in any change or alteration to the physical environment and Respondent may not make any physical changes to the environment in furtherance of the Project, pending discharge of the writ in accordance with the terms of this writ.

7. Under Public Resources Code section 21168.9 subdivision (c), this Court does not direct Respondent to exercise their lawful discretion in any particular way.

Let the foregoing peremptory writ of mandate issue.

DATED: 01/23, 2025

CLERK OF THE SUPERIOR COURT

2015270.1

PROOF OF SERVICE

Cleveland National Forest Foundation, et al. v. County of San Diego, et al.
Case No. 37-2024-00000536-CU-WM-CTL
San Diego Superior Court

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Tuloa Sanchez