INITIAL STUDY/
MITIGATED NEGATIVE DECLARATION

HILLSIDE NATURAL AREA FIRE RESILIENCE AND FOREST CONSERVATION MANAGEMENT PLAN

EL CERRITO, CALIFORNIA

LSA

March 2025

This page intentionally left blank

INITIAL STUDY/
MITIGATED NEGATIVE DECLARATION

HILLSIDE NATURAL AREA FIRE RESILIENCE AND FOREST CONSERVATION MANAGEMENT PLAN

EL CERRITO, CALIFORNIA

Submitted to:

City of El Cerrito
10890 San Pablo Avenue
El Cerrito, California 94530

Prepared by:

LSA
157 Park Place
Pt. Richmond, California 94801
(510) 236-6810

Project No. 20231296

LSA

March 2025

This page intentionally left blank

TABLE OF CONTENTS

APPENDICES

FIGURES AND TABLES

FIGURES

TABLES

LIST OF ABBREVIATIONS AND ACRONYMS

µg/m^3	micrograms per cubic meter
AB	Assembly Bill
ABAG	Association of Bay Area Governments
ACTC	Alameda County Transportation Commission
APN	Assessor's Parcel Number
BAAQMD	Bay Area Air Quality Management District
Basin Plan	Water Quality Control Plan for the San Francisco Bay Basin
BMP	Best Management Practice
Cal/EPA	California Environmental Protection Agency
CDFW	California Department of Fish and Wildlife
CDPR	California Department of Pesticide Regulation
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
City	City of El Cerrito
Clean Air Plan	BAAQMD 2017 Clean Air Plan
CNDDB	California Natural Diversity Database
CNEL	community noise equivalent level
CNPS	California Native Plant Society
CO	carbon monoxide
CRHR	California Register of Historical Resources
CRPR	California Rare Plant Rank
dB	decibel
dBA	A-weighted decibel
DOC	California Department of Conservation
DTSC	California Department of Toxic Substances Control
DWR	Department of Water Resources
EBMUD	East Bay Municipal Utility District
EFZ	Earthquake Fault Zones
EOP	Emergency Operations Plan

EQ Zapp	California Earthquake Hazards Zone Application
ESA	Federal Endangered Species Act
GHG	greenhouse gas
GSA	Groundwater Sustainability Agency
GSP	Groundwater Sustainability Plan
HNA	Hillside Natural Area
I-80	Interstate 80
IPM	Integrated Pest Management
IS/MND	Initial Study/Mitigated Negative Declaration
L_{dn}	day-night average level
L_{eq}	equivalent continuous sound level
Lisjan Nation	Confederated Villages of Lisjan Nation
MLD	Most Likely Descendant
MMI	Modified Mercalli Intensity
mpg	miles per gallon
MTC	Metropolitan Transportation Commission
NAHC	Native American Heritage Commission
NO_2	nitrogen dioxide
NO_x	nitrogen oxide
NOD	Notice of Determination
NRCS	Natural Resources Conservation Service
NWIC	Northwest Information Center
OHP	State of California Office of Historic Preservation
OS-N	Open Space and Open Space Natural (OS-N),
PG&E	Pacific Gas and Electric Company
PM	particulate matter
PM_{10}	particulate matter less than 10 microns in size
$PM_{2.5}$	particulate matter less than 2.5 microns in size
POTWs	publicly owned treatment works
PR	Parks and Recreation
PRC	Public Resources Code

project, or Plan	Hillside Natural Area Fire Resilience and Forest Conservation Management Plan
PS	Public and Semi Public
ROG	reactive organic gases
RS-5	Single-family Residential with a minimum lot size of 5,000 square feet
RS-10	Single-family Residential with a minimum lot size of 10,000 square feet
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SGMA	Sustainable Groundwater Management Act
SLF	Sacred Lands File
SO_2	sulfur dioxide
SWRCB	State Water Resources Control Board
TAC	toxic air contaminant
USACE	United States Army Corps of Engineers
USDA	United States Department of Agriculture
USGS	United States Geological Survey
VdB	vibration velocity decibels
VMT	Vehicle Miles Traveled

This page intentional left blank

1.0 INTRODUCTION AND PURPOSE

1.1 PURPOSE OF THE INITIAL STUDY

The City of El Cerrito (City) as the Lead Agency, has prepared this Initial Study for the proposed Hillside Natural Area Fire Resilience and Forest Conservation Management Plan ("project" or "Plan") in compliance with the California Environmental Quality Act (CEQA), the *State CEQA Guidelines* (California Code of Regulations Section 15000-et. seq.) and the regulations and policies of the City of El Cerrito, California. This Initial Study evaluates the environmental impacts that might reasonably be anticipated to result from implementation of the proposed project.

1.2 PUBLIC REVIEW PERIOD

Publication of this Initial Study/Mitigated Negative Declaration (IS/MND) marks the beginning of a 30-day public review and comment period. During this period, the IS/MND will be available to local, State, and federal agencies and to interested organizations and individuals for review. Written comments concerning the environmental review contained in this Initial Study during the 30-day public review period should be sent to:

Karineh Samkian, Senior Program Manager
10890 San Pablo Avenue
El Cerrito, CA 94530
KSamkian@ci.el-cerrito.ca.us

1.3 CONSIDERATION OF THE INITIAL STUDY AND PROJECT

Following the conclusion of the public review period, the City of El Cerrito will consider adoption of the IS/MND for the proposed project at a regularly scheduled meeting. The City shall consider the IS/MND together with any comments received during the public review process. Upon adoption of the IS/MND, the City may proceed with project approval actions.

1.4 NOTICE OF DETERMINATION

If the proposed project is approved, the City of El Cerrito will file a Notice of Determination (NOD), which will be available for public inspection and posted within 24 hours of receipt at the Contra Costa County Clerk's Office for 30 days. The filing of the NOD starts a 30-day statute of limitations on court challenges to the approval under CEQA (*State CEQA Guidelines* Section 15075(g)).

This page intentionally left blank

2.0 PROJECT INFORMATION

1. **Project Title:**

   Hillside Natural Area Fire Resilience and Forest Conservation Management Plan

2. **Lead Agency Name and Address:**

   City of El Cerrito
   10890 San Pablo Avenue
   El Cerrito, California 94530

3. **Contact Person and Phone Number:**

   Karineh Samkian, Senior Program Manager
   (510) 525-7603

4. **Project Location:**

   The project site consists of the Hillside Natural Area (HNA), located within the City of El Cerrito, California, near the Northern Berkeley and Oakland Hills.

5. **Project Sponsor's Name and Address:**

   City of El Cerrito
   10890 San Pablo Avenue
   El Cerrito, California 94530

6. **General Plan Designation:**

   Parks and Open Space, Very Low Density Residential

7. **Zoning:**

   Open Space Natural (OS-N), Single-Family Residential (RS-10)

8. **Description of Project:**

   The City of El Cerrito (City) proposes to establish and adopt a comprehensive fire hazard reduction and forest conservation plan that will guide maintenance activities and improve eligibility for grant funding for the City's HNA. A more detailed description of the proposed project is provided in Section 3.0, Project Description.

9. **Surrounding Land Uses and Setting:**

   The HNA is generally surrounded by single-family residential uses.

10. Other Public Agencies Whose Approval is Required (e.g., permits, financial approval, or participation agreements):

Please see Section 3.3, Project Approvals.

11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resource Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

Native American consultation was conducted in compliance with Assembly Bill (AB) 52. A letter and map depicting the project site and surrounding area was sent to the Native American Heritage Commission (NAHC) requesting a search of the Sacred Lands File (SLF) and list of tribes eligible to consult with the City, pursuant to Public Resources Code Sections 21080.1, 21080.3.1, and 21080.3.2, on August 15, 2023. On August 24, 2023, the NAHC responded in a letter with a list of tribal contacts and stated that the search of the SLF was positive, indicating that a culturally sensitive property had been identified within or near the project site. Letters to the list of tribal contacts were sent on August 30, 2023, informing them of the proposed project and inquiring if they had any knowledge of cultural properties within or near the project site. A summary of tribal consultation efforts is provided in Section 5.8, Tribal Cultural Resources, of this IS/MND.

3.0 PROJECT DESCRIPTION

The following describes the proposed Hillside Natural Area (HNA) Fire Resilience and Forest Conservation Management Plan ("project" or "Plan") that is the subject of this Initial Study/Mitigated Negative Declaration (IS/MND) prepared pursuant to the California Environmental Quality Act (CEQA). The proposed project is a comprehensive fire hazard reduction and forest conservation plan that will guide maintenance activities and improve eligibility for grant funding for the City of El Cerrito's (City) HNA. The City is the lead agency for review of the proposed project under CEQA.

3.1 PROJECT SITE AND SITE DESCRIPTION

The following describes the geographic context of the project site and provides a brief overview of the existing land uses within and in the vicinity of the project site.

3.1.1 Project Location

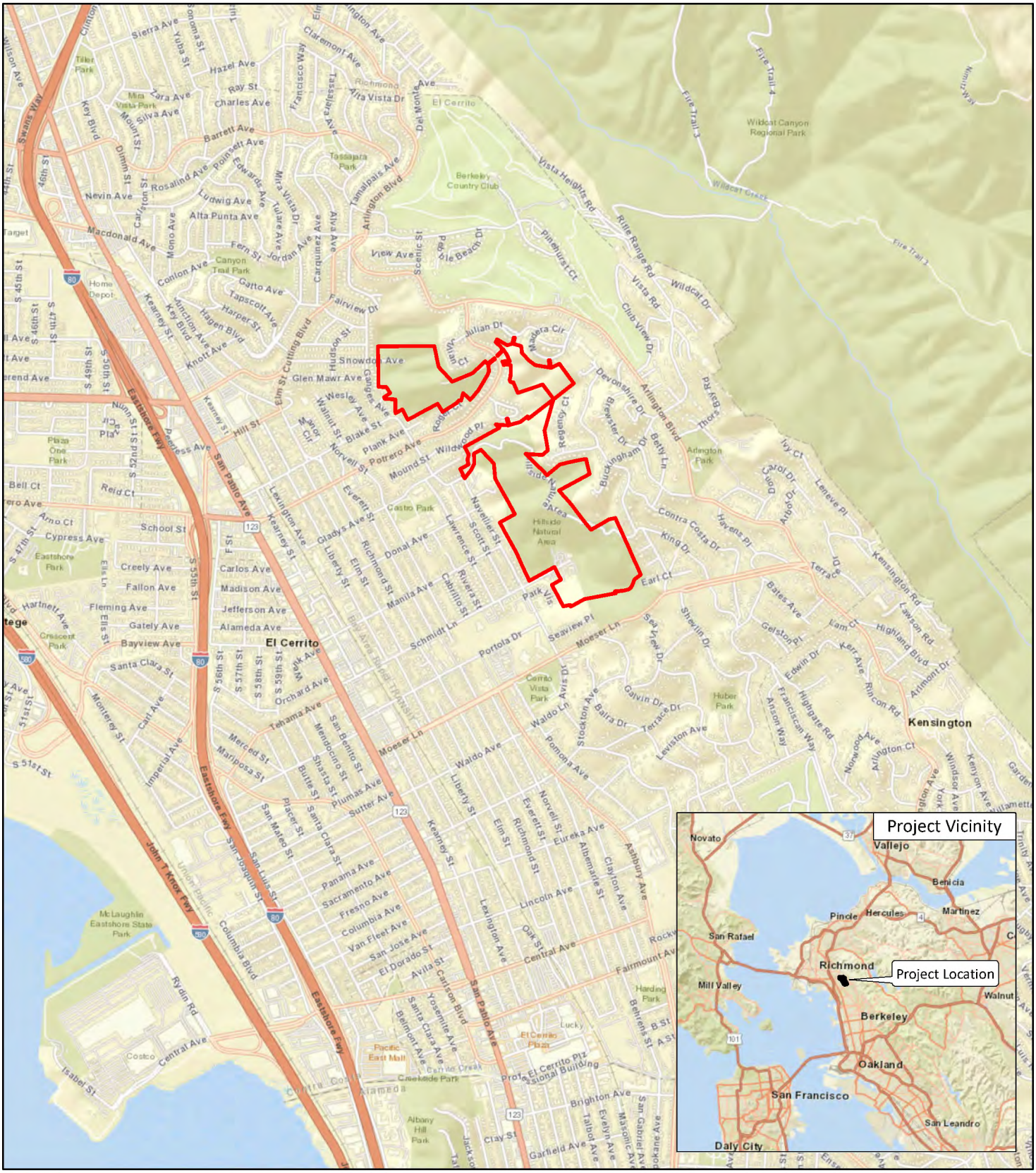
The project site consists of the HNA, located within El Cerrito, California, near the Northern Berkeley and Oakland Hills. The HNA is generally surrounded by single-family residential uses. Interstate 80 (I-80) provides regional access to the HNA, and direct vehicle access is provided via Schmidt Lane, King Court, Regency Court, Snowden Avenue, Navellier Street and Potrero Avenue. Figure 3-1 depicts the regional and local context of the project site.

3.1.2 Existing Conditions

The approximately 107.18-acre HNA is the City's largest community-serving recreation facility and is divided into three management units: HNA North (24.22 acres), Madera Property (9.53 acres), and HNA South (73.43 acres). The three management units are discussed below, and Table 3.A provides the APNs and lot sizes for each management unit. Figure 3-2 depicts an aerial view of the HNA and the three management units.

- **HNA North**: The HNA North Management Unit lies at the end of Snowden Avenue and is often referred to as Motorcycle Hill, due to its historic use as a motorcycle hill racing area in the early 1900s. The management unit is approximately 24.22 acres. This area slopes south with steep slopes prevailing throughout the management unit. The management unit surrounds a former water storage tank site, previously operated by the East Bay Municipal Utility District (EBMUD), which is now a flat, circular gravel area and is directly adjacent to an undeveloped 14.9-acre privately-owned parcel. Due to the existence of an extensive stand of eucalyptus trees on the slopes and top of Motorcycle Hill, grassland, and smaller stands of native shrubs and oak trees, this parcel could pose a fire risk to adjacent properties. There is currently no fire break between the HNA North Management Unit and the large adjacent undeveloped private parcel. This 14.9-acre private parcel is a largely unmanaged area which includes a creek, steep terrain, and a mixture of densely populated native and invasive trees and shrubs.

This page intentionally left blank



LSA

LEGEND

Project Site

FIGURE 3-1

Hillside Natural Area Fire Resilience and Forest Conservation Management Plan
El Cerrito, Contra Costa County, California

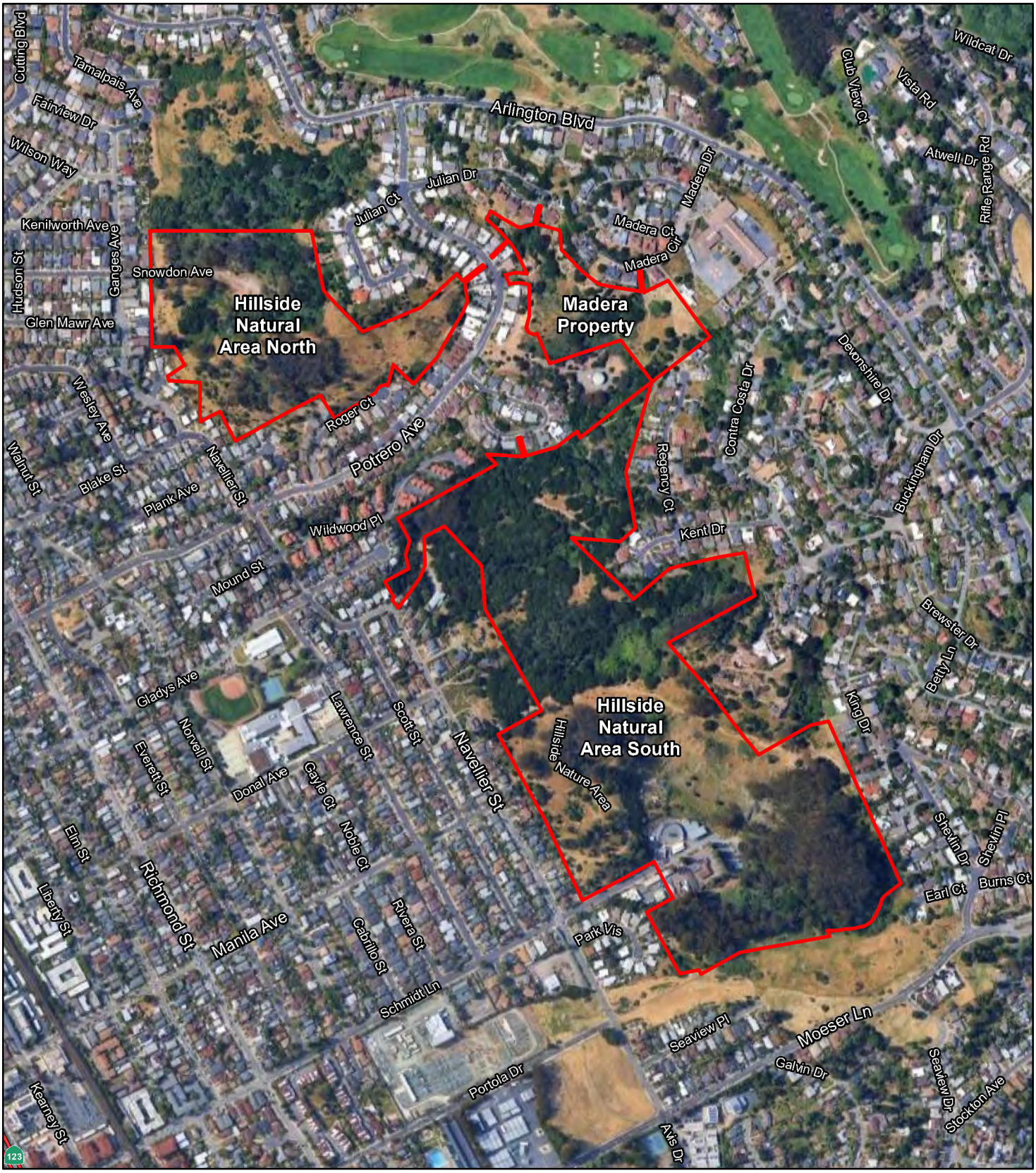
Regional Location

0 1000 2000
FEET

SOURCE: Contra Costa County (05/2024); Esri (2024).

I:\2023\20231296\GIS\MXD\Bio Report\Figure 1_Hillside Natural Area, El Cerrito.mxd (7/5/2024)

This page intentionally left blank



LSA

LEGEND

Project Site

FIGURE 3-2

N

0 350 700

FEET

SOURCE: Contra Costa County (05/2024); Google (2024)

I:\2023\20231296\GIS\MXD\CEQA\ProjectSite_ManagementAreas.mxd (12/17/2024)

Hillside Natural Area Fire Resilience and Forest Conservation Management Plan
El Cerrito, Contra Costa County, California

Project Site and Management Areas

This page intentionally left blank

- **Madera Property**: The Madera Property Management Unit is the smallest management unit (9.53 acres) and is located at the north-east corner of the HNA, east of the HNA North Management Unit and north of the HNA South Management Unit. The Madera Property Management Unit is connected to the HNA South Management Unit at the southern end and is separated from the HNA North Management Unit by Potrero Avenue. The unit can be accessed via Madera Circle in the north, Potrero Avenue to the west, and Regency Court from the southeast. The Madera Management Unit contains small stands of non-native pines, a 2-acre oak woodland, extensive shrub, and grasslands (including purple needle grass patches).

- **HNA South:** The HNA South Management Unit is the largest management unit, comprising 73.43 acres, and is located south of the HNA North and Madera Property Management Units. The unit extends from Gladys Avenue in the north (south of Potrero Avenue) to just north of Moeser Lane in the south. Adjacent streets also include Navellier Street to the west and Regency Court, Kent Drive, and King Drive to the east. This unit contains several large stands of native oak, a former quarry with steep slopes and exposed bedrock, and a large stand of non-native eucalyptus in the south-east corner. The Quarry Hill, Ken Smith, and Wildwood eucalyptus groves are also located in this management unit. The unit also has two major drainages with riparian forest corridors and is the centerpiece of the trail system. The City of El Cerrito Recycling and Environmental Resource Center (Recycling Center) is located near the quarry.

Table 3.A: Parcel Sizes and APNs for the Management Units of the Hillside Natural Area

HNA North		Madera Property		HNA South	
APN	Size (acres)	APN	Size (acres)	APN	Size (acres)
505-040-004	11.16	505-421-020	1.45	505-403-018	0.85
505-040-005	4.36	505-142-012	0.42	505-130-002	6.35
502-154-014	0.35	505-142-013	0.06	505-070-035	8.03
505-050-004	4.15	505-142-014	7.61	505-080-013	2.91
505-061-024	0.18			505-080-015	3.17
505-061-025	0.17			505-080-010	3.38
505-061-026	0.17			505-122-025	3.54
505-061-027	0.16			505-080-004	2.33
505-061-028	0.16			505-080-005	2.38
505-061-029	0.22			505-090-017	4.93
505-401-014	3.15			505-090-016	5.07
				505-090-015	11.09
				503-160-029	7.66
				503-170-001	6.45
				505-110-003	5.30
Total	**24.22**	***Total***	**9.53**	***Total***	**73.43**
				Total HNA	**107.18**

Source: *Hillside Natural Area Fire Resilience and Forest Conservation Management Plan* (LSA 2024).
APN = Assessor's Parcel Number
HNA = Hillside Natural Area

Elevations within the HNA range from approximately 150 to 650 feet above sea level. The topography of the HNA is characterized by west-facing slopes that receive full afternoon sun when it is the hottest.

The slopes are generally steep, with two very steep slopes (45-90 degrees), including an exposed rock face in HNA South that rises up from the area near the Recycling Center on Schmidt Lane (formerly a quarry) and at Motorcycle Hill in HNA North at the end of Snowden Avenue.

Several stream/drainage channels are present in the HNA and flow in the southwest direction into culverts beneath the adjacent residential area to the southwest. Some of the drainages occur within concrete v-ditches and become natural stream channels further downstream within the HNA. Streams/drainages are likely to be considered jurisdictional features by the U.S. Army Corps of Engineers (USACE), California Department of Fish and Wildlife (CDFW), and Regional Water Quality Control Board (RWQCB) and subject to regulation under Sections 404 and 401 of the Clean Water Act and/or the California Porter-Cologne Water Quality Control Act.

3.1.2.1 Land Cover Types

Vegetation in the HNA is characterized by native and non-native grassland, riparian scrub and woodland, oak woodland, and other scrub and "soft" chaparral, in addition to extensive introduced landscaping and naturalized non-native species such as acacia, eucalyptus, pine and pittosporum. There are 6 major vegetation cover types within the HNA, as described below and depicted in Figure 3-3.

- **Eucalyptus and Pine Groves** are the most prevalent vegetation types within the HNA, totaling over 36.2 acres (33.8 percent of the HNA). Eucalyptus groves are present in four locations. The largest grove is located above and along the southeast rim of the quarry (Quarry Hill grove). The Ken Smith grove is located northwest of the quarry. A linear grove of eucalyptus follows the drainage south of Wildwood Place. Finally, a large stand of eucalyptus is located southwest of Julian Court adjacent to the former EBMUD reservoir site at Snowden Avenue, north of Motorcycle Hill.

  The Quarry Hill eucalyptus grove was planted around 1910 by the quarry operator to minimize slippage of quarry overburden. In 1972, uncommonly cold weather resulted in the death of eucalyptus tree crowns over hundreds of acres throughout the East Bay hills. Although the crowns of many trees were damaged at the HNA, few trees actually died, and resprouting from the trunk and branches occurred. Sprouting also occurred from the stumps of the trees, which were cut. The result was an increased density of eucalyptus stands at the HNA.

- **Ruderal/Non-Native Grassland** comprises approximately 33.47 acres (31.2 percent of the HNA) and consists of primarily non-native annual grassland species with patches of perennial grassland and ruderal plant species.

- **Native Grasslands** in the HNA consist of small, dispersed patches of native graminoids,[1] including perennial bunchgrasses. These are generally rare, but fairly common in certain areas, such as El Cerrito Memorial Grove and the Julian Fuel Break, which supports a healthy stand of purple needlegrass (*Stipa pulchra*). The presence and relative abundance of native annual and

[1] In botany and ecology, a graminoid refers to a herbaceous plant with a grass-like morphology.

perennial herbs is influenced by the level of historic and recent disturbance at a particular site. Most native grasslands are considered sensitive natural communities.

- **Coast Live Oak Woodland** comprises approximately 28.7 acres (26.8 percent of the HNA) and is dominated by coast live oak (*Quercus agrifolia*) with California bay (*Umbellularia californica*) and California buckeye (*Aesculus californica*) in the overstory and native shrubs, vines, and grasses in the understory. Dense stands of oak woodland are located in the drainages and on north facing slopes. Stands of native oaks at the HNA appear to be of roughly the same age, with a uniform, dense canopy and in places, little understory. As in many coast live oak forests in California, the HNA has relatively low numbers of coast live oak (seedlings and saplings) and the sapling size class is particularly underrepresented.

- **North Franciscan Coastal Scrub** comprises approximately 2.6 acres (2.4 percent of the HNA) and is found throughout the HNA, but mainly occupies the steeper portions of the south and west facing slopes along the eastern boundary of the HNA. This vegetation community is characterized by a mix of shrubs, herbaceous species, and grasses that are adapted to the cool, moist coastal climate, and is dominated by coyote brush (*Baccharis pilularis*). California sage (*Artemisia californica*), coffeeberry (*Rhamnus californica*), poison oak, and bush monkey flower (*Mimulus aurantiacus*) can also be found intermixed within the coastal scrub habitat.

- **Riparian Woodland** occurs along the streams and drainages and occupies a relatively small acreage within the HNA. Riparian woodland occurs in the drainages northwest of Earl Court, southwest of Kent Court, north of Buckingham Drive, east of Gladys Avenue, and in the upper portion of the Wildwood drainage. Tree species observed include willows (*Salix* spp.), cottonwood (*Populus fremontii*), alder (*Alnus* spp.), California bay, California buckeye, and coast live oak. Riparian woodland occurs in the drainages northwest of Earl Court, southwest of Kent Court, north of Buckingham Drive, east of Gladys Avenue, and in the upper portion of the Wildwood drainage. Other species occurring in the riparian woodland include arroyo willow (*Salix lasiolepis*), elderberry (*Sambucus mexicana*), and non-native Himalayan blackberry (*Rubus armeniacus*). These species present within the riparian woodland indicate the presence of water in the moist canyon bottom environment. Riparian woodland is characteristically wet and is considered a sensitive plant community.

- **Rock Outcrops** are present in small areas throughout the HNA. The disturbed quarry walls have proven to be a hostile environment for the development of vegetative cover. Pampas grass (*Cortaderia selloana*) has sparsely covered the walls with a density of approximately 25 percent.

3.1.2.2 Existing Trails

The HNA has a network of existing service roads and trails that support a variety of uses, including emergency access, hiking, dog walking, running, mountain biking,[2] birdwatching, etc. Several trails

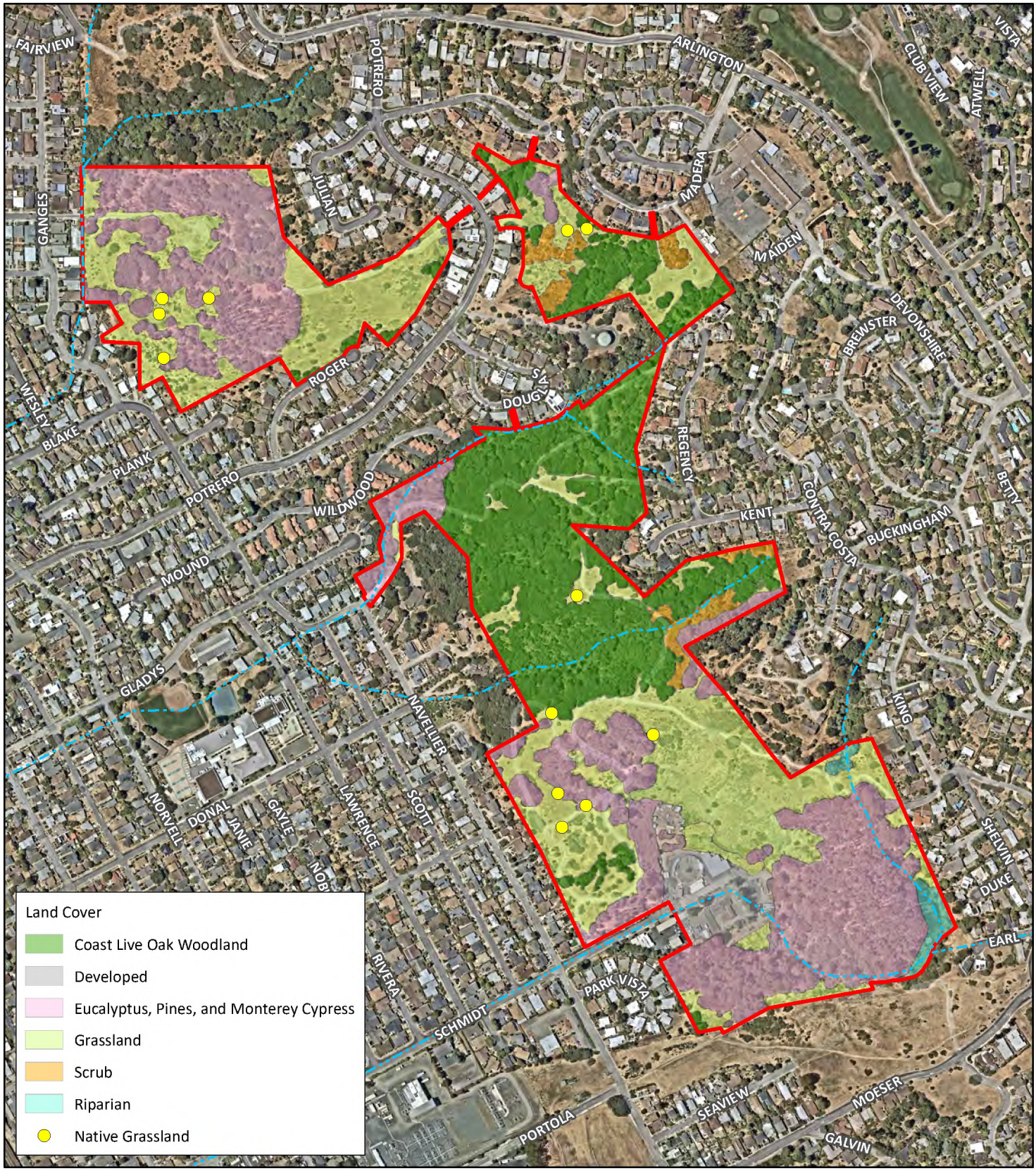
[2] While signage is currently inconsistent, mountain biking is allowed in the HNA as long as it is not motorized. Future plans may evaluate bicycle use on trails.

are fire access roads are maintained by the City. The existing trails and fire roads within each management area are discussed below and depicted in Figure 3-4.

- **HNA North**
    - **Motorcycle Hill Trail** is an approximately 0.57-mile trail that starts at Blake Street and ends at Potrero Avenue. The narrow trail includes steep switchbacks. The top of Motorcycle Hill, also accessible from Potrero Avenue using a relatively flat trail, provides scenic views of the East Bay cities and coast. The Motorcycle Hill Trail is very steep and likely challenging for the average hiker.
    - **Castro Trail, a.k.a. Lower Snowden Trail** is an approximately 0.14-mile one-way trail that starts at Snowden Avenue and connects to the Motorcycle Hill Trail.
    - **Peralta Trail** is an approximately 0.10-mile, one-way trail that is relatively unmaintained. The trail starts at the former EBMUD tank site at the end of a 15-foot-wide paved fire road and connects to the Motorcycle Hill Trail.
- **Madera Property**
    - **Madera-Julian Trail** is an approximately 0.21-mile one-way trail that starts at the concrete steps at 1625 Julian Drive and ends at Ridge Fire Road below Madera Circle. This trail is also accessible via a 0.1-mile trail starting at 1556 Madera Circle.
- **HNA South**
    - **Ridge Fire Road** is an approximately 0.75-mile, one-way trail that starts at King Court and ends at Regency Court.
    - **Navellier Fire Road** is an approximately 0.35-mile, one-way trail that connects Navellier Street to Regency Court and overlaps with Ridge Fire Road. The trailhead is a paved road between 1432 and 1440 Navellier Street, which turns into a fire road. The trail crosses Ridge Fire Road and Live Oak Trail and ends near the mouth of Regency Court.
    - **Ken Smith Trail** is an approximately 0.19-mile, trail that starts near Ridge Fire Road and dissipates to the south into a narrow, steep foot trail leading to the Moeser Lane electrical transmission corridor.
    - **Forest Brown Fire Road** is an approximately 0.34-mile, trail that starts at Schmidt Lane and climbs to Ridge Fire Road.
    - **Wildwood Creek Trail** is an approximately 265-foot, trail that branches off from the Navellier Fire Road alongside the partially channelized Wildwood Creek. The trailhead is at Navellier Fire Road right after the first big turn going uphill and connects with Douglas Drive trailhead.

- **The Lower Trail** is approximately 0.16 mile that connects Forest Brown Fire Road to Live Oak Trail and to Little Hill Trail. The northern section past the Little Hill Trail splits the trail into one well-maintained segment and another segment that is not maintained as a public trail and ends at a fenced off area.
- **The Little Hill Trail** is an approximately 265-foot, one-way trail that connects the Lower Trail to the Live Oak Trail.
- **Church Trail** is an approximately 0.14-mile, one-way trail that connects Navellier Fire Road to Live Oak Trail. An eroded segment is located near the Live Oak Trail.
- **Live Oak Trail** is an approximately 0.41-mile, one-way trail that connects Douglas Drive to the Forest Brown Fire Road. The trailhead is at 1524 Douglas Drive, and the trail crosses the Navellier Fire Road, runs south, roughly parallel to the Ridge Fire Road, to Forest Brown Fire Road. Portion of the trail includes the sign-posted Rotary Interpretive Trail and erosion of the trail occurs towards Douglas Drive.

This page intentionally left blank



LSA

LEGEND

Project Site

Stream/Drainage

N

0 300 600

FEET

FIGURE 3-3

Hillside Natural Area Fire Resilience and Forest Conservation Management Plan
El Cerrito, Contra Costa County, California

Land Cover Types

SOURCE: LSA (2023, 2024); Contra Costa County (05/2024); Nearmap (07/2023).

I:\2023\20231296\GIS\MXD\Bio Report\Figure 6_Land Cover Types.mxd (7/6/2024)

This page intentionally left blank

LSA

LEGEND

- Project Site
- Vehicle Accessible Trail
- Foot+Bike or Foot-only Trail
- Recommended to be Modified for Improved Vehicular Access

0 300 600
FEET

FIGURE 3-4

Hillside Natural Area Fire Resilience and Forest Conservation Management Plan
El Cerrito, Contra Costa County, California

Trail Map

SOURCE: LSA (2024); Contra Costa County (05/2024); USGS The National Map (04/2023).

I:\2023\20231296\GIS\MXD\Bio Report\Figure 10_Hillside Natural Area Trails and Fire Roads.mxd (7/9/2024)

This page intentionally left blank

3.1.3 Surrounding Land Uses

As shown on Figure 3-2, the HNA is generally surrounded by single-family residential uses. Other uses, including an assisted living home, the Stege Sanitary District administrative offices, the Recycling Center, City and government offices, churches, schools, parks, and various commercial businesses, are also located in the surrounding area (up to 0.5-mile radius from the HNA boundaries. South of the HNA, the area is bordered by a 10.8-acre stretch of grassland, where a Pacific Gas & Electric (PG&E) transmission line corridor is located near Moeser Lane.

Schools in the surrounding area include Madera Elementary School, located immediately northeast of the HNA, and Fred T. Korematsu Middle School, located approximately 0.2 mile west of the HNA. Other parks in the surrounding area include Cerrito Vista Park, located 0.2 feet southwest, Huber Park, located 0.4 mile south, Arlington Park, located 0.2 mile east, and Canyon Trail Park, located 0.2-mile northwest of the project site. The Berkeley Country Club and the El Cerrito Fire Department Station 52 are also located 0.1-mile northeast of the HNA.

3.1.4 Regulatory Setting

The City of El Cerrito General Plan Land Use Map[3] and City of El Cerrito Zoning Map[4] designates the majority of the HNA as Parks and Open Space and Open Space Natural (OS-N), respectively. However, the Madera property is designated as Very Low Density residential and zoned Single-family Residential with a minimum lot size of 10,000 square feet (RS-10). This designation is the result of the property being privately owned until it was acquired by the City in 2014.

The purpose of the open space and parks districts is to create, preserve and enhance land for permanent open space, including environmentally sensitive lands and habitats, creeks, and city parks and recreation facilities that meet community needs for both active recreational use and passive visual enjoyment and provide appropriately located areas for public and privately owned lands to be used for low-intensity, open space activities, such as hiking, walking or picnicking and to meet the active and passive recreational needs of the city's residents. Specifically, the OS-N land use designation serves to preserve publicly owned parklands, environmentally sensitive lands and habitats, and creeks in their natural state. Uses permitted in the OS-N zoning district are to be limited to those that maintain the property in its natural state such as passive recreation.

The RS-10 zoning district serves to promote and protect single-family neighborhoods at a base density of up to 10 dwelling units per net acre; and to minimize the out-of-scale appearance of large homes and development relative to their lot size and slope, and relative to adjacent homes in the neighborhood. Certain areas of the RS district areas are intended to: protect sensitive hillside areas from extensive development; protect against hazards related to earthquakes, unstable terrain, and wildfires; protect sensitive environmental areas and features; and provide sites for larger, distinctive residences.

---

3 City of El Cerrito. 2012. General Plan Land Use Map.

4 City of El Cerrito. Zoning Map. Website: https://maps.digitalmapcentral.com/production/VECommunityView/cities/ElCerrito/index.aspx (accessed December 2024).

Properties located north of the HNA are zoned as RS-10, Single-family Residential with a minimum lot size of 5,000 square feet (RS-5), Parks and Recreation (PR), and Public and Semi Public (PS); properties located west of the HNA are zoned as RS-5 and PS; properties located south of the HNA are zoned as OS-N and RS-5; and properties located west of the HNA are zoned as RS-10 and RS-5.

3.2 PROPOSED PROJECT

The City proposes to establish and adopt a comprehensive fire hazard reduction and forest conservation plan that will guide maintenance activities and improve eligibility for grant funding for the City's HNA. The proposed Hillside Natural Area Fire Resilience and Forest Conservation Management Plan (Plan) aims to:

1. Identify and protect critical resource areas, such as sensitive natural communities, wetlands and riparian zones, and special-status species that may occur in the HNA.
2. Guide the City's fire fuel reduction, native forest conservation, and fire prevention activities, by providing specific, measurable, achievable, reasonable, and time-sensitive prescriptions for forest management. Some of these activities will be conducted within the City's current scope and budget for fire risk reduction, others will require additional funding.
3. Provide compliance with CEQA that will identify potential environmental impacts that could result from implementation of the recommended treatments within the HNA to ensure compliance with state and federal grant guidelines.
4. Evaluate fire road and trail network conditions.

3.2.1 Project Background

Rising global temperatures and community concerns regarding the risk of fire make the development of an updated Plan necessary. The primary purpose of the Plan is to guide the City in performing the most effective, sustainable, and cost-efficient fuel reduction and forest conservation activities.

The HNA is a valuable open space asset within the City that is popular with residents and visitors for its recreational opportunities, scenic vistas, biodiversity and the beauty of its natural landscape. The HNA is heavily vegetated and can present a fire hazard to the surrounding residential areas and to the City as a whole. There is a strong consensus in the science community that climate change extends the periods of fire risk and enhances the likelihood of fires throughout the Bay Area. Over the last few years, community concerns regarding fire risk in the HNA and surrounding communities have significantly increased. The City has responded with ongoing and increased vegetation maintenance activities, completing work largely based on past planning efforts. A new Plan is needed to guide more robust, comprehensive, and balanced management of the HNA. The present Plan is intended to further guide the City's management and aid in securing grant funding for high priority management activities.

The Plan provides a science-based framework and strategy to improve fire resilience and forest health in the HNA and the surrounding neighborhoods and residential areas. It represents a locally

driven solution in partnership with community groups from the City. It draws upon a site-specific assessment of conditions and constraints and formulates goals and objectives that are specific, measurable, achievable, relevant, and prioritized for implementation. The Plan also aids in securing grant funding for priority management activities.

Building the HNA's resilience to fires means also restoring the health of the native plant communities. Native vegetation that is properly managed to avoid fuel accumulation and invasion by flammable non-native plants is key to reducing the risk to residential neighborhoods and livelihoods. This Plan represents a focus on forest conservation, fuel reduction, and proper vegetation management of the City-owned open space for the purposes of fire prevention. However, it is also important to recognize that addressing growing fire risks must also include actions residents take in their homes and neighborhoods such as home hardening by making structures less prone to ignition and creating defensible space around structures to prevent a fire from reaching the structure. The City embraces its leadership role in bringing diverse interests together to align and integrate fire prevention activities, coordinate investments in future resilience, and educate and engage community members.

3.2.2 Key Considerations of the Plan

Natural areas provide essential habitats for wildlife, protect water resources, and offer opportunities for recreation and education. Effective management of these areas requires strategic planning to ensure their long-term preservation and to balance multiple uses. It also lays out a step-by-step Plan that can be followed over time. Key considerations for the Plan include:

- **A Science-Based Framework:** At the fundamental level, it is important to understand the natural resources in the area, including vegetation, wildlife, water resources, topography, weather, and geological features. This information can help guide decisions about how to best protect and manage these resources. The Plan relies on scientifically collected data, peer reviewed literature, and proven ecological knowledge, including Traditional Ecological Knowledge (i.e., the on-going accumulation of knowledge about a specific ecosystem that is derived by Indigenous people through their direct contact and manipulation of the environment). The science-based framework not only relies on data on species and ecological processes, but also acknowledges the human dimensions of conservation and forest management (i.e., human health, relationship with nature, and ecosystem services).

- **Stakeholder Involvement and Recognition:** Engaging stakeholders, including local communities, land managers, elected officials, neighbors, and conservation organizations, is critical to the success of natural areas management. Stakeholders provide valuable insights and perspectives on the resources and challenges in the area and can help identify potential conflicts and solutions. The Plan was developed with extensive stakeholder input and its success largely depends on continued community engagement.

- **Balancing Multiple Uses/Values:** Natural areas in urban settings often have multiple uses, including recreation and wildlife habitat, but can also impose significant burdens for risk mitigation, especially fire. Strategic planning must balance these uses to ensure that the natural resources are protected while still providing benefits to the community.

- **Ecologically Sound Practices:** Fuel reduction projects can affect the biological diversity of the HNA. The Plan approves and promotes only methods and approaches that maintain, enhance, and restore native plant community structure and ecological function. The Plan provides a list of Avoidance and Minimization Measures designed to eliminate or mitigate adverse impacts during or following implementation of the Plan's Actions.

- **Defensible Space:** Defensible space, coupled with ignition-resistant construction, is essential to reduce fire risk to neighborhoods. Defensible space is the buffer around a building in which vegetation is managed for fire. Currently, 100 feet of defensible space are required by law (see also Assembly Bill 3074, passed into law in 2020, pertaining to the new ember-resistant zone within 0 to 5 feet of a home). While defensible space is primarily a concern for homeowners on their property, the Plan recognizes the importance of a managed vegetation beyond their property boundary to reduce flame length, fire progression and embers before they reach the property line.

- **Invasive Species Management:** Invasive species can have a negative impact on natural areas by outcompeting native species and altering ecosystems. Effective strategic planning should include strategies for managing and controlling invasive species, such as early detection and rapid response, biological control, and education and outreach.

- **Climate Change Adaptation:** Climate change is having a significant impact on natural areas, affecting temperature, precipitation patterns, and the distribution of wildlife and vegetation. Strategic planning must consider the effects of climate change and incorporate strategies for adapting to these changes, such as restoring habitats and improving the resilience of ecosystems.

- **Future Funding and Resources:** Implementing a strategic Plan for natural areas management requires funding and resources, including staff, equipment, and materials. Strategic planning should identify potential sources of funding and resources and prioritize the allocation of these resources to ensure effective implementation. The Plan provides a framework for grant applications and strategic allocation of resources. The City continues funding important maintenance activities in the HNA. However, many of the actions listed in the Plan will be dependent on future grants. A major purpose of the Plan is to support the City's applications for grant funding in the future.

3.2.3 Goals and Actions of the Plan

The Plan includes the following goals and actions.

3.2.3.1 Goal 1: Protect Residential Areas Surrounding the HNA From Wildfire

The HNA is surrounded by residential neighborhoods. Because of the steep slopes and abundant fuel, along with occasional strong winds during warm and dry conditions driving a potential fire uphill, threats to hillside residences are similar to Berkeley, Oakland, and other west facing hillsides in the East Bay. Goal 1 includes the following objectives:

- Objective 1.1: Establish Defensible Space on the HNA within 100 feet of residential dwelling structures[5]
- Objective 1.2: Establish Fuel Breaks
- Objective 1.3: Reduce Abundance of High-Risk Invasive Trees
- Objective 1.4. Develop a Fire Roads and Trails Network

3.2.3.2 Goal 2: Increase Forest Health

Aside from Wildfire Resilience, an additional goal of the Plan is to improve the ecological health of the HNA. While ecosystem health can have multiple definitions, for the purposes of the Plan, a healthy HNA would include woodlands, grasslands, shrublands, and related vegetation types that yield both ecological and community benefits. Healthy vegetation improves climate resilience, reduces the risk of fire, safeguards water and air quality, protects fish and wildlife habitat, enhances biodiversity, sequesters carbon, improves recreational opportunities, and avoids economic losses. Goal 2 includes the following objectives:

- Objective 2.1 Actively Manage Threats to Native Oak Species
- Objective 2.2 Remove Invasive Species
- Objective 2.3 Restore and Re-Establish Native Species

3.2.3.3 Goal 3: Measure Progress

It is recommended that the City continues to engage in inventory and monitoring programs within the limits imposed by available funds and resources. Monitoring results would be used to understand the status of and trends within the natural communities within the HNA.

- Objective 3.1: Measure Progress towards Vegetation Management Goals
- Objective 3.2: Review the Plan Every 5 Years
- Objective 3.3: Maintain Community Engagement and Stakeholder Involvement

3.2.3.4 Action Plan

The Plan presents a prioritized list of actions to reduce the risks and impacts of increasingly severe fire events in the HNA, as summarized in Table 3.B. All Actions are directly linked to the Goals and Objectives of the Plan. Management actions would decrease damage from fire by creating shaded fuel breaks, expanding defensible space into the HNA altering forest structure or species composition, and removing highly flammable invasive species. The removal of highly flammable invasive species, such as eucalyptus trees, may include the use of mechanical equipment, such as woodchippers and trucks to remove felled trees. In addition, helicopters may be used to remove

[5] This objective pertains only to the portion of HNA land that is within a 100-foot perimeter of an existing dwelling structure. Where the 100-foot perimeter around the structure is fully contained within privately owned parcels, the establishment and maintenance of defensible space is the responsibility of the homeowner as legally mandated.

felled trees from areas that are not accessible by road, such as felled eucalyptus trees from Motorcycle Hill.

The recommended actions are designed to minimize fire threats and vulnerabilities, while at the same time protecting the recreational and ecological values that the HNA offers. The recommended actions are based on current fire management standards and best practices to protect and improve ecosystem function, minimize soil erosion, and enhance recreational possibilities. The success of these actions would be enhanced with ongoing maintenance activities after each project is completed. In order to adequately plan for maintenance funding, it is recommended that the City develop a maintenance program which includes the relative costs of each action (e.g. per acre cost to maintain a fuel break).

While the Plan has considered the surrounding area as it relates to threat and vulnerability, recommendations of the Action Plan only pertain to City-owned parcels within the HNA, and its recommendations pertain solely to responsibilities of the various departments of the City of El Cerrito. Homeowners, volunteers, citizen scientists, and other local experts would have the opportunity to interact and engage with the City through the public relations, partnerships, and education component of the Plan.

3.3 PROJECT APPROVALS

While the City is both the proponent and the CEQA Lead Agency for adoption of the Plan and its implementation, other agencies also have discretionary authority related to the project or serve as a responsible and/or trustee agency in connection to the proposed project. A list of these agencies and potential permits and approvals that may be required is provided in Table 3.C.

Table 3.C: Potential Permits and Approvals

Lead Agency	Permits/Approvals
City of El Cerrito	• Environmental Review • Plan Approval
Other Agencies/Entities	
Bay Area Air Quality Management District	• Approval of Smoke Management Plan
California Department of Fish and Wildlife	• Lake or Streambed Alteration Agreement
San Francisco Regional Water Quality Control Board	• Applicable stormwater permits (i.e., NPDES permits) • Water Quality Certification
United States Army Corps of Engineers	• Nationwide Permit or Individual Permit (depending on impacts to waters of the United States)

Source: Compiled by LSA (2025).

Table 3.B: Summary of Management Actions, Priority, Location, and Prescriptions

Action	Priority	Location	Prescription	Lead Department
1: Create Defensible Space (Objective 1.1)	Highest	Within 100 feet of dwelling structures immediately adjacent to the HNA.	Where dwelling structures are closer than 100 feet from the HNA, the City will manage portions of the HNA within this distance to create a defensible space by maintaining vegetation. The City will promote Contra Costa County Measure X as a funding source for private property owners to manage the portions of their properties within this distance.	El Cerrito Fire Department
2: Establish Shaded Fuel Breaks (Objective 1.2)	High	A 100 feet wide shaded fuel break along the entire perimeter of the HNA, beginning at the property boundary (where feasible i.e. the presence of a drainage or other topographic features may prohibit full 100 feet.)	Establish and maintain a shaded fuel break by removing or pruning trees, shrubs, brush, and other vegetative growth. A canopy of large native trees will be maintained where possible. All work will be accomplished by use of hand crews or mechanical equipment; supported by chippers and/or burning as determined appropriate on a case-by-case basis, while conserving native vegetation.	El Cerrito Fire Department El Cerrito Public Works Department
3: Remove Eucalyptus And Non-Native Conifers (Objective 1.3)	High-medium, depending on location and cost	1. The eucalyptus stand at Motorcycle Hill 2. The extensive eucalyptus stand at Quarry Hill 3. Eucalyptus and other non-native trees between Kent Court and Buckingham Drive 4. Non-native invasive trees in the Madera property 5. The Ken Smith eucalyptus grove and potentially along riparian corridors (likely requires permit from CDFW)	Stand removal involves the felling of all standing trees and prevention of resprouting from the stump. Landings are typically needed to sort, store, and chip cut trees into mulch and spread or remove the material. Stump treatments may include herbicides and tarping. Small logs and branches may be burned or chipped. Include follow-up treatments for latent seedling and weed management.	El Cerrito Public Works Department El Cerrito Fire Department

Table 3.B: Summary of Management Actions, Priority, Location, and Prescriptions

Action	Priority	Location	Prescription	Lead Department
4: Manage A Sustainable System Of Fire Roads & Trails (Objective 1.4)	High-medium, depending on location	Improvements to the fire road access at Potrero Avenue and King Court, addition of service access to Motorcycle Hill, conversion of Ken Smith trail into a fire road with turnaround, and improvement of existing roads to enhance emergency equipment response.	Improved fire roads and trails are needed to facilitate implementation of vegetation treatment projects and provide firefighting equipment and personnel access to various parts of the HNA. Existing unimproved surface fire trails will be widened and recontoured where necessary to provide vehicle access to treatment areas as well as for emergency vehicle and maintenance access while preserving native vegetation and preventing weed spread where practicable.	El Cerrito Public Works Department El Cerrito Fire Department
5: Actively Manage Threats To Native Oak Species (Objective 2.1)	High-Medium	Throughout the existing oak woodlands at the HNA.	Sudden oak death (SOD) is present in the HNA but has not reached a high level of infection. Disease monitoring and selective removals is a critical component of this Plan. Conduct complete inventory of all mature oak and bay laurel trees for monitoring the progression of SOD within the HNA. Best management practices include limiting the movement of host material or infested soil.	El Cerrito Public Works Department
6: Remove Invasives (Objective 2.2)	Medium	Throughout the HNA, wherever they are found. Single infestations are targeted first, followed by spot treatments and follow-up maintenance projects.	Remove invasive plants mostly by hand and prevent re-invasion where practicable. Mechanical treatments (grinding, shredding, chipping, mulching, or mowing) of understory shrubs or small trees in some places. Prioritize invasive species removal in healthy native plant communities	El Cerrito Public Works Department
7: Restore And Re-Establish Native	Medium	Prioritize areas where invasive species removals are complete.	Promote passive restoration of plants from the existing native	El Cerrito Public Works Department

Table 3.B: Summary of Management Actions, Priority, Location, and Prescriptions

Action	Priority	Location	Prescription	Lead Department
Species (Objective 2.3)		This includes the removal of eucalyptus and conifer stands at Motorcycle Hill and Quarry Hill, but also shrub and grassland patches throughout the HNA where invasive species have been removed.	seedbank wherever possible. In some cases, active restoration of native plants is necessary following invasive plant control. Active restoration includes the initial reintroduction of the native, site-adapted species (grasses and shrubs). Conserving native grasslands and other Sensitive Natural Communities, enhancing, and expanding them is an important part of achieving this goal.	
8: Monitor Key Performance Indicators (Objectives 3.1 – 3.3)	Medium	Monitoring at the HNA will include the key indicators resiliency, recreation, plan review, and public relations.	Use monitoring to adapt management practices for each of these key indicators: • Fire Behavior: Inspect fuel breaks at the HNA annually. Inspections of defensible space is another metric of the neighborhood's resilience. • Biodiversity: Regularly monitor the HNA for the abundance and presence of key special status species, including monarch butterfly, and monitor native plant communities, weed cover, and wildlife populations as funding allows. • Fire-Adapted Communities: Conduct FlamMap (or equivalent) analysis of fire risk and behavior every 5–10 years as a means to pinpoint areas of deficiencies and target vegetation treatments.	El Cerrito Public Works Department El Cerrito Fire Department

Table 3.B: Summary of Management Actions, Priority, Location, and Prescriptions

Action	Priority	Location	Prescription	Lead Department
			• Trail Monitoring: Inspect all trails at least once per year to evaluate surface conditions. • Plan Review: Provide a review and, if necessary, update to the Plan every 5 years. • Public Relations: Provide multiple avenues for a community engagement and feedback process that allows the community and stakeholders to support and be informed of the City's management of the HNA.	

Source: Hillside Natural Area Fire Resilience and Forest Conservation Management Plan (LSA, December 2024).

4.0 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist in Chapter 5.0.

☐ Aesthetics	☐ Agriculture and Forestry Resources	☐ Air Quality
☐ Biological Resources	☐ Cultural Resources	☐ Energy
☐ Geology/Soils	☐ Greenhouse Gas Emissions	☐ Hazards & Hazardous Materials
☐ Hydrology/Water Quality	☐ Land Use/Planning	☐ Mineral Resources
☐ Noise	☐ Population/Housing	☐ Public Services
☐ Recreation	☐ Transportation	☐ Tribal Cultural Resources
☐ Wildfire	☐ Utilities/Service Systems	☐ Mandatory Findings of Significance

4.1 DETERMINATION

On the basis of this initial evaluation:

☐ I find that the proposed Project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed Project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the Project have been made by or agreed to by the Project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed Project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed Project MAY have a "Potentially Significant Impact" or "Potentially Significant Unless Mitigated" impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed Project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed Project, nothing further is required.

Sean Moss, AICP
Zoning Administrator/Planning Manager

Date

This page intentionally left blank

5.0 ENVIRONMENTAL CHECKLIST

This Environmental Checklist provides an evaluation of the following environmental issue topics according to the thresholds provided in Appendix G of the *State CEQA Guidelines*: air quality, biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, noise, and tribal cultural resources. Due to the project location and nature of the proposed implementation actions of the Plan, these topics have the potential to result in environmental impacts and are therefore fully addressed in this section. As discussed below, all impacts would either be less than significant or less than significant with mitigation.

5.1 AESTHETICS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Except as provided in Public Resources Code Section 21099, would the project:				
a. Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☐	☒
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☒

The proposed project would establish and adopt a comprehensive fire hazard reduction and forest conservation plan that would guide maintenance activities and improve eligibility for grant funding for the HNA. Implementation of the proposed Plan would include some modifications to the HNA, including creating defensible space within 100 feet of residences; establishing shaded fuel breaks; the removal of eucalyptus, non-native conifers and invasive spaces; and the restoration and re-establishment of native species. However, the HNA would be generally maintained similar to existing conditions. Therefore, the overall views of the HNA would not be substantially affected with implementation of the proposed Plan. In addition, the restoration and re-establishment of native species would improve and enhance the visual character of the HNA and the removal of eucalyptus and non-native conifers (i.e., mature trees) would likely improve views of and from the HNA. Further, no officially designated or eligible State Scenic Highways are located near the HNA.[6]

[6] California Department of Transportation (Caltrans). California State Scenic Highway System Map. Website: https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa (accessed December 2024).

Therefore, the proposed Plan does not have the potential to damage resources within a State-designated scenic highway.

Therefore, the proposed project would have **no impact**, either individually or cumulatively, related to aesthetics.

5.2 AGRICULTURE AND FORESTRY RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	☐	☐	☐	☒
d. Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

The HNA and vicinity are located within an urban area of the City that does not currently support agricultural uses. In addition, the California Department of Conservation identifies the HNA as grazing land.[7] Therefore, the project site does not contain prime farmland, unique farmland, or farmland of Statewide importance; forest land; or land under a Williamson Act contract.[8] In addition, the area is not zoned for any agricultural uses.

Therefore, the proposed project would have **no impact**, either individually or cumulatively, on agricultural or forest resources.

7 California Department of Conservation. 2022. California Important Farmland Finder (map). Website: maps.conservation.ca.gov/dlrp/ciff (accessed December 2024).

8 California Department of Conservation. 2023. *California Williamson Act Enrollment Finder*. Website: https://maps.conservation.ca.gov/dlrp/WilliamsonAct/ (accessed December 2024).

5.3 AIR QUALITY

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
f. Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
g. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☐	☒	☐
h. Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
i. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

The project site is within the jurisdiction of the Bay Area Air Quality Management District (BAAQMD), which regulates air quality in the San Francisco Bay Area. Air quality conditions in the San Francisco Bay Area have improved significantly since the BAAQMD was created in 1955. Ambient concentrations of air pollutants and the number of days during which the region exceeds air quality standards have fallen substantially. In Berkeley, and the rest of the air basin, exceedances of air quality standards occur primarily during meteorological conditions conducive to high pollution levels, such as cold, windless winter nights or hot, sunny summer afternoons.

Within the BAAQMD, ambient air quality standards for ozone, carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), particulate matter (particulate matter less than 10 microns in size [PM_{10}], and particulate matter less than 2.5 microns in size [$PM_{2.5}$]), and lead (Pb) have been set by both the State of California and the federal government. The State has also set standards for sulfate and visibility. The BAAQMD is under State non-attainment status for ozone and particulate matter (both PM_{10} and $PM_{2.5}$) standards. The BAAQMD is classified as non-attainment for the federal ozone 8-hour standard and non-attainment for the federal $PM_{2.5}$ 24-hour standard.

*a. Would the project conflict with or obstruct implementation of the applicable air quality plan? **(Less Than Significant Impact)***

The applicable air quality plan is the BAAQMD 2017 Clean Air Plan (Clean Air Plan),[9] which was adopted on April 19, 2017. The Clean Air Plan is a comprehensive plan to improve Bay Area air quality and protect public health. The Clean Air Plan defines control strategies to reduce emissions and ambient concentrations of air pollutants; safeguard public health by reducing exposure to air pollutants that pose the greatest heath risk, with an emphasis on protecting the communities most heavily affected by air pollution; and reduce greenhouse gas emissions to protect the climate.

[9] Bay Area Air Quality Management District (BAAQMD). 2017. *Clean Air Plan*. April 19.

Consistency with the Clean Air Plan can be determined if the project: (1) supports the goals of the Clean Air Plan; (2) includes applicable control measures from the Clean Air Plan; and (3) would not disrupt or hinder implementation of any control measures from the Clean Air Plan. As discussed below, implementation of the proposed Plan would not conflict with or obstruct implementation of the Clean Air Plan, and this impact would be **less than significant.**

Clean Air Plan Goals. The primary goals of the Bay Area Clean Air Plan are to: attain air quality standards; reduce population exposure and protect public health in the Bay Area; and reduce greenhouse gas emissions and protect climate.

The BAAQMD has established significance thresholds for project construction and operational impacts at a level at which the cumulative impact of exceeding these thresholds would have an adverse impact on the region's attainment of air quality standards. The health and hazards thresholds were established to help protect public health. The proposed project would establish and adopt a comprehensive fire hazard reduction and forest conservation plan that would guide maintenance activities and improve eligibility for grant funding for the City's HNA. As discussed below, implementation of the proposed Plan would result in less than significant emissions. Therefore, implementation of the proposed Plan would not conflict with the Clean Air Plan goals.

Clean Air Plan Control Measures. The control strategies of the Clean Air Plan include measures in the following categories: Stationary Source Measures, Transportation Measures, Energy Measures, Building Measures, Agriculture Measures, Natural and Working Lands Measures, Waste Management Measures, Water Measures, and Super-Greenhouse Gas (GHG) Pollutants Measures. The project's compliance with each of these control measures is discussed below. As discussed, implementation of the proposed Plan would not conflict with the Clean Air Plan control measures.

Stationary Source Control Measures. The Stationary Source Control Measures, which are designed to reduce emissions from stationary sources such as metal melting facilities, cement kilns, refineries, and glass furnaces, are incorporated into rules adopted by the BAAQMD and then enforced by BAAQMD permit and inspection programs. Because the proposed project would not include any such stationary sources, the Stationary Source Measures of the Clean Air Plan do not apply to the project.

Transportation Control Measures. The BAAQMD identifies Transportation Control Measures as part of the Clean Air Plan to decrease emissions of criteria pollutants, toxic air contaminants (TACs), and GHGs by reducing demand for motor vehicle travel, promoting efficient vehicles and transit service, decarbonizing transportation fuels, and electrifying motor vehicles and equipment. Implementation of the proposed Plan would not inhibit the ability of residents and employees to use alternative modes of transportation. Therefore, implementation of the proposed Plan would not conflict with Transportation Control Measures.

Energy Control Measures. The Clean Air Plan also includes Energy Control Measures, which are designed to reduce emissions of criteria air pollutants, TACs, and GHGs by decreasing the amount of electricity consumed in the Bay Area, as well as decreasing the carbon intensity of the electricity used by switching to less GHG intensive fuel sources for electricity generation. Because these measures apply to electrical utility providers and local government agencies (and

not to individual projects), the Energy Control Measures of the Clean Air Plan are not directly applicable to the proposed project. However, no new proposed buildings or energy intensive uses are proposed as part of the Plan. All work will would be accomplished by use of hand crews or mechanical equipment; supported by chippers and/or burning as determined appropriate on a case-by-case basis, while conserving native vegetation. Implementation of the proposed Plan would expand and continue to the maintenance activities already occurring at the HNA, and therefore would not result in a substantial increase in energy usage. Therefore, the Energy Control Measures are not applicable to the proposed project.

Building Control Measures. The BAAQMD has authority to regulate emissions from certain sources in buildings such as boilers and water heaters but has limited authority to regulate buildings themselves. Therefore, the strategies in the control measures for this sector focus on working with local governments that do have authority over local building codes, to facilitate adoption of best GHG control practices and policies. Therefore, the Building Control Measures of the Clean Air Plan are not applicable to the proposed project. In addition, implementation of the proposed Plan would not involve the construction of any new buildings.

Agriculture Control Measures. The Agriculture Control Measures are designed to primarily reduce emissions of methane. Since implementation of the proposed Plan does not include any agricultural activities, the Agriculture Control Measures of the Clean Air Plan do not apply to the proposed project.

Natural and Working Lands Control Measures. The Natural and Working Lands Control Measures focus on increasing carbon sequestration on rangelands and wetlands, as well as encouraging local governments to adopt ordinances that promote urban tree plantings. Because implementation of the proposed Plan does not include the disturbance of any rangelands or wetlands, the Natural and Working Lands Control Measures of the Clean Air Plan are not applicable to the proposed project. However, the proposed project would be supportive of forest conservation efforts, which is in-line with the goals of these measures.

Waste Management Control Measures. The Waste Management Measures focus on reducing or capturing methane emissions from landfills and composting facilities, diverting organic materials away from landfills, and increasing waste diversion rates through efforts to reduce, reuse, and recycle. It is anticipated that most of the resulting biomass associated with eucalyptus removal proposed as part of the Plan would be shipped by truck to a power plant. Other removal efforts may include reuse or implementation of a carbonator. The proposed project would comply with local requirements for waste management (e.g., recycling, and composting services). Therefore, the proposed project would be consistent with the Waste Management Control Measures of the Clean Air Plan.

Water Control Measures. The Water Control Measures focus on reducing emissions of criteria pollutants, TACs, and GHGs by encouraging water conservation, limiting GHG emissions from publicly owned treatment works (POTWs), and promoting the use of biogas recovery systems. Since these measures apply to POTWs and local government agencies (and not individual projects), the Water Control Measures are not directly applicable to the proposed project.

Super GHG Control Measures. The Super-GHG Control Measures are designed to facilitate the adoption of best GHG control practices and policies through the BAAQMD and local government agencies. Since these measures do not apply to individual projects, the Super-GHG Control Measures are not applicable to the proposed project.

Clean Air Plan Implementation. As discussed above, implementation of the proposed Plan would not disrupt or hinder implementation of a control measure from the Clean Air Plan, and this impact would be **less than significant.**

b. Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation? ***(Less Than Significant Impact)***

The BAAQMD is currently designated as a non-attainment area for State and national ozone standards and national particulate matter ambient air quality standards. The BAAQMD's non-attainment status is attributed to the region's development history. Past, present, and future development projects contribute to the region's adverse air quality impacts on a cumulative basis. By its very nature, air pollution is largely a cumulative impact. No single project is sufficient in size to, by itself, result in non-attainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project's contribution to the cumulative impact is considerable, then the project's impact on air quality would be considered significant.

In developing thresholds of significance for air pollutants, the BAAQMD considered the emission levels for which a project's individual emissions would be cumulatively considerable. If a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions. The following analysis assesses the potential project-level air quality impacts and CO impacts associated with implementation of the Plan.

During implementation of the proposed Plan, short-term degradation of air quality may occur due to the release of particulate matter emissions (i.e., fugitive dust) generated by activities that require the use of mechanical equipment. Emissions from equipment are also anticipated and would include CO, nitrogen oxide (NO_x), reactive organic gases (ROG), directly emitted particulate matter ($PM_{2.5}$ and PM_{10}), and TACs such as diesel exhaust particulate matter.

Effects on air quality from implementation of the proposed Plan would be greatest during vegetation removal due to the disturbance of soils. If not properly controlled, these activities would temporarily generate particulate emissions. Sources of fugitive dust would include disturbed soils at the HNA. Unless properly controlled, vehicles leaving the site would deposit dirt and mud on local streets, which could be an additional source of airborne dust after it dries. PM_{10} emissions would vary from day to day, depending on the nature and magnitude of construction activity and local weather conditions. PM_{10} emissions would depend on soil moisture, silt content of soil, wind speed, and the amount of operating equipment. Larger dust particles would settle near the source, while fine particles would be dispersed over greater distances from the construction site. However, vegetation removal activities would be relatively minimal and would be temporary. Therefore, these impacts would be less than significant. Furthermore, the proposed project would be in compliance

with BAAQMD regulations related to fugitive dust emissions, further reducing the potential impact related to particulate matter emissions.

In addition to dust-related PM_{10} emissions, equipment powered by gasoline and diesel engines would generate CO, SO_2, NO_x, ROGs and some soot particulate ($PM_{2.5}$ and PM_{10}) in exhaust emissions. These emissions would be temporary and limited to the immediate area surrounding the areas of vegetation removal.

Long-term air pollutant emission impacts are also those associated with mobile sources (e.g., vehicle trips) and energy sources (e.g., natural gas) related to implementation of the proposed Plan. It is anticipated that most of the resulting biomass associated with eucalyptus removal proposed as part of the Plan would be shipped by truck to a power plant or other methods as mentioned above. However, eucalyptus removal activities would be temporary, and these truck trips would terminate as removal is completed. Therefore, even with these temporary truck trips, implementation of the proposed Plan would not substantially increase the number of vehicle trips to and from the HNA or include new energy intensive uses, no other long-term air pollutant emission impacts are anticipated.

Therefore, implementation of the proposed Plan would not result in a cumulatively considerable net increase of any criteria pollutant for which the project is in non-attainment under applicable federal or State ambient air quality standards. Impacts would be **less than significant**.

Localized CO Impacts. Emissions and ambient concentrations of CO have decreased dramatically in the Bay Area with the introduction of the catalytic converter in 1975. No exceedances of the State or federal CO standards have been recorded at Bay Area monitoring stations since 1991. The BAAQMD's 2022 CEQA Guidelines include recommended methodologies for quantifying concentrations of localized CO levels for proposed development projects. A screening level analysis using guidance from the BAAQMD CEQA Guidelines was performed to determine the impacts of the project. The screening methodology provides a conservative indication of whether the implementation of a project would result in significant CO emissions. According to the BAAQMD's 2022 CEQA Guidelines, a project would result in a less than significant impact to localized CO concentrations if the following screening criteria are met:

- The project is consistent with an applicable congestion management program established by the county congestion management agency for designated roads or highways, and the regional transportation plan and local congestion management agency plans.

- Project traffic would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour.

- The project would not increase traffic volumes at affected intersections to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage, bridge underpass, natural or urban street canyon, or below-grade roadway).

Implementation of the proposed Plan would not conflict with standards established by the Alameda County Transportation Commission (ACTC). As discussed above, implementation of the proposed

Plan would not substantially increase the number of vehicle trips to and from the HNA. The project's contribution to peak-hour traffic volumes at intersections in the vicinity of the project site would be well below 44,000 vehicles per hour. Similarly, the project would not increase traffic volumes at affected intersections to more than 24,000 vehicles such that vertical and/or horizontal mixing would be substantially limited. As such, implementation of the proposed Plan would not result in localized CO concentrations that exceed State or federal standards, and impacts would be **less than significant**.

c. Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non- attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)? ***(Less Than Significant Impact)***

Sensitive receptors are defined as residential uses, schools, daycare centers, nursing homes, and medical centers. Individuals particularly vulnerable to diesel particulate matter are children, whose lung tissue is still developing, and the elderly, who may have serious health problems that can be aggravated by exposure to diesel particulate matter. Exposure from diesel exhaust associated with construction activity contributes to both cancer and chronic non-cancer health risks.

According to the BAAQMD, a project would result in a significant impact if it would: individually expose sensitive receptors to TACs resulting in an increased cancer risk greater than 10.0 in one million, an increased non-cancer risk of greater than 1.0 on the hazard index (chronic or acute), or an annual average ambient $PM_{2.5}$ increase greater than 0.3 micrograms per cubic meter ($\mu g/m^3$). A significant cumulative impact would occur if the project, in combination with other projects located within a 1,000-foot radius of the project site, would expose sensitive receptors to TACs resulting in an increased cancer risk greater than 100.0 in one million, an increased non-cancer risk of greater than 10.0 on the hazard index (chronic), or an ambient $PM_{2.5}$ increase greater than 0.8 $\mu g/m^3$ on an annual average basis. Impacts from substantial pollutant concentrations are discussed below.

The HNA is generally surrounded by urban development, including existing residential and school uses that could be exposed to diesel emission exhaust during the vegetation removal activities. However, these activities would be minimal and temporary and are not anticipated to exceed BAAQMD thresholds. Therefore, sensitive receptors would not be exposed to substantial pollutant concentrations and potential impacts would be **less than significant**.

d. Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people? ***(Less Than Significant Impact)***

During implementation of the proposed Plan, some odors may be present due to diesel exhaust. However, these odors would be temporary and localized. Because the project's potential odor impacts are localized and temporary, they would not adversely affect a substantial number of people and would not result in frequent odor complaints. Implementation of the proposed Plan would not include any activities or operations that would generate objectionable odors as may be more commonly observed with wastewater treatment, landfills and composters, heavy manufacturers and food processors, and, once operational, the project would not be a source of odors. Therefore, implementation of the proposed Plan would not result in other emissions (such as

those leading to odors) adversely affecting a substantial number of people. Impacts would be **less than significant**.

5.4 BIOLOGICAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☒	☐	☐
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☒	☐	☐
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☒	☐	☐
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

The information and analysis in this section is based, in part, on the Biological Resources Assessment prepared for the HNA (**Appendix A**).[10]

The project site consists of the 107.18-acre HNA and is divided into three sections: HNA North (24.22 acres), Madera Property (9.53 acres) and HNA South (73.43 acres). Elevations ranges from approximately 150 and 650 feet above sea level. The project site is characterized by steep hillslopes with predominantly western and southern exposures. Several stream/drainage channels are present in the HNA and flow in the southwest direction into culverts beneath the adjacent residential area to the southwest. Some of the drainages occur within concrete v-ditches and become natural stream channels further downstream within the HNA. Streams/drainages are likely to be considered jurisdictional features by the U.S. Army Corps of Engineers (USACE) and Regional Water Quality Control Board (RWQCB) and subject to regulation under Section 404 and 401 of the Clean Water Act and/or the California Porter Cologne Water Quality Control Act.

[10] LSA. 2024. Biological Resources Assessment, Hillside Natural Area Fire Resilience and Forest Conservation Management Plan, El Cerrito, California. November 2024. (Appendix A).

Vegetation in the HNA is characterized by native and non-native grassland, riparian scrub and woodland, oak woodland, and other scrub and "soft" chaparral, in addition to extensive introduced landscaping and naturalized non-native species such as eucalyptus and pine. There are 6 major vegetation cover types within the HNA, as described in Section 3.1.2, Existing Conditions, above and depicted in Figure 3-3.

Several common wildlife species inhabit the project site. Most of the bird species observed were foraging in the oak woodland and scrub habitats. A few birds, such as turkey vulture (*Cathartes aura*), red-tailed hawk (*Buteo jamaicensis*), American crow (*Corvus brachyrhynchos*), and common raven (*C. corax*) were observed flying over the project site. No active bird nests were identified during the reconnaissance-level field surveys, which were conducted in the late summer and early fall of 2023, but a few inactive stick nests were found in the onsite trees. Numerous resident birds were observed foraging at the project site, suggesting that they likely nested on or near the project site. Non-native fox squirrel (*Sciurus niger*) nests were also observed in the oak trees. Foraging black-tailed deer (*Odocoileus hemionus*) and Botta's pocket gopher (*Thomomys bottae*) burrows were observed in the non-native grasslands.

a. Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? ***(Less Than Significant with Mitigation Incorporated)***

Special-status species are defined as follows:

- Species that are listed, formally proposed for listing, or designated as candidates for listing as threatened or endangered under the federal Endangered Species Act (ESA);
- Species that are listed, or designated as candidates for listing, as rare, threatened, or endangered under the California Endangered Species Act (CESA);
- Plant species on California Rare Plant Rank (CRPR) Lists 1A, 1B, and 2 in the California Native Plant Society's (CNPS) Inventory of Rare and Endangered Plants;
- Animal species designated as Species of Special Concern or Fully Protected by the California Department of Fish and Wildlife (CDFW);
- Species that meet the definition of rare, threatened, or endangered under Section 15380 of the *State CEQA Guidelines*; and
- Species considered being a taxon of special concern by the relevant local agencies.

To identify special-status plant and wildlife species known to occur or potentially occurring in the project site vicinity, the following resources were reviewed: Friends of Five Creek's Native Plants of the El Cerrito Hillside Natural Area, the El Cerrito Hillside Natural Area Vegetation Management

Plan,[11] Biological Resources Report for the Madera Property Fuel Reduction Project,[12] California Department of Fish and Wildlife's California Natural Diversity Database (CNDDB), United States Fish and Wildlife Service's (USFWS) Information for Planning and Consultation online system, California Native Plant Society's (CNPS) Inventory of Rare Plants, and eBird's online system for the occurrence of special-status plant and/or wildlife species on or near the project site.

In addition, a biologist conducted biological field surveys at the project site on August 11, September 27, and October 3, 2023. Surveys involved walking throughout the project site to search for biological resources, such as the presence of special-status plants, wildlife, and their habitats, and sensitive habitats, such as wetlands and drainage channels. The potential presence of special-status species was based on an evaluation of the habitat types present on the site and the CNDDB records and other occurrence information from the vicinity of the site. During the field survey, the biologist also investigated the presence of waters of the United States/waters of the State (including wetlands and drainages).

Based on the results of the database search and literature review, 10 special-status plant species and 31 special-status wildlife species have been documented in the vicinity of the project site. Table 5.2.A summarizes the potential for occurrence for each special-status plant and wildlife species occurring in the vicinity of the project site.

Table 5.2.A: Special-Status Species Evaluated for the Project

Species	Status (Federal/ State/CRPR)	Habitat	Potential for Occurrence[a]
Plants			
Amsinckia lunaris Bent-flowered fiddleneck	1B	Occurs in coastal bluff scrub, cismontane woodland, valley and foothill grassland, openings. Elevation: 3-500 m. Blooms: March-June	Although suitable habitat is present, the potential for this species to occur is low due to the density of invasive plants. Nearest occurrence is near San Pablo Ridge approximately 2.4 miles from the project site.
Arctostaphylos pallida Pallid manzanita	FT/CE/1B	Broadleaved upland forest, close coned coniferous forest, cismontane woodland, coastal scrub, and chaparral. Grows on siliceous shale, sandy, or gravelly substrates in uplifted marine terraces. Elevation: 185-465 m. Blooms: December-March	Although woodland habitat is present, suitable substrates are absent. Nearest CNDDB occurrence is in Sobrante Ridge Regional Preserve approximately 3.0 miles from the project site.

11 LSA Associates, Inc. (LSA). 1987. El Cerrito Hillside Natural Area Vegetation Management Plan. Prepared for the City of El Cerrito.

12 LSA Associates, Inc. (LSA). 2014. Biological Resources Report for the Madera Property Fuel Reduction Project, El Cerrito, Contra Costa County, CA.

Table 5.2.A: Special-Status Species Evaluated for the Project

Species	Status (Federal/ State/CRPR)	Habitat	Potential for Occurrence[a]
Astragalus tener var. tener Alkali milk-vetch	1B	Playas and vernal-pools in freshwater wetlands, alkali sink, valley grassland, wetland-riparian. Elevation: 0-90 m. Blooms: March-June	No suitable habitat present. The closest CNDDB occurrence is a possibly extirpated 1900 record from an unknown location near the Stege Marsh in Richmond.
Cirsium andrewsii Franciscan thistle	1B	Northern coastal scrub, mixed evergreen forest, wetland-riparian. Elevation: 0-160 m. Blooms: March-July	Although woodland habitat is present, the potential for this species to occur is low due to the density of invasive plants. The closest CNDDB occurrence is near Tilden Regional Park approximately 3.3 miles from the project site.
Dirca occidentalis Western leatherwood	1B	Broad-leafed upland forest, chaparral, closed-cone coniferous forest, cismontane woodland, north coast coniferous forest, riparian forest, and riparian woodland on brushy slopes, mesic sites. Elevation: 30-395 m. Blooms: January-March	Suitable woodland habitat present. The closest CNDDB occurrence is from an unknown location in Wildcat Canyon Regional Park approximately 0.4 mile from the project site.
Fritillaria liliacea Fragrant fritillary	1B	Northern coastal scrub, coastal prairie, valley grassland, wetland-riparian. Elevation: 0-360 m. Blooms: February-April	Although woodland habitat is present, the potential for this species to occur is low due to the density of invasive plants. The closest CNDDB occurrence is a possibly extirpated 1938 record from an unknown location near the Mira Vista Country Club, near the north end of Wildcat Canyon Regional Park.
Gilia millefoliata Dark-eyed gilia	1B	Coastal strand. Elevation: 0-30 m. Blooms: April-July	No suitable habitat present. The closest CNDDB occurrence is from an 1863 record at unknown location in Oakland estimated at approximately 3.6 miles from the project site.
Helianthella castanea Diablo helianthela	1B	Broadleaved upland forest, chaparral, cismontane woodland, coastal scrub, riparian woodland, valley and foothill grassland, usually within rocky azonal soils. Elevation: 60–300 m. Blooms: April-June.	Suitable habitat present within the woodland and scrub habitat, but species likely not to occur due to prior disturbance and the introduction of invasive species. The closest CNDDB occurrence is from a presumed extant population near the San Pablo Reservoir approximately 2.2 miles from the project site.

Table 5.2.A: Special-Status Species Evaluated for the Project

Species	Status (Federal/ State/CRPR)	Habitat	Potential for Occurrence[a]
Loma Prieta hoita *Hoita strobilina*	1B	Chaparral, cismontane woodland, and riparian woodland on mesic serpentine sites. Elevation: 30-860 m. Blooms: May- October	Although woodland is present, serpentine is absent from the project site. The closest CNDDB occurrence is from a presumed extant population in El Sobrante approximately 2.0 miles from the project site.
Santa Cruz tarplant *Holocarpa macradenia*	FT/CE/1B	Occurs in sandy-clay soil in coastal prairie, coastal scrub, and in valley and foothill grassland. Elevation: 10-220 m. Blooms: June-October	Although valley and foothill grassland is present, this species is known to occur on sandy soils, which are absent from the project site. All extant populations of this plant have been reintroduced. The closest CNDDB occurrences are northeast of the project site in Wildcat Canyon Regional Preserve approximately 0.7 mile from the project site.
Insects			
Monarch butterfly *Danaus plexippus*	FC/Sensitive Winter Roosting Sites	Winter roosts along the coast from northern Mendocino to Baja California, Mexico in wind-protected tree groves (eucalyptus, Monterey pine, cypress) with nectar and water sources nearby. Uses milkweed (*Asclepias* spp.) as host plants.	Suitable sheltered groves of trees present, but project site is likely located at too high of an elevation to provide suitable roost sites. Suitable breeding habitat present in onsite patches of milkweed; milkweed has been recorded on the project site (Xerces et al. 2023). Suitable nectar plants present. Individual monarch butterflies observed flying through project site during the October field survey. Closest CNDDB occurrence of an overwintering roost is at the University of California Richmond Field Station, approximately 1.2 miles from the project site.
Crotch's bumble bee *Bombus crotchii*	–/ Candidate CE	Open grassland and scrub habitats supporting flowering plants, such as *Asclepias* sp., *Chaenactis* sp., *Lupinus* sp., *Medicago* sp., *Phacelia* sp., and *Salvia* sp.	Suitable habitat present. Closest CNDDB occurrence is a 1933 and 2015 record from Berkeley, approximately 2.4 miles from the project site.
Western bumble bee *Bombus occidentalis*	–/ Candidate CE	Variety of habitat types, supporting native flowering plants. Species has declined precipitously perhaps from disease.	Suitable habitat present. Closest CNDDB occurrence is a 1992 record from Berkeley Richmond Field Station, in Richmond, approximately 1.2 miles from the site.
Fish			
Steelhead (central California coast Distinct Population Segment) *Oncorhynchus mykiss*	FT/CSC	Pacific Ocean, San Francisco estuary, Sacramento and San Joaquin Rivers and tributaries.	No suitable habitat present. Onsite stream and drainages do not provide suitable habitat. No CNDDB occurrences within 5 miles of the project site.

Table 5.2.A: Special-Status Species Evaluated for the Project

Species	Status (Federal/ State/CRPR)	Habitat	Potential for Occurrence[a]
Amphibians			
California tiger salamander *Ambystoma californiense*	FT/CT	Breeds in vernal pools, ponds, and stock ponds. Spends summer and early Fall in uplands surrounding breeding sites, taking refuge in small mammal burrows or other underground cover.	Although suitable upland habitat is present in grasslands, no suitable breeding habitat present at or near the site. No CNDDB occurrences within 5 miles of the project site.
California red-legged frog *Rana draytonii*	FT/CSC	Found in lowlands and foothills in or near permanent ponds and streams with dense, shrubby, or emergent riparian vegetation.	Suitable non-breeding aquatic, upland, and dispersal habitat present in onsite streams, but species not known to occur at or near the project site (CDFW 2023). The closest extant CNDDB occurrence is from near the San Pablo Dam approximately 2.2 miles from the project site. The CNDDB also includes a 1956 record approximately 1.5 miles from the project site at Jewell Lake in Tilden Regional Park in Berkeley, but due to the presence of introduced predators, such as bullfrogs and fish, this occurrence is likely extirpated.
Foothill yellow-legged frog Central Coast Distinct Population Segment *Rana boylii*	FT/CE	Partly shaded, shallow streams and riffles with a rocky substrate.	No suitable habitat present. No extant CNDDB occurrences recorded within 5 miles of the project site.
Reptiles			
Northwestern pond turtle *Emys marmorata*	FC/CSC	Ponds, marshes, rivers, streams, and irrigation ditches with aquatic vegetation. Requires basking sites and adjacent grasslands or other open habitat for egg-laying.	Suitable aquatic habitat present in onsite streams, but lack of deep plunge pools and high-quality basking sites likely precludes the species from occurring The closest CNDDB occurrence is from Jewell Lake in Tilden Regional Park approximately 1.5 miles from the project site.
Alameda whipsnake *Masticophis lateralis euryxanthusi*	FT/CT	Chaparral and rock outcrops. Also occurs in riparian woodland, forests, and grasslands where chaparral and rocky outcrops are present nearby.	Suitable habitat present. The closest CNDDB occurrence is approximately 1.6 miles from the project site.
Birds			
American white pelican *Pelecanus erythrorhynchos*	–/CSC	Occurs in shallow inland and coastal marine habitats, marshes, lakes, and rivers.	No suitable habitat present. Species does not breed in the project area but may fly over the project site. Species observed at the project site (eBird 2023). Species not tracked in the CNDDB.

Table 5.2.A: Special-Status Species Evaluated for the Project

Species	Status (Federal/ State/CRPR)	Habitat	Potential for Occurrence[a]
Long-eared owl *Asio otus*	–/CSC	Woodlands and forests that are open or adjacent to grasslands, meadows, or shrublands.	Suitable nesting habitat present in trees on or adjacent to the site. No CNDDB occurrences within 5 miles of the site.
Short-eared owl *Asio flammeus*	–/CSC	Open grasslands, meadows, and marshes with few trees. Requires dense ground vegetation for both roosting and nesting.	Suitable habitat present. Wintering/migrating individuals observed in Point Pinole Regional Park (eBird 2023). No CNDDB occurrences within 5 miles of the site.
Burrowing owl *Athene cunicularia*	–/CSC	Nests in burrows in grasslands and woodlands; often associated with ground squirrels. Will also nest in artificial structures (culverts, concrete debris piles, etc.)	Suitable habitat present, but not known to nest in the project area. During the time of the field surveys, no ground squirrel burrows were observed and the grass within the grassland was too tall for burrowing owl burrows. Species is known to winter along the San Francisco Bay shoreline in Richmond, Albany, and Berkeley. Closest CNDDB occurrences is in Richmond, approximately 1.5 miles from the project site.
White-tailed kite *Elanus leucurus*	–/CFP	Nests in shrubs and trees in open areas and forages in adjacent grasslands and agricultural land.	May nest and forage on the project site. Species observed at the project site. Closest CNDDB occurrences is approximately 3.2 miles from the project site.
Northern harrier *Circus hudsonius*	–/CSC	Nests and forages in meadows, grasslands, open rangeland, and fresh or saltwater marshes.	Suitable nesting and foraging habitat present. The closest CNDDB occurrence is from the Berkeley Meadow near the Berkeley Marina approximately 3.2 miles from the project site.
Golden eagle *Aquila chrysaetos*	–/CFP	Forages in rolling foothill or coast-range terrain, with open grassland and scattered large trees. Nests in large trees, on cliffs, and occasionally on power line poles.	Suitable nesting and foraging habitat present. No CNDDB occurrences recorded within 5 miles of the project site.
Bald eagle *Haliaeetus leucocephalus*	Delisted/CE; CFP	Winters at lakes, reservoirs, river systems, and some rangelands and coastal wetlands throughout most of California. Breeds in mountainous habitats near reservoirs, lakes and rivers, mainly in the northern two-thirds of the State, in the Central Coast Range, and on Santa Catalina Island. Nests generally built in the upper canopy of large trees.	No suitable habitat present, but species could fly over the project site. The closest CNDDB occurrence is approximately 3.2 miles from the project site.

Table 5.2.A: Special-Status Species Evaluated for the Project

Species	Status (Federal/ State/CRPR)	Habitat	Potential for Occurrence[a]
American peregrine falcon *Falco peregrinus anatum*	Delisted/ Delisted/ CFP	Forages in open country, mountains, and seacoasts. Nests on high cliffs, bridges, and buildings.	No suitable nesting habitat present, but grasslands provide suitable foraging habitat.
Loggerhead shrike *Lanius ludovicianus*	–/CSC	Found in grasslands and open shrub or woodland communities. Nests in dense shrubs or trees and forages in scrub, open woodlands, grasslands, and croplands. Frequently uses fences, posts, and utility lines as hunting perches.	Suitable nesting and foraging habitat present, but species is rare in the project vicinity. No CNDDB occurrences recorded within 5 miles of the project site.
Vaux's swift *Chaetura vauxi*	–/CSC	Grasslands and agricultural fields; nests in dense vegetation in large hollow trees near open water; forages in most habitats but prefers rivers and lakes.	Suitable nesting and foraging habitat present. Species observed at the project site. Species not tracked in the CNDDB.
Olive-sided flycatcher *Contopus cooperi*	–/CSC	Coniferous forests with open canopies.	Suitable nesting and foraging habitat present. Species observed at the project site. Species not tracked in the CNDDB.
Purple martin *Progne subis*	–/CSC	Occurs in woodlands; nests in tree snags and abandoned woodpecker cavities and human-made structures.	Suitable nesting habitat present, but species is rare in the County. No CNDDB occurrences within 5 miles of the project site.
Grasshopper sparrow *Ammodramus savannarum*	–/CSC	Occurs in grasslands with coyote brush and other shrubs.	Suitable nesting and foraging habitat present. Species not tracked in the CNDDB.
Tricolored blackbird *Agelaius tricolor*	–/CT, CSC	Nests in dense vegetation near open water, forages in grasslands and agricultural fields.	No suitable nesting habitat present, but site provides suitable foraging habitat. No CNDDB occurrences within 5 miles of the project site.
Yellow warbler *Dendroica petechia*	–/CSC	Nests in extensive willow riparian woodlands.	Suitable nesting and foraging habitat present, but species is a rare breeder in the County. May forage on the site during migration. Species observed during migration at the project site. No CNDDB occurrences within 5 miles.
Mammals			
Townsend's big-eared bat *Corynorhinus townsendii*	–/CSC	Found in wooded areas with caves or old buildings for roost sites.	No suitable roosting, hibernating habitat present, but could forage over the project site. The closest CNDDB occurrence is from Strawberry Canyon approximately 3.4 miles from the project site.

Table 5.2.A: Special-Status Species Evaluated for the Project

Species	Status (Federal/ State/CRPR)	Habitat	Potential for Occurrence[a]
Pallid bat *Antrozous pallidus*	–/CSC	Occupies a wide variety of habitats at low elevations. Most commonly found in open, dry habitats with rocky areas for roosting.	Suitable roosting, hibernating, or foraging habitat present. The closest CNDDB occurrence is a 1943 record from an unknown location in El Cerrito.
Western red bat *Lasiurus blossevillii*	–/CSC	Often roosts and forages on or near riparian habitat. Roosts primarily in trees, 2-40 feet above ground, from sea level up through mixed conifer forests. Prefers habitat edges and mosaics with trees that are protected from above and open below with open areas for foraging.	Suitable roosting habitat present in trees and foraging habitat present. Species does not breed in the project area. No CNDDB occurrences recorded within 5 miles of the project site. Species observed near Jewell Lake in Tilden Regional Park in Berkeley.
Big free-tailed bat *Nyctinomops macrotis*	–/CSC	Typically in deserts and arid grasslands where rocky outcrops, canyons, or cliffs occur for roosting. Occasionally roosts in buildings, caves, and tree cavities.	No suitable habitat present. The closest CNDDB occurrence is a 1916 record from an unknown location in Berkeley estimated at approximately 2.4 miles from the project site.
San Francisco dusky-footed woodrat *Neotoma fuscipes annectens*	–/CSC	Primarily along riparian areas within chaparral and woodlands. Feeds mainly on woody plants but also eats acorns, grasses, and fungi. Builds conspicuous stick houses in trees and on the ground.	Suitable habitat and species present within the riparian woodland, scrub, and trees on and adjacent to the site. Woodrat houses observed during the field surveys. The closest CNDDB occurrence is approximately 4.2 miles from the project site.
American badger *Taxidea taxus*	–/CSC	Grassland, scrub, and woodland with loose-textured soils.	Suitable grassland habitat present, but site's proximity to residential development and isolation from large open space area likely preclude this species. No CNDDB occurrences within 5 miles.

Sources: LSA 2023 (CDFW 2023; eBIRD 2023; Glover 2009; Xerces et al. 2023).
Status Codes:

FT = Federal threatened.
FC = Federal candidate.
CE = California endangered.
CT = California threatened.
CFP = California fully protected.
CSC = California Species of Special Concern.
List 1B = California Rare Plant Rank (CRPR) List 1B: plant considered rare, threatened, or endangered in California and elsewhere.
– = No status
[a] Nearest records are based on CNDDB (CDFW 2023) occurrences unless otherwise noted.

None of the special-status plant species are likely to occur within the majority of project site due to: (1) prior disturbance in the project area; (2) the introduction of non-native plant species; and (3) the absence of suitable habitat and substrates such as wetlands and serpentine substrates. Less disturbed areas on the project site, such as the oak woodland, riparian woodland, scrub, and native grasslands, may provide suitable habitat for special-status plant species. Implementation of the Plan would include vegetation removal, trail widening and construction, and other activities that could result in the direct removal of special-status plant species, if present during fuel reduction treatment activities. Implementation of **Mitigation Measure BIO-1**, which requires that protocol-level plant surveys be conducted where suitable habitat is present and adequate buffer areas be established if special-status plant species are identified, would reduce potential impacts to special-status plant species to **less than significant.**

Mitigation Measure BIO-1

Protocol-Level Plant Surveys. If fuel reduction treatments are proposed within the native grasslands, riparian woodland, drainage channels, or the less disturbed portions of the oak woodland and scrub habitat), focused plant surveys for sensitive native local plants and special-status plants should be conducted according to CDFW's *Protocols for Surveying and Evaluating Impacts to Special Status Plant Populations and Natural Communities* by a qualified biologist. If special-status plant species or sensitive native local plant communities are identified within the project work limits by a qualified biologist, then a qualified biologist shall establish an adequate buffer area for each plant population and/or sensitive natural community to exclude activities that directly remove or alter the habitat of, or result in indirect adverse impacts on, the special-status plant species or sensitive natural community. Buffer areas shall be marked with temporary fencing or other barriers at the boundary of the disturbance. A qualified biologist shall oversee installation of a temporary, plastic mesh-type construction fence (Tensor Polygrid or equivalent) at least 4 feet (1.2 meters) tall around any established buffer areas to prevent encroachment by construction vehicles and personnel. The qualified biologist shall determine the exact location of the fencing. The fencing shall be strung tightly on posts set at maximum intervals of 10 feet (3 meters) and shall be checked and maintained weekly until all construction is complete.

Recommended buffer distances to minimize and avoid potential adverse impacts to listed plants or sensitive natural communities from activities are as follows:

- *Cutting and Removing Vegetation by Hand or Hand Tools (e.g., weeding):* 3-foot (1 meter) buffer.

- *Mechanical Removal of Individual Plants or Woody Vegetation (e.g., chainsaw, weed eater):* 3-foot buffer or up to height of removed vegetation (whichever is greater).
- *Removal of Vegetation with Heavy Equipment (e.g., bulldozer, tractor, "bush hog"):* 2 times the width of the equipment plus the height of vegetation.

With implementation of **Mitigation Measure BIO-1**, this impact would be **less than significant with mitigation incorporated**.

Special-status animal species that are known to occur in the vicinity of the project site and for which suitable habitat is present include the following:

- Monarch butterfly (*Danaus plexippus*; Federal Candidate)
- Crotch's bumble bee (*Bombus crotchii*; State Candidate Endangered)
- Western bumble bee (*Bombus occidentalis*; State Candidate Endangered)
- Alameda whipsnake (*Masticophis lateralis*; Federal and State Threatened)
- California red-legged frog (*Rana draytonii*; Federal Threatened, California Species of Special Concern)
- Northwestern pond turtle (*Emys marmorata*; Federal Candidate, California Species of Special Concern)
- American white pelican (*Pelecanus erythrorhynchos*; California Species of Special Concern)
- Burrowing owl (*Athene cunicularia*; California Species of Special Concern)
- Long-eared owl (*Asio otus*; California Species of Special Concern)
- Short-eared owl (*Asio flammeus*; California Species of Special Concern)
- White-tailed kite (*Elanus leucurus*; California Fully Protected)
- Northern harrier (*Circus hudsonius*; California Species of Special Concern)
- Golden eagle (*Aquila chrysaetos*; California Fully Protected)
- Bald eagle (*Haliaeetus leucocephalus*; State Endangered, California Fully Protected)
- American peregrine falcon (*Falco peregrinus anatum*; California Fully Protected)
- Loggerhead shrike (*Lanius ludovicianus*; California Species of Special Concern)
- Vaux's swift (*Chaetura vauxi*; California Species of Special Concern)
- Olive-sided flycatcher (*Contopus cooperi*; California Species of Special Concern)
- Purple martin (*Progne subis*; California Species of Special Concern)
- Grasshopper sparrow (*Ammodramus savannarum*; California Species of Special Concern)

- Tricolored blackbird (*Agelaius tricolor*; State Threatened, California Species of Special Concern)
- Yellow warbler (*Dendroica petechia*; California Species of Special Concern)
- Townsend's western big-eared bat (*Corynorhinus townsendii*; California Species of Special Concern)
- Pallid bat (*Antrozous pallidus*; California Species of Special Concern)
- Western red bat (*Lasiurus frantzii*; California Species of Special Concern)
- San Francisco dusky-footed woodrat (*Neotoma fuscipes annectens*; California Species of Special Concern)
- American badger (*Taxidea taxus*; California Species of Special Concern)

Special-status wildlife species could be impacted both directly and indirectly during ongoing maintenance activities associated with implementation of the proposed Plan. The potential for protected resources to be impacted by maintenance activities associated with implementation of the proposed Plan are a function of the likelihood the species is present when the project activity occurs, as well as the type and duration of activities. Another factor is the sensitivity of the species or resource to disturbance. For example, a roosting bat may not react to activities near its roost during the day, whereas a raptor may abandon its nest if activities occur within 100 feet from the nest. Special-status wildlife species that are known to occur at the project site or have been documented in the vicinity of the project site, are discussed below.

Monarch Butterfly. The monarch butterfly is a federal candidate listed species that could breed within the project site. This species utilizes other flowering species for nectaring during the breeding season. Although no milkweed was observed during the reconnaissance-level field surveys and milkweed is not listed in the Friends of Five Creek plant list, milkweed has been recorded at the HNA by the Western Monarch Milkweed Tracker. Therefore, monarch butterflies could breed within the HNA. In addition, individual monarch butterflies were observed flying through the project site during the October 3, 2023, field survey. However, the project site is not known to support wintering monarch butterflies, and therefore, winter roosts (which are considered sensitive habitat by CDFW) would likely not be impacted by fuel reduction activities.While it is possible that milkweed plants could be used by breeding monarchs, related impacts would be minimal because of the large area of open space that would be maintained relative to project-related habitat alteration, and because winter roosts would not be disturbed. In addition, **Mitigation Measures BIO-2a** and **BIO-2b** would further reduce potential impacts to monarch butterflies by requiring field surveys for milkweed prior to fuel treatment activities and detailing restrictions for vegetation control activities that may occur during the monarch breeding season in areas containing milkweed and nectar plants.

Mitigation Measure BIO-2a **Milkweed Field Surveys.** Prior to fuel treatment activities, appropriately timed field surveys (generally June through September) shall be conducted by a qualified biologist to identify, map, and estimate (a) stand sizes, densities, and number and species of milkweed (Asclepias spp. and others); (b) number and

species of adult nectar plants in the entire project site; and (c) record any observations of monarch activity.

Mitigation Measure BIO-2b

Vegetation Control Activities During Monarch Breeding Season. Vegetation control activities may occur between December 1 and March 14 without special restrictions. From March 15 to November 30 restrictions for vegetation control practices (e.g., ground disturbance, tree removal, mowing, grazing, herbicide application, or hand removal) during the monarch breeding season in areas containing milkweed and nectar plants shall apply. During the monarch breeding season from March 15-November 30, the City and its contractors may conduct vegetation control activities and other management actions provided that:

- Site specific buffers shall be established by a qualified biologist around patches of milkweed and associated nectar plants where no vegetation control may occur.
- If milkweed and associated nectar plants cannot be avoided, a qualified biologist shall complete pre-activity surveys. If no monarch breeding activity is identified, Contractors may proceed with vegetation control activities subject to conditions below. If monarch breeding activity is identified, the milkweed stand shall be avoided until a qualified biologist implements a salvage and relocation plan that has been reviewed and approved by the applicable Resource Agency.
- Unoccupied growing milkweed shall be avoided by a minimum of 2 feet during the application of herbicides (target spray, cut stump, wiping and wicking). Herbicide application within 125 feet of a milkweed plant shall be conducted with a low-pressure backpack sprayer to reduce the risk of drift.
- No broad-spectrum herbicide application shall take place within 125 feet of occupied monarch habitat when wind speeds exceed 10 mph, or temperatures exceed 85°F to minimize potential for drift and volatilization.
- No persistent or pre-emergent herbicides shall be used within 125 feet of milkweed or other occupied monarch habitats.
- No prescribed fire treatment shall occur within 125 feet of habitat occupied by monarchs during the active monarch season.

- Mowing shall not be conducted within 125 feet of active monarch breeding habitat (adults or larvae) during the breeding season March 15-November 30. Mowing projects affecting nectar plants any time of year within 125 feet of active monarch habitat shall only be conducted when temperatures are above 55 degrees on a sunny day and 60 degrees on cloudy days to avoid injuring adult monarchs.

- If mowing occurs from March to June near areas where breeding occurs, mowing height shall be set to a minimum of 10-12 inches to avoid cutting newly emerged milkweed plants.

With implementation of **Mitigation Measures BIO-2a** and **BIO-2b**, potential impacts on monarch butterflies would be **less than significant with mitigation incorporated.**

Crotch's and Western Bumble Bee. The Crotch's and western bumble bee are Candidate State Endangered listed species. These species are known to occur in grassland and scrub habitat where suitable native nectar plants are present. These species historically occurred in the region but are now considered rare. Due to the presence of suitable flowering plant species, these species, although unlikely due to their rarity, could be present. Should Crotch's and/or western bumble bee colonies or overwintering queens be present in underground nests within the project site, construction activities could adversely affect this species and its habitat, resulting in a potentially significant impact to these bumblebee species. As such, implementation of the proposed Plan would include **Mitigation Measure BIO-3**, which requires pre-activity surveys prior to ground disturbing activities to identify bumble bee activity and development of a protection plan, in order to reduce impacts to less than significant.

Mitigation Measure BIO-3

Bumble Bee Pre-activity Surveys. A minimum of two pre-activity surveys shall be conducted within 30 days during appropriate activity periods (i.e., March through September) prior to the start of ground disturbing activities to identify bumble bee activity. The pre-activity surveys shall occur when temperatures are above 60° Fahrenheit (15.5°Celsius) and not during wet conditions (e.g., foggy, raining, or drizzling). The survey shall be conducted at least 2 hours after sunrise and 3 hours before sunset and shall occur at least 1 hour after rain subsides. Preferably, the survey should be conducted during sunny days with low wind speeds (less than 8 miles per hour), but surveying during partially cloudy days or overcast conditions are permissible if the surveyors can still see their own shadow.

If Crotch's and/or western bumble bees, or potential Crotch's or western bumble bees (since bumble bees can be difficult to identify in the field) are observed within the project site, a plan to protect Crotch's and/or western bumble bee nests and individuals shall be developed and implemented in consultation with CDFW and

USFWS. The plan shall include, but not be limited to, the following measures:

- Specifications for fuel treatment timing and sequencing requirements (e.g., avoidance of raking, mowing, tilling, or other ground disturbance until late March to protect overwintering queen bumble bees);
- Establishment of appropriate no-disturbance buffers for bumble bee nest sites to avoid impacts to the bees and monitoring by a qualified biologist to ensure compliance if bumble bee nests are identified;
- Restrictions associated with fuel treatment practices, equipment, or materials that may harm bumble bees (e.g., avoidance of pesticides/herbicides, BMPs to minimize the spread of invasive plant species);
- Provisions to avoid Crotch's and/or western bumble bees, or potential western bumble bees if observed away from a bumble bee nest during project activity (e.g., ceasing of project activities until the animal has left the active work area on its own volition); and
- Prescription of an appropriate restoration seed mix targeted for the western bumble bee, including native plant species known to be visited by native bumble bee species and containing a mix of flowering plant species with continual floral availability through the entire active season of the western bumble bee (March through September).

With implementation of **Mitigation Measure BIO-3**, potential impacts to Crotch's and western bumblebees would be **less than significant with mitigation incorporated**.

California Red-Legged Frog. Suitable non-breeding aquatic, upland, and dispersal habitat is present in onsite streams; however, the species has not been recorded at the project site. The nearest occurrence of the California red-legged frog is at Jewell Lake, approximately 1.5 miles from the project site. Therefore, impacts related to the California red-legged frog would be **less than significant**. **Alameda Whipsnake.** Alameda whipsnake is a federal and State listed threatened species that occurs in chaparral and rock outcrops and adjacent habitats, such as riparian woodland, oak woodland, and grasslands. Although very little high-quality chaparral habitat is present, the project site provides suitable habitat for this species. Focused habitat field surveys for Alameda whipsnake at the project site in 1993 determined that the project site provides suitable habitat for this species. However, no CNDDB occurrences have been recorded at the project site and the closest non-historic CNDDB occurrence was recorded near the San Pablo Dam, approximately 2.7 miles from the project site. The likelihood that Alameda whipsnake occurs at the project site is low and

therefore, impacts related to the Alameda whipsnake would be **less than significant.Northwestern Pond Turtle.** The stream channels that convey larger amounts of water could support northwestern pond turtles and therefore, this species could be present during periods of high flows. However, implementation of the proposed Plan would not impact any streams on the project site with implementation of **Mitigation Measure BIO-7a** (see Section 5.2.b, below). Therefore, impacts related to the northwestern pond turtle would be **less than significant with mitigation incorporated.Special-Status Birds and Other Nesting Bird Species.** Several special-status bird species are known to occur at or near the project site. These bird species could nest, winter, and/or migrate through the project site. Some of these bird species, such as the American peregrine falcon, could forage on the project site, but are unlikely to nest at or adjacent to the site due to the lack of suitable nesting habitat. Special-status birds observed at the project site include white-tailed kite, olive-sided flycatcher, and Vaux's swift, among others. Several other special-status birds have been recorded in the project vicinity.

Proposed construction of the project could result in a potentially significant impact to nesting birds, either directly from removing the nest or indirectly from noise or human presence during construction of the proposed project. Active nests of special-status and other native bird species are protected by the Migratory Bird Treaty Act and/or California Fish and Game Code. Breeding birds are most likely to abandon nests early in the nest cycle. If the young birds are forced to fledge early, they could be subject to predation or starvation, which could result in reproductive failure. This impact would be considered potentially significant. Implementation of **Mitigation Measures BIO-4a and BIO-4b**, requiring pre-activity surveys for nesting birds and establishment of appropriate buffers, would ensure potential direct and indirect impacts to nesting birds during all fuel reduction treatment activities would be reduced to **less than significant with mitigation incorporated**.

Mitigation Measure BIO-4a **Nesting Bird Surveys.** Prior to fuel reduction treatment activities occurring during the nesting bird season (February 1 through August 31), a pre-activity activity surveys for nesting birds shall be conducted by a qualified biologist to ensure that no nests will be disturbed during project implementation. Surveys will be conducted no more than seven days prior to the initiation of fuel reduction treatment activities. During this survey, the biologist shall inspect all trees and other potential nesting habitats (e.g., shrubs, ground, and structures) in the impact area plus a surrounding 300-foot buffer for nests. If removal of potential nesting substrate or project grading will occur during more than one nesting season, or in different parts of the site in phases over the course of a single season, then additional pre-activity surveys must be performed within seven days prior to initiation of work in any particular area. If the pre-activity activity survey does not identify the presence of any active nests on or within 300 feet of the site, construction or vegetation treatment activities may proceed.

Mitigation Measure BIO-4b **Nesting Bird Buffers.** If nests known to have eggs or young, or that cannot be confirmed to be inactive or to lack eggs or young, are

found, or adults are demonstrating nesting behavior, a qualified biologist shall establish an appropriate fuel reduction-free buffer around each nest. Generally, a buffer of 300 feet for raptors and 100 feet for songbirds are adequate to avoid causing nest abandonment. The buffer shall remain in place until the qualified biologist has confirmed that the nest is no longer active.

If less than a 100-foot nest buffer is necessary and determined to be appropriate for a particular nest or nests, a qualified biologist shall monitor the nest(s) before the activity to document baseline nesting behavior and monitor the nest during vegetation treatment or road construction to ensure nesting birds are not exhibiting signs of stress and territorial behavior. If signs of stress are observed during the monitoring, treatment or construction activities shall cease or buffer shall increase, as determined by a qualified biologist, the to a sufficient distance where the nesting birds are longer exhibiting signs of stress.

To prevent encroachment, the buffer shall be clearly marked for avoidance. The established buffer shall remain in effect until the young have fledged or the nest is no longer active as confirmed by the biologist.

With implementation of **Mitigation Measures BIO-4a** and **BIO-4b**, potential impacts to nesting birds would be **less than significant with mitigation incorporated**.

Special-Status Bats and Other Bat Species. Several bat species, including special-status bat species, could roost and/or forage at the project site. All roosts of native bats, regardless of their status, are protected by California Fish and Game Code. Townsend's western big-eared bat (California Species of Special Concern) may briefly forage over the project site but would not roost on the project site due to the lack of suitable roosting habitat. Suitable habitat for pallid bat and western red bat, both of which are California Species of Special Concern, and other bat species could roost in the onsite trees. Pallid bats will roost in tree cavities and in structures, while western red bats roost in trees. Western red bats typically roost in riparian habitats but could roost in any of the larger onsite trees. This species does not breed in the area but does occur in the spring and fall during migration.

Roosting bats could be disturbed, killed, or injured by tree removal activities, if present in fuel reduction activity areas. Disturbance of roosting special-status bats would be a potentially significant impact. Implementation of **Mitigation Measures BIO-5a** and **BIO-5b** would reduce potential direct and indirect impacts to bat species during all fuel reduction treatment activities by requiring pre-activity tree habitat assessments and implementation of appropriate tree removal methods.

Mitigation Measure BIO-5a **Focused Tree Habitat Assessment for Bat Species.** Prior to any tree removal during the maternity roosting period (April 15 to August 31) or hibernation period (October 15 to February 28), a focused

tree habitat assessment shall be conducted by a qualified biologist of all trees that will be removed or impacted by vegetation treatment activities. Trees containing suitable potential bat roost habitat features would then be clearly marked. The habitat assessments should be conducted enough in advance to allow preparation of a report with specific recommendations, and to ensure tree removal can be scheduled during seasonal periods of bat activity if required. If it is determined that day roosting bats are unlikely to occur, the tree may be removed as described below. If the absence of roosting bats cannot be confirmed, then the removal of trees providing suitable maternity or hibernation roosting habitat should only be conducted during seasonal periods of bat activity, including between March 1 and April 15 or between September 1 and October 15.

Mitigation Measure BIO-5b **Tree Removal.** Appropriate methods shall be used to minimize the potential of harm to bats during tree removal. Such methods may include but are not limited to using a two-step tree removal process. This method is conducted over two consecutive days and works by creating noise and vibration by cutting non-habitat branches and limbs from habitat trees using chainsaws only (no other heavy machinery) on Day 1. The noise and vibration disturbance, together with the visible alteration of the tree, is very effective in causing bats that emerge nightly to feed, to not return to the roost that night. The remainder of the tree is removed on Day 2. A biologist qualified in two-step tree removal is required on Day 1 to supervise and instruct the tree-cutters who will be on the site conducting the work, but only for a sufficient length of time to train all tree cutters who will conduct two-step removal of habitat trees. The biologist is generally not required on Day 2, unless a very large cavity is present and a large colony is suspected. Fallen branches and trees shall be left onsite overnight to allow any bats that may be present to fly away during the nighttime hours. Removal of native oaks and riparian trees shall be avoided where possible.

With implementation of **Mitigation Measures BIO-5a** and **BIO-5b**, potential impacts on bats would be **less than significant with mitigation incorporated**.

San Francisco Dusky-Footed Woodrat. The San Francisco dusky-footed woodrat is a California Species of Special Concern. This species occurs in riparian woodland, woodland/forests, and scrub habitat and has been observed at the project site. Woodrat houses were observed in the northern portion of the project site, but this species could occur throughout the project site where suitable habitat is present. Woodrat houses on the ground and in trees could be destroyed by tree removal and other fuel reduction treatment activities, leading to direct and indirect mortality of San Francisco dusky-footed woodrat. This is a potentially significant impact. Therefore, **Mitigation**

Measure BIO-6, requiring a pre-activity survey for the San Francisco dusky-footed woodrat, would be implemented in order to impacts to this species to a **less than significant** level.

Mitigation Measure BIO-6 **San Francisco Dusky-Footed Woodrat Pre-activity Surveys.** A qualified biologist shall conduct a pre-activity survey for San Francisco dusky-footed woodrat nests prior to the start of project activities. Surveys will be conducted in the immediate work area and a 25-foot buffer around those areas. If woodrat nests are present, the nests will be flagged in the field and delineated on project site maps in order to avoid potential impacts to woodrat nests during vegetation treatment activities. For any woodrat nests that cannot be avoided, a woodrat nest relocation plan shall be prepared and submitted to CDFW for approval. At a minimum, the plan shall include the phased dismantling and relocation of the nest materials to a suitable location, and the installation of artificial shelters at a ratio of 1:1 per dismantled nest to provide readily accessible refugia for dispersing individuals. If breeding woodrats are present, relocation of houses shall be delayed until the breeding season is over or the qualified biologist otherwise determines that young are no longer present.

With implementation of **Mitigation Measure BIO-6**, potential impacts to the San Francisco dusky-footed woodrat would be less than significant with mitigation incorporated.

American Badger. Grasslands present on the site may be suitable for the American badger, but this species is not likely to occur due to the project site's proximity to urban development and isolation from larger open grassland habitat. In addition, the soil characteristics of the rock outcrop would limit burrowing activities in the majority of the project area. Nevertheless, **Mitigation Measure BIO-7b** (see Section 5.2.b below), which protects native grassland, would ensure that if present, impacts to the American badger would be **less than significant with mitigation incorporated**.

Overall, with implementation of **Mitigation Measures BIO-1** through **BIO-7**, the proposed project would not have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS. Impacts would be **less than significant with mitigation incorporated**.

b. Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? ***(Less Than Significant with Mitigation Incorporated)***

The project site consists of the HNA, an open space area in the City. Vegetation in the HNA is characterized by native and non-native grassland, riparian scrub and woodland, oak woodland, and other scrub and "soft" chaparral, in addition to extensive introduced landscaping and naturalized non-native species such as eucalyptus and pine. There are six major vegetation cover types within

the HNA, as described above and depicted in Figure 3-3. Of the six major vegetation cover types, the areas of riparian woodlands and native grassland are considered sensitive plant communities under CEQA.

Riparian woodland occurs along the streams and drainages and occupies a relatively small acreage within the HNA. Riparian woodland occurs in the drainages northwest of Earl Court, southwest of Kent Court, north of Buckingham Drive, east of Gladys Avenue, and in the upper portion of the Wildwood drainage. Species present within the riparian woodland indicate the presence of water in the moist canyon bottom environment.

Native grasslands in the HNA consist of small, dispersed patches of native graminoids[13], including perennial bunchgrasses. These are generally rare, but fairly common in certain areas, such as El Cerrito Memorial Grove and the Julian Fuel Break, which supports a healthy stand of purple needlegrass (*Stipa pulchra*). The presence and relative abundance of native annual and perennial herbs is influenced by the level of historic and recent disturbance at a particular site.

To minimize disturbance to riparian habitat occurring adjacent to the fuel reduction area, riparian areas shall be clearly delineated by a qualified biologist, as required by **Mitigation Measure BIO-7a**. In addition, **Mitigation Measure BIO-7b** requires the proposed fuel treatments to avoid/minimize impacts to the purple needlegrass grasslands, other native grasslands, and other sensitive natural communities, if feasible and to provide compensatory mitigation for any impacted areas. In addition, the stands of native grasslands shall be avoided during fuel treatment activities.

Mitigation Measure BIO-7a **Riparian Delineation.** To minimize disturbance to riparian habitat occurring adjacent to the fuel reduction area, riparian areas shall be clearly delineated by a qualified biologist. Riparian areas shall be separated and protected from the work area through silt fencing, amphibian/reptile-friendly fiber rolls (i.e., no mono-filament), or other appropriate erosion control material. Material staging, and all other project-related activity shall be located as far as possible from riparian areas with no driving or parking of vehicles or equipment within the dripline of a riparian tree.

Mitigation Measure BIO-7b **Avoidance/Minimization of Purple Needlegrass and Other Grasslands.** If feasible, the proposed fuel treatments shall avoid/minimize impacts to the purple needlegrass grasslands, other native grasslands, and other sensitive natural communities. The stands of native grasslands shall be avoided during fuel treatment activities.

If the native grasslands cannot be avoided, the loss of native grasslands shall be mitigated by restoring an equivalent amount of native grasslands onsite. The City shall reseed temporarily disturbed areas of native grassland habitat that are disturbed by fuel

[13] In botany and ecology, a graminoid refers to a herbaceous plant with a grass-like morphology.

reduction activities with an appropriate weed-free native seed mix that contains the particular native grass seed and/or plugs. Any restored native grassland areas shall be monitored and reported on an annual basis, as required by CDFW.

With implementation of **Mitigation Measures BIO-7a** and **BIO-7b**, implementation of the proposed Plan would not have a substantial adverse effect on any riparian habitat or other sensitive natural communities. Impacts would be **less than significant with mitigation incorporated**.

c. Would the project have a substantial adverse effect on state or federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? ***(Less Than Significant with Mitigation Incorporated)***

While several streams/drainage channels that may be considered jurisdictional features by the USACE and RWQCB and subject to regulation under Section 404 and 401 of the Clean Water Act and/or the California Porter Cologne Act are present within the HNA, no other potential waters of the United States or State, such as seasonal wetlands or seeps, were observed during the reconnaissance-level field survey. However, the survey was conducted during the dry season when wetlands and seeps are less identifiable. Therefore, additional jurisdictional features, such as wetlands and seeps, could be present within the HNA. To address potential impacts on state or federally protected wetlands that may be present, **Mitigation Measure BIO-8** requires that onsite streams/drainages (and seasonal wetlands/seeps, if present) be avoided during the fuel reduction activities, where possible. In addition, **Mitigation Measure BIO-8** requires that no fill, including plant cuttings, rocks, or soils will be placed in these jurisdictional features without obtaining the appropriate permits from the regulatory agencies and implementing mitigation in accordance with permit requirements.

Mitigation Measure BIO-8 **Streams/Drainages.** Potential impacts to potentially jurisdictional features, such as the onsite streams/drainages (and seasonal wetlands/seeps, if present), are subject to regulation by the USACE, RWQCB, and/or CDFW. These features will be avoided during the fuel reduction activities, where possible. No fill, including plant cuttings, rocks, or soils will be placed in these jurisdictional features without the appropriate permits from the regulatory agencies. If these features are impacted, the City would need to obtain the required permits from the relevant regulatory agencies, including the USACE, CDFW, and RWQCB. These permits would include conditions and BMPs that the City would implement during fuel reduction activities. These permits may also specify mitigation, which the City would provide as specified by the regulatory agencies.

With implementation of **Mitigation Measure BIO-8**, implementation of the proposed Plan would not have a substantial adverse effect on any state or federally protected wetlands as defined by Section 404 of the Clean Water Act. Impacts would be **less than significant with mitigation incorporated**.

d. Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? ***(Less Than Significant with Mitigation Incorporated)***

The HNA provides a movement corridor for several wildlife species, including aquatic species that use the stream and riparian channels during the wet season and numerous species of birds, amphibians, reptiles, insects, and mammals that move through the HNA. However, wildlife movement within the streams, drainages, riparian, woodland, and grassland habitat would not be permanently impacted by the proposed fuel management activities. Wildlife that currently inhabit the project site are expected to continue to move through the site after the fuel reduction activities have been implemented. In addition, although the HNA is not known to support important wildlife nursery sites, several species of birds and bats could breed at the HNA. Implementation of mitigation measures for nesting birds, roosting bats, and other wildlife species, as detailed in Mitigation Measures BIO-2 through BIO-7, would protect wildlife nursery sites, if present. Impacts would be **less than significant with mitigation incorporated**.

e. Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? ***(Less Than Significant with Mitigation Incorporated)***

Chapter 7, Resources and Hazards, of the City's General Plan establishes goals, policies, and actions to protect natural resources within the City. Specifically, Policies R1.1, R1.2, R1.3, R1.7, R1.9, and R1.11 state:

Policy R1.1 **Habitat Protection.** Preserve oak/woodland, riparian vegetation, creeks, native grasslands, wildlife corridors and other important wildlife habitats. Loss of these habitats should be fully offset through creation of habitat of equal value. Compensation rate for habitat re-creation shall be determined by a qualified biologist.

Policy R1.2 **Rare and Endangered Species.** Limit development in areas that support rare and endangered species. If development of these areas must occur, any loss of habitat should be fully compensated on site. If off-site mitigation is necessary, it should occur within the El Cerrito planning area whenever possible and must be accompanied by plans and a monitoring program prepared by a qualified biologist.

Policy R1.3 **Potential Environmental Impacts.** Encourage development patterns that minimize impacts on the City's biological, visual, and cultural resources, and integrate development with open space areas.

Policy R1.7 **Creek Protection.** Preserve riparian vegetation, protect owners and buyers of property from erosion and flooding, and increase public access to the creeks. Lands adjacent to riparian areas should be protected as public or private permanent open space through dedication or easements.

Policy R1.9 **Development Near Creeks.** For development adjacent to creeks and major drainages, provide adequate building setbacks from creek banks, provision of access easements for creek maintenance purposes and for public access to creekside amenities, and creek improvements such as bank stabilization. Also protect riparian vegetation outside the setback.

Policy R1.11 **Native Plant Communities.** Encourage use of native plant species for landscaping in hillside areas, preserve unique plant communities, and use fire-preventive landscaping techniques.

As described above, implementation of appropriate mitigation measures, including **Mitigation Measures BIO-1** through **BIO-8**, would ensure that impacts to special-status species, creeks, habitat, and native plant communities would be reduced to a less than significant level. Therefore, implementation of the proposed Plan would not conflict with the policies or goals of the City's General Plan.

Chapter 13.28 of the City's Municipal Code provides regulations for the removal of private and public trees. Although implementation of the proposed Plan would include vegetation removal, including the removal of mature trees, proposed activities would be implemented to reduce the threat of fire hazard in the area and would not conflict with Chapter 13.28 of the City's Municipal Code.

Overall, with implementation of **Mitigation Measures BIO-1** through **BIO-8**, implementation of the proposed Plan would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. Impacts would be **less than significant with mitigation incorporated**.

f. Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? ***(No Impact)***

The HNA is not situated within the limits of any adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. Therefore, implementation of the proposed Plan would not conflict with any approved local, regional, or State habitat conservation plan. **No impact** would occur.

5.5 CULTURAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	☐	☐	☐	☒
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☒	☐	☐
c. Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐

The information and analysis in this section is based, in part, on the Cultural Resources Assessment prepared for the project site (**Appendix B**).[14]

*a. Would the project cause a substantial adverse change in the significance of a historical resource as defined in §15064.5? **(No Impact)***

CEQA defines a "historical resource" as a resource which meets one or more of the following criteria:

- Listed in, or eligible for listing in, the California Register of Historical Resources (CRHR);
- Listed in a local register of historical resources as defined in Public Resources Code (PRC) Section 5020.1(k);
- Identified as significant in a historical resource survey meeting the requirements of Section 5024.1(g) of the PRC; or
- Determined to be a historical resource by a project's lead agency (PRC Section 21084.1 and *State CEQA Guidelines* Section 15064.5[a]).

The CRHR defines a "historical resource" as a resource that meets one or more of the following criteria: (1) associated with events that have made a significant contribution to the broad patterns or local or regional history of the cultural heritage of California or the United States; (2) associated with the lives of persons important to local, California, or national history; (3) embodies the distinctive characteristics of a type, period, region, or method of construction or represents the work of a master or possesses high artistic values; or (4) has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation. Under CEQA, historical resources can include precontact (i.e., Native American) archaeological deposits, historic-period archaeological deposits, historic buildings, and historic districts.

[14] Solano Archaeological Services, LLC. 2023. Cultural Resources Technical Memorandum, Cultural Resources Investigation – Hillside Natural Area Fire Resilience and Forest Conservation Management Plan, City of El Cerrito, Contra Costa County, California. October 18. (Appendix B).

Background research and a field survey were conducted to identify potential cultural resources at the project site. The results are summarized below.

On September 18, 2023, a cultural resources records search of the project site and a 0.5-mile radius was conducted by the Northwest Information Center (NWIC). The NWIC, an affiliate of the State of California Office of Historic Preservation (OHP), is the official State repository of cultural resource records and reports for Contra Costa County. As part of the background research, national, State, and local inventories for cultural resources were also reviewed and the Native American Heritage Commission (NAHC) was contacted. The record search results identified one cultural resource, a house built in 1898, located immediately adjacent to the project site. The NWIC record search results also reported six additional cultural resources within 0.5-mile of the project site. The NWIC also noted that two previous cultural resources investigations included at least a portion of the project site, and an additional five studies have been conducted within 0.5-mile of the project site. No resources were identified within the HNA.

A search of the Sacred Lands File (SLF) by the NAHC was also requested on August 15, 2023, to determine the potential presence of Native American cultural resources that might be affected by implementation of the proposed Plan. The NAHC responded on August 24, 2023, stating that the search of the SLF was positive, indicating that a culturally sensitive property had been identified within or near the project site. Although the NAHC noted that a culturally significant property was known to be present within or near the project site, none of the tribal representatives contacted as part of tribal consultation have expressed any concerns regarding this possible site.

On September 27th, 2023, qualified archaeologists conducted an intensive pedestrian survey of the project site utilizing pedestrian transects. The previously documented 1898 house on Navellier Street was noted by the field team; however, no historic-era or early Native American sites, features, sensitive landforms, or soil types (e.g., midden) or artifacts were recorded on the project site as part of the pedestrian survey.

The proposed project would establish and adopt a comprehensive fire hazard reduction and forest conservation plan that would guide maintenance activities and improve eligibility for grant funding for the City's HNA and would not include substantial ground disturbance. In addition, the literature review, database searches, and field survey indicated that no development of any kind has occurred in the project site. Consequently, the Cultural Resources Assessment determined that the project site has a low level of sensitivity for significant historic-era sites, features, or artifacts. As the previously documented 1898 house on Navellier Street, adjacent to the project site, would not be affected by implementation of the proposed Plan, implementation of the proposed Plan would not cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5 of the *State CEQA Guidelines,* and **no impact** would occur.

b. Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5? ***(Less Than Significant with Mitigation Incorporated)***

According to the *State CEQA Guidelines*, "When a project will impact an archaeological site, a lead agency shall first determine whether the site is an historical resource" (*CEQA Guidelines* Section 15064.5(c)(1)). Those archaeological sites that do not qualify as historical resources shall be

assessed to determine if these qualify as "unique archaeological resources" (California PRC Section 21083.2).

As discussed above, the archival research, outreach to the Native American community, and an intensive field survey performed as part of the Cultural Resources Assessment did not document any indications of prehistoric activities at the project site or surrounding area. Although the NAHC indicated that a culturally significant property was known to be present near the project site, none of the tribal contacts and representatives have expressed any concerns regarding this possible site. In addition, the intensive field survey did not identify any potentially sensitive landforms or significant level terrain at the project site, suggesting it retains a low level of sensitivity for containing traces of early Native American occupation. In addition, the proposed project would establish and adopt a comprehensive fire hazard reduction and forest conservation plan that will guide maintenance activities and improve eligibility for grant funding for the City's HNA and would not include substantial ground disturbance. Therefore, the potential for the proposed fuel reduction activities to impact previously undiscovered archaeological resources is low. Nevertheless, implementation of **Mitigation Measure CUL-1** would be implemented to ensure work stoppage in the event of an archaeological discovery.

Mitigation Measure CUL-1 **Unanticipated Archaeological Deposits.** Should an archaeological deposit be encountered during project activities, all ground-disturbing activities within 25 feet shall be redirected and a qualified archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for Archaeology shall be contacted to assess the situation, determine if the deposit qualifies as a historical resource, consult with agencies as appropriate, and make recommendations for the treatment of the discovery. If the deposit is found to be significant (i.e., eligible for listing in the California Register of Historical Resources), the City shall be responsible for funding and implementing appropriate mitigation measures. Mitigation measures may include recording the archaeological deposit, data recovery and analysis, and public outreach regarding the scientific and cultural importance of the discovery. Upon completion of the selected mitigations, a report documenting methods, findings, and recommendations shall be prepared by the qualified archaeologist, and the final report shall be submitted to the Northwest Information Center at Sonoma State University. Significant archaeological materials shall be submitted to an appropriate local curation facility and used for future research and public interpretive displays, as appropriate.

With implementation of **Mitigation Measure CUL-1**, potential impacts to archaeological resources would be reduced to **less than significant with mitigation incorporated.**

c. Would the project disturb any humans remains, including those interred outside of formal cemeteries? ***(Less Than Significant Impact)***

Based on previous archaeological investigation and analysis, there is a low potential for the disturbance of archaeological human remains. However, if human remains are encountered at the project site, State Health and Safety Code Section 7050.5 and *State CEQA Guidelines* Section 15064.5(e)(1) state that no further disturbance shall occur to the area of the find until the County Coroner has made a determination of origin and disposition of the remains pursuant to PRC Section 5097.98. The County Coroner must be notified of the find immediately and shall make a determination within two working days of being notified. If the remains are determined to be Native American, the County Coroner shall notify the NAHC by phone within 24 hours, and the NAHC shall then immediately determine and notify a Most Likely Descendent (MLD). With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection and make recommendations or preferences for treatment of the remains within 48 hours of being granted access to the site. MLD recommendations may include scientific removal and nondestructive analysis of human remains and items associated with Native American burials, preservation of Native American human remains and associated items in place, relinquishment of Native American human remains and associated items to the descendants for treatment, or any other culturally appropriate treatment.

Compliance with Section 7050.5 of the California Health and Safety Code and PRC Section 5097.98 regarding the treatment of human remains would ensure that potential impacts to human remains would be **less than significant**.

5.6 ENERGY

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
d. Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation?	☐	☐	☐	☒
e. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☐	☒

The proposed project would establish and adopt a comprehensive fire hazard reduction and forest conservation plan that would guide maintenance activities and improve eligibility for grant funding for the HNA. No new proposed buildings or energy intensive uses are proposed as part of the Plan. All work would be accomplished by use of hand crews or mechanical equipment; supported by chippers and/or burning as determined appropriate on a case-by-case basis, while conserving native vegetation. Implementation of the proposed Plan would expand and continue the maintenance activities already occurring at the HNA, and therefore would not result in a substantial increase in energy usage.

Therefore, the proposed project would have **no impact**, either individually or cumulatively, on energy.

5.7 GEOLOGY AND SOILS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	☒
ii. Strong seismic ground shaking?	☐	☐	☒	☐
iii. Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv. Landslides?	☐	☐	☒	☐
b. Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☒	☐	☐
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☐	☒	☐
e. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐

a. Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

*i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. **(No Impact)***

The San Francisco Bay Area is one of the most seismically active regions in the United States. The significant earthquakes that occur in the Bay Area are generally associated with crustal movement along well-defined active fault zones of the San Andreas Fault system, which regionally trend in a northwesterly direction. Fault rupture is generally expected to occur along active fault traces that have exhibited signs of recent geological movement (i.e., within the last 11,000 years).

The State of California enacted the Alquist-Priolo Earthquake Fault Zoning Act in 1972, requiring the State Geologist to delineate Earthquake Fault Zones (EFZ) along known active faults that have high potential for fault rupture. Active faults are defined as a fault that has surface displacement within

the last 11,000 years.[15] State regulations prohibit habitable structures from being sited within 50 feet of an active fault. According to the California Earthquake Hazards Zone Application ("EQ Zapp"),[16] the HNA is not located within an Earthquake Fault Zone. Therefore, fault rupture through the HNA is not anticipated, and implementation of the proposed Plan would not directly or indirectly cause substantial adverse effects related to fault rupture. **No impact** would occur.

ii. Strong seismic ground shaking? ***(Less Than Significant Impact)***

The project site is located in the San Francisco Bay Area, a region of intense seismic activity. Due to the location of the project site in a seismically active area, strong seismic ground shaking at the site is highly probable during the life of the project. The intensity of ground shaking would depend on the characteristics of the fault, distance from the fault, the earthquake magnitude and duration, and site-specific geologic conditions. The intensity of an earthquake is a subjective measure of the perceptible effects of a seismic event at a given point. The Modified Mercalli Intensity (MMI) scale is the most commonly used scale to measure the subjective effects of earthquake intensity. It uses values ranging from I to XII.[17]

Mapping has been compiled by the Metropolitan Transportation Commission (MTC) and the Association of Bay Area Governments (ABAG) for the likely shaking intensities in the Bay Area that would have a 10 percent chance of occurring in any 50-year period. A large earthquake (magnitude 6.7 or greater) on one of the major active faults in the region would generate severe (MMI 8) ground shaking at the HNA.[18]

The most significant adverse impact associated with strong seismic shaking is potential damage to structures and improvements. As the proposed project is a fire resiliency plan and would not include the construction of any new structures, no significant adverse impacts associated with strong seismic shaking would occur. Implementation of the proposed Plan would not create any new impacts related to strong seismic shaking beyond existing conditions and impacts would be **less than significant**.

iii. Seismic-related ground failure, including liquefaction? ***(Less Than Significant Impact)***

Liquefaction is the transformation of loose, fine-grained sediment to a fluid-like state similar to quicksand. This phenomenon occurs due to strong seismic activity and lessens the soil's ability to support a structural foundation. The primary factors affecting the possibility of liquefaction in soil are: (1) intensity and duration of earthquake shaking; (2) soil type and relative density;

---

15 California Department of Conservation (DOC). 2019. Alquist-Priolo Earthquake Fault Zones. Website: www.conservation.ca.gov/cgs/alquist-priolo (accessed January 2025).

16 California Department of Conservation (DOC). 2021. *California Earthquake Hazards Zone Application ("EQ Zapp").* Website: https://maps.conservation.ca.gov/cgs/EQZApp/app/ (accessed January 2025).

17 United States Geological Survey (USGS). 2018. The Modified Mercalli Intensity Scale. Website: www.usgs.gov/natural-hazards/earthquake-hazards/science/modified-mercalli-intensity-scale?qt-science_center_objects=0#qt-science_center_objects, (accessed January 2025).

18 Metropolitan Transportation Commission (MTC) and Association of Bay Area Governments (ABAG). 2018. Probabilistic Earthquake Shaking Hazard Map. Website: https://mtc.maps.arcgis.com/apps/webappviewer/index.html?id=4a6f3f1259df42eab29b35dfcd086fc8 (accessed January 2025).

(3) overburden pressures; and (4) depth to groundwater. Soil most susceptible to liquefaction is clean, loose, fine-grained sands and non-plastic silts that are saturated.

Mapping has been compiled by the MTC and ABAG to delineate areas susceptible to liquefaction. According to the MTC and ABAG, liquefaction susceptibility at the project site is considered low to very low.[19] Therefore, implementation of the proposed Plan would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure. This impact would be **less than significant.**

iv. Landslides? ***(Less Than Significant Impact)***

A landslide generally occurs on relatively steep slopes and/or on slopes underlain by weak materials. According to the MTC and ABAG, the project site contains areas susceptible to landslides. Vegetation removal associated with implementation of the proposed Plan would increase the likelihood of landslides at the HNA; however, revegetation of the HNA with native plant species would stabilize soils. Implementation of the proposed Plan would not create any new impacts related to strong seismic shaking beyond existing conditions and impacts would be **less than significant**.

b. Would the project result in substantial soil erosion or the loss of topsoil? ***(Less Than Significant Impact)***

Vegetation removal associated with implementation of the proposed Plan could result in soil erosion between the time when vegetation removal is completed, and new native vegetation is established. Exposed soils could be entrained in stormwater runoff and transported off the project site. However, as discussed above, revegetation of the HNA with native plant species would stabilize soils. Overall, implementation of the proposed Plan would not create any new impacts related to substantial soil erosion or the loss of topsoil beyond existing conditions and impacts would be **less than significant**.

c. Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse? ***(Less Than Significant With Mitigation Incorporated)***

As discussed above, implementation of the proposed Plan would not create any new impacts related to landslides or liquefaction beyond existing conditions and the HNA is not anticipated to become unstable or result in on- or off-site landslides, liquefaction, or lateral spreading as a result of implementation of the proposed Plan. In addition, geotechnical analysis would be performed to assess the potential for soil instability to occur at the project site, especially in the Quarry Hill Grove and at the east wall of the former EBMUD property at Motorcycle Hill, as required by **Mitigation**

[19] Metropolitan Transportation Commission (MTC) and Association of Bay Area Governments (ABAG). 2018. Probabilistic Earthquake Shaking Hazard Map. Website: https://mtc.maps.arcgis.com/apps/webapp viewer/index.html?id=4a6f3f1259df42eab29b35dfcd086fc8 (accessed January 2025).

Measure GEO-1. This geotechnical analysis would be performed prior to implementation of any actions proposed as part of the Plan.

Mitigation Measure GEO-1 **Geotechnical Analysis.** Prior to implementation of any actions proposed as part of the Plan, including vegetation removal, geotechnical analysis shall be performed to assess the potential for soil instability to occur at the project site. Geotechnical analysis shall include the evaluation of areas that contain steep slopes, such as the Quarry Hill Grove and at Motorcycle Hill. Specific geotechnical design recommendations shall be developed to mitigate the potential for soil instability, including stabilization using biotechnical stabilization measures. This measure shall be completed to the satisfaction of the City of El Cerrito Director of Public Works, or designee.

With implementation of **Mitigation Measure GEO-1**, which requires preparation of a geotechnical evaluation and implementation of recommendations to reduce potential slope instability, impacts related to unstable slopes would be reduced to **less than significant with mitigation incorporated**.

d. Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property? ***(Less Than Significant Impact)***

Expansive soils are characterized by the potential for shrinking and swelling as the moisture content of the soil decreases and increases, respectively. Shrink-swell potential is influenced by the amount and type of clay minerals present and can be measured by the percentage of change in the soil volume. Soils underlying the project site are composed of cut and fill land associated with the Los Osos complex (9 to 30 percent slopes) and the Millsholm complex (9 to 30 percent slopes), quarry, and rock outcrop associated with the Xerorthents association according to the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey.[20]

Implementation of the proposed Plan would not include the construction of new habitable structures and the conditions of the HNA would be generally the same as existing conditions. Therefore, impacts associated with expansive soils would be **less than significant**.

e. Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of waste water? ***(No Impact)***

Implementation of the proposed Plan would not include the construction or use of septic tanks, alternative wastewater disposal systems, or City operated sewers as no wastewater generation

[20] United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS). 2023. Web Soil Survey. Website: https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx (accessed January 2025).

would occur with implementation of the proposed Plan. Therefore, implementation of the proposed Plan would have **no impact** associated with soils incapable of supporting alternative wastewater disposal systems.

f. Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? ***(Less Than Significant with Mitigation Incorporated)***

Although no paleontological resources or unique geological features are known to exist within or near the HNA, site disturbance activities associated with the implementation of the proposed Plan could result in the accidental discovery of paleontological resources. Implementation of **Mitigation Measure GEO-2** would reduce potential impacts to a less than significant level.

Mitigation Measure GEO-2 **Unanticipated Paleontological Resources.** Should paleontological resources be encountered during project subsurface construction activities, all ground-disturbing activities within 25 feet shall be redirected and a qualified paleontologist contacted to assess the situation, consult with agencies as appropriate, and make recommendations for the treatment of the discovery. For purposes of this mitigation, a "qualified paleontologist" shall be an individual with the following qualifications: (1) a graduate degree in paleontology or geology and/or a person with a demonstrated publication record in peer-reviewed paleontological journals; (2) at least two years of professional experience related to paleontology; (3) proficiency in recognizing fossils in the field and determining their significance; (4) expertise in local geology, stratigraphy, and biostratigraphy; and (5) experience collecting vertebrate fossils in the field. If the paleontological resources are found to be significant and project activities cannot avoid them, measures shall be implemented to ensure that the project does not cause a substantial adverse change in the significance of the paleontological resource. Measures may include monitoring, recording the fossil locality, data recovery and analysis, a final report, and accessioning the fossil material and technical report to a paleontological repository. Upon completion of the assessment, a report documenting methods, findings, and recommendations shall be prepared and submitted to the City of Vallejo for review. If paleontological materials are recovered, this report also shall be submitted to a paleontological repository such as the University of California Museum of Paleontology, along with significant paleontological materials. Public educational outreach may also be appropriate.

Implementation of **Mitigation Measure GEO-2** would reduce the level of the potential impact through the identification of paleontological resources during construction; the evaluation of unanticipated discoveries; and the recovery of significant paleontological data from those resources that warrant such investigation. This process would recover scientifically consequential information

from at-risk resources to offset their potential loss. Therefore, with implementation of **Mitigation Measure GEO-2**, this impact would be **less than significant with mitigation incorporated.**

5.8 GREENHOUSE GAS EMISSIONS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
g. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
h. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

Greenhouse gases (GHGs) are present in the atmosphere naturally, are released by natural sources, or are formed from secondary reactions taking place in the atmosphere. The gases that are widely seen as the principal contributors to human-induced global climate change are:

- Carbon dioxide (CO_2);
- Methane (CH_4);
- Nitrous oxide (N_2O);
- Hydrofluorocarbons (HFCs);
- Perfluorocarbons (PFCs); and
- Sulfur hexafluoride (SF_6).

Over the last 200 years, humans have caused substantial quantities of GHGs to be released into the atmosphere. These extra emissions are increasing GHG concentrations in the atmosphere and enhancing the natural greenhouse effect, believed to be causing global warming. While manmade GHGs include naturally-occurring GHGs such as CO_2, methane, and N_2O, some gases, like HFCs, PFCs, and SF_6 are completely new to the atmosphere.

Certain gases, such as water vapor, are short-lived in the atmosphere. Others remain in the atmosphere for significant periods of time, contributing to climate change in the long term. Water vapor is excluded from the list of GHGs above because it is short-lived in the atmosphere and its atmospheric concentrations are largely determined by natural processes, such as oceanic evaporation.

These gases vary considerably in terms of Global Warming Potential (GWP), a concept developed to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. The GWP is based on several factors, including the relative effectiveness of a gas to absorb infrared radiation and length of time that the gas remains in the atmosphere ("atmospheric lifetime"). The GWP of each gas is measured relative to CO_2, the most abundant GHG. The definition of GWP for a particular GHG is the ratio of heat trapped by one unit mass of the GHG to the ratio of heat trapped by one unit mass of CO_2 over a specified time period. GHG emissions are typically measured in terms of pounds or tons of "CO_2 equivalents" (CO_2e).

a. Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? ***(Less Than Significant Impact)***

This section describes the proposed project's GHG emissions and contribution to global climate change. In April 2023, the BAAQMD adopted the 2022 CEQA Guidelines[21] which identify applicable GHG significance thresholds. These thresholds evaluate a project based on its effect on California's efforts to meet the State's long-term climate goals. Applying this approach, the BAAQMD identifies and provides supporting documentation, outlining the necessary requirements that new land use development projects must implement to achieve California's long-term climate goal of carbon neutrality by 2045. Based on the analysis, the BAAQMD found that new land use development projects need to incorporate specified design elements to contribute their "fair share" toward implementation of the goal of carbon neutrality by 2045. If a project is designed and built to incorporate the identified design elements, then it would contribute its portion of what is necessary to achieve California's long-term climate goals—its "fair share"—and an agency reviewing the project under CEQA can conclude that the project will not make a cumulatively considerable contribution to global climate change. The document concludes that if a project does not incorporate these design elements, it should be found to result in a significant climate impact because it would hinder California's efforts to address climate change.

According to BAAQMD's 2022 CEQA Guidelines, a project would have a less than significant impact related to GHG emissions if it would:

a. Include, at a minimum, the following project design elements:

    1. Buildings

        a. The project will not include natural gas appliances or natural gas plumbing (in both residential and nonresidential development).

        b. The project will not result in any wasteful, inefficient, or unnecessary electrical usage as determined by the analysis required under CEQA Section 21100(b)(3) and Section 15126.2(b) of the *State CEQA Guidelines.*

    2. Transportation

        a. Achieve a reduction in project-generated VMT below the regional average consistent with the current version of the California Climate Change Scoping Plan (currently 15 percent) or meet a locally adopted SB743 VMT target, reflecting the recommendations provided in the Governor's Office of Planning and Research's *Technical Advisory on Evaluating Transportation Impacts in CEQA*:

            1. Residential projects: 15 percent below the existing VMT per capita
            2. Office projects: 15 percent below the existing VMT per employee

[21] Bay Area Air Quality Management District (BAAQMD). 2023. *California Environmental Quality Act Air Quality Guidelines.* April.

3. Retail projects: no net increase in existing VMT

b. Achieve compliance with off-street electric vehicle requirements in the most recently adopted version of CALGreen Tier 2.

b. Or be consistent with a local GHG reduction strategy that meets the criteria under State CEQA Guidelines Section 15183.5(b).

The proposed project would establish and adopt a comprehensive fire hazard reduction and forest conservation plan that would guide maintenance activities and improve eligibility for grant funding for the HNA. The proposed project does not constitute a new land use development project; however, implementation of the proposed Plan would produce combustion emissions from various sources. During vegetation removal activities, GHGs would be emitted through the operation of mechanical equipment, such as woodchippers and helicopters (if necessary), and from worker vehicles, each of which typically use fossil-based fuels to operate. In addition, although the City currently has no plans to implement prescribed burning on a large scale, the proposed project may include some prescribed burning, as determined appropriate on a case-by-case basis. The combustion of fossil-based fuels creates GHGs such as CO_2, CH_4, and N_2O. Furthermore, CH_4 is emitted during the fueling of heavy equipment. Exhaust emissions from proposed management activities would vary daily as construction activity levels change.

The BAAQMD does not have an adopted threshold of significance for GHG emissions. However, lead agencies are encouraged to disclose GHG emissions that would occur. As discussed in Section 5.3, Air Quality, equipment powered by gasoline and diesel engines would be temporary. In addition, the proposed project would comply with the BAAQMD's recommended measures, such as reducing the amount of vehicle idling and requiring the use of properly maintained equipment. Although some prescribed burns may occur, burning activities would be temporary and relatively minimal. Required fire suppression equipment (e.g., fire engine[s] and a water tender) would be on site during a prescribed broadcast burn both to bolster already-existing control lines and quickly extinguish any fire that deviated from the burn prescription. In addition, prescribed burns in the HNA would require the approval of the El Cerrito Fire Department and the preparation of a Burn Plan that includes a Smoke Management Plan (SMP) approved by the BAAQMD. BAAQMD Regulation 5 requires all burn activity to only occur with written approval of an SMP by BAAQMD and to only be conducted on permissive burn days.

Although the proposed project is not considered a new land use development project, this section evaluates the proposed project's consistency with the BAAQMD's project design elements.

Natural Gas Usage. According to the BAAQMD, a less than significant GHG impact would occur if the project does not include natural gas appliances or natural gas plumbing. The proposed project would establish and adopt a comprehensive fire hazard reduction and forest conservation plan, and would not include long-term or operational use of natural gas. Therefore, the proposed project would be consistent with the BAAQMD's project design element related to natural gas and would be consistent with the BAAQMD's GHG emission thresholds. As such, the proposed project would not generate significant GHG emissions that would have a significant effect on the environment.

Energy Usage. The project must not result in any wasteful, inefficient, or unnecessary energy usage as determined by the analysis required under Section 21100(b)(3) and Section 15126.2(b) of the *State CEQA Guidelines*. As discussed previously in Section 5.6, Energy, the proposed project would not result in the wasteful, inefficient, or unnecessary consumption of fuel or energy. As such, the proposed project would be consistent with this design element.

Vehicle Miles Traveled. To meet the BAAQMD's VMT threshold, the project must achieve a reduction in project-generated VMT below the regional average consistent with the current version of the California Climate Change Scoping Plan or meet a locally adopted SB 743 VMT target, reflecting the recommendations provided in the Governor's Office of Planning and Research's (OPR) 2018 *Technical Advisory on Evaluating Transportation Impacts in CEQA*. As discussed in Section 5.17, Transportation, implementation of the proposed Plan would not substantially increase the number of vehicles traveling to and from the HNA and would not result in any VMT impacts Therefore, the proposed project would be consistent with this design element.

Electric Vehicle Requirements. This criterion requires that the project achieve compliance with off-street electric vehicle requirements in the most recently adopted version of the CALGreen Tier 2 measures. The proposed project would not provide any vehicle parking spaces; therefore, this project design feature would not be applicable to the proposed project.

As discussed above, the proposed project would not conflict with the BAAQMD's project design elements related to natural gas, energy, VMT, or electric vehicle requirements. Therefore, the proposed project would be consistent with the BAAQMD's GHG emission thresholds. In addition, implementation of the proposed Plan would expand and continue the maintenance activities already occurring at the HNA, and therefore would not result in a substantial increase in greenhouse gas emissions. As such, the proposed project would not generate GHG emissions that would have a significant effect on the environment. Therefore, the proposed project would result in **less than significant impacts** related to greenhouse gas emissions.

*b. Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? **(Less Than Significant Impact)***

Overall, the implementation of the comprehensive fire hazard reduction and forest conservation plan would be supportive of long-term State and regional goals to reduce GHG emissions, by working to reduce fire hazards and to conserve forests that act as important sinks for anthropogenic carbon emissions. As discussed above, the proposed project would be consistent with the project design thresholds of significance recommended by the BAAQMD, supporting that the proposed project would be contributing it's "fair share" of emission reductions to support achieving State goals for emission reductions and carbon neutrality by 2045. Furthermore, the proposed project would be supportive of State goals to conserve natural resources, as included in the 2022 California Air Resources Board Scoping Plan, which supports the State's achievement of legislation including Assembly Bill (AB) 1279 and Senate Bill (SB) 32. Therefore, the proposed project would not conflict with plans, policies, or regulations adopted for the purpose of reducing GHG emissions. This impact would be **less than significant**.

5.9 HAZARDS AND HAZARDOUS MATERIALS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☒	☐
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☐	☒

a. Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? ***(Less Than Significant Impact)***

Implementation of the proposed Plan may involve the minimal use of herbicides at the HNA for vegetation management. Herbicides are chemicals that kill or inhibit plant growth; they can be extremely effective tools when used to control certain species. However, the effectiveness of herbicides can vary among sites, species, and climatic conditions. Environmental risks posed by herbicide use include drift, volatilization, persistence in the environment, groundwater contamination, and harmful effects on insects and other animals. In order to minimize these environmental risks, the application of herbicides at the HNA would be limited to direct application on eucalyptus tree stumps or other woody invasive species stumps and resprouts i.e., brushed or injected into the inner bark; cut stems and stumps (cut stump), and pin-point treatment of selected invasive herbaceous plant species. Herbicide application for widely occurring herbaceous weeds is not recommended without specific cause and City-approved prescription. Application of herbicides in the HNA must be made under direct supervision and control of a Licensed Applicator pursuant to the California Department of Pesticide Regulation (CDPR) regulations, site specific methods, and pre-approved by the City Integrated Pest Management (IPM) Coordinator.

Stumps would be ground to the tree root collar where accessible, to minimize the use of herbicides. Where inaccessible, a qualified licensed pest control applicator would apply an herbicide solution to the cambium layer of the freshly cut tree stump within a few minutes of felling. The herbicide mixture would likely consist of a combination of Garlon 4 Ultra (triclopyr), Stalker (imazapyr), and/or RoundUp (glyphosate[22]) in a solution of methylated seed oil, water, or other product as indicated and acceptable by the product label, and marking dye (e.g., Hi-Light). All chemical applications would be conducted per the CDPR pesticide guidance. All cut tree stumps would receive semiannual follow-up treatment of herbicides. Semiannual follow-up treatments would involve strictly controlled low-volume foliar spray mix applied to any re-sprouted foliage after the re-sprout reaches three feet in height but before it reaches six feet in height. In addition, where herbicide application is not recommended (riparian areas, near seeps or rare plants), tarping of stumps may be applicable.

Transport and use of hazardous materials would be subject to all applicable State and federal laws, such as the Hazardous Materials Transportation Act, the Resource Conservation and Recovery Act, the California Hazardous Materials Management Act, the California Health and Safety Code, and California Code of Regulations Title 8 and Title 22. Therefore, compliance with existing regulations would ensure that implementation of the proposed Plan would not create a significant hazard to the public, or the environment associated with the routine transport, use, or disposal of hazardous materials by ensuring these materials are properly handled during implementation of the proposed Plan. Therefore, this impact would be **less than significant**.

b. Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? ***(Less Than Significant Impact)***

As described above, small quantities of herbicides would be used at the HNA during implementation of the proposed Plan. Improper use, storage, or handling could result in a release of hazardous materials into the environment which could pose a risk to construction workers and the public. However, the City and its contractors would be required to comply with existing government regulations in the use and disposal of these materials, and such materials would not be used in sufficient strength or quantity to create a substantial risk to human or environmental health. In addition, implementation of the proposed Plan does not include the demolition of existing structures. Therefore, this impact would be **less than significant**.

c. Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? ***(Less Than Significant Impact)***

Schools in the surrounding area include Madera Elementary School, located immediately northeast of the HNA, and Fred T. Korematsu Middle School, located approximately 0.2 mile west of the HNA. As described above, small quantities of herbicides would be used at the HNA during implementation of the proposed Plan. However, the application of herbicides in the HNA would be made under direct supervision and control of a Licensed Applicator pursuant to the CDPR regulations, site

[22] Note that the City of El Cerrito has currently a moratorium on the use of glyphosate. Thus, any glyphosate use will require City approval under special circumstances.

specific methods, and pre-approved by the City IPM Coordinator. Therefore, impacts related to emitting hazardous emissions or handling hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school would be **less than significant**.

d. Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? ***(Less Than Significant Impact)***

The HNA and surrounding area was evaluated via the State Water Resources Control Board (SWRCB) GeoTracker database,[23] the Department of Toxic Substances Control's (DTSC) EnviroStor database,[24] and the Hazardous Waste and Substances Sites (Cortese) List [25] for the purposes of identifying recognized environmental conditions or historical recognized environmental conditions. The HNA is not included on any list of hazardous materials sites compiled pursuant to Government Code Section 65962.5.

The nearest listed hazardous site to the HNA is the Stege Sanitary District site, located at 7500 Schmidt Lane adjacent to the west side of the HNA. However, the site is listed as closed, indicating that regulatory requirements for response actions, such as site assessment and remediation, have either been completed or were not necessary and, therefore, potential migration of residual contaminants in groundwater beneath the site does not likely pose a risk to human health and the environment. Based on the analysis provide above, and because the HNA itself is not included on any list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, impacts would be **less than significant.**

e. For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area? ***(No Impact)***

The nearest airport to the HNA is the Oakland International Airport located over 14 miles south of the HNA. The HNA is not located within the airport land use plan for the Oakland International Airport and none of the proposed activities would affect air traffic patters. Therefore, the project would result in **no impact** regarding safety hazards or excessive noise for people residing within the project area.

---

23 State Water Resources Control Board (SWRCB). 2022. Geotracker Database. Website: https://geotracker.waterboards.ca.gov/ (accessed January 2025).

24 California Department of Toxic Substances Control (DTSC). 2022. EnviroStar Database. Website: https://www.envirostor.dtsc.ca.gov/public/ (accessed January 2025).

25 California Environmental Protection Agency (Cal/EPA). 2020. Cortese List Data Resources. Website: calepa.ca.gov/sitecleanup/corteselist/ (accessed January 2025).

f. Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? ***(No Impact)***

The El Cerrito Police Department, El Cerrito/Kensington Fire Department and the Kensington Police Department have designed a Wildfire Preparedness and Evacuation Booklet[26] to help residents protect their families, homes, and neighborhoods, particularly during wildfire season. This booklet includes evacuation and preparedness tips and an evacuation map for the El Cerrito and Kensington communities. In addition, the City's Emergency Operations Plan (EOP)[27] identifies operational strategies and plans for managing inherently complex and potentially catastrophic events.

Implementation of the proposed Plan would be consistent with the goal and policies of the City's Wildfire Preparedness and Evacuation Booklet and EOP. Implementation of the proposed Plan would not alter or block adjacent roadways and would not be expected to impair the function of nearby emergency evacuation routes. Although implementation of the Plan would widen unimproved surface fire trails to provide vehicle access to treatment areas and improve emergency and maintenance vehicle access, these road improvements would be restricted to the HNA and would not cause permanent alterations to vehicle circulation routes and patterns in the surrounding area or impede public access or travel upon public rights-of-way. Instead, these improvements would provide emergency vehicles better access to the HNA.

Further, as the proposed project would implement the fuel reduction measures outlined in the proposed Plan and would help the City address wildfire concern at the HNA and surrounding area. Therefore, **no impact** related to impairing or interfering with an adopted emergency response plan or emergency evacuation plan would occur.

g. Would the project expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands? ***(No Impact)***

Over the last few years, community concerns regarding fire risk in the HNA and surrounding communities have significantly increased. The proposed Plan provides a science-based framework and strategy to improve fire resilience and forest health in the HNA and the surrounding neighborhoods and residential areas. Overall, implementation of the proposed Plan would address fire hazards at the HNA and the surrounding area, and **no impact** related to exposing people or structures to a significant risk of loss, injury or death involving wildland fires would occur.

[26] City of El Cerrito. 2022. El Cerrito & Kensington Residents Guide to Wildfire Preparedness & Evacuation. November.

[27] City of El Cerrito. 2022. City of El Cerrito Emergency Operations Plan. April.

5.10 HYDROLOGY AND WATER QUALITY

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	☐	☒	☐	☐
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☐	☒
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i. Result in substantial erosion or siltation on- or offsite;	☐	☐	☒	☐
ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	☐	☐	☐	☒
iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☒	☐
iv. Impede or redirect flood flows?	☐	☐	☐	☒
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	☒
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐

a. Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality? ***(Less Than Significant with Mitigation Incorporated)***

Under existing conditions, stormwater runoff at the HNA either infiltrates into the soil or discharges to one of the several stream/drainage channels that are present in the HNA. These generally flow in the southwest direction into culverts beneath the adjacent residential area to the southwest. Some of the drainages occur within concrete v-ditches and become natural stream channels further downstream within the HNA. During implementation of the proposed Plan, vegetation removal would expose soils and there would be an increased potential for soil erosion and sedimentation compared to existing conditions. In addition, herbicides used during vegetation management activities could be discharged into receiving waters during rain events.

As discussed in the proposed Plan, trees within 50 feet of watercourses (e.g., along Wildwood Creek) would not be removed as part of this action. If control of non-native or hazard trees with the riparian buffer is required later, these activities would be accomplished pursuant to a Lake and Streambed Alteration Agreement or a Routine Maintenance Agreement to be authorized by CDFW. Erosion control Best Management Practices (BMPs), identified by the San Francisco Bay Regional

Water Quality Control Board (RWQCB), would be implemented to control erosion during and after vegetation removal. In addition, as required by **Mitigation Measure BIO-7a**, riparian areas shall be separated and protected from the work area through silt fencing, amphibian/reptile-friendly fiber rolls (i.e., no mono-filament mesh), or other appropriate erosion control material. Material staging, and all other project-related activity shall be located as far as possible from riparian areas with no off-road driving or parking of vehicles or equipment within the dripline of a riparian tree. The HNA would be revegetated with native species, which would stabilize the soil and reduce erosion impacts. In addition, the application of herbicides in the HNA would be minimal and would be made under direct supervision and control of a Licensed Applicator pursuant to the CDPR regulations, site specific methods, and pre-approved by the City IPM Coordinator.

Therefore, because implementation of the proposed Plan would include erosion control BMPs and adhere to application regulation related to herbicide use, implementation of the proposed Plan would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality. Impacts would be **less than significant with mitigation incorporated**.

b. Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin? ***(No Impact)***

The HNA does not overlie a groundwater basin.[28] In addition, no groundwater dewatering would be necessary during implementation of the proposed Plan and no new impervious surface area would be development at the HNA. Therefore, **no impact** related to depletion of groundwater supplies or interference with groundwater recharge in a manner that may impede sustainable groundwater management during construction and operation would occur.

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

i. Result in substantial erosion or siltation on- or off-site; ***(Less Than Significant Impact)***

Implementation of the proposed Plan would generally maintain the same drainage patterns as existing conditions. As discussed above, implementation of the proposed Plan could increase erosion or siltation at the HNA during vegetation removal activities. However, trees within 50 feet of watercourses (e.g., along Wildwood Creek) would not be removed as part of these actions. In addition, erosion control BMPs, identified by the San Francisco Bay RWQCB, would be implemented to control erosion during and after vegetation removal. Therefore, impacts related to substantial erosion or siltation on- or off-site would be **less than significant**.

[28] California Department of Water Resources (DWR). 2022. SGMA Data Viewer. Website: https://sgma.water.ca.gov/webgis/index.jsp?appid=gasmaster&rz=true (accessed January 2025).

ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off site; ***(No Impact)***

As previously discussed, no new impervious surface area would be developed at the HNA, and implementation of the proposed Plan would generally maintain the same drainage patterns as existing conditions. Therefore, implementation of the proposed Plan would not substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off site. **No impact** would occur.

iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or ***(Less Than Significant Impact)***

As previously discussed, no new impervious surface area would be developed at the HNA, and implementation of the proposed Plan would generally maintain the same drainage patterns as existing conditions. Runoff from the HNA would continue to either infiltrate into the soil or discharge to one of the several stream/drainage channels that are present in the HNA, flowing in the southwest direction into culverts beneath the adjacent residential area to the southwest. The existing stormwater infrastructure in the residential area to the southwest would have sufficient capacity to continue to accommodate runoff from the HNA. In addition, erosion BMPs, identified by the San Francisco Bay RWQCB[29] and implemented as part of the proposed Plan and the minimal application of herbicides in the HNA made under direct supervision and control of a Licensed Applicator pursuant to the CDPR regulations, site specific methods, and pre-approved by the City IPM Coordinator would ensure no additional sources of polluted runoff would enter the stormwater system.

For these reasons, impacts related to the exceedance of existing or planned stormwater drainage systems or substantial additional sources of polluted runoff during construction and operation would be **less than significant**.

iv. Impede or redirect flood flows? ***(No Impact)***

According to the MTC and ABAG, the HNA is not within a 100-year floodplain or 500-year floodplain.[30] As implementation of the proposed Plan would not include the construction of any new structures and would not be located within a floodplain, implementation of the proposed Plan would not impede or redirect flood flows, and there would be **no impact**.

d. In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation? ***(No Impact)***

---

29 See https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/planningtmdls/basinplan/web/bp_ch4c.html#4.19.

30 Metropolitan Transportation Commission (MTC) and Association of Bay Area Governments (ABAG). 2018. Probabilistic Earthquake Shaking Hazard Map. Website: https://mtc.maps.arcgis.com/apps/webappviewer/index.html?id=4a6f3f1259df42eab29b35dfcd086fc8 (accessed January 2025).

As previously discussed, the HNA is not located within a 100-year floodplain or 500-year floodplain. In addition, the MTC and ABAG does not identify the HNA as within a tsunami hazard zone.[31] Seiches are waves that are created in an enclosed body of water such as a bay, lake, or harbor and go up and down or oscillate and do not progress forward like standard ocean waves. The nearest enclosed body of water to the HNA is the San Pablo Reservoir, located approximately 2.4 miles east of the HNA. Due to the distance from the HNA and the presence of an intervening mountain range, San Pablo Reservoir would not inundate the HNA in the event of a seiche. Therefore, there would be **no impact** related to the release of pollutants in the event of inundation due to flood hazard, tsunamis, or seiches.

e. Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan? ***(Less Than Significant Impact)***

The project site is within the jurisdiction of the San Francisco Bay RWQCB. The Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan)[32] is the master policy document that establishes the water quality objectives and strategies needed to protect designated beneficial water uses for all surface and groundwater within its jurisdiction. As discussed above, implementation of the proposed Plan would include implementation of BMPs, identified by the San Francisco Bay RWQCB, would address potential water quality impacts.

The Sustainable Groundwater Management Act (SGMA) was enacted in September 2014. SGMA requires governments and water agencies located within high- and medium-priority groundwater basins to halt overdraft of the basins. SGMA requires the formation of local Groundwater Sustainability Agencies (GSAs), which are required to adopt Groundwater Sustainability Plans (GSPs) to manage the sustainability of the groundwater basins. As previously discussed, the project site does not overly a groundwater basin.[33] Therefore, implementation of the proposed Plan would not conflict with or obstruct the implementation of a sustainable groundwater management plan.

For the reasons above and with implementation of applicable BMPs, implementation of the proposed Plan would not conflict with or obstruct the implementation of a water quality control plan or sustainable groundwater management plan, and impacts would be **less than significant**.

---

31 Metropolitan Transportation Commission (MTC) and Association of Bay Area Governments (ABAG). 2018. Probabilistic Earthquake Shaking Hazard Map. Website: https://mtc.maps.arcgis.com/apps/webapp viewer/index.html?id=4a6f3f1259df42eab29b35dfcd086fc8 (accessed January 2025).

32 San Francisco Bay Regional Water Quality Control Board (RWQCB). 2017. San Francisco Bay Region. *Water Quality Control Plan for the San Francisco Bay Basin*. May 4.

33 California Department of Water Resources (DWR). 2022. SGMA Data Viewer. Website: https://sgma. water.ca.gov/webgis/index.jsp?appid=gasmaster&rz=true (accessed January 2025).

5.11 LAND USE AND PLANNING

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
f. Physically divide an established community?	☐	☐	☐	☒
g. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒

The City of El Cerrito General Plan Land Use Map[34] and City of El Cerrito Zoning Map[35] designates the majority of the HNA as Parks and Open Space and Open Space Natural (OS-N), respectively. However, a portion of the HNA in the northeast is designated as Very Low Density residential and zoned Single-family Residential with a minimum lot size of 10,000 square feet (RS-10). The proposed project would establish and adopt a comprehensive fire hazard reduction and forest conservation plan that would guide maintenance activities and improve eligibility for grant funding for the City's HNA and would not result in a change to the existing land use. Additionally, maintenance associated with implementation of the proposed Plan would be restricted to the existing HNA. Although implementation of the Plan would widen unimproved surface fire trails to provide vehicle access to treatment areas and improve emergency and maintenance vehicle access, these road improvements would also be restricted to the HNA, and the proposed project would not alter any other existing roadways. Therefore, implementation of the Plan would not divide any established community.

Therefore, the proposed project would have **no impact**, either individually or cumulatively, related to land use and planning.

34 City of El Cerrito. 2012. General Plan Land Use Map.

35 City of El Cerrito. Zoning Map. Website: https://maps.digitalmapcentral.com/production/VECommunityView/cities/ElCerrito/index.aspx (accessed December 2024).

5.12 MINERAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
h. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
i. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

No mineral resources are identified within the City, and the nearest mineral resources in Contra Costa County are located over 16 miles east of the HNA.[36] The HNA does not contain any known mineral resources and is not used for mineral production. Therefore, implementation of the proposed Plan would not result in the loss of availability of a known mineral resource of value to the region or residents of the State or any locally important mineral resource recover site, and **no impact**, either individually or cumulatively, related to the loss of mineral resources would occur.

[36] Contra Costa County. 2024. Contra Costa County 2045 General Plan – Conservation, Open Space, and Working Lands Element, Figure COS-13: Mineral Resource Areas. November 5.

5.13 NOISE

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project result in:				
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
b. Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

Noise is usually defined as unwanted sound and consists of any sound that may produce physiological or psychological damage and/or interfere with communication, work, rest, recreation, or sleep. Several noise measurement scales exist that are used to describe noise in a particular location. A decibel (dB) is a unit of measurement that indicates the relative intensity of a sound. Sound levels in dB are calculated on a logarithmic basis. An increase of 10 dB represents a 10-fold increase in acoustic energy, while 20 dB is 100 times more intense, and 30 dB is 1,000 times more intense. Each 10 dB increase in sound level is perceived as approximately a doubling of loudness; and similarly, each 10 dB decrease in sound level is perceived as half as loud. Sound intensity is normally measured through the A-weighted decibel (dBA) sound level. This scale gives greater weight to the frequencies of sound to which the human ear is most sensitive. The A-weighted sound level is the basis for 24-hour sound measurements that better represent human sensitivity to sound at night.

As noise spreads from a source, it loses energy so that the farther away the noise receiver is from the noise source, the lower the perceived noise level would be. Geometric spreading causes the sound level to attenuate or be reduced, resulting in a 6 dB reduction in the noise level for each doubling of distance from a single point source of noise to the noise sensitive receptor of concern.

There are many ways to rate noise for various time periods, but an appropriate rating of ambient noise affecting humans also accounts for the annoying effects of sound. Equivalent continuous sound level (L_{eq}) is the total sound energy of time varying noise over a sample period. However, the predominant rating scales for human communities in the State of California are the L_{eq}, the community noise equivalent level (CNEL), and the day-night average level (L_{dn}) based on dBA. CNEL is the time varying noise over a 24-hour period, with a 5 dBA weighting factor applied to the hourly L_{eq} for noises occurring from 7:00 p.m. to 10:00 p.m. (defined as relaxation hours) and 10 dBA weighting factor applied to noise occurring from 10:00 p.m. to 7:00 a.m. (defined as sleeping hours). L_{dn} is similar to the CNEL scale, but without the adjustment for events occurring during the evening relaxation hours. CNEL and L_{dn} are within one dBA of each other and are normally exchangeable. The noise adjustments are added to the noise events occurring during the more sensitive hours.

A project would have a significant noise effect if it would substantially increase the ambient noise levels for adjoining areas or conflict with adopted environmental plans and goals of applicable regulatory agencies, including, as appropriate, the City of El Cerrito.

Certain land uses are considered more sensitive to noise than others. Examples of these land uses include residential areas, educational facilities, hospitals, childcare facilities, and senior housing. The project site is surrounded by a mix of uses within an urban area of the City. The project site is located within an urban area of the City, adjacent to residential uses and schools. The closest sensitive receptors are residential uses located adjacent to the HNA.

a. Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? ***(Less Than Significant Impact)***

Implementation of the proposed Plan would result in short-term noise impacts on the nearby sensitive receptors during vegetation removal activities that use mechanical equipment, such as woodchippers during vegetation removal activities. In addition, helicopters may be used to remove felled trees from areas that are not accessible by road, such as felled eucalyptus trees from Motorcycle Hill. The closest sensitive receptors are the residences directly adjacent to the HNA. Maximum noise would be short-term, generally intermittent depending on the phase, and variable depending on receiver distance from the activity. The duration of noise impacts generally would be from one day to 20 days depending on the type of vegetation removal, with the use of helicopters lasting up to 20 days.

Title 10, Public Peace, Morals, and Welfare, of the City's Municipal Code provides the City's noise ordinance and prohibits unnecessary noises or sounds that are physically annoying or disturbing to others. For construction activities, the City enforces specific hours to minimize disturbances. Construction noise that exceeds ambient noise levels is allowed Monday through Friday only between 7:00 a.m. and 6:00 p.m. and Saturday only between 8:00 a.m. and 5:00 p.m. No construction noise is permitted on Sundays and holidays. The use of mechanical equipment and helicopters during vegetation removal activities would only occur during these permitted times. Further, the use of mechanical equipment, including helicopters, would be temporary in nature, and would cease once vegetation removal activities are completed. In addition, implementation of the proposed Plan would expand and continue the maintenance activities already occurring at the HNA. Therefore, implementation of the proposed Plan would not result in the generation of a substantial temporary or permanent increase in noise levels in excess of standards established by the City's noise ordinance. Impacts would be **less than significant**.

b. Would the project result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels? ***(Less Than Significant Impact)***

Vibrating objects in contact with the ground radiate vibration waves through various soil and rock strata to the foundations of nearby buildings. As the vibration propagates from the foundation throughout the remainder of the building, the vibration of floors and walls may cause perceptible vibration from the rattling of windows or a rumbling noise. The rumbling sound caused by the

vibration of room surfaces is called groundborne noise. When assessing annoyance from groundborne noise, vibration is typically expressed as root mean square (rms) velocity in units of decibels of 1 micro-inch per second. To distinguish vibration levels from noise levels, the unit is written as "VdB." Human perception to vibration in indoor environments starts at levels as low as 67 VdB and sometimes lower. Annoyance due to vibration in residential settings starts at 70 VdB. Groundborne vibration is almost never annoying to people who are outdoors. Although the motion of the ground may be perceived, without the effects associated with the shaking of the building, the motion does not provoke the same adverse human reaction.

In extreme cases, excessive groundborne vibration has the potential to cause structural damage to buildings. Common sources of groundborne vibration include trains and construction activities such as blasting, pile driving and operating heavy earthmoving equipment.

Although implementation of the proposed Plan would include the use of mechanical equipment during vegetation removal activities, these activities would be minimal and temporary. No impact pile driving or other substantial construction equipment use or activity would occur as part of implementation of the proposed Plan.

For all other equipment associated with the proposed activities, vibration impacts would approach 0.089 inches per second at a distance of 25 feet. This level would not exceed the 0.12 inches per second threshold at which there is virtually no risk resulting in architectural damage to buildings extremely susceptible to vibration damage. Therefore, adjacent buildings would be structurally safe from fuel reduction activities and no structural damages would occur as a result of onsite fuel reduction activities. Therefore, this impact would be **less than significant**.

c. *For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?* ***(No Impact)***

The nearest airport to the HNA is the Oakland International Airport located over 14 miles south of the HNA. The HNA is not located within the airport land use plan for the Oakland International Airport. Furthermore, the project would not increase use or activity within the HNA and existing conditions would largely remain the same after fuel management activities are implemented. Therefore, implementation of the proposed Plan would not expose people residing or working in the project area to excessive noise levels due to the proximity of a public airport. There would be **no impact**.

5.14 POPULATION AND HOUSING

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
d. Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
e. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

The HNA currently provides open space and recreational opportunities for residents living in the area and in the City and does not contain any residential units. The implementation of the proposed Plan would not result in an increase in housing or employment, as implementation of the Plan would expand and continue the maintenance activities already occurring at the HNA and would not provide additional housing on-site or require additional permanent employees for operation. As there would be no measurable increase in employees, no measurable inducement of population growth would occur. In addition, implementation of the proposed Plan does not include the demolition of any existing structures or the removal of any existing housing units and would not otherwise displace any existing people or housing.

Therefore, the proposed project would have **no impact**, either individually or cumulatively, related to population and housing.

5.15 PUBLIC SERVICES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
f. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
i. Fire protection?	☐	☐	☐	☒
ii. Police protection?	☐	☐	☐	☒
iii. Schools?	☐	☐	☐	☒
iv. Parks?	☐	☐	☐	☒
v. Other public facilities?	☐	☐	☐	☒

As discussed in Section 4.2.7 above, implementation of the proposed Plan would not result in any new unplanned population growth, either directly or indirectly. Therefore, implementation of the proposed Plan would not result in an increase in population that would require the provision of new fire or police facilities, schools, parks, or other public facilities or result in the need for physically altered facilities. In addition, implementation of the proposed Plan would address fire concerns at the HNA, which would help reduce the risk of fire at the HNA and surrounding area, reducing the burden for fire protection services in the City.

Therefore, the proposed project would have **no impact** related to public services, parks, or other public facilities.

5.16 RECREATION

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
g. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
h. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

As discussed in Section 4.2.7 above, implementation of the proposed Plan would not result in any new unplanned population growth, either directly or indirectly. Therefore, implementation of the proposed Plan would not result in an increase in population that would require the provision of new parks and recreational facilities in the City. In addition, implementation of the Plan would expand and continue the maintenance activities already occurring at the HNA and the HNA would continue to serve the same population as existing conditions. Therefore, implementation of the proposed Plan would not contribute to the increased use of existing neighborhood or regional parks such that substantial physical deterioration would occur. In addition, implementation of the proposed Plan does not include the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment.

Therefore, **no impact**, either individually or cumulatively, related to recreation would occur.

5.17 TRANSPORTATION

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
i. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	☐	☒
j. Conflict or be inconsistent with CEQA Guidelines §15064.3, subdivision (b)?	☐	☐	☐	☒
k. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
l. Result in inadequate emergency access?	☐	☐	☐	☒

As discussed above, implementation of the Plan would expand and continue the maintenance activities already occurring at the HNA and would continue to serve the same population as existing conditions. Some new access points and trails within the HNA are proposed as part of the Plan; however, any increase in use of the HNA with implementation of the Plan is anticipated to be minimal. As such, implementation of the proposed Plan would not substantially increase the number of vehicles traveling to and from the HNA. Implementation of the proposed Plan would also not conflict with any program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities, result in any vehicle miles traveled (VMT) impacts, substantial increase hazards due to a geometric design feature, or result in inadequate emergency access. Although implementation of the Plan would widen unimproved surface fire trails to provide vehicle access to treatment areas and improve emergency and maintenance vehicle access, these road improvements would be restricted to the HNA, and the proposed project would not alter any other existing public roadways.

Therefore, **no impact**, either individually or cumulatively, related to transportation would occur.

5.18 TRIBAL CULTURAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)? Or	☐	☒	☐	☐
ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☒	☐	☐

a. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)? Or

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

Native American consultation was conducted in compliance with Assembly Bill (AB) 52. A letter and map depicting the project site (i.e., HNA) and surrounding area was sent to the Native American Heritage Commission (NAHC) requesting a search of the Sacred Lands File (SLF) and list of tribes eligible to consult with the City, pursuant to Public Resources Code Section 21080.1, 21080.3.1, and 21080.3.2, on August 15, 2023. On August 24, 2023, the NAHC responded in a letter with a list of tribal contacts and stated that the search of the SLF was positive, indicating that a culturally sensitive property had been identified within or near the HNA. Letters to the list of tribal contacts

were sent on August 30, 2023, informing them of the proposed project and inquiring if they had any knowledge of cultural properties within or near the HNA.

On September 11, 2023, Francis Ranstead, Tribal Administrator for the Confederated Villages of Lisjan Nation (Lisjan Nation) responded and requested consultation regarding implementation of the proposed Plan. The Lisjan Nation also engaged directly with the City in a meeting on October 18, 2023. At this meeting, the Lisjan Nation representatives requested a copy of the Native American Heritage Commission (NAHC) and Northwest Information Center (NWIC) search which the City provided. The representatives also requested confirmation that ground disturbances would not occur near creek bottoms and that the City would notify them if the scope changed. In the City's letter dated December 7, 2023, the City confirmed that no ground disturbances is planned as part of the project and agreed to contact the representatives if the project scope changes. There were no further requests.

As discussed in Section 5.3, Cultural Resources, the archival research, outreach to the Native American community, and an intensive field survey performed as part of the Cultural Resources Assessment did not document any indications of prehistoric activities at the project site or surrounding area. Although the NAHC indicated that a culturally significant property was known to be present near the project site, none of the tribal contacts and representatives have expressed any concerns regarding this possible site. In addition, the intensive field survey did not identify any potentially sensitive landforms or significant level terrain at the project site, suggesting it retains a low level of sensitivity for containing traces of early Native American occupation. In addition, the proposed project would establish and adopt a comprehensive fire hazard reduction and forest conservation plan that will guide maintenance activities and improve eligibility for grant funding for the City's HNA and would not include substantial ground disturbance. Nevertheless, implementation of **Mitigation Measure CUL-1** would ensure work stoppage in the event of an archaeological discovery. With implementation of **Mitigation Measures CUL-1** and compliance with Section 7050.5 of the California Health and Safety Code and Section 5097.98 of the PRC, the potential discovery of previously unidentified tribal cultural resources would be reduced to a **less than significant with mitigation incorporated**.

5.19 UTILITIES AND SERVICE SYSTEMS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
b. Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☐	☒
c. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☐	☒
d. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
e. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☐	☒
f. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☐	☒

The proposed project would establish and adopt a comprehensive fire hazard reduction and forest conservation plan that would guide maintenance activities and improve eligibility for grant funding for the City's HNA. No new buildings would be constructed with implementation of the proposed Plan; therefore, the proposed project would not include uses that would increase demand for wastewater treatment, stormwater management, water, and solid waste disposal (landfill service facilities) and would not adversely affect long-term water supplies. The proposed project would not require or result in the construction of new utilities or expansion of existing facilities.

Therefore, **no impact**, either individually or cumulatively, related to utilizes and service systems would occur.

5.20 WILDFIRE

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
g. Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
h. 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?	☐	☐	☐	☒
i. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☐	☒
j. 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?	☐	☐	☐	☒

According to the most recent fire hazard maps approved by the California Department of Forestry and Fire Protection (CAL FIRE), the HNA is located within a Very High Fire Hazard Severity Zone (FHSZ) in a Local Responsibility Area (LRA).[37] As previously discussed, the HNA is heavily vegetated and can present a fire hazard to the surrounding residential areas and to the City as a whole. Over the last few years, community concerns regarding fire risk in the HNA and surrounding communities have significantly increased. The City has responded with ongoing and increased vegetation maintenance activities, completing work largely based on past planning efforts. The proposed project is intended to guide more robust, comprehensive, and balanced management of the HNA. The proposed Plan provides a science-based framework and strategy to improve fire resilience and forest health in the HNA and the surrounding neighborhoods and residential areas. In order to accomplish this, the proposed Plan includes goals, objectives, and actions related to protecting residential areas surrounding the HNA from wildfire, establishing fuel breaks, reducing abundance of high-risk invasive trees, and developing a fire roads and trails network. Therefore, implementation of the proposed Plan would not exacerbate wildfire risks or expose surrounding uses to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. Instead, implementation of the proposed Plan would help reduce the risk of wildfire at the HNA.

Therefore, **no impact**, either individually or cumulatively, related to wildfire would occur.

[37] California Department of Forestry and Fire Protection (CAL FIRE). Fire Hazard Severity Zone Viewer. Website: https://experience.arcgis.com/experience/03beab8511814e79a0e4eabf0d3e7247/ (accessed January 2025).

5.21 MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	☐	☒	☐	☐
c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☐	☒

a. Does the Project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? ? ***(Less Than Significant With Mitigation Incorporated)***

Implementation of the mitigation measures recommended in this Initial Study/Mitigated Negative Declaration (IS/MND) would ensure that implementation of the proposed Plan would not substantially degrade the quality of the environment; reduce the habitat, population, or range of a plant or animal species; or eliminate important examples of California history or prehistory. Section 5.2, Biological Resources, includes mitigation measures (**Mitigation Measures BIO-1** through **BIO-8**) to minimize impacts to special-status species, riparian habitat, sensitive natural communities, wetlands, and migratory corridors. Mitigation (**Mitigation Measure CUL-1**) is provided in Section 4.5, Cultural Resources, in the event that unanticipated archaeological resources, including human remains, are identified in the project area. With implementation of these mitigation measures, implementation of the proposed Plan would result in less than significant impacts to the quality of the environment. This impact would be **less than significant with mitigation incorporated.**

b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)? ***(Less Than Significant With Mitigation Incorporated)***

The *State CEQA Guidelines* require a discussion of significant environmental impacts that would result from project-related actions in combination with "closely related past, present, and probably future projects: located in the immediate vicinity" (*State CEQA Guidelines* Section 15130[b][1][A]). Cumulative environmental impacts are those impacts that by themselves are not significant, but when considered with impacts occurring from other projects in the vicinity would result in a cumulative impact. Related projects considered to have the potential of creating cumulative impacts in association with the proposed project consist of projects that are reasonably foreseeable and that would be constructed or operated during the life of the proposed project.

The proposed project's impacts would be individually limited and not cumulatively considerable. The potentially significant impacts that can be reduced to a less than significant level with implementation of recommended mitigation measures include the topics of biological resources, cultural/tribal cultural resources, and geology and soils. For the topic of biological resources, implementation of **Mitigation Measures BIO-1** through **BIO-8** would ensure that impacts to special-status species, riparian habitat, sensitive natural communities, wetlands, and migratory corridors would be less than significant. For the topics of cultural/tribal cultural resources, potentially significant impacts to archaeological and tribal cultural resources would be reduced to less than significant with implementation of **Mitigation Measure CUL-1.** For the topic of geology and soils, implementation of **Mitigation Measures GEO-1 and GEO-2** would ensure that impacts related to unstable soils and paleontological resources would be less than significant.

For all other environmental topics, implementation of the proposed Plan would have no impacts or less than significant impacts and, therefore, would not substantially contribute to any potential cumulative impacts for these topics. All environmental impacts that could occur as a result of implementation of the proposed Plan would be reduced to less than significant through the implementation of the mitigation measures recommended in this document.

Implementation of these measures would ensure that the impacts of the project would be below established thresholds of significance and that these impacts would not combine with the impacts of other cumulative projects to result in a cumulatively considerable impact on the environment as a result of project development. Therefore, this impact would be **less than significant with mitigation incorporated.**

c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? ***(No Impact)***

Implementation of the proposed Plan would not result in any environmental effects that would cause substantial direct or indirect adverse effects to human beings, beyond those topics previously discussed in Sections 4.2.1 through 4.2.11 and Sections 5.1 through 5.8 of this IS/MND. **No impact** would occur.

6.0 LIST OF PREPARERS

6.1 CITY OF EL CERRITO

10890 San Pablo Avenue
El Cerrito, CA 94530

Sean Moss, AICP, Planning Manager
Jeff Ballantine, AICP, Senior Planner
Karineh Samkian, Senior Program Manager
Stephen Prée, Environmental Programs Manager/City Arborist

6.2 LSA ASSOCIATES, INC.

157 Park Place
Pt. Richmond, CA 94801

Theresa Wallace, AICP, Principal Environmental Planner/Principal in Charge
Shanna Guiler, AICP, Associate Environmental Planner/ Project Manager
Lauren Peachey, Environmental Planner/Assistant Project Manager
Jessica Coria, Associate/Director of Air Quality & Climate Change Services
JT Stephens, Principal Noise Specialist

This page intentionally left blank

7.0 REFERENCES

Bay Area Air Quality Management District (BAAQMD). 2017. Clean Air Plan. April 19.

California Department of Conservation (DOC). 2019. Alquist-Priolo Earthquake Fault Zones. Website: www.conservation.ca.gov/cgs/alquist-priolo

California Department of Conservation (DOC). 2021. *California Earthquake Hazards Zone Application ("EQ Zapp").* Website: https://maps.conservation.ca.gov/cgs/EQZApp/app/

California Department of Conservation (DOC). 2022. California Important Farmland Finder (map). Website: maps.conservation.ca.gov/dlrp/ciff

California Department of Conservation. 2023. *California Williamson Act Enrollment Finder*. Website: https://maps.conservation.ca.gov/dlrp/WilliamsonAct/

California Department of Toxic Substances Control (DTSC). 2022. EnviroStar Database. Website: https://www.envirostor.dtsc.ca.gov /public/

California Department of Transportation (Caltrans). California State Scenic Highway System Map. Website: https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa

California Department of Water Resources (DWR). 2022. SGMA Data Viewer. Website: https://sgma.water.ca.gov/webgis/index.jsp?appid=gasmaster&rz=true

California Environmental Protection Agency (Cal/EPA). 2020. Cortese List Data Resources. Website: calepa.ca.gov/sitecleanup/corteselist/

City of El Cerrito. 2022. City of El Cerrito Emergency Operations Plan. April.

City of El Cerrito. 2022. El Cerrito & Kensington Residents Guide to Wildfire Preparedness & Evacuation. November.

City of El Cerrito. 2012. General Plan Land Use Map.

City of El Cerrito. Zoning Map. Website: https://maps.digitalmapcentral.com/production/VECommunityView/cities/ElCerrito/index.aspx

Contra Costa County. 2024. Contra Costa County 2045 General Plan – Conservation, Open Space, and Working Lands Element, Figure COS-13: Mineral Resource Areas. November 5.

LSA Associates, Inc. (LSA). 2024. Biological Resources Assessment, Hillside Natural Area Fire Resilience and Forest Conservation Management Plan, El Cerrito, California. November 2024. (Appendix A).

LSA Associates, Inc. (LSA). 2014. Biological Resources Report for the Madera Property Fuel Reduction Project, El Cerrito, Contra Costa County, CA.

LSA Associates, Inc. (LSA). 1987. El Cerrito Hillside Natural Area Vegetation Management Plan. Prepared for the City of El Cerrito.

LSA Associates, Inc. (LSA). 2024. Hillside Natural Area Fire Resilience and Forest Conservation Management Plan. November.

Metropolitan Transportation Commission (MTC) and Association of Bay Area Governments (ABAG). 2018. Probabilistic Earthquake Shaking Hazard Map. Website: https://mtc.maps.arcgis.com/apps/webappviewer/index.html?id=4a6f3f1259df42eab29b35dfcd086fc8

San Francisco Bay Regional Water Quality Control Board (RWQCB). 2017. San Francisco Bay Region. *Water Quality Control Plan for the San Francisco Bay Basin*. May 4.

Solano Archaeological Services, LLC. 2023. Cultural Resources Technical Memorandum, Cultural Resources Investigation – Hillside Natural Area Fire Resilience and Forest Conservation Management Plan, City of El Cerrito, Contra Costa County, California. October 18. (Appendix B).

State Water Resources Control Board (SWRCB). 2022. Geotracker Database. Website: https://geotracker.waterboards.ca.gov/

United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS). 2023. Web Soil Survey. Website: https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx

United States Geological Survey (USGS). 2018. The Modified Mercalli Intensity Scale. Website: www.usgs.gov/natural-hazards/earthquake-hazards/science/modified-mercalli-intensity-scale?qt-science_center_objects=0#qt-science_center_objects,

APPENDIX A

BIOLOGICAL RESOURCES ASSESSMENT

This page intentionally left blank

BIOLOGICAL RESOURCES ASSESSMENT

HILLSIDE NATURAL AREA FIRE RESILIENCE AND FOREST CONSERVATION MANAGEMENT PLAN

EL CERRITO, CALIFORNIA

LSA

November 2024

BIOLOGICAL RESOURCES ASSESSMENT

HILLSIDE NATURAL AREA FIRE RESILIENCE AND FOREST CONSERVATION MANAGEMENT PLAN

EL CERRITO, CALIFORNIA

Submitted to:

City of El Cerrito
10890 San Pablo Avenue
El Cerrito, California 94530

Prepared by:

LSA
157 Park Place
Pt. Richmond, California 94801
510.236.6810
Project No. 20231296

Funding provided by:

Coastal Conservancy

LSA

November 2024

TABLE OF CONTENTS

TABLES

APPENDICES

EXECUTIVE SUMMARY

PURPOSE AND BACKGROUND

The City of El Cerrito ("City") proposes to develop and adopt a comprehensive fire hazard reduction and vegetation management plan for the City's "Hillside Natural Area" (HNA). The purpose of the "Hillside Natural Area Fire Resilience and Forest Conservation Management Plan" is to:

- identify and protect critical resource areas,
- guide the City's fire fuel reduction, native forest conservation, and maintenance activities, and
- evaluate fire road and trail network conditions.

This Biological Resources Report provides a California Environmental Quality Act (CEQA)-compliant identification of special-status species and their habitats, wetlands and other regulated waters, and other potential biological resource constraints to the Plan development. The report also provides recommended mitigation measures to address the requirements of CEQA.

PROJECT SITE DESCRIPTION

Site Characteristics

The project site is located within the City of El Cerrito, California (Figure 1). The HNA is approximately 107.18 acres and is divided into three sections: Hillside Natural Area North ("Motorcycle Hill;" 24.22 acres), Madera Property (9.53 acres) and Hillside Natural Area South (73.43 acres). Elevations ranges from approximately 150 and 650 feet above sea level. The project site is characterized by steep hillslopes with predominantly western and southern exposures (Figure 2). There are 6 major vegetation cover types within the HNA (Figure 3). Soils on the project site consist of mostly Rock outcrop-Xerorthents association with Cut and fill land-Millsholm complex mapped along the western boundary and Quarry mapped near the southern boundary of the project site (USDA 2023; Figure 4).

Vegetation Communities

The project site supports ruderal/non-native grassland, native grassland, coast live oak woodland, scrub, riparian woodland, and drainages (Figure 3).

Ruderal/Non-Native Grassland. The ruderal/non-native grassland (33.47 acres) supports primarily non-native annual grassland species with patches of perennial grassland and ruderal plant species.

Non-native grasses are also abundant throughout the understory within all habitat types at the project site.

Native Grasslands. Native grasslands (Figure 3) observed on the project site consist of small localized patches of purple needle grass (*Stipa pulchra*), foothill needle grass (*Stipa lepida*), bent grass (*Agrostis pallens*), and creeping wild rye (*Elymus triticoides*).

North Franciscan Coastal Scrub. The scrub habitat within the project site comprises 2.6 acres and is dominated by coyote brush (*Baccharis pilularis*), and French broom (*Genista monspessulana*). Other dominant to co-dominant species include orange bush monkey flower (*Diplacus aurantiacus*). Stands of northern Franciscan coastal scrub are found throughout the project site, but they mainly occupy the steeper portions of the south and west facing slopes along the eastern boundary.

Coast Live Oak Woodland. The coast live oak woodland (28.7 acres) on the project site is dominated by coast live oak (*Quercus agrifolia*) with California bay (*Umbellularia californica*), California buckeye (*Aesculus californica*), and Toyon *(Hetreomeles arbutifolia)*.

Riparian Woodland. Riparian woodland occupies approximately 1.15 acres on the HNA, but that estimate is probably too low and will need to be evaluated by field mapping. It occurs along the streams and drainages and contains trees and shrubs, such as arroyo willow (*Salix lasiolepis*), Pacific willow (*S. lasiandra*), cottonwood (*Populus sp.*), alder (*Alnus sp.*), California bay (*Umbellularia californica*), California buckeye, and coast live oak. Riparian woodland is considered a sensitive plant community under CEQA.

Eucalyptus and Pine Groves. Eucalyptus groves are present in several areas within the project site. They are the most prevalent vegetation community at the project site, totaling over 36.2 acres. Eucalyptus are the dominant tree species within the groves. Both blue gum (*Eucalyptus globulus*) and yellow gum (*E. viminalis*) are growing at the project site (LSA 1987).

Rock Outcrops. Rock outcrops are present in small areas throughout the project site. Species observed at the outcrops include naked-stem buckwheat (*Eriogonum nudum*), California poppy (*Eschscholzia californica*), coyote mint (*Monardella villosa*), and various non-native plants.

Streams/Drainages. Several intermittent and ephemeral streams/drainage channels are present in the project site (Figure 3). These streams/drainages appear to flow in the southwest direction and flow off the project site into culverts beneath the adjacent residential area to the southwest. Some of the drainages occur within concrete v-ditches and become natural stream channels further downstream within the project site. These streams/drainages are likely to be considered jurisdictional features by the U.S. Army Corps of Engineers (USACE) and Regional Water Quality Control Board (RWQCB) and subject to regulation under Section 404 and 401 of the Clean Water Act and/or the California Porter Cologne Act.

SPECIAL-STATUS SPECIES

For the purposes of this assessment, special-status species are defined as follows:

- Species that are listed, formally proposed, or designated as candidates for listing as threatened or endangered under the federal Endangered Species Act (ESA);
- Species that are listed, or designated as candidates for listing, as rare, threatened, or endangered under the California Endangered Species Act (CESA);
- Plant species that are on the California Rare Plant Rank (CRPR) Lists 1A, 1B, and 2;
- Animal species designated as Species of Special Concern or Fully Protected by the California Department of Fish and Wildlife (CDFW); or
- Species that meet the definition of rare, threatened, or endangered under Section 15380 of the CEQA guidelines.

Several special-status species could occur on the project site or in the vicinity (Table A). No special-status species were observed during the field survey.

SPECIES FOR WHICH AVOIDANCE, MINIMIZATION AND MITIGATION MAY BE REQUIRED:

- Special-Status Plants. If fuel reduction treatments are proposed within the native grasslands, riparian woodland, drainage channels, or the less disturbed portions of the oak woodland and scrub habitat (such as areas where French broom is not present), focused plant surveys for special-status plants should be conducted according to CDFW's Protocols for Surveying and Evaluating Impacts to Special Status Plant Populations and Natural Communities (CDFW 2018).

- Monarch Butterfly. The monarch butterfly is a federal candidate listed species that could breed within the project site. No California Natural Diversity Database (CNDDB; CDFW 2023) occurrences for monarch butterfly have been recorded at the project site, but the species was observed during field work on October 10, 2023, at Motorcycle Hill.

- Crotch and Western Bumble Bee. The Crotch and western bumble bee are Candidate State Endangered listed species. These species are known to occur in grassland and scrub habitat where suitable native nectar plants are present. These species historically occurred in the region but are now considered rare. Due to the presence of suitable flowering plant species, these species, although unlikely due to their rarity, could be present.

- Special-Status Birds and Other Nesting Bird Species. Several special-status bird species are known to occur at or near the project site (Table A; see list above). These bird species could nest, winter, and/or migrate through the project site. Some of these bird species, such as the American peregrine falcon, could forage on the project site, but are unlikely to nest at or adjacent to the site due to the lack of suitable nesting habitat. Special-status birds observed at the project site include white-tailed kite, olive-sided flycatcher, and Vaux's swift, among others (eBird 2023). Active nests of special-status and other native bird species are protected by the Migratory Bird Treaty Act and/or California Fish and Game Code.

- Special-Status Bats and Other Bat Species. Several bat species, including special-status bat species, could roost and/or forage at the project site. All roosts of native bats, regardless of their status, are protected by California Fish and Game Code. Townsend's western big-eared bat

(California Species of Special Concern) may briefly forage over the project site but would not roost on the project site due to the lack of suitable roosting habitat. Suitable habitat for pallid bat and western red bat, both of which are California Species of Special Concern and other bat species could roost in the onsite trees.

- San Francisco Dusky-Footed Woodrat. The San Francisco dusky-footed woodrat is a California Species of Special Concern. This species occurs in riparian woodland, woodland/forests, and scrub habitat and has been observed at the project site. LSA observed woodrat houses in the northern portion of the site, but this species could occur throughout the project site where suitable habitat is present.

OTHER MITIGATION MEASURES

- Waters of the United States/Waters of the State. Potential impacts to potentially jurisdictional features, such as the onsite streams/drainages (and seasonal wetlands/seeps, if present), are subject to regulation by the USACE, RWQCB, and/or CDFW. These features will be avoided during the fuel reduction activities, where possible. If these features are impacted, the City would need to obtain the required permits from the relevant regulatory agencies, including the USACE, CDFW, and RWQCB.

- Riparian Vegetation. To minimize disturbance to riparian habitat occurring adjacent to the fuel reduction area, riparian areas shall be clearly delineated by a qualified biologist. Riparian areas shall be separated and protected from the work area through silt fencing, amphibian/reptile-friendly fiber rolls (i.e., no mono-filament), or other appropriate erosion control material. If impacts to riparian habitat within the project area cannot be avoided, a Habitat Mitigation and Monitoring Plan (HMMP) shall be prepared and implemented for all impacted riparian habitat.

- Native Grasslands and Other Sensitive Natural Communities. If feasible, the proposed fuel treatments shall avoid/minimize impacts to the purple needlegrass grasslands, other native grasslands, and other sensitive natural communities. The stands of native grasslands shall be avoided during fuel treatment activities. If the native grasslands cannot be avoided, the loss of native grasslands shall be mitigated by restoring an equivalent acreage of native grasslands onsite. The City shall reseed temporarily disturbed areas of native grassland habitat that are disturbed by fuel reduction activities with an appropriate weed-free native seed mix that contains the particular native grass seed and/or plugs. Any restored native grassland areas shall be monitored and reported on an annual basis, as required by CDFW.

INTRODUCTION

Background

The City of El Cerrito ("City") proposes to implement the Project (project) to establish and adopt a comprehensive fire hazard reduction and vegetation management plan for the City's "Hillside Natural Area" (HNA). The "Hillside Natural Area Fire Resilience and Forest Conservation Management Plan "will:

- identify and protect critical resource areas,
- guide the City's fire fuel reduction, native forest conservation, and maintenance activities, and
- evaluate fire road and trail network access.

Over the last few years, community concerns regarding fire risk in the City's HNA and surrounding residential communities have significantly increased. The City has responded with ongoing and increased vegetation maintenance activities, completing work largely based on planning efforts that were completed many years ago, including the 1994 City of El Cerrito Hillside Natural Area Fire Hazard Reduction Plan. However, the need for more robust, comprehensive, and balanced vegetation management practices became increasingly evident and was identified in the City's 2015 Urban Greening Plan. Additionally, in 2019, the El Cerrito Parks and Recreation Facilities Master Plan specifically called for action to "support the El Cerrito-Kensington Wildfire Action Plan goals and policies by creating defensible spaces, increasing weed abatement, and managing dead or diseased trees and other vegetation, especially in the Hillside Natural Area". El Cerrito voters passed a measure (Measure H) to further fund park maintenance activities that same year and the City has since increased its fire fuel reduction and vegetation management activities, in part with these park maintenance funds. Given the ongoing and historic drought, rising global temperatures and community concerns regarding the risk of wildfire, an updated plan with the required environmental site analysis is needed now to guide the City in performing and budgeting for the most effective, sustainable, and cost-efficient fuel reduction and forest conservation activities.

This Plan was developed with support from a $166,750 State Coastal Conservancy grant in September 2022. The Coastal Conservancy is a California state agency, established in 1976 to protect and improve natural lands and waterways, to help people get to and enjoy the outdoors, and to sustain local economies along California's coast. It acts with others to protect and restore, and increase public access to California's coast, ocean, coastal watersheds and the San Francisco Bay Area. Its vision is of a beautiful, restored, and accessible coast for current and future generations of Californians.

Purpose

The purpose of the Biological Resources Report is to provide a California Environmental Quality Act (CEQA)-compliant identification of special-status species and their habitats, wetlands and other regulated waters, and other potential biological resource constraints to the Plan development. The

report includes a description of the project, an explanation of the methods used to conduct the analysis, the results of field surveys including documentation of plant and wildlife species observed, and a list of special-status species (plants and animals) that could potentially occur at the site (and the likelihood of occurrence). The report also provides recommended mitigation measures to address the requirements of CEQA (50 Code of Federal Regulations [CFR] §402.12).

Methods

LSA reviewed available background information/literature, such as the Friends of *Five Creek's Native Plants of the El Cerrito Hillside Natural Area, and the El Cerrito Hillside Natural Area Vegetation Management Plan* (LSA 1987), Biological Resources Report for the Madera Property Fuel Reduction Project (LSA 2014), and searched the records of the California Department of Fish and Wildlife's California Natural Diversity Database (CNDDB; CDFW 2023), United States Fish and Wildlife Service's (USFWS 2023) Information for Planning and Consultation online system, California Native Plant Society's Inventory of Rare Plants (CNPS 2023), and eBird's online system (eBird 2023) for the occurrence of special-status plant and/or wildlife species on or near the project site.

An LSA senior biologist conducted a biological field survey at the project site on August 11, September 27, and October 3, 2023. The survey involved walking throughout the project site to search for biological resources, such as the presence of special-status plants, wildlife, and their habitats, and sensitive habitats, such as wetlands and drainage channels. The potential presence of special-status species was based on an evaluation of the habitat types present on the site and the CNDDB records and other occurrence information from the vicinity of the site. During the field survey, the biologist also investigated the presence of waters of the United States/waters of the State (including wetlands and drainages).

The scientific and vernacular nomenclature for the plant and wildlife species used in this study are from the following standard sources:

- Plants (Baldwin et al. 2012) and updates listed on the Jepson Herbarium website (http://ucjeps.berkeley.edu/eflora/)
- Amphibians and Reptiles (Crother 2017)
- Birds (American Ornithologists' Union 1998) and supplements through 2023
- Mammals (Bradley et al. 2014)

PROJECT SITE DESCRIPTION

Location and Site Characteristics

The project site is located within the City of El Cerrito, California (Figure 1). The HNA is approximately 107.18 acres and is divided into three sections: Hillside Natural Area North ("Motorcycle Hill;" 24.22 acres), Madera Property (9.53 acres) and Hillside Natural Area South (73.43 acres). Elevations ranges from approximately 150 and 650 feet above sea level. The project site is characterized by steep hillslopes with predominantly western and southern exposures (Figure 2). There are 6 major vegetation cover types within the HNA (Figure 3). Soils on the project site consist of mostly Rock outcrop-Xerorthents association with Cut and fill land-Millsholm complex mapped along the western boundary and Quarry mapped near the southern boundary of the project site (USDA 2023; Figure 4).

Vegetation

Vegetation in the City of El Cerrito is characterized by native and non-native grassland, riparian scrub and woodland, oak woodland, salt marsh near the San Francisco Bay, and other scrub and "soft" chaparral, in addition to extensive introduced landscaping and naturalized nonnative species such as eucalyptus, pine and French broom. LSA inventoried over 150 plant species that commonly occur in the HNA. The majority of those are native (n=82), but most of the non-native species are considered invasive. In addition, Friends of Five Creek (2014) produced a plant list containing 129 native species. The heavily vegetated, undeveloped San Pablo and Sobrante ridges occur northeast of the City. The project site supports ruderal/non-native grassland, native grassland, coast live oak woodland, scrub, riparian woodland, and drainages (Figure 3).

Ruderal/Non-Native Grassland. The ruderal/non-native grassland (33.47 acres) supports primarily non-native annual grassland species with patches of perennial grassland and ruderal plant species. Dominant annual grass species include wild oats (*Avena fatua*) and ripgut brome (*Bromus diandrus*). The dominant grass in the perennial grassland is veldt grass (*Ehrharta erecta*). Associated species observed in the annual grassland include rattlesnake grass (*Briza minor*), wild mustard (*Hirschfeldia incana*), Italian thistle (*Carduus pycnocephalus*), bristly ox-tongue (*Helminthotheca echioides*), English plantain (*Plantago lanceolata*), field hedge parsley (*Torilis arvensis*), and willow leaf lettuce (*Lactuca saligna*). Non-native grasses are also abundant throughout the understory within all habitat types at the project site.

Native Grasslands. Native grasslands observed on the project site consist of patches of purple needle grass (*Stipa pulchra*), foothill needle grass (*Stipa lepida*), bent grass (*Agrostis pallens*), and creeping wild rye (*Elymus triticoides*). Native herbaceous species observed within the native grasslands include soap root (*Chlorogalum pomeridianum*), golden rod (*Solidago velutina*), hayfield tarweed (*Hemizonia congesta subsp. luzulifolia*), and bracken fern (*Pteridium aquilinum*). Several other native grassland plant species, such as blue-eyed grass (*Sisyrinchium bellum*), narrowleaf mule

ears (*Wyethia angustifolia*), and arroyo lupine (*Lupinus succulentus*), have been observed at the project site (Friends of Five Creeks 2014).

North Franciscan Coastal Scrub. The scrub habitat within the project site comprises 2.6 acres and is dominated by coyote brush (*Baccharis pilularis*) and French broom (*Genista monspessulana*). Other dominant to co-dominant species include orange bush monkey flower (*Diplacus aurantiacus*). California sagebrush (*Artemisia californica*), coffeeberry (*Frangula californica*), and poison oak (*Toxicodendron diversilobum*). Stands of northern Franciscan coastal scrub are found throughout the project site, but they mainly occupy the steeper portions of the south and west facing slopes along the eastern boundary.

Coast Live Oak Woodland. The coast live oak woodland on the project site (28.7 acres) is dominated by coast live oak (*Quercus agrifolia*) with California bay (*Umbellularia californica*) and California buckeye (*Aesculus californica*). This woodland supports an abundance of mature native shrubs, vines, and grasses including toyon (*Heteromeles arbutifolia*), pink honeysuckle (*Lonicera hispidula*), California blackberry (*Rubus ursinus*), blue elderberry (*Sambucus mexicana*), California aster (*Aster chilensis*), Pacific pea (*Lathyrus vestitus*), California bee plant (*Scrophularia californica*), blue witch (*Solanum umbelliferum*), coyote brush, bush monkey flower, poison oak, and bent grass. Non-native species observed within the oak woodland included pittosporum (*Pittosporum sp.*), Bailey Acacia (*Acacia baileyana*), blackwood acacia (*Acacia melanoxylon*), pampas grass (*Cortaderia selloana*), orange cotoneaster (*Cotoneaster franchetii*), Himalayan blackberry (*Rubus armeniacus*), English ivy (*Hedera canariensis*), plum (*Prunus sp.*), and non-native grasses. Understory species include beaked hazelnut (*Corylus cornuta*), wood fern (*Dryopteris arguta*), western sword fem (*Polystichum munitum*), soap plant (*Chlorogalum pomeridianum*), pink honeysuckle (*Lonicera hispidula*), poison oak, California blackberry, coffeeberry, and coyote brush.

Riparian Woodland. Riparian woodland occurs along the streams and drainages. This community occupies approximately 1.15 acres on the HNA, but that estimate is probably too low and will need to be evaluated by field mapping. Tree species observed include arroyo willow (*Salix lasiolepis*), Pacific willow (*S. lasiandra*), cottonwood (*Populus sp.*), alder (*Alnus sp.*), California bay (*Umbellularia californica*), California buckeye, and coast live oak. Associated species observed include common lady fern (*Athyrium filix-femina var. cyclosorum*), western chain fern (*Woodwardia fimbriata*), California blackberry, Himalayan blackberry, blue elderberry, English ivy, and French broom.

Eucalyptus and Pine Groves. Eucalyptus groves are present in several areas within the project site. They are the most prevalent vegetation community at the project site, totaling over 36.2 acres. Eucalyptus are the dominant tree species within the groves. Blue gum (*Eucalyptus globulus*), red ironbark (*E. sideroxylon*) and yellow gum (*E. viminalis*) are growing at the project site (LSA 1987). Conifers, primarily Monterey pine (*Pinus radiata*) and coast live oaks also occur within the groves. Dense shade created by the eucalyptus canopy, combined with volatile chemicals contained in the large amount of bark and leaf litter deposited by eucalyptus, create poor growing conditions for most herbaceous and woody understory species. Consequently, the understory of these woodlands is often devoid of vegetation and may consist of a thick layer of bark and leaves. Where openings in

the canopy allow sufficient light to penetrate to the grove floor, patches of poison oak, toyon, other shrubs and annual grasses can occur.

Rock Outcrops. Rock outcrops are present in small areas throughout the project site. Species observed at the outcrops include naked-stem buckwheat (*Eriogonum nudum*), California poppy (*Eschscholzia californica*), coyote mint (*Monardella villosa*), and various non-native plants.

Streams/Drainages. Several intermittent and ephemeral streams/drainage channels are present in the project site (Figure 3). These streams/drainages appear to flow in the southwest direction and flow off the project site into culverts beneath the adjacent residential area to the southwest. Some of the drainages occur within concrete v-ditches and become natural stream channels further downstream within the project site.

Wildlife

Several common wildlife species inhabit the project site. Most of the bird species observed were foraging in the oak woodland and scrub habitats. A few birds, such as of turkey vulture (*Cathartes aura*), red-tailed hawk (*Buteo jamaicensis*), American crow (*Corvus brachyrhynchos*), and common raven (*C. corax*) were observed flying over the project site. No active bird nests were identified during the reconnaissance-level field surveys, which were conducted in the late summer and early fall of 2023, but a few inactive stick nests were found in the onsite trees. Numerous resident birds were observed foraging at the project site, suggesting that they likely nested on or near the project site. Non-native fox squirrel (*Sciurus niger*) nests were also observed in the oak trees. Foraging black-tailed deer (*Odocoileus hemionus*) and Botta's pocket gopher (*Thomomys bottae*) burrows were observed in the non-native grasslands.

BIOLOGICAL RESOURCE ASSESSMENT

SPECIAL-STATUS SPECIES

For the purposes of this assessment, special-status species are defined as follows:

1. Species that are listed, formally proposed, or designated as candidates for listing as threatened or endangered under the federal Endangered Species Act (ESA);

2. Species that are listed, or designated as candidates for listing, as rare, threatened, or endangered under the California Endangered Species Act (CESA);

3. Plant species that are on the California Rare Plant Rank (CRPR) Lists 1A, 1B, and 2;

4. Animal species designated as Species of Special Concern or Fully Protected by the California Department of Fish and Wildlife (CDFW); or

5. Species that meet the definition of rare, threatened, or endangered under Section 15380 of the CEQA guidelines.

Several special-status species could occur on the project site or in the vicinity (Table A). No special-status species were observed during the field survey.

Table A: Special-Status Species Evaluated for the Project

Species	Status (Federal/ State/CRPR)	Habitat	Potential for Occurrence[a]
Plants			
Amsinckia lunaris Bent-flowered fiddleneck	1B	Occurs in coastal bluff scrub, cismontane woodland, valley and foothill grassland; openings. Elevation: 3-500 m. Blooms: March-June	Although suitable habitat is present, the potential for this species to occur is low due to the density of invasive plants. Nearest occurrence is near San Pablo Ridge approximately 2.4 miles from the project site.
Arctostaphylos pallida Pallid manzanita	FT/CE/1B	Broadleaved upland forest, close coned coniferous forest, cismontane woodland, coastal scrub, and chaparral. Grows on siliceous shale, sandy, or gravelly substrates in uplifted marine terraces. Elevation: 185-465 m. Blooms: December-March	Although woodland habitat is present, suitable substrates are absent. Nearest CNDDB occurrence is in Sobrante Ridge Regional Preserve approximately 3.0 miles from the project site.
Astragalus tener var. tener Alkali milk-vetch	1B	Playas and vernal-pools in freshwater wetlands, alkali sink, valley grassland, wetland-riparian. Elevation: 0-90 m. Blooms: March-June	No suitable habitat present. The closest CNDDB occurrence is a possibly extirpated 1900 record from an unknown location near the Stege Marsh in Richmond.
Cirsium andrewsii Franciscan thistle	1B	Northern coastal scrub, mixed evergreen forest, wetland-riparian. Elevation: 0-160 m. Blooms: March-July	Although woodland habitat is present, the potential for this species to occur is low due to the density of invasive plants. The closest CNDDB occurrence is near Tilden Regional Park approximately 3.3 miles from the project site.
Dirca occidentalis Western leatherwood	1B	Broad-leafed upland forest, chaparral, closed-cone coniferous forest, cismontane woodland, north coast coniferous forest, riparian forest, and riparian woodland on brushy slopes, mesic sites. Elevation: 30-395 m. Blooms: January-March	Suitable woodland habitat present. The closest CNDDB occurrence is from an unknown location in Wildcat Canyon Regional Park approximately 0.4 mile from the project site.
Fritillaria liliacea Fragrant fritillary	1B	Northern coastal scrub, coastal prairie, valley grassland, wetland-riparian. Elevation: 0-360 m. Blooms: February-April	Although woodland habitat is present, the potential for this species to occur is low due to the density of invasive plants. The closest CNDDB occurrence is a possibly extirpated 1938 record from an unknown location near the Mira Vista Country Club, near the

Table A: Special-Status Species Evaluated for the Project

Species	Status (Federal/ State/CRPR)	Habitat	Potential for Occurrence[a]
			north end of Wildcat Canyon Regional Park.
Gilia millefoliata Dark-eyed gilia	1B	Coastal strand. Elevation: 0-30 m. Blooms: April-July	No suitable habitat present. The closest CNDDB occurrence is from an 1863 record at unknown location in Oakland estimated at approximately 3.6 miles from the project site.
Helianthella castanea Diablo helianthela	1B	Broadleaved upland forest, chaparral, cismontane woodland, coastal scrub, riparian woodland, valley and foothill grassland, usually within rocky azonal soils. Elevation: 60–300 m. Blooms: April-June.	Suitable habitat present within the woodland and scrub habitat, but species likely not to occur due to prior disturbance and the introduction of invasive species. The closest CNDDB occurrence is from a presumed extant population near the San Pablo Reservoir approximately 2.2 miles from the project site.
Loma Prieta hoita *Hoita strobilina*	1B	Chaparral, cismontane woodland, and riparian woodland on mesic serpentine sites. Elevation: 30-860 m. Blooms: May- October	Although woodland is present, serpentine is absent from the project site. The closest CNDDB occurrence is from a presumed extant population in El Sobrante approximately 2.0 miles from the project site.
Santa Cruz tarplant *Holocarpa macradenia*	FT/CE/1B	Occurs in sandy-clay soil in coastal prairie, coastal scrub, and in valley and foothill grassland. Elevation: 10-220 m. Blooms: June-October	Although valley and foothill grassland is present, this species is known to occur on sandy soils, which are absent from the project site. All extant populations of this plant have been reintroduced. The closest CNDDB occurrences are northeast of the project site in Wildcat Canyon Regional Preserve approximately 0.7 mile from the project site.
Insects			
Monarch butterfly *Danaus plexippus*	FC/Sensitive Winter Roosting Sites	Winter roosts along the coast from northern Mendocino to Baja California, Mexico in wind-protected tree groves (eucalyptus, Monterey pine, cypress) with nectar and water sources nearby. Uses milkweed (*Asclepias* spp.) as host plants.	Suitable sheltered groves of trees present, but project site is likely located at too high of an elevation to provide suitable roost sites. Suitable breeding habitat present in onsite patches of milkweed; milkweed has been recorded on the project site (Xerces et al. 2023). Suitable nectar plants present. Individual monarch butterflies observed flying through project site during the October field survey. Closest CNDDB occurrence of an overwintering roost is at the University of California Richmond Field Station, approximately 1.2 miles from the project site.
Crotch bumble bee *Bombus crotchii*	–/ Candidate CE	Open grassland and scrub habitats supporting flowering plants, such	Suitable habitat present. Closest CNDDB occurrence is a 1933 and

Table A: Special-Status Species Evaluated for the Project

Species	Status (Federal/ State/CRPR)	Habitat	Potential for Occurrence[a]
		as *Asclepias* sp., *Chaenactis* sp., *Lupinus* sp., *Medicago* sp., *Phacelia* sp., and *Salvia* sp.	2015 record from Berkeley, approximately 2.4 miles from the project site.
Western bumble bee *Bombus occidentalis*	–/ Candidate CE	Variety of habitat types, supporting native flowering plants. Species has declined precipitously perhaps from disease.	Suitable habitat present. Closest CNDDB occurrence is a 1992 record from Berkeley Richmond Field Station, in Richmond, approximately 1.2 mile from the site.
Fish			
Steelhead (central California coast Distinct Population Segment) *Oncorhynchus mykiss*	FT/CSC	Pacific Ocean, San Francisco estuary, Sacramento and San Joaquin Rivers and tributaries.	No suitable habitat present. Onsite stream and drainages do not provide suitable habitat. No CNDDB occurrences within 5 miles of the project site.
Amphibians			
California tiger salamander *Ambystoma californiense*	FT/CT	Breeds in vernal pools, ponds, and stock ponds. Spends summer and early Fall in uplands surrounding breeding sites, taking refuge in small mammal burrows or other underground cover.	Although suitable upland habitat is present in grasslands, no suitable breeding habitat present at or near the site. No CNDDB occurrences within 5 miles of the project site.
California red-legged frog *Rana draytonii*	FT/CSC	Found in lowlands and foothills in or near permanent ponds and streams with dense, shrubby, or emergent riparian vegetation.	Suitable non-breeding aquatic, upland, and dispersal habitat present in onsite streams, but species not known to occur at or near the project site (CDFW 2023). The closest extant CNDDB occurrence is from near the San Pablo Dam approximately 2.2 miles from the project site. The CNDDB also includes a 1956 record approximately 1.5 miles from the project site at Jewell Lake in Tilden Regional Park in Berkeley, but due to the presence of introduced predators, such as bullfrogs and fish, this occurrence is likely extirpated.
Foothill yellow-legged frog Central Coast Distinct Population Segment *Rana boylii*	FT/CE	Partly shaded, shallow streams and riffles with a rocky substrate.	No suitable habitat present. No extant CNDDB occurrences recorded within 5 miles of the project site.
Reptiles			
Northwestern pond turtle *Emys marmorata*	FC/CSC	Ponds, marshes, rivers, streams, and irrigation ditches with aquatic vegetation. Requires basking sites and adjacent grasslands or other open habitat for egg-laying.	Suitable aquatic habitat present in onsite streams, but lack of deep plunge pools and high quality basking sites likely precludes the species from occurring The closest

Table A: Special-Status Species Evaluated for the Project

Species	Status (Federal/ State/CRPR)	Habitat	Potential for Occurrence[a]
			CNDDB occurrence is from Jewell Lake in Tilden Regional Park approximately 1.5 miles from the project site.
Alameda whipsnake *Masticophis lateralis euryxanthusi*	FT/CT	Chaparral and rock outcrops. Also occurs in riparian woodland, forests, and grasslands where chaparral and rocky outcrops are present nearby.	Suitable habitat present. The closest CNDDB occurrence is approximately 1.6 miles from the project site.
Birds			
American white pelican *Pelecanus erythrorhynchos*	–/CSC	Occurs in shallow inland and coastal marine habitats, marshes, lakes, and rivers.	No suitable habitat present. Species does not breed in the project area but may fly over the project site. Species observed at the project site (eBird 2023). Species not tracked in the CNDDB.
Long-eared owl *Asio otus*	–/CSC	Woodlands and forests that are open or adjacent to grasslands, meadows, or shrublands.	Suitable nesting habitat present in trees on or adjacent to the site. No CNDDB occurrences within 5 miles of the site.
Short-eared owl *Asio flammeus*	–/CSC	Open grasslands, meadows, and marshes with few trees. Requires dense ground vegetation for both roosting and nesting.	Suitable habitat present. Wintering/migrating individuals observed in Point Pinole Regional Park (eBird 2023). No CNDDB occurrences within 5 miles of the site.
Burrowing owl *Athene cunicularia*	–/CSC	Nests in burrows in grasslands and woodlands; often associated with ground squirrels. Will also nest in artificial structures (culverts, concrete debris piles, etc.)	Suitable habitat present, but not known to nest in the project area. During the time of the field surveys, no ground squirrel burrows were observed and the grass within the grassland was too tall for burrowing owl burrows. Species is known to winter along the San Francisco Bay shoreline in Richmond, Albany, and Berkeley (eBird 2023). Closest CNDDB occurrences is in Richmond, approximately 1.5 miles from the project site.
White-tailed kite *Elanus leucurus*	–/CFP	Nests in shrubs and trees in open areas and forages in adjacent grasslands and agricultural land.	May nest and forage on the project site. Species observed at the project site (eBird 2023). Closest CNDDB occurrences is approximately 3.2 miles from the project site.
Northern harrier *Circus hudsonius*	–/CSC	Nests and forages in meadows, grasslands, open rangeland, and fresh or saltwater marshes.	Suitable nesting and foraging habitat present. The closest CNDDB occurrence is from the Berkeley

Table A: Special-Status Species Evaluated for the Project

Species	Status (Federal/ State/CRPR)	Habitat	Potential for Occurrence[a]
			Meadow near the Berkeley Marina approximately 3.2 miles from the project site.
Golden eagle *Aquila chrysaetos*	–/CFP	Forages in rolling foothill or coast-range terrain, with open grassland and scattered large trees. Nests in large trees, on cliffs, and occasionally on power line poles.	Suitable nesting and foraging habitat present. No CNDDB occurrences recorded within 5 miles of the project site.
Bald eagle *Haliaeetus leucocephalus*	Delisted/CE; CFP	Winters at lakes, reservoirs, river systems, and some rangelands and coastal wetlands throughout most of California. Breeds in mountainous habitats near reservoirs, lakes and rivers, mainly in the northern two-thirds of the State, in the Central Coast Range, and on Santa Catalina Island. Nests generally built in the upper canopy of large trees.	No suitable habitat present, but species could fly over the project site. The closest CNDDB occurrence is approximately 3.2 miles from the project site.
American peregrine falcon *Falco peregrinus anatum*	Delisted/ Delisted/ CFP	Forages in open country, mountains, and seacoasts. Nests on high cliffs, bridges, and buildings.	No suitable nesting habitat present, but grasslands provide suitable foraging habitat.
Loggerhead shrike *Lanius ludovicianus*	–/CSC	Found in grasslands and open shrub or woodland communities. Nests in dense shrubs or trees and forages in scrub, open woodlands, grasslands, and croplands. Frequently uses fences, posts, and utility lines as hunting perches.	Suitable nesting and foraging habitat present, but species is rare in the project vicinity (eBird 2023). No CNDDB occurrences recorded within 5 miles of the project site.
Vaux's swift *Chaetura vauxi*	–/CSC	Grasslands and agricultural fields; nests in dense vegetation in large hollow trees near open water; forages in most habitats but prefers rivers and lakes.	Suitable nesting and foraging habitat present. Species observed at the project site (eBird 2023). Species not tracked in the CNDDB.
Olive-sided flycatcher *Contopus cooperi*	–/CSC	Coniferous forests with open canopies.	Suitable nesting and foraging habitat present. Species observed at the project site (eBird 2023). Species not tracked in the CNDDB.
Purple martin *Progne subis*	–/CSC	Occurs in woodlands; nests in tree snags and abandoned woodpecker cavities and human-made structures.	Suitable nesting habitat present, but species is rare in the County (Glover 2009). No CNDDB occurrences within 5 miles of the project site.
Grasshopper sparrow *Ammodramus savannarum*	–/CSC	Occurs in grasslands with coyote brush and other shrubs.	Suitable nesting and foraging habitat present. Species not tracked in the CNDDB.
Tricolored blackbird *Agelaius tricolor*	–/CT, CSC	Nests in dense vegetation near open water, forages in grasslands and agricultural fields.	No suitable nesting habitat present, but site provides suitable foraging habitat. No CNDDB

Table A: Special-Status Species Evaluated for the Project

Species	Status (Federal/ State/CRPR)	Habitat	Potential for Occurrence[a]
			occurrences within 5 miles of the project site.
Yellow warbler *Dendroica petechia*	–/CSC	Nests in extensive willow riparian woodlands.	Suitable nesting and foraging habitat present, but species is a rare breeder in the County (Glover 2009). May forage on the site during migration. Species observed during migration at the project site (eBird 2023). No CNDDB occurrences within 5 miles.
Mammals			
Townsend's big-eared bat *Corynorhinus townsendii*	–/CSC	Found in wooded areas with caves or old buildings for roost sites.	No suitable roosting, hibernating habitat present, but could forage over the project site. The closest CNDDB occurrence is from Strawberry Canyon approximately 3.4 miles from the project site.
Pallid bat *Antrozous pallidus*	–/CSC	Occupies a wide variety of habitats at low elevations. Most commonly found in open, dry habitats with rocky areas for roosting.	Suitable roosting, hibernating, or foraging habitat present. The closest CNDDB occurrence is a 1943 record from an unknown location in El Cerrito.
Western red bat *Lasiurus blossevillii*	–/CSC	Often roosts and forages on or near riparian habitat. Roosts primarily in trees, 2-40 feet above ground, from sea level up through mixed conifer forests. Prefers habitat edges and mosaics with trees that are protected from above and open below with open areas for foraging.	Suitable roosting habitat present in trees and foraging habitat present. Species does not breed in the project area. No CNDDB occurrences recorded within 5 miles of the project site. Species observed near Jewell Lake in Tilden Regional Park in Berkeley (LSA pers. obs.).
Big free-tailed bat *Nyctinomops macrotis*	–/CSC	Typically in deserts and arid grasslands where rocky outcrops, canyons, or cliffs occur for roosting. Occasionally roosts in buildings, caves, and tree cavities.	No suitable habitat present. The closest CNDDB occurrence is a 1916 record from an unknown location in Berkeley estimated at approximately 2.4 miles from the project site.
San Francisco dusky-footed woodrat *Neotoma fuscipes annectens*	–/CSC	Primarily along riparian areas within chaparral and woodlands. Feeds mainly on woody plants but also eats acorns, grasses, and fungi. Builds conspicuous stick houses in trees and on the ground.	Suitable habitat and species present within the riparian woodland, scrub, and trees on and adjacent to the site. Woodrat houses observed during the field surveys. The closest CNDDB occurrence is approximately 4.2 miles from the project site.
American badger *Taxidea taxus*	–/CSC	Grassland, scrub, and woodland with loose-textured soils.	Suitable grassland habitat present, but site's proximity to residential development and isolation from large open space area likely

Table A: Special-Status Species Evaluated for the Project

Species	Status (Federal/ State/CRPR)	Habitat	Potential for Occurrence[a]
			preclude this species. No CNDDB occurrences within 5 miles.

Source: LSA 2023 (CDFW 2023, eBird 2023, Glover 2009, Xerces et al. 2023)
Status Codes:

FT = Federal threatened.
FC = Federal candidate.
CE = California endangered.
CT = California threatened.
CFP = California fully protected.
CSC = California Species of Special Concern.
List 1B = California Rare Plant Rank (CRPR) List 1B: plant considered rare, threatened, or endangered in California and elsewhere.
– = No status
[a] Nearest records are based on CNDDB (CDFW 2023) occurrences unless otherwise noted.

Special-Status Plants

Special-status plant species for which extant or non-historic CNDDB (CDFW 2023) records exist in the vicinity consist of the following species:

- Bent-flowered fiddleneck (*Amsinckia lunaris*; CRPR List 1B)
- Pallid manzanita (*Arctostaphylos pallida*; Federal Threatened, State Endangered, CRPR List 1B)
- Franciscan thistle (*Cirsium andrewsii*; CRPR List 1B)
- Western leatherwood (*Dirca occidentalis*; CRPR List 1B)
- Fragrant fritillary (*Fritillaria liliacea*; CRPR List 1B)
- Diablo helianthela (*Helianthella castanea*; CRPR List 1B)
- Loma Prieta hoita (Hoita strobilina; CRPR List 1B)
- Santa Cruz tarplant (*Holocarpha macradenia*; Federal Threatened, State Endangered, CRPR List 1B).

Several other special-status plants are also known to occur in the region (Diablo Fire Safe Council 2017). None of these or other special-status species, however, are likely to occur within the majority of project site due to; 1) prior disturbance in the project area; 2) the introduction of non-native plant species; and 3) the absence of suitable habitat and substrates such as wetlands and serpentine substrates. Less disturbed areas on the project site, such as the oak woodland, riparian woodland, scrub, and native grasslands, may provide suitable habitat for special-status plant species and therefore, protocol-level plant surveys are recommended to be conducted where suitable habitat is present (see Recommendations section).

Special-Status Wildlife

Special-status animal species that are known to occur in the vicinity of the project site and for which suitable habitat is present include the following:

- Monarch butterfly (*Danaus plexippus*; Federal Candidate)
- Crotch bumble bee (*Bombus crotchii*; State Candidate Endangered)
- Western bumble bee (*Bombus occidentalis*; State Candidate Endangered)
- Alameda whipsnake (*Masticophis lateralis*; Federal and State Threatened)
- California red-legged frog (*Rana draytonii*; Federal Threatened, California Species of Special Concern)
- Northwestern pond turtle (*Emys marmorata*; Federal Candidate, California Species of Special Concern)
- American white pelican (*Pelecanus erythrorhynchos*; California Species of Special Concern)
- Burrowing owl (*Athene cunicularia*; California Species of Special Concern)
- Long-eared owl (*Asio otus*; California Species of Special Concern)
- Short-eared owl (*Asio flammeus*; California Species of Special Concern)
- White-tailed kite (*Elanus leucurus*; California Fully Protected)
- Northern harrier (*Circus hudsonius*; California Species of Special Concern)
- Golden eagle (*Aquila chrysaetos*; California Fully Protected)
- Bald eagle (*Haliaeetus leucocephalus*; State Endangered, California Fully Protected)
- American peregrine falcon (*Falco peregrinus anatum*; California Fully Protected)
- Loggerhead shrike (*Lanius ludovicianus*; California Species of Special Concern)
- Vaux's swift (*Chaetura vauxi*; California Species of Special Concern)
- Olive-sided flycatcher (*Contopus cooperi*; California Species of Special Concern)
- Purple martin (*Progne subis*; California Species of Special Concern)
- Grasshopper sparrow (*Ammodramus savannarum*; California Species of Special Concern)
- Tricolored blackbird (*Agelaius tricolor*; State Threatened, California Species of Special Concern)
- Yellow warbler (*Dendroica petechia*; California Species of Special Concern)
- Townsend's western big-eared bat (*Corynorhinus townsendii*; California Species of Special Concern)
- Pallid bat (*Antrozous pallidus*; California Species of Special Concern)
- Western red bat (*Lasiurus frantzii*; California Species of Special Concern)
- San Francisco dusky-footed woodrat (*Neotoma fuscipes annectens*; California Species of Special Concern)
- American badger (*Taxidea taxus*; California Species of Special Concern)

Monarch Butterfly. The monarch butterfly is a federal candidate listed species that could breed within the project site. Monarch butterflies breed from June to September and require their obligate larval host plant, milkweed (*Asclepias spp.*), for laying eggs, larval development, and metamorphosis. This species utilizes other flowering species for nectaring during the breeding season. Although no milkweed was observed during LSA's reconnaissance-level field surveys and milkweed is not listed in Friends of Five Creek (2014) plant list, milkweed has been recorded at the Hillside Natural Area by the Western Monarch Milkweed Tracker (Xerces et al. 2023). Therefore, monarch butterflies could breed. Individual monarch butterflies were observed flying through the project site during the October 3, 2023, field survey.

Trees do provide suitable overwintering roosting habitat for monarch butterflies. The project site is situated approximately 1.5 miles from the San Francisco Bay shoreline, which falls within the

distance in which monarchs overwintering roosts are known to occur (Xerces et al. 2023). According to a monarch study completed for the project site in 1993 by Entomological Consulting Services, Ltd (ECHNA 1993), the project site may be situated at too high an elevation to allow monarchs to use the project site as an overwintering roost site. No CNDDB occurrences for monarch butterfly have been recorded at the project site, while the closest CNDDB occurrence for an overwinter roost is in Richmond, approximately 1.2 miles from the site. The project site is not listed as a location for Xerces Society's Thanksgiving Count for monarch butterflies (Xerces Society Western Monarch Count 2022).

Crotch and Western Bumble Bee. The crotch and western bumble bee are Candidate State Endangered listed species. These species are known to occur in grassland and scrub habitat where suitable native nectar plants are present. These species historically occurred in the region but are now considered rare. Due to the presence of suitable flowering plant species, these species, although unlikely due to their rarity, could be present.

California Red-Legged Frog. The California red-legged frog is not expected to occur onsite due the lack of suitable aquatic habitat on or adjacent to the project site (the streams/drainages on-site carry minimal water flow and are isolated from other aquatic habitat, such as ponds and lakes). This species has not been recorded at the project site, but does occur at Jewell Lake, approximately 1.5 miles from the site (CDFW 2023).

Alameda Whipsnake. Alameda whipsnake is a Federal and State listed threatened species that occurs in chaparral and rock outcrops and adjacent habitats, such as riparian woodland, oak woodland, and grasslands. Although very little high-quality chaparral habitat is present, the project site provides suitable habitat for this species. Beeman and Associates (1993) conducted focused habitat field surveys for Alameda whipsnake at the project site in 1993 and determined that the site provides suitable habitat for this species. No CNDDB occurrences have been recorded at the project site. The closest non-historic CNDDB occurrence was recorded near the San Pablo Dam, approximately 2.7 miles from the project site. The likelihood that Alameda whipsnake occurs at the project site is low.

Northwestern Pond Turtle. The northwestern pond turtle is not expected to occur onsite due the lack of suitable aquatic habitat on or adjacent to the project site (the streams/drainages on-site carry minimal water flow and are isolated from other natural aquatic habitat). The stream channels that convey larger amounts of water could support northwestern pond turtles and therefore, this species could be present during periods of high flows.

Special-Status Birds and Other Nesting Bird Species. Several special-status bird species are known to occur at or near the project site (Table A; see list above). These bird species could nest, winter, and/or migrate through the project site. Some of these bird species, such as the American peregrine falcon, could forage on the project site, but are unlikely to nest at or adjacent to the site due to the lack of suitable nesting habitat. Special-status birds observed at the project site include white-tailed kite, olive-sided flycatcher, and Vaux's swift, among others (eBird 2023). Several other special-status birds have been recorded in the project vicinity (CDFW 2023, eBird 2023). Active nests of special-

status and other native bird species are protected by the Migratory Bird Treaty Act and/or California Fish and Game Code.

Special-Status Bats and Other Bat Species. Several bat species, including special-status bat species, could roost and/or forage at the project site. All roosts of native bats, regardless of their status, are protected by California Fish and Game Code. Townsend's western big-eared bat (California Species of Special Concern) may briefly forage over the project site but would not roost on the project site due to the lack of suitable roosting habitat. Suitable habitat for pallid bat and western red bat, both of which are California Species of Special Concern) and other bat species could roost in the onsite trees. Pallid bats will roost in tree cavities and in structures, while western red bats roost in trees. Western red bats typically roost in riparian habitats but could roost in any of the larger onsite trees. This species does not breed in the area but does occur in the spring and fall during migration. The western red bat has been observed approximately 1.5 miles from the project site near Jewell Lake (LSA pers. obs.).

San Francisco Dusky-Footed Woodrat. The San Francisco dusky-footed woodrat is a California Species of Special Concern. This species occurs in riparian woodland, woodland/forests, and scrub habitat and has been observed at the project site. LSA observed woodrat houses in the northern portion of the site, but this species could occur throughout the project site where suitable habitat is present.

American Badger. Grasslands present on the site may be suitable for the American badger, but this species is not likely to occur due to the project site's proximity to urban development and isolation from larger open grassland habitat. In addition, the soil characteristics of the rock outcrop-Xerorthents limit burrowing activities in the majority of the project area.

STREAMS/DRAINAGES

Several stream/drainage channels are present on the project site (Figure 3). Some of these drainages occur within concrete v-ditches. These streams/drainages are likely to be considered jurisdictional features by the U.S. Army Corps of Engineers (USACE) and Regional Water Quality Control Board (RWQCB) and subject to regulation under Section 404 and 401 of the Clean Water Act and/or the California Porter Cologne Act.

No other potential waters of the United States/State, such as seasonal wetlands or seeps, were observed during the reconnaissance-level field survey, but the survey was conducted during the dry season when wetlands and seeps are less identifiable. Therefore, additional jurisdictional features, such as wetlands and seeps, could be present at the project site.

RIPARIAN HABITAT AND SENSITIVE PLANT COMMUNITIES

Riparian Woodland

As described above, riparian woodland vegetation is present along the stream and drainage channels. The onsite riparian habitat contains both native and non-native trees and shrubs, including willows (*Salix spp.*), acacias (*Acacia spp.*), coast live oak, alder, and cottonwood. Riparian woodland is considered a sensitive plant community under CEQA.

Native Grasslands

As discussed above, scattered patches of native grasslands are present within the non-native grassland habitat. Species observed during LSA's 2023 reconnaissance-level field survey include purple needlegrass, but several native grasses have been identified at the project site (Friends of Five Creeks 2014, LSA 1987). Most native grasslands are considered sensitive natural communities under CEQA.

WILDLIFE MOVEMENT CORRIDORS

The project site provides a movement corridor for several wildlife species. The stream and riparian channels provide movement habitat for aquatic species during the wet season. Numerous species of birds, amphibians, reptiles, insects, and mammals also move through the project site. Wildlife movement within the streams, drainages, riparian, woodland, and grassland habitat will not be permanently impacted by the proposed fuel management activities. Wildlife that currently inhabit the project site are expected to continue to move through the site after the fuel reduction activities have been implemented.

WILDLIFE NURSERY SITES

The project site is not known to support important wildlife nursery sites, such as heron rookeries, but several species of birds and bats could breed at the project site. The recommended mitigation measures for nesting birds, roosting bats, and other wildlife species would protect wildlife nursery sites, if present.

HABITAT CONSERVATION PLANS

The project site is not situated within the limits of any adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

RECOMMENDED MITIGATION MEASURES

Based on the field investigation, literature review, and database search, LSA makes the following recommendations:

GENERAL AVOIDANCE AND MINIMIZATION MEASURES

The following general avoidance measures shall be implemented to avoid potential direct and indirect impacts to special-status wildlife species during all fuel reduction treatment activities:

- Biological surveys appropriate to special-status wildlife species potentially present shall be conducted by the qualified biologist within 5 to 7 days prior to initiation of fuel reduction treatments. All special-status wildlife species observed during surveys shall be reported to the CNDDB.

- Before any fuel reduction treatments activities begin on the project, the qualified biologist shall conduct a training session for fuel reduction workers and other personnel present during

vegetation treatment activities. The training shall include a description of each special-status species that might occur and their respective habitats, the general measures that are being implemented to protect each of the species as they relate to the project, and the physical boundaries within the project shall be accomplished. The training shall also provide instruction in the appropriate protocol to follow in the event that a special-status species is found onsite, including contact telephone numbers.

- A qualified biologist or biological monitor shall be present to observe fuel reduction treatment activities and shall have the authority to halt work as necessary if special-status species are in harm's way or permit conditions or mitigation measures are being violated. If special-status wildlife species are found within or near fuel reduction treatment areas, all fuel reduction activities shall cease in the vicinity of the animal until the animal moves on its own outside of the project area (if possible). The wildlife resource agency(ies) with jurisdiction over the species shall be contacted if permits issued for the project do not address relocation of the species regarding any additional avoidance, minimization, or mitigation measures that may be necessary if the animal does not move on its own. The daily monitoring report prepared by the qualified biologist shall document the activities of the animal within the site; exclusion fence construction, modification, and repair efforts; and movements of the animal once again outside of the treatment area. This report shall be submitted to the City and the appropriate regulatory agency with jurisdiction over the wildlife species.

- Before starting ground disturbing activities within fuel reduction treatment areas, the City and its contractors shall clearly delineate the boundaries of the fuel reduction treatment area with fencing, stakes, or flags. Contractors shall be required to restrict fuel reduction treatment-related activities to within the fenced, staked, or flagged areas. Contractors shall maintain fencing, stakes, and flags until the completion of fuel reduction activities in that area. Fencing stakes and flags shall be removed upon completion of work. Sensitive habitat areas, including special-status wildlife species habitat, known plant populations, and jurisdictional wetlands, shall be clearly indicated on the fuel reduction treatments plans.

- Vehicles shall pass and turn around only within the delineated work area boundary or existing local road network. Where new access is required outside of existing roads or the work area, the route shall be clearly marked (i.e., flagged and/or staked) prior to being used, subject to review and approval of the qualified biologist.

- Where wildlife exclusion fencing is not installed and ground disturbing activity (e.g., road or trail construction) is occurring, the qualified biologist shall approve the proposed disturbance in advance and clear the area prior to the start of ground disturbance activity.

- The introduction of exotic plant species shall be avoided first through prevention, followed by physical methods. All equipment shall arrive at the project area free of soil, seed, and vegetative debris to reduce the likelihood of introducing new weed species. Mechanical seeding equipment shall be inspected for residual seeds and cleaned prior to use onsite. Equipment operators shall ensure that clothing, footwear, and equipment used during vegetation treatment and road construction is free of soil, seeds, vegetative matter or other debris or seed-bearing material

before entering the project site or from an area with known infestations of invasive plants and noxious weeds. Weed populations introduced into the site during treatment or construction shall be eliminated by mechanical means approved by the qualified biologist.

- Vehicles and equipment shall be in proper working condition to ensure that there is no potential for fugitive emissions of motor oil, antifreeze, hydraulic fluid, grease, or other hazardous materials. Contractor equipment shall be checked for leaks daily prior to operation and repaired when leaks are detected. Fuel containers shall be stored within appropriately sized secondary containment barriers. The qualified biologist shall be immediately informed of any hazardous spills and not more than 24 hours of the incident occurrence. Hazardous spills shall be immediately cleaned up and the contaminated soil shall be properly disposed of at an appropriate facility. If vehicle or equipment maintenance is necessary, it may be performed in the designated staging areas, as shown on the treatment or construction plans or approved by the qualified biologist.

- Temporarily disturbed areas shall be returned to pre-project conditions or better.

- Herbicide will only be administered by Qualified Applicator Certificate holders (minimum qualification) from the California Department of Pesticide Regulation using best practices including from the EPA (2018b). Applicators must be trained by a biologist to recognize milkweed, monarch butterflies and special-status bumble bees and their habitat.

- No herbicide application will take place within 125 ft of active monarch or bumble bee breeding sites (eggs, larvae, or active adult nectaring sites) when these insects are present (adults or larvae) based on Natural Resources Conservation Service and Monarch Joint Venture guidance (2022a). If herbicide application must occur within 125 ft of occupied monarch or bumble bee breeding and nectaring habitat, then application will only be conducted using targeted spraying, cut stump, and wiping by a trained and licensed applicator and will be no closer than 2 ft to milkweed and other important nectar sources.

- Herbicide application by qualified applicators is only allowed to occur when the Qualified Applicator Certificate holder determines it is appropriate forecasted weather (e.g., no heavy winds above 15 mph or any precipitation) and that the herbicide activities will not damage soil and/or vegetative cover. No herbicide application will be permitted 12 hours before or after a storm.

Special-Status Plants

If fuel reduction treatments are proposed within the native grasslands, riparian woodland, drainage channels, or the less disturbed portions of the oak woodland and scrub habitat (such as areas where French broom is not present), focused plant surveys for special-status plants should be conducted according to CDFW's Protocols for *Surveying and Evaluating Impacts to Special Status Plant Populations and Natural Communities* (CDFW 2018).

Nesting Birds

The following general avoidance measures shall be implemented to avoid potential direct and indirect impacts to nesting birds during all fuel reduction treatment activities:

- Prior to fuel reduction treatment activities occurring during the nesting bird season (February 1 through August 31), a preactivity activity surveys for nesting birds shall be conducted by a qualified biologist to ensure that no nests will be disturbed during project implementation. Surveys will be conducted no more than seven days prior to the initiation of fuel reduction treatment activities. During this survey, the biologist shall inspect all trees and other potential nesting habitats (e.g., shrubs, ground and structures) in the impact area plus a surrounding 300-foot buffer for nests. If removal of potential nesting substrate or project grading will occur during more than one nesting season, or in different parts of the site in phases over the course of a single season, then additional pre-activity surveys must be performed within seven days prior to initiation of work in any particular area. If the preactivity activity survey does not identify the presence of any active nests on or within 300 feet of the site, construction or vegetation treatment activities may proceed.

- If nests known to have eggs or young, or that cannot be confirmed to be inactive or to lack eggs or young, are found, or adults are demonstrating nesting behavior, a qualified biologist shall establish an appropriate fuel reduction-free buffer around each nest. Generally, a buffer of 300 feet for raptors and 100 feet for songbirds are adequate to avoid causing nest abandonment. The buffer shall remain in place until the qualified biologist has confirmed that the nest is no longer active.

- If less than a 100-foot nest buffer is necessary and determined to be appropriate for a particular nest or nests, a qualified biologist shall monitor the nest(s) before the activity to document baseline nesting behavior and monitor the nest during vegetation treatment or road construction to ensure nesting birds are not exhibiting signs of stress and territorial behavior. If signs of stress are observed during the monitoring, treatment or construction activities shall cease or buffer shall increase, as determined by a qualified biologist, the to a sufficient distance where the nesting birds are longer exhibiting signs of stress.

- To prevent encroachment, the buffer shall be clearly marked for avoidance. The established buffer shall remain in effect until the young have fledged or the nest is no longer active as confirmed by the biologist.

Roosting Bats

The following general avoidance measures shall be implemented to avoid potential direct and indirect impacts to bat species during all fuel reduction treatment activities:

- Prior to any tree removal during the maternity roosting period (April 15 to August 31) or hibernation period (October 15 to February 28), a focused tree habitat assessment shall be conducted by a qualified biologist of all trees that will be removed or impacted by vegetation treatment activities. Trees containing suitable potential bat roost habitat features would then be clearly marked. The habitat assessments should be conducted enough in advance to allow

preparation of a report with specific recommendations, and to ensure tree removal can be scheduled during seasonal periods of bat activity if required. If it is determined that day roosting bats are unlikely to occur, the tree may be removed as described below. If the absence of roosting bats cannot be confirmed, then the removal of trees providing suitable maternity or hibernation roosting habitat should only be conducted during seasonal periods of bat activity, including:

Between March 1 and April 15; or

Between September 1 and October 15.

- Appropriate methods will be used to minimize the potential of harm to bats during tree removal. Such methods may include but are not limited to using a two-step tree removal process. This method is conducted over two consecutive days and works by creating noise and vibration by cutting non-habitat branches and limbs from habitat trees using chainsaws only (no other heavy machinery) on Day 1. The noise and vibration disturbance, together with the visible alteration of the tree, is very effective in causing bats that emerge nightly to feed, to not return to the roost that night. The remainder of the tree is removed on Day 2. A biologist qualified in two-step tree removal is required on Day 1 to supervise and instruct the tree-cutters who will be on the site conducting the work, but only for a sufficient length of time to train all tree cutters who will conduct two-step removal of habitat trees. The biologist is generally not required on Day 2, unless a very large cavity is present and a large colony is suspected. Fallen branches and trees should be left onsite overnight to allow any bats that may be present to fly away during the nighttime hours.

- Removal of native oaks and riparian trees will be avoided where possible.

San Francisco Dusky-Footed Woodrat

- A qualified biologist shall conduct a pre-activity survey for San Francisco dusky-footed woodrat nests prior to the start of project activities. Surveys will be conducted in the immediate work area and a 25-foot buffer around those areas. If woodrat nests are present, the nests will be flagged in the field and delineated on project site maps in order to avoid potential impacts to woodrat nests during vegetation treatment activities. For any woodrat nests that cannot be avoided, a woodrat nest relocation plan shall be prepared and submitted to CDFW for approval. At a minimum, the plan shall include the phased dismantling and relocation of the nest materials to a suitable location, and the installation of artificial shelters at a ratio of 1:1 per dismantled nest to provide readily accessible refugia for dispersing individuals. If breeding woodrats are present, relocation of houses shall be delayed until the breeding season is over or the qualified biologist otherwise determines that young are no longer present.

Monarch Butterfly

The project site is not known to support wintering monarch butterflies, and therefore, winter roosts (which are considered sensitive habitat by CDFW) would likely not be impacted by fuel reduction activities. While it is possible that milkweed plants could be used by breeding monarchs, related impacts would be minimal because of the large area of open space maintained relative to project-

related habitat alteration, and because winter roosts would not be disturbed. The following avoidance and minimization measures shall be observed:

- Prior to fuel treatment activities, appropriately timed field surveys (generally June through September) shall be conducted by a qualified biologist to identify, map, and estimate (a) stand sizes, densities, and number and species of milkweed (Asclepias spp. and others); (b) number and species of adult nectar plants in the entire project site; and (c) record any observations of monarch activity.

- Vegetation control activities may occur between December 1 and March 14 without special restrictions. The following restrictions are applicable from March 15 to November 30 for vegetation control practices (e.g., ground disturbance, tree removal, mowing, grazing, herbicide application, or hand removal) during the monarch breeding season in areas containing milkweed and nectar plants:

    a. During the monarch breeding season from March 15-November 30, the City and its contractors may conduct vegetation control activities and other management actions provided:

    b. Site specific buffers are established by a qualified biologist around patches of milkweed and associated nectar plants where no vegetation control may occur.

    c. If milkweed and associated nectar plants cannot be avoided, a qualified biologist shall complete pre-activity surveys. If no monarch breeding activity is identified, Contractors may proceed with vegetation control activities subject to conditions below. If monarch breeding activity is identified, the milkweed stand shall be avoided until a qualified biologist implements a salvage and relocation plan that has been reviewed and approved by the applicable Resource Agency.

    d. Unoccupied growing milkweed will be avoided by a minimum of 2 ft during the application of herbicides (target spray, cut stump, wiping and wicking). Herbicide application within 125 ft of a milkweed plant will be conducted with a low-pressure backpack sprayer to reduce the risk of drift.

    e. No broad-spectrum herbicide application will take place within 125 ft of occupied monarch habitat when wind speeds exceed 10 mph, or temperatures exceed 85°F to minimize potential for drift and volatilization.

    f. No persistent or pre-emergent herbicides will be used within 125 ft of milkweed or other occupied monarch habitats.

    g. No prescribed fire treatment will occur within 125 ft of habitat occupied by monarchs during the active monarch season.

    h. Mowing will not be conducted within 125 ft of active monarch breeding habitat (adults or larvae) during the breeding season March 15-November 30. Mowing projects affecting

nectar plants any time of year within 125 ft of active monarch habitat shall only be conducted when temperatures are above 55 degrees on a sunny day and 60 degrees on cloudy days to avoid injuring adult monarchs (Monarch Joint Venture 2022b).

i. If mowing occurs from March to June near areas where breeding occurs, mowing height will be set to a minimum of 10-12 inches to avoid cutting newly emerged milkweed plants.

Crotch's and Western Bumble Bees

A minimum of two preactivity surveys shall be conducted within 30 days during appropriate activity periods (i.e., March through September) prior to the start of ground disturbing activities to identify bumble bee activity. The preactivity surveys shall occur when temperatures are above 60° Fahrenheit (15.5°Celsius) and not during wet conditions (e.g., foggy, raining, or drizzling). The survey shall be conducted at least 2 hours after sunrise and 3 hours before sunset and shall occur at least 1 hour after rain subsides. Preferably, the survey should be conducted during sunny days with low wind speeds (less than 8 miles per hour), but surveying during partially cloudy days or overcast conditions are permissible if the surveyors can still see their own shadow.

If western bumble bees, or potential Crotch or western bumble bees (since bumble bees can be difficult to identify in the field) are observed within the project site, a plan to protect Crotch and/or western bumble bee nests and individuals shall be developed and implemented in consultation with CDFW and USFWS. The plan shall include, but not be limited to, the following measures:

- Specifications for fuel treatment timing and sequencing requirements (e.g., avoidance of raking, mowing, tilling, or other ground disturbance until late March to protect overwintering queen bumble bees);

- Establishment of appropriate no-disturbance buffers for bumble bee nest sites to avoid impacts to the bees and monitoring by a qualified biologist to ensure compliance if bumble bee nests are identified;

- Restrictions associated with fuel treatment practices, equipment, or materials that may harm bumble bees (e.g., avoidance of pesticides/herbicides, BMPs to minimize the spread of invasive plant species);

- Provisions to avoid western bumble bees, or potential western bumble bees if observed away from a bumble bee nest during project activity (e.g., ceasing of project activities until the animal has left the active work area on its own volition); and

- Prescription of an appropriate restoration seed mix targeted for the western bumble bee, including native plant species known to be visited by native bumble bee species and containing a mix of flowering plant species with continual floral availability through the entire active season of the western bumble bee (March through September).

Waters of the United States/Waters of the State

Potential impacts to potentially jurisdictional features, such as the onsite streams/drainages (and seasonal wetlands/seeps, if present), are subject to regulation by the USACE, RWQCB, and/or CDFW. These features will be avoided during the fuel reduction activities, where possible. No fill, including plant cuttings, rocks, or soils will be placed in these jurisdictional features without the appropriate permits from the regulatory agencies. If these features are impacted, the City would need to obtain the required permits from the relevant regulatory agencies, including the USACE, CDFW, and RWQCB. These permits would include conditions and BMPs that the City would implement during fuel reduction activities. These permits may also specify mitigation, which the City would provide as specified by the regulatory agencies.

Riparian Vegetation

To minimize disturbance to riparian habitat occurring adjacent to the fuel reduction area, riparian areas shall be clearly delineated by a qualified biologist. Riparian areas shall be separated and protected from the work area through silt fencing, amphibian/reptile-friendly fiber rolls (i.e., no mono-filament), or other appropriate erosion control material. Material staging, and all other project-related activity shall be located as far as possible from riparian areas with no driving or parking of vehicles or equipment within the dripline of a riparian tree.

Native Grasslands and Other Sensitive Natural Communities

If feasible, the proposed fuel treatments shall avoid/minimize impacts to the purple needlegrass grasslands, other native grasslands, and other sensitive natural communities. The stands of native grasslands shall be avoided during fuel treatment activities.

If the native grasslands cannot be avoided, the loss of native grasslands shall be mitigated by restoring an equivalent amount of native grasslands onsite. The City shall reseed temporarily disturbed areas of native grassland habitat that are disturbed by fuel reduction activities with an appropriate weed-free native seed mix that contains the particular native grass seed and/or plugs. Any restored native grassland areas shall be monitored and reported on an annual basis, as required by CDFW.

REFERENCES

American Ornithologists' Union (AOU). 1998. Check-list of North American birds. 7th edition. American Ornithologists' Union, Washington, D.C.

Baldwin, B. G., D. H. Goldman, D. J. Keil, R. Patterson, T. J. Rosatti, and D. H. Wilken, editors. 2012. The Jepson Manual: Vascular Plants of California, Second Edition. University of California Press, Berkeley.

Beeman and Associates. 1993. El Cerrito Hillside Natural Area Fire Hazard Reduction Plan (ESA Project #920492) – Site Review for Alameda Whipsnakes. July 10.

Bradley, R.D., L.K. Ammerman, R.J. Baker, L.C. Bradley, J.A. Cook, R.C. Dowler, D.J. Schmidly, F.B. Stangl, Jr., R.A. Van Den Bussche, and B. Würsig. 2014. Revised Checklist of North American Mammals North of Mexico. Occasional Papers, Museum of Texas Tech University No. 237.

California Department of Fish and Game (CDFG). 2012. Staff Report on Burrowing Owl Mitigation. State of California, Natural Resources Agency, Department of Fish and Game. March 7.

California Department of Fish and Wildlife (CDFW). 2023. Query of the California Natural Diversity Database for special-status species occurrences within 5 miles of the project site. Biogeographic Data Branch, California Department of Fish and Wildlife, Sacramento.

California Department of Fish and Wildlife (CDFW). 2019. Evaluation of the Petition from the Xerces Society, Defenders of Wildlife, and the Center for Food Safety to List Four Species of Bumble Bees as Endangered Under the California Endangered Species Act. State of California, Natural Resources Agency. Report to the Fish and Game Commission.

California Department of Fish and Wildlife (CDFW). 2018. Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities. State of California, California Natural Resources Agency..

California Native Plant Society (CNPS). 2023. Inventory of Rare and Endangered Plants (online edition, v9.5). California Native Plant Society, Rare Plant Program, Sacramento, CA. Website: www.rareplants.cnps.org, accessed August 2, 2023.

Crother, B.I. (ed.). 2017. Scientific and Standard English Names of Amphibians and Reptiles of North America North of Mexico, with Comments Regarding Confidence in Our Understanding, pp. 1-102, SSAR Herpetological Circular No. 43.

Diablo Fire Safe Council. 2017. El Cerrito - Kensington Wildfire Action Plan. An Appendix to the Contra Costa Countywide Community Wildfire Protection Plan (CWPP), Contra Costa County. Prepared in conjunction with the El Cerrito Fire Department Kensington Fire Protection District Stakeholder Committee Members.

eBird. 2023. eBird: An online database of bird distribution and abundance [web application]. Cornell Lab of Ornithology, Ithaca, New York. Available online at: www.ebird.org, accessed: October 5, 2023.

Entomological Consulting Services, Ltd. 1993. El Cerrito Hillside Natural Area Fire Hazard Reduction Plan Site Reconnaissance for Monarch Butterfly Habitat.

Glover, S.A. 2009. A Breeding Bird Atlas of Contra Costa County. Mount Diablo Audubon Society. Walnut Creek, CA.

Friends of Five Creek. 2014. Native Plants of the El Cerrito Hillside Natural Area. Available online at: www.fivecreeks.org/projects/hillside_natural_area/HNANativesforWebMay2014.pdf, accessed October 9, 2023.

LSA Associates, Inc. (LSA). 2014. Biological Resources Report for the Madera Property Fuel Reduction Project, El Cerrito, Contra Costa County, CA.

LSA Associates, Inc. (LSA). 1987. El Cerrito Hillside Natural Area Vegetation Management Plan. Prepared for the City of El Cerrito.

Sawyer, J.O., T. Keeler-Wolf, and J. Evens. 2009. A Manual of California Vegetation, Second Edition. California Native Plant Society. Sacramento, CA.

United States Department of Agriculture Natural Resources Conservation Service (USDA). 2023. Web Soil Survey. Website: http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>, accessed October 9, 2023.

United States Fish and Wildlife Service (USFWS). 2023. IPaC Information for Planning and Consultation. List of Threatened and Endangered Species that May Occur in Your Proposed Project Location or May Be Affected by Your Proposed Project. August 31.

Xerces Society for Invertebrate Conservation, Idaho Department of Fish and Game, Washington Department of Fish and Game, National Fish and Wildlife Foundation, and U.S Fish and Wildlife Service (Xerces et al.). 2023. Western Monarch Milkweed Mapper. Available online at: www.monarchmilkweedmapper.org, accessed October 9, 2023.

Xerces Society Western Monarch Count. 2022. Western Monarch Thanksgiving Count and New Year's Count Data, 1997-2021. Available online at: www.westernmonarchcount.org, accessed October 9, 2023.

FIGURES

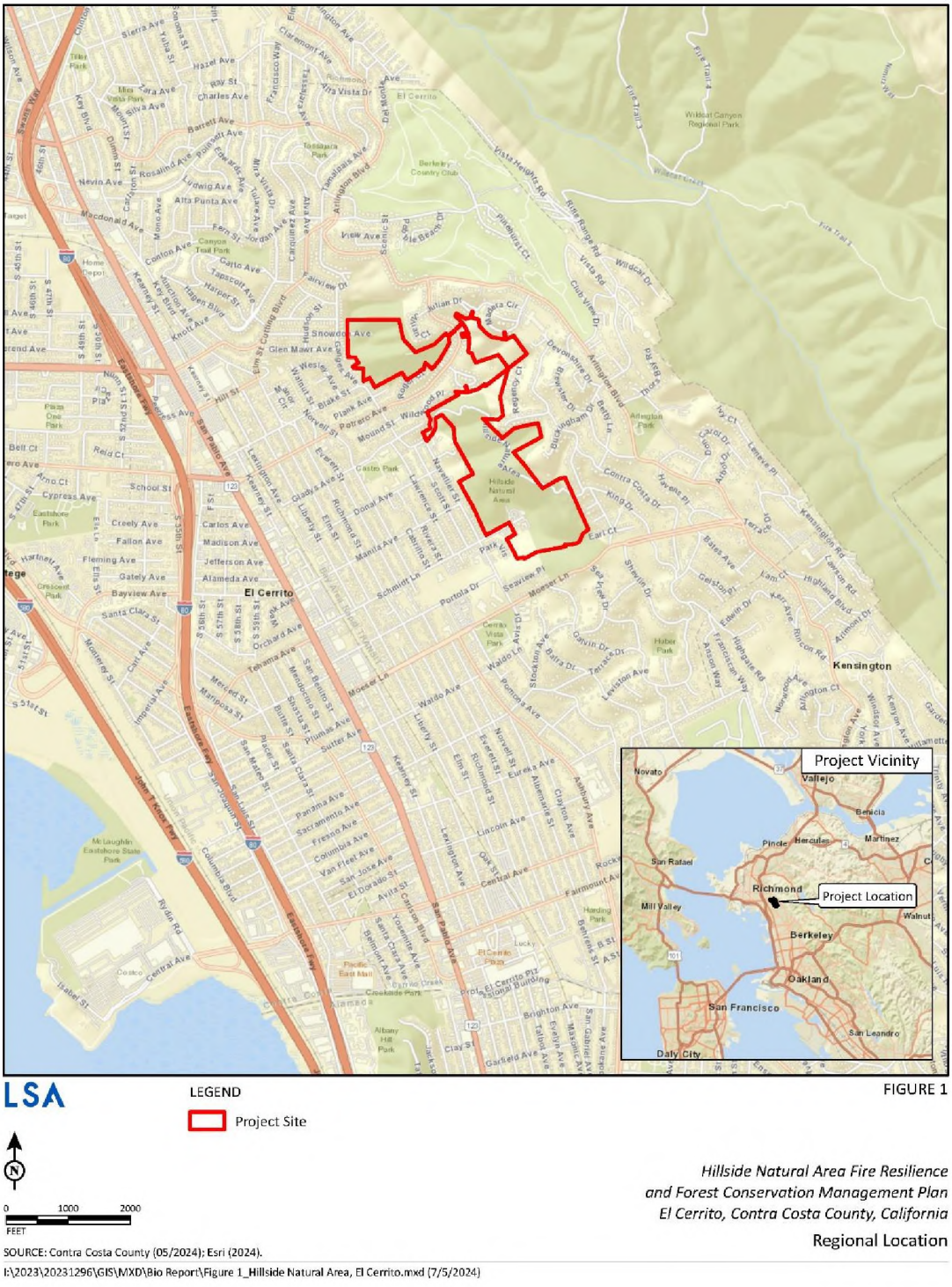


Figure 1: General Location

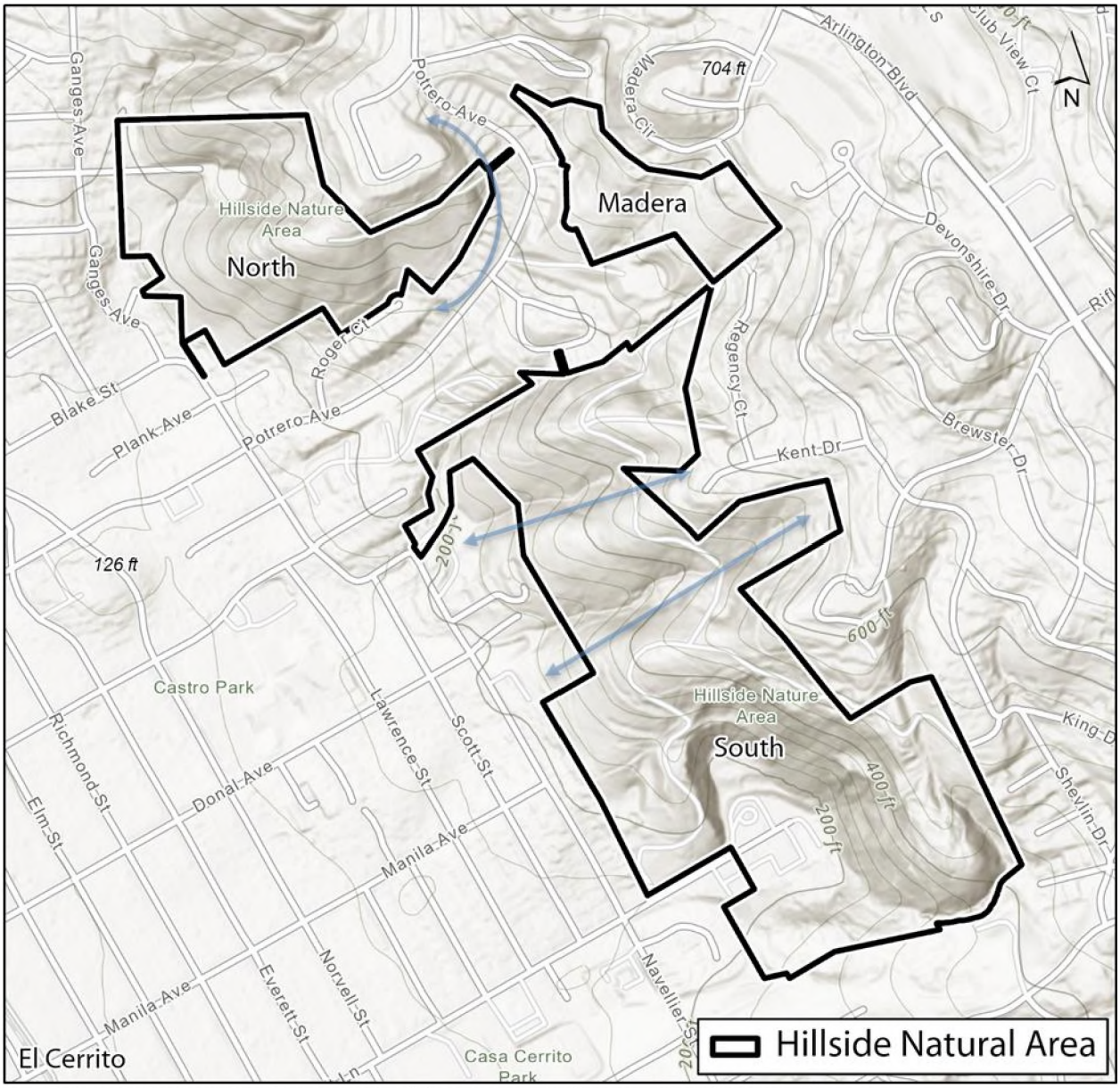


Figure 2: Project Site Topography (blue arrows indicate major drainages).

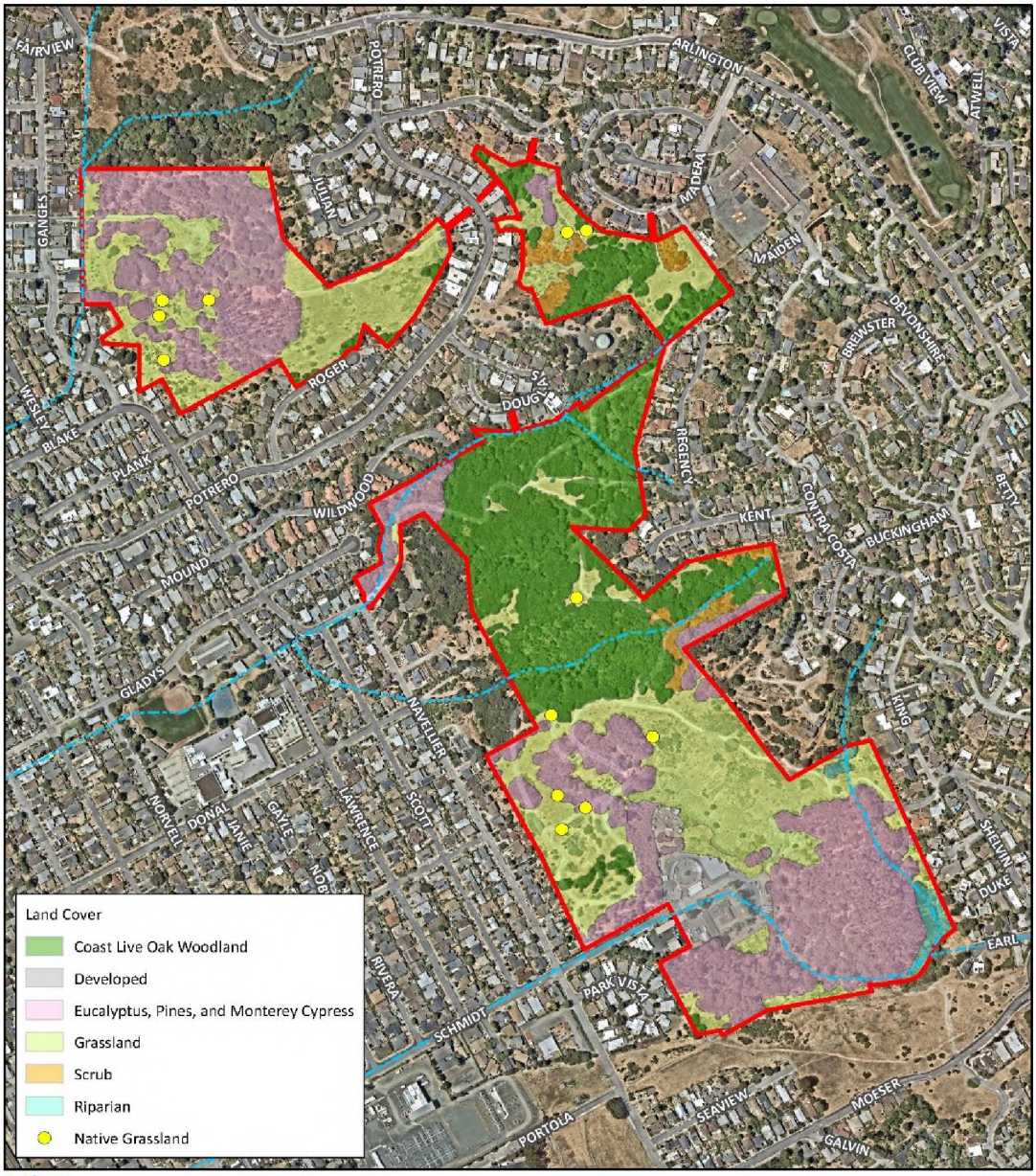


Figure 3:Vegetation Communities

Map Unit	Description
CnE	CUT AND FILL LAND-LOS OSOS COMPLEX, 9 TO 30 PERCENT SLOPES
CoE	CUT AND FILL LAND-MILLSHOLM COMPLEX, 9 TO 30 PERCENT SLOPES
CoF	CUT AND FILL LAND-MILLSHOLM COMPLEX, 30 TO 50 PERCENT SLOPES
GcF	GILROY CLAY LOAM, 30 TO 50 PERCENT SLOPES
Qa	QUARRY
Re	ROCK OUTCROP-XERORTHENTS ASSOCIATION
TaC	TIERRA LOAM, 2 TO 9 PERCENT SLOPES

LSA

LEGEND

Project Site

Soil Map Units

N

0 300 600
FEET

SOURCE: NRCS (10/2023); Contra Costa County (05/2024); Nearmap (07/2023).

I:\2023\20231296\GIS\MXD\Bio Report\Figure 5_Soils.mxd (7/6/2024)

FIGURE 4

Hillside Natural Area Fire Resilience and Forest Conservation Management Plan
El Cerrito, Contra Costa County, California

Soil Types

Figure 4: Soils

APPENDIX B

CULTURAL RESOURCES ASSESSMENT

This page intentionally left blank

P.O. Box 367
Elmira, CA 95625

Fax 707-451-4775
www.solanoarchaeology.com

CULTURAL RESOURCES TECHNICAL MEMORANDUM

Date: October 18th, 2023
To: LSA Associates, Inc.
From: Solano Archaeological Services, LLC

Subject: Cultural Resources Investigation – Hillside Natural Area Fire Resilience and Forest Conservation Management Plan, City of El Cerrito, Contra Costa County, California

INTRODUCTION

This technical memorandum summarizes the background research, Native American community outreach, archaeological survey, and study findings for the proposed Hillside Natural Area (HNA) Fire Resilience and Forest Conservation Management Plan in the City of El Cerrito (the City), Contra Costa County, California (the Project). As a discretionary effort, the Project is subject to California Environmental Quality Act (CEQA) requirements, and Solano Archaeological Services, LLC (SAS) has prepared this report to support compliance with the cultural resources provisions of CEQA.

PROJECT LOCATION

The project area consists of approximately 107.18-acre (ac.) on three discontiguous but adjacent lots generally located to the northwest, and southeast of Potrero Avenue. (Attachment A, Figure 1). The project area is depicted on the *Richmond*, *California* U.S. Geological Survey (USGS) topographic 7.5 minute quadrangle in Township 1 North, Range 4 West, sections 15, 16, 21, and 22 (Attachment A, Figures 2, 3).

PROJECT DESCRIPTION

Community concerns regarding fire risk in the City's HNA and surrounding residential communities have significantly increased. The City has responded with ongoing and increased vegetation maintenance activities, completing work largely based on planning efforts completed in the 1990s. However, the need for more robust, comprehensive, and balanced vegetation management practices was identified in the City's 2015 Urban Greening Plan. Additionally, in 2019, the El Cerrito Parks and Recreation Facilities Master Plan specifically called for action to "support the El Cerrito-Kensington Wildfire Action Plan goals and policies by creating defensible spaces, increasing weed abatement, and managing dead or diseased trees and other vegetation, especially in the Hillside Natural Area". El Cerrito voters passed a measure (Measure H) to further fund park maintenance activities that same year and the City has since increased its fire fuel reduction and vegetation management activities, in part with these park maintenance funds. Given the ongoing and historic drought, rising global temperatures and community concerns regarding the risk of wildfire, an updated plan with the required environmental site analysis is needed now to guide the City in performing and budgeting for the most effective, sustainable, and cost-efficient fuel reduction and forest conservation activities. To assist in this effort, the City of El Cerrito was awarded a $145,000 State Coastal Conservancy grant in September 2022 to complete the Plan by September 2024.

The purpose of this project is to establish and adopt a comprehensive fire hazard reduction and vegetation management plan for the City's HNA. The proposed plan will:

- identify and protect critical resource areas,
- guide the City's fire fuel reduction, native forest conservation, and maintenance activities, and
- evaluate fire road and trail network conditions.

REGULATORY SETTING

CEQA requires that public agencies having authority to finance or approve public or private projects assess the effects of those projects on cultural resources. Cultural resources include buildings, sites, structures, objects, or districts, each of which may have historical, architectural, archaeological, cultural, or scientific significance. CEQA states that if a proposed project would result in an effect that may cause a substantial adverse change in the significance of a significant cultural resource (termed a "historical resource"), alternative plans or mitigation measures must be considered. Because only significant cultural resources need to be addressed, the significance of cultural resources must be determined before mitigation measures are developed.

CEQA §5024.1 (Public Resources Code [PRC] §5024.1) and §15064.5 of the State CEQA Guidelines (14 California Code of Regulations [CCR] §15064.5) define a *historical resource* as "a resource listed or eligible for listing on the California Register of Historical Resources." A historical resource may be eligible for inclusion in the California Register of Historical Resources if it:

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

In addition, CEQA also distinguishes between two classes of archaeological resources: archaeological sites that meet the definition of a historical resource, and "unique archaeological resources." An archaeological resource is considered unique if it:

- Is associated with an event or person of recognized significance in California or American history or of recognized scientific importance in prehistory
- Can provide information that is of demonstrable public interest and is useful in addressing scientifically consequential and reasonable research questions
- Has a special or particular quality such as oldest, best example, largest, or last surviving example of its kind
- Is at least 100 years old and possesses substantial stratigraphic integrity; or
- Involves important research questions that historical research has shown can be answered only with archaeological methods (Public Resources Code §21083.2)

According to the CEQA Guidelines, a project with an effect that may cause a substantial adverse change in the significance of a historical resource, or a unique archaeological resource is a project that may have a significant effect on the environment (14 CCR §15064.5[b]). CEQA further states that a substantial adverse change in the significance of a resource means the physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired.

NATURAL AND CULTURAL SETTING

The project area lies within the east bay region of the San Francisco Bay Area, where warm, dry summers are complemented by cool, wet winters with rainfall averaging 25–50 inches per year. This climate is complemented by a diverse topographic landscape bounded on the west by the Pacific Ocean, to the east by low coastal mountains and the Central Valley, and to the south by the southern coast mountain ranges. Accordingly, this region has a rich and diverse natural environment with lush stands of redwood, pine, and fir trees, as well as grassland, oak, and chaparral zones. Large expanses of these varied vegetation zones form extensive, highly productive interfaces where prehistoric people exploited staples, such as acorns. Moreover, these widespread verdant areas support abundant species of wildlife, also a staple resource for prehistoric people (Baumhoff 1978).

The geologic legacy of the San Francisco Bay area also proved important to local Native American groups. Rocks and minerals for tool production and other uses were abundant in the general region. Sources of obsidian continue to be present at Napa Mountain and Anadel, and Franciscan chert can be found in local streambeds. Equally important were deposits of asphaltum (a tar-like substance originating from natural oil seepage) in Marin County and hematite and cinnabar in Sonoma County. The geology of the project area vicinity is also an important consideration when evaluating factors that affect archaeological site visibility. The geomorphic setting of the project area and vicinity includes alluvial, colluvial, and estuarine environments that actively deposited sediments during the Holocene epoch. The region has also been subject to widespread filling during the historic and modern periods (Rice et al. 2002; Wagner et al. 2002) which may have buried prehistoric and early historic-period archaeological sites and remains.

Prehistoric Setting

The prehistoric cultural chronology for the Bay Area was developed over a century of organized archaeological survey, from N. C. Nelson in 1906 to the present day. Since the 1950s, archaeological work in Marin, San Francisco, and Contra Costa Counties has led to identification and refinement of a cultural sequence of early Native American occupation. This sequence consists of the Early Holocene (*Lower Archaic*), Early Period (*Middle Archaic*), Lower Middle Period (*Initial Upper Archaic*), Upper Middle Period (*Late Upper Archaic*), Initial Late Period (*Lower Emergent*), and Terminal Late Period.

The Early Holocene or Lower Archaic (8,000 B.C. – 3,500 B.C.) is characterized as a mobile forager pattern, with milling slabs, handstones, and a variety of large, wide-stemmed and leaf-shaped projectile points, largely composed of local Franciscan chert dominating archaeological assemblages (Hylkema 2002:235; Milliken et al. 2007:114). During the Early Period or Middle Archaic (3,500 B.C. – 500 B.C.), several technological and social developments emerged including new groundstone technology and the first cut shell beads in mortuaries suggest new levels of sedentism and increased regional trade in the Bay Area (Vellanoweth 2001). The Lower Middle Period or Initial Upper Archaic (500 B.C. – A.D. 430) is marked by a "major disruption in symbolic integration systems" (Milliken et al. 2007:115) and new bone tools appeared for the first time, including barbless fish spears, elk femur spatulas, tubes, and whistles, as well as coiled basketry manufacture (Bennyhoff 1986:70; Bieling 1998:218). During the Upper Middle Period or Late Upper Archaic, (A.D. 430 – 1050), many sites from the previous period were abandoned, and single-barbed bone fish spears, ear spools, and large mortars were developed (Milliken et al. 2007:116).

Following the Archaic Period, the Initial Late Period or Lower Emergent (A.D. 1050 – 1550) is marked by an increase in sedentism, status ascription, and ceremonial integration in lowland Central California (Fredrickson 1973). Increased social stratification throughout the Bay Area after 1250 A.D. is expressed in mortuary practices through the quality of goods in high-status burials and cremations (Fredrickson 1994). The Terminal Late Period is defined by changes in artifact types and mortuary objects including toggle harpoons, hopper mortars, plain corner-notched arrow-sized projectile points, clamshell disk beads, magnesite tube beads, and secondary cremation in the North Bay (Bennyhoff 1994:54; Wickstrom 1986).

Ethnographic Context

During the early decades of the 20th century, pioneering anthropologists including Alfred Kroeber of the University of California at Berkeley, laid the groundwork for understanding the cultures of California's indigenous peoples (Lightfoot 2005). Due to the extensive cultural diversity that existed within pre-colonial California, Kroeber and other early anthropologists created a framework to organize populations into language groups. The people living in central coastal California at the time of Euro-American contact were grouped into the Costanoan language family (also referred to as Ohlone), which occupied the coastal area from San Francisco Bay to south of Monterey Bay. Eight separate language groups are believed to have been within this family. Around fifty politically autonomous groups referred to as tribelets ranged in population from 50 to 500 individuals (Levy 1978). Linguistically, the Costanoan people were divided into large groups consisting of sets of tribelets that spoke a common dialect within a particular geographical area. The dialect spoken amongst the tribelets that occupied the Palo Alto area is believed to have been *Chochenyo*, one of the eight linguistically separate groups within the Costanoan family (Levy 1978). The closest documented village to the project area where Chochenyo was likely spoken was *Huchiun,* several miles to the northwest of the HNA. According to (Bennyhoff 1977:142), *Huchiun Costanoan is firmly established in the Point San Pablo-Richmond region. The tribelet center was probably CCO-270, in the present town of San Pablo.*

The Costanoan carefully managed the landscape within their territory with wildlife habitat and desirable fauna being enhanced through controlled burns. This burning also eased the gathering of acorns; a staple food for the Costanoans. Other plants utilized ethnographically include nuts of buckeye, laurel and hazelnut trees, seeds of various plants, numerous berries, and roots. Animals consumed by the Costanoan included deer, elk, antelope, grizzly bear, sea lion, whale, various small mammals, numerous species of birds and waterfowl, and several species of fish including steelhead, salmon, and sturgeon. The Costanoan people traded mussels, abalone shells, salt, and dried abalone with neighbors to the east, and obtained piñon nuts, obsidian, and other items in return (Levy 1978).

With the establishment of seven Spanish missions within traditional Costanoan territory beginning in 1769, native peoples experienced dramatic cultural changes. The introduction of Spanish administration led to the relocation of many native Californians from their villages to missions for the purpose of being "converted" and to serve as laborers. The exact timing and nature of the relocation of the Chochenyo speakers is difficult to determine. Mission Santa Clara began converting Native Americans in 1777 but prior to 1806 their records are problematic for determining tribal group affiliation. In 1797, Mission San Jose de Guadeloupe (Mission San Jose) began converting native peoples, yet their registers provide no tribal names until 1803 (Milliken 1995). Despite this information gap, more than likely, the Chochenyo group was brought under Spanish administration sometime between 1801, and 1806 in the Santa Clara, and San Jose Missions (Milliken 1995), and possibly Mission San Francisco de Asís (Mission Dolores) when other Costanoan groups were subjected to the same fate.

At the missions, native groups were subjected to a daily routine of agricultural labor and a regimented lifeway. By 1810, the indigenous people of present-day Contra Costa and the surrounding counties had been entirely relocated to the missions. With notable exceptions, such as the village of *Alisal* (in present-day Alameda County) where the traditional native social system persisted into the 20th century, the indigenous mode of existence had largely disappeared by 1810. By 1935, for all practical purposes the Costanoan language was extinct and, by 1968, less than 200 people could claim probable Costanoan/Ohlone descent (Levy 1978). Today, however, the Ohlone people are reinvesting in their culture and traditional lifeways. Through new-found political, economic, and social influence Costanoan peoples constitute a thriving native community within the broader context of present-day California.

Historic Period Setting

Although Spanish expeditions to the California coastline date to the 16th and early 17th centuries (e.g., Juan Rodriguez Cabrillo in 1542, Sebastian Rodriguez Cermeño in 1595, and Sebastián Vizcaino in 1602), the conventional date for the beginning of the Spanish Period in California is 1769, the date of the founding of the first mission in California, *Mission San Diego de Alcalá*. Spanish exploration of the San Francisco Bay Area and surrounding lands also began in 1769 when Gaspar de Portola led his expedition into Alta California to locate Monterey Bay. In 1774, Don Fernando de Rivera y Moncada headed another party to identify potential mission sites, and Juan Bautista de Anza followed with an expedition in 1776 (Beck and Haase 1974).

The Franciscans eventually established 21 missions and four presidios (military bases) between Sonoma and San Diego between 1769, and 1823 (Beck and Haase 1974). The missions were situated so that they could be reached within a day's ride of each other. The presidios were spread out evenly among the missions although some missions also housed soldiers within their walls. Most missions included a Convento (padre's residence), housing for the neophytes, and various other facilities such as school rooms, shops, mills, tanneries, storehouses, sheds, and livestock corrals. Other amenities, such as gardens, vineyards, orchards, cultivated fields, and grazing land were developed in and around the missions (Blackmar 1976) that were self-sustaining as they raised a variety of grains and crops as well as sheep and cattle.

Mexico achieved independence from Spain in 1821 at which time Alta California was declared a territory of the Mexican republic. In 1834, the Mexican government secularized the missions and divided their land holdings into ranchos including Rancho San Pablo within which the NHA is located. Rancho San Pablo was a 17,938-ac. land grant given to Francisco María Castro, a former soldier at the San Francisco Presidio and one-time *alcalde* of the Pueblo of San José, in 1823 (Beck and Haase 1974). With the cession of California to the United States following the Mexican–American War, the 1848 Treaty of Guadalupe Hidalgo provided that the land grants would be honored. As required by the California Land Act of 1851(9 Stat. 631), a claim for Rancho San Pablo was filed with the Public Land Commission by Joaquín Ysidro Castro in 1852, and the grant was patented to Joaquín Ysidro Castro in 1878.

El Cerrito

The most notable Euro-American to settle in what would become the City of El Cerrito was Wilhelm F. Rust, a native of Hannover (Germany) who immigrated to California in 1883. He leased property, built a blacksmith shop and his business grew supporting the local cattle ranches, dairies, and farms. As a community grew around his shop and a hardware store he later purchased, the settlement was named Rust in his honor. The town remained generally quiet and unremarkable until 1906 when the Sand Francisco earthquake destroyed much of the city and refugees fled to the east side of the San Francisco Bay and quickly settled in. The town of Rust essentially became official in 1909 when a post office was established in Rust's hardware store, and he took on the role as the Postmaster.

The town rapidly grew and was formally incorporated at El Cerrito (*little hill* in Spanish) in 1917 with a population of 1,500 residents. One of the first orders of business after the City was incorporated was to impose a license fee for each of the saloons in town to pay the wages of marshal, clerk and treasurer, and for other needs of the City. As there were nearly twenty saloons scattered about the community, mostly along San Pablo Avenue, the revenue was significant and for the first time, fire and police protection were also available to the new city's residents. Priority was given to a street paving program and soon after the incorporation the driving of cattle down San Pablo Avenue to a slaughterhouse on Central Avenue was stopped (El Cerrito Historical Society 2023).

Being just across from San Francisco, El Cerrito grew quickly, reaching a population of 3,852 in 1930, and 7,000 in 1940. During the World War II years, the population sky-rocketed to over 16,000 and with the post-war housing boom, to over 18,000 in 1950. Today, El Cerrito has a population of 24,000 and serves as an economic and cultural hub for the Bay Area.

Chung Mei Home

In 1923, Dr. Charles R. Shepard founded the Chung Mei Home for Chinese Boys after seeing dozens of hungry, abandoned Chinese boys in San Francisco's Chinatown. Shepard noted that "No other orphanage would take in children of color or Asiatic races." The home was first located in an old wooden building in Berkeley, but in part due to the efforts of the boys themselves, money was raised to build a larger facility and the location in El Cerrito was eventually chosen. The home (Chung Mei Home Historic District) was built in 1935 on a hillside bordered by Elm Street to the west and by existing residential housing to the north, east, and south. The home consisted of a main building, a maintenance building, an art studio, an L-shaped classroom building, a gymnasium, a library/classroom building, and numerous additional structures, buildings, and features. From 1935 to 1954, the home provided residential care, guidance, and structure for neglected and abandoned Chinese boys. The present-day Chung Mei Home for Chinese Boys Historic District (the District) still reflects its institutional design and integrity. LSA Associates of Richmond, California completed a Historical Resources Evaluation of the district in 2007. The evaluation concluded that the District appeared eligible for listing on the California Register of Historical Resources for its association with the Chinese experience in California and the San Francisco Bay Area.

NATIVE AMERICAN COMMUNITY OUTREACH

Public Resources Code (PRC) Sections 21080.1, 21080.3.1, and 21080.3.2 require public agencies to consult with the appropriate California Native American tribes identified by the Native American Heritage Commission (NAHC) for the purpose of mitigating impacts to cultural resources. To meet PRC requirements, on August 15th, 2023, SAS emailed a letter and a map depicting the project area and surrounding vicinity to the NAHC requesting a Sacred Lands File (SLF) search, and a list of Native American community representatives who might have an interest in, or concerns with the proposed Project. The NAHC responded to SAS on August 24th stating that the search of the SLF was positive, indicating that a culturally sensitive property had been identified within or near the project area (Attachment B).

The NAHC also provided a list of appropriate local tribal organizations and individual contacts each of which SAS by mailed letter on August 30th, 2023, informing them of the proposed Project and inquiring if they had any knowledge of cultural properties within or near the project area. On September 11th, Francis Ranstead, Tribal Administrator for the Confederated Villages of Lisjan Nation (Lisjan Nation), emailed SAS and noted that:

> *The Tribe would like to consult for this project. You can find our Calendly link below to schedule a consultation at your earliest convenience. Please make sure to include the project name in the notes section when scheduling the consultation to help us prepare for our meeting.*

Francis Ranstead, in a separate email, also requested:

> *…a copy of the final CHRIS, Sacred Lands File and EIR for this project, along with the SLF from Native American Heritage Commission and any additional archeological reports. Our physical address is: PO BOX 6487 Oakland CA 94603 or if you would prefer to send them electronically, please send them to this email address.*

Since SAS cannot directly engage in Consultation and requests for Project documentation have to go through the City, SAS forwarded these requests to the City for further action. No other requests have been forwarded from any of the contacts suggested by the NAHC. If additional outreach or requests for Consultation are received, SAS will forward them to the City and prepare an addendum to this report if necessary.

The Lisjan Nation also engaged directly with the City in a meeting on October 18th, 2023. At this meeting, the Lisjan Nation representatives requested confirmation that ground disturbances would not occur near creek bottoms and that the City would notify them if the scope changed. The representatives also requested a copy of this report which the City provided.

California Historical Resources Information System Records Search

The Northwest Information Center (NWIC) of the California Historical Resources Information System provided the results of a record search request to SAS on September 18th, 2023 (NWIC File No. 23-0215). This search included a review of the NWIC archives for previously known or recorded cultural resources, studies, and isolates within the project area and a half-mile (mi.) radius. The search also included, but was not necessarily restricted to, a review of the following sources:

- The *National Register of Historic Places* (Historic Properties Directory, California Office of Historic Preservation)
- The *California Register of Historic Places* (Historic Properties Directory, California Office of Historic Preservation)
- The *California Historical Landmarks* (California Office of Historic Preservation)
- The *California Points of Historical Interest* (California Office of Historic Preservation)
- The *California Inventory of Historic Resources* (California Department of Parks and Recreation).

The NWIC record search indicated that one cultural resource, a house built in 1898 on Navellier Street (P-07-000995), was located immediately adjacent to the project area. NWIC also reported six additional cultural resources within one half-mi. of the project area:

- P-07-002714: Prehistoric shell midden at 8420 Buckingham Ave.
- P-07-002910: Chung Me Home for Chinese Boys District / Windrush School
- P-07-002911: Main building - Chung Me Home for Chinese Boys
- P-07-002912: Maintenance building - Chung Me Home for Chinese Boys
- P-07-002913: Windrush School classroom building
- P-07-003064: Indian mound at Navellier Street

The NWIC also noted that two previous cultural resources investigations included at least a portion of the current project area and an additional five studies have been conducted within the half-mi. search area.

Additional Research

In order to ascertain patterns of public-private land ownership within the project area and identify potential undocumented cultural resources and sensitive landforms, SAS conducted additional archival research focused on historic mapping and federal land transfer records. This research consisted of reviews of the Bureau of Land Management's General Land Office (GLO) archives including patent records, historical USGS topographic quadrangle maps, and aerial photography.

USGS mapping showing the project area and surrounding region dates to as early as 1895 with regular modifications and re-prints throughout the 20th century. The early topographic quadrangle (1895) does not show any developments within the project area other than a possible building at the current-day intersection of Arlington Boulevard and where Scenic Drive would be constructed in the mid-late 1940s (outside the HNA). This building appears on USGS mapping between 1895, and 1947 after which time development was clearly shown encroaching on the area where the HNA would eventually be established. Historic aerial photography, which only dates to as early as 1946, does not show any indications of a structure or building at the Arlington Boulevard/Scenic Drive location. The duration of its depiction on USGS mapping well into the 1940s suggests the symbol for the building on the USGS mapping was an error simply transferred onto later printings long after the actual building or structure was gone.

Aerial photography generally confirms a lack of buildings, structures, or substantial road alignments in the HNA parcels. However, a clear picture of encroaching urban/suburban development can be seen during the latter half of the 20th century.

A review of GLO land patent records detailing the transfers of public land to private individuals and companies (or the State of California) shows that only one patent was issued for lands encompassing the project area. This was for the 17,938-ac. Rancho San Pablo which, under the California Land Act of 1851, was formally patented to Francisco Maria Castro, Juaquin Isidro Castro, and Juaquin Y. Castro. The 1867 GLO plat map of Township 1 North, Range 4 West shows the boundaries of the Rancho San Pablo but no other developments, natural features, or survey markers are depicted which was common practice at the time for Mexican land grant properties.

Field Survey

Methods

On September 27th, 2023, SAS archaeologists conducted an intensive pedestrian survey of the project area utilizing pedestrian transects spaced no greater than approximately 10 meters apart. A sub-meter accurate Trimble GPS unit was utilized to verify project area boundaries and to record locations of landscape features and cultural resources. In areas where extremely steep hillsides and/or impenetrably dense vegetation were present, opportunistic survey techniques were employed as necessary using existing trails within the HNA.

Results

The project area consists of a rugged landscape of slopes, drainages, and dense woodlands on a series of steep-sided hills with a western aspect towards San Francisco Bay. Ground surface visibility was poor throughout the project area due to heavy vegetation with the exception of small erosional areas along established trails, and in rodent burrows. One previously documented historic-era resource, the 1898 house on Navellier Street (P-07-000995) was noted by the SAS field team. No other historic-era or early Native American sites, features, sensitive landforms or soil types (e.g., midden) or artifacts were recorded. Representative photographs of the overall project area as encountered in the field survey are included as Attachment C.

Summary and Recommendations

Archival research, outreach to the Native American community, and an intensive field survey did not document indications of prehistoric activities in the project area. Although the NAHC noted that a culturally significant property was known to be present within or near the project area, none of the tribal contacts and representatives have expressed any concerns regarding this possible site. In addition, an intensive field survey did not identify any potentially sensitive landforms or significant level terrain in the project area, suggesting it retains a low level of sensitivity for containing traces of early Native American occupation. Concerning historic period resources, historic mapping, aerial photographs, archival research, and the field survey indicated that no developments of any kind occurred in the project area although P-07-000995 is located immediately adjacent. Consequently, SAS proposes a low level of sensitivity for the project area to exhibit potentially significant historic-era sites, features, or artifacts. As P-07-000995 would not be affected by the proposed Project, no Native American representatives or groups have expressed concerns regarding the Project, and research did not identify any cultural resources or sensitive landforms, SAS recommends that the Project would have *no impact on historical resources* per CEQA.

If human remains or any associated funerary artifacts are discovered during construction, all work must cease within the immediate vicinity of the discovery. In accordance with the California Health and Safety Code (Section 7050.5), the Contra Costa County Sheriff/Coroner must be contacted immediately. If the Coroner determines the remains to be Native American, the Coroner will notify the Native American Heritage Commission, which will in turn appoint a Most Likely Descendent (MLD) to act as a tribal representative. The MLD will work with the City and a qualified archaeologist to determine the proper treatment of the human remains and any associated funerary objects. Construction activities will not resume until either the human remains are exhumed, or the remains are avoided via Project construction design change.

REFERENCES

Baumhoff, M. A.
1978 Environmental Background. In Handbook of North American Indians, Vol. 8; California, R. F. Heizer, ed., pp. 16–24. Washington, D.C.: Smithsonian Institution.

Beck, Warren A. and Ynez D. Haas
1974 Historical Atlas of California. University of Oklahoma Press Publishing. Norman, OK.

Bennyhoff, J.
1977 Ethnogeography of the Plains Miwok. Center for Archaeological Research at Davis, Publication 5. University of California, Davis.

1986 The Emeryville Site, Viewed 93 Years Later. Pages 65–75 in G. S. Breschini and T. Haversat (eds.), Symposium: A New Look at Some Old Sites. Archives of California Prehistory 6. Coyote Press, Salinas, CA

1994 Central California Augustine: Implications for Northern California Archaeology. Pages 65–74 in R. E. Hughes (ed.), Toward a New Taxonomic Framework for Central California Archaeology: Essays by James A. Bennyhoff and David A. Fredrickson. Contributions of the University of California Archaeological Research Facility 52. Berkeley, CA.

Bieling, D. G.
1998 Archaeological Investigations at CA-MRN-254, the Dominican College Site, San Rafael, Marin County, California. Holman and Associates, San Francisco, CA. Submitted to Dominican College, San Rafael, CA and to Davidon Homes, Walnut Creek, CA.

Blackmar, F.W.
1976 Spanish Institutions of the Southwest. Rio Grande Press, Glorieta, NM

El Cerrito Historical Society
2023 https://www.elcerritohistoricalsociety.org/

Fredrickson, David A.
1973 Spatial and Cultural Units in Central California Archaeology. In *Toward a New Taxonomic Framework for Central California Archaeology*, essays by James A. Bennyhoff and David A. Fredrickson, edited by Richard E. Hughes, Contributions of the University of California Archaeological Research Facility No 52, Berkeley, CA.

1993 Archaeological Taxonomy in Central California Reconsidered. In *Toward a New Taxonomic Framework for Central California Archaeology*. Edited by Richard E. Hughes, Contributions of the University of California Archaeological Research Facility No. 52, Berkeley, CA.

Hylkema, M.
2002 Tidal Marsh, Oak Woodlands, and Cultural Florescence in the Southern San Francisco Bay Region. Pages 205–231 in Jon M. Erlandson and Terry L. Jones (eds.), Catalysts to Complexity: Late Holocene Societies of the California Coast. Perspectives in California Archaeology 6, series editor J. E. Arnold. Institute of Archaeology, University of California, Los Angeles.

Levy, Richard.
1978 Eastern Miwok. Handbook of North American Indians 8: 398–413. Smithsonian Institution. Washington, DC.

Lightfoot, K.G.
2005 *Indians, Missionaries, and Merchants: The Legacy of Colonial Encounters on the California Frontiers*. University of California. Press, Berkeley, CA.

Milliken, R.
1995 *A Time of Little Choice: The Disintegration of Tribal Culture in the San Francisco Bay Area, 1769-I810*. Ballena Press Anthropological Papers No. 43.

Milliken, R., R. T. Fitzgerald, M. G. Hylkema, T. Origer, R. Groza, R. Wiberg, A. Leventhal, D. Bieling, A. Gottsfield, D. Gillette, V. Bellefemine, E. Strother, R. Cartier, and D. A. Fredrickson
2007 Punctuated Culture Change in the San Francisco Bay Area. In T. L. Jones and K. Klar (eds.), *California Prehistory: Colonization, Culture, and Complexity*. Altamira Press. Walnut Creek, CA

Rice, S. R., T.C. Smith, R. G. Strand, D. L. Wagner, C. E. Randolph-Loar, R. C. Witter, and K.B. Clahan.
2002 Geologic Map of the Novato 7.5" Quadrangle, Marin and Sonoma Counties, California Geological Survey, California Department of Conservation.

Vellanoweth, R. L.
2001 AMS Radiocarbon Dating and Shell Bead Chronologies: Middle Holocene Trade and Interaction in Western North America. *Journal of Archaeological Science* 28:941–950.

Wagner, D. L., S. R. Rice, S. Bezore, C. E. Randoph-Loar, J. Allen, and R. C. Witter
2002 Geologic Map of the Petaluma River 7.5" Quadrangle, Marin and Sonoma Counties, California. California Geological Survey, California Department of Conservation.

Wickstrom, B. P.
1986 An Archaeological Investigation of Prehistoric Sites CA-SON-1250 and CA-SON-1251, Southern Sonoma County, California. Master's thesis, Department of Anthropology, Sonoma State University, Sonoma, Rohnert Park.

ATTACHMENT A

Figures

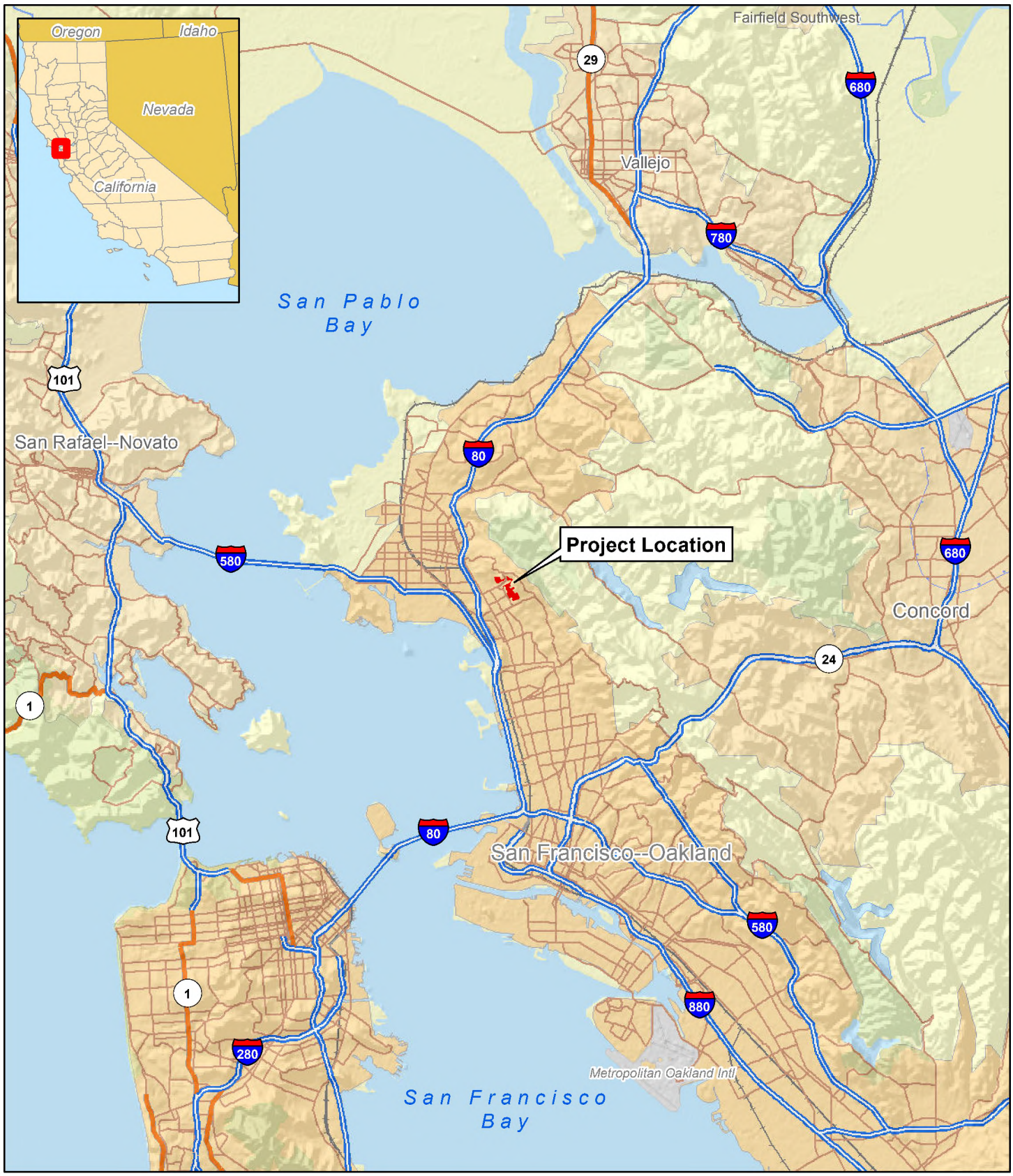


Figure 1. Project Vicinity Map.

Hillside natural Area Plan Project Area

1:250,000

0 3 Miles

0 6 Kilometers

Sources: *USA Base Map* [layer],*Data and Maps* [CD]. ESRI, 2006.

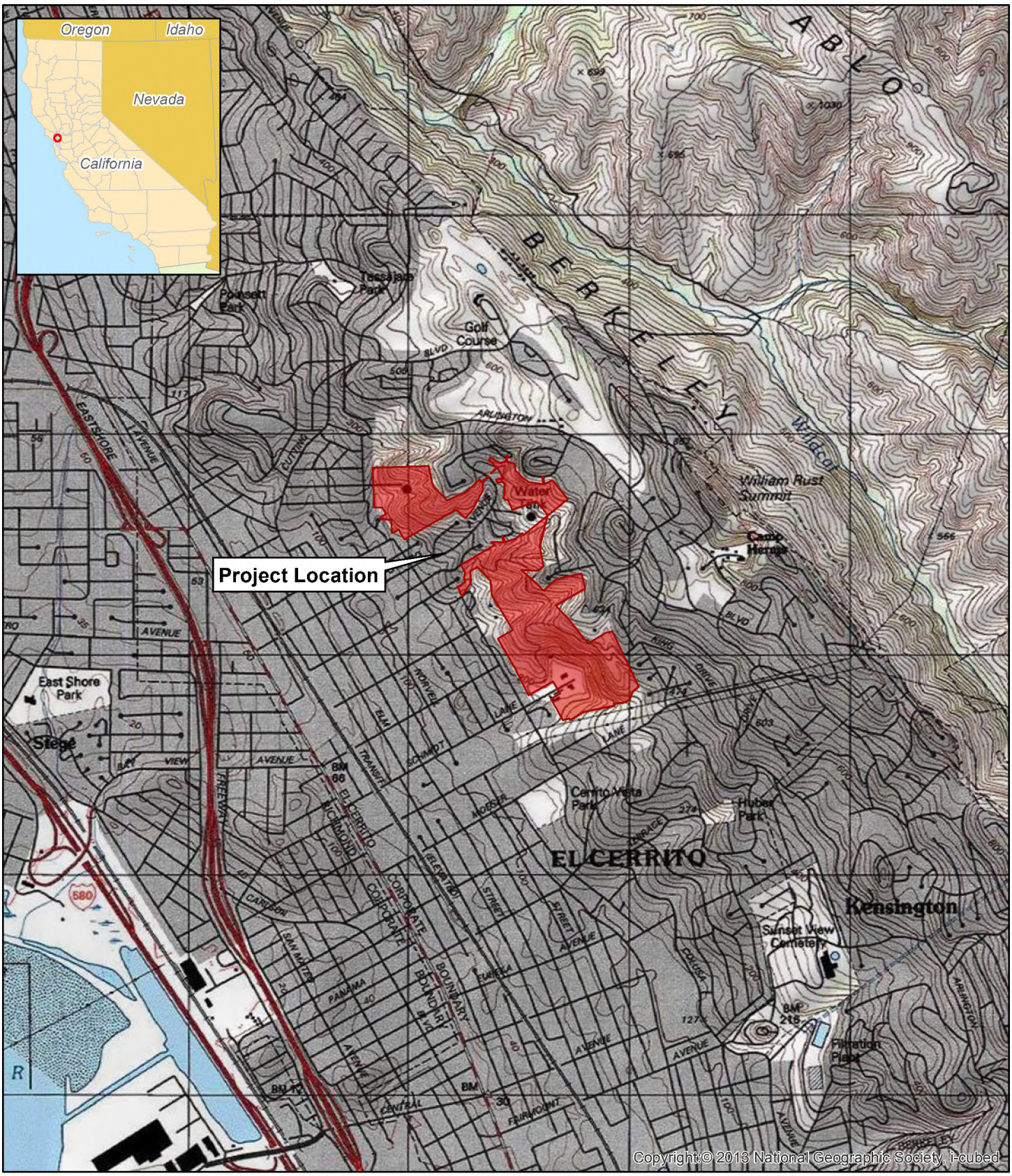


Figure 2. Project Location Map.

Hillside Natural Area Plan Project Area

San Pablo Land Grant (Presumed T01N, R04W, Secs 15, 16, 21 and 22).
Richmond 7.5' Series Quadrangle, USGS, 1980.

1:24,000

0.5 Miles

1 Kilometers

Figure 3. Project Area Map.

Hillside Natural Area Plan Project Area

Total Acres: 106.22

1:10,000

0 500 Feet

0 250 Meters

ATTACHMENT B

Native American Community Outreach

NATIVE AMERICAN HERITAGE COMMISSION

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov
NAHC.ca.gov

August 24, 2023

Brian Ludwig, Ph.D.
Solano Archaeological Services

Via Email to: brian@solanoarchaeology.com

Re: Native American Tribal Consultation, Pursuant to the Assembly Bill 52 (AB 52), Amendments to the California Environmental Quality Act (CEQA) (Chapter 532, Statutes of 2014), Public Resources Code Sections 5097.94 (m), 21073, 21074, 21080.3.1, 21080.3.2, 21082.3, 21083.09, 21084.2 and 21084.3, Hillside Natural Area Fire Resilience and Forest Conservation Management Plan Project, Alameda County

To Whom It May Concern:

Pursuant to Public Resources Code section 21080.3.1 (c), attached is a consultation list of tribes that are traditionally and culturally affiliated with the geographic area of the above-listed project. Please note that the intent of the AB 52 amendments to CEQA is to avoid and/or mitigate impacts to tribal cultural resources, (Pub. Resources Code §21084.3 (a)) ("Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource.")

Public Resources Code sections 21080.3.1 and 21084.3(c) require CEQA lead agencies to consult with California Native American tribes that have requested notice from such agencies of proposed projects in the geographic area that are traditionally and culturally affiliated with the tribes on projects for which a Notice of Preparation or Notice of Negative Declaration or Mitigated Negative Declaration has been filed on or after July 1, 2015. Specifically, Public Resources Code section 21080.3.1 (d) provides:

Within 14 days of determining that an application for a project is complete or a decision by a public agency to undertake a project, the lead agency shall provide formal notification to the designated contact of, or a tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, which shall be accomplished by means of at least one written notification that includes a brief description of the proposed project and its location, the lead agency contact information, and a notification that the California Native American tribe has 30 days to request consultation pursuant to this section.

The AB 52 amendments to CEQA law does not preclude initiating consultation with the tribes that are culturally and traditionally affiliated within your jurisdiction prior to receiving requests for notification of projects in the tribe's areas of traditional and cultural affiliation. The Native American Heritage Commission (NAHC) recommends, but does not require, early consultation as a best practice to ensure that lead agencies receive sufficient information about cultural resources in a project area to avoid damaging effects to tribal cultural resources.

The NAHC also recommends, but does not require that agencies should also include with their notification letters, information regarding any cultural resources assessment that has been completed on the area of potential effect (APE), such as:

1. The results of any record search that may have been conducted at an Information Center of the California Historical Resources Information System (CHRIS), including, but not limited to:

- A listing of any and all known cultural resources that have already been recorded on or adjacent to the APE, such as known archaeological sites;
- Copies of any and all cultural resource records and study reports that may have been provided by the Information Center as part of the records search response;
- Whether the records search indicates a low, moderate, or high probability that unrecorded cultural resources are located in the APE; and
- If a survey is recommended by the Information Center to determine whether previously unrecorded cultural resources are present.

2. The results of any archaeological inventory survey that was conducted, including:

- Any report that may contain site forms, site significance, and suggested mitigation measures.

  All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for public disclosure in accordance with Government Code section 6254.10.

3. The result of any Sacred Lands File (SLF) check conducted through the Native American Heritage Commission was positive. Please contact the tribes on the attached list for more information.

4. Any ethnographic studies conducted for any area including all or part of the APE; and

5. Any geotechnical reports regarding all or part of the APE.

Lead agencies should be aware that records maintained by the NAHC and CHRIS are not exhaustive and a negative response to these searches does not preclude the existence of a tribal cultural resource. A tribe may be the only source of information regarding the existence of a tribal cultural resource.

This information will aid tribes in determining whether to request formal consultation. In the event that they do, having the information beforehand will help to facilitate the consultation process.

If you receive notification of change of addresses and phone numbers from tribes, please notify the NAHC. With your assistance, we can assure that our consultation list remains current.

If you have any questions, please contact me at my email address: Cody.Campagne@nahc.ca.gov.

Sincerely,

Cody Campagne

Cody Campagne
Cultural Resources Analyst

Attachment

Native American Heritage Commission
Native American Contact List
Contra Costa County
8/24/2023

County	Tribe Name	Fed (F) Non-Fed (N)	Contact Person	Contact Address	Phone #	Fax #	Email Address	Cultural Affiliation	Counties	Last Updated
Contra Costa	Amah MutsunTribal Band of Mission San Juan Bautista	N	Irene Zwierlein, Chairperson	3030 Soda Bay Road Lakeport, CA, 95453	(650) 851-7489	(650) 332-1526	amahmutsuntribal@gmail.com	Costanoan	Alameda,Contra Costa,Monterey,San Benito,San Francisco,San Mateo,Santa Clara,Santa Cruz	
	Confederated Villages of Lisjan Nation	N	Corrina Gould, Chairperson	10926 Edes Avenue Oakland, CA, 94603	(510) 575-8408		cvltribe@gmail.com	Bay Miwok Ohlone Delta Yokut	Alameda,Contra Costa,Sacramento,San Joaquin,Santa Clara,Solano,Stanislaus	3/22/2023
	Confederated Villages of Lisjan Nation	N	Deja Gould, Language Program Manager	10926 Edes Ave Oakland, CA, 94603	(510) 575-8408		cvltribe@gmail.com	Bay Miwok Ohlone Delta Yokut	Alameda,Contra Costa,Sacramento,San Joaquin,Santa Clara,Solano,Stanislaus	3/22/2023
	Confederated Villages of Lisjan Nation	N	Cheyenne Gould, Tribal Cultural Resource Manager	10926 Edes Ave Oakland, CA, 94603	(510) 575-8408		cvltribe@gmail.com	Bay Miwok Ohlone Delta Yokut	Alameda,Contra Costa,Sacramento,San Joaquin,Santa Clara,Solano,Stanislaus	3/22/2023
	Guidiville Rancheria of California	F	Bunny Tarin, Tribal Administrator	PO Box 339 Talmage, CA, 95481	(707) 462-3682		admin@guidiville.net	Pomo	Alameda,Contra Costa,Lake,Marin,Mendocino,Napa,Sacramento,San Joaquin,Solano,Sonoma	6/21/2023
	Guidiville Rancheria of California	F	Michael Derry, Historian	PO Box 339 Talmage, CA, 95481	(707) 391-1665		historian@guidiville.net	Pomo	Alameda,Contra Costa,Lake,Marin,Mendocino,Napa,Sacramento,San Joaquin,Solano,Sonoma	6/21/2023
	Indian Canyon Mutsun Band of Costanoan	N	Ann Marie Sayers, Chairperson	P.O. Box 28 Hollister, CA, 95024	(831) 637-4238		ams@indiancanyon.org	Costanoan	Alameda,Contra Costa,Monterey,San Benito,San Francisco,San Mateo,Santa Clara,Santa Cruz	
	Indian Canyon Mutsun Band of Costanoan	N	Kanyon Sayers-Roods, MLD Contact	1615 Pearson Court San Jose, CA, 95122	(408) 673-0626		kanyon@kanyonkonsulting.com	Costanoan	Alameda,Contra Costa,Monterey,San Benito,San Francisco,San Mateo,Santa Clara,Santa Cruz	4/17/2018
	Muwekma Ohlone Indian Tribe of the SF Bay Area	N	Charlene Nijmeh, Chairperson	20885 Redwood Road, Suite 232 Castro Valley, CA, 94546	(408) 464-2892		cnijmeh@muwekma.org	Costanoan	Alameda,Contra Costa,Marin,Merced,Napa,Sacramento,San Francisco,San Joaquin,San Mateo,Santa Clara,Santa Cruz,Solano,Sonoma,Stanislaus	
	Muwekma Ohlone Indian Tribe of the SF Bay Area	N	Monica Arellano, Vice Chairwoman	20885 Redwood Road, Suite 232 Castro Valley, CA, 94546	(408) 205-9714		monicavarellano@gmail.com	Costanoan	Alameda,Contra Costa,Marin,Merced,Napa,Sacramento,San Francisco,San Joaquin,San Mateo,Santa Clara,Santa Cruz,Solano,Sonoma,Stanislaus	7/12/2019
	The Ohlone Indian Tribe	N	Vincent Medina, Tribal Consultant	17365 Via Del Rey San Lorenzo, CA, 94580	(510) 610-7587		vincent.d.medina@gmail.com	Bay Miwok Ohlone Patwin Plains Miwok	Alameda,Contra Costa,San Francisco,San Mateo,Santa Clara	7/24/2023
	The Ohlone Indian Tribe	N	Andrew Galvan, Chairperson	P.O. Box 3388 Fremont, CA, 94539	Phone: (510) 882-0527	(510) 687-9393	chochenyo@AOL.com	Bay Miwok Ohlone Patwin Plains Miwok	Alameda,Contra Costa,San Francisco,San Mateo,Santa Clara	7/24/2023
	The Ohlone Indian Tribe	N	Desiree Vigil, THPO	1775 Marco Polo Way, Apt. 21 Burlingame, CA, 94010	(650) 290-0245		dirwin0368@yahoo.com	Bay Miwok Ohlone Patwin Plains Miwok	Alameda,Contra Costa,San Francisco,San Mateo,Santa Clara	7/24/2023

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and section 5097.98 of the Public Resources Code.

This list is only applicable for consultation with Native American tribes under Public Resources Code Sections 21080.3.1 for the proposed Hillside Natural Area Fire Resilience and Forest Conservation Management Plan Project, Contra Costa County.

Record: PROJ-2023-004249
Report Type: AB52 GIS
Counties: Contra Costa
NAHC Group: All

P.O. Box 367
Elmira, CA 95625

707-718-1416 ▲ Fax 707-451-4775
www.solanoarchaeology.com

August 30th, 2023

The Ohlone Indian Tribe
Andrew Galvan
P.O. Box 3388
Fremont, CA 94539

Re: Hillside Natural Area Fire Resilience and Forest Conservation Management Plan Project, City of El Cerrito, Alameda County, California

Dear Mr. Galvan:

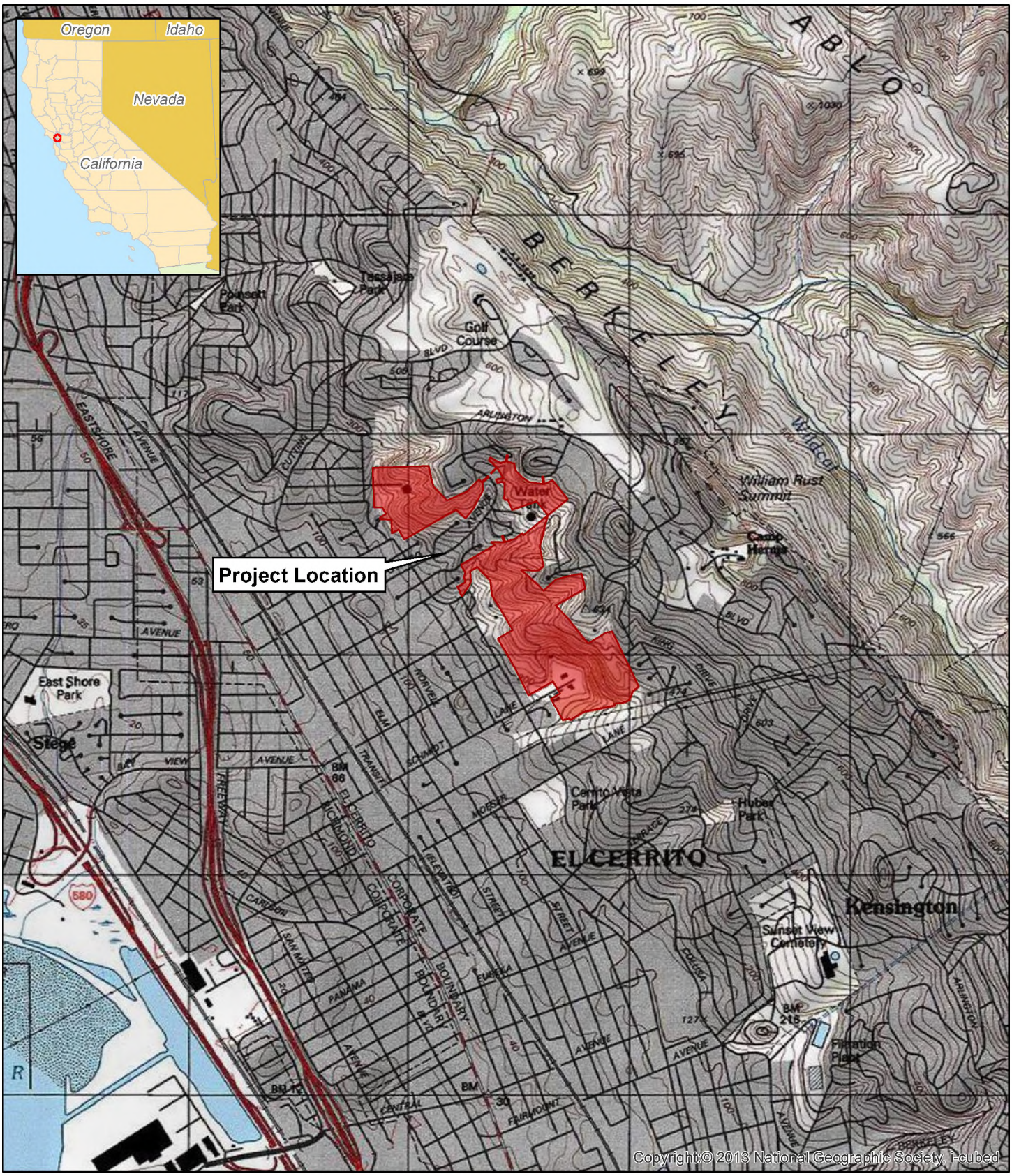
LSA Associates has retained Solano Archaeological Services (SAS) to conduct a cultural resources inventory of an approximately 107-acre project area located near Potrero Avenue in the City of El Cerrito (the City) in Alameda County, California. The City was awarded a State Coastal Conservancy grant with which to conduct forest revitalization activities, and as such the Project is subject to California Environmental Quality Act requirements. The project area is situated in the San Pablo Land Grant in projected Township 1 North, Range 4 East, as depicted on the attached *Richmond, California* USGS 7.5' topographic quadrangle map.

The cultural investigation will include an intensive field survey and we would like to know if you have any knowledge of cultural resources in the vicinity. For your information, the Native American Heritage Commission conducted a search of the Sacred Lands File and identified a previously documented culturally sensitive site or property within or near the project area. If you have any concerns with the proposed Project or know of any potentially significant properties in the area, I would appreciate hearing from you.

If you have any questions, feel free to contact me by email at brian@solanoarchaeology, or via phone at 530-417-7007.

Regards,

Brian Ludwig, Ph.D.
Principal Investigator



Project Location Map.

Hillside Conservation Management Plan Project Area

San Pablo Land Grant (Presumed T01N, R04W, Secs 15, 16, 21 and 22).
Richmond 7.5' Series Quadrangle, USGS, 1980.

1:24,000

0.5 Miles

1 Kilometers

P.O. Box 367
Elmira, CA 95625

707-718-1416 ▲ Fax 707-451-4775
www.solanoarchaeology.com

August 30th, 2023

Indian Canyon Mutsun Band of Costanoan
Ann Marie Sayers, Chair
P.O. Box 28
Hollister, CA 95024

Re: Hillside Natural Area Fire Resilience and Forest Conservation Management Plan Project, City of El Cerrito, Alameda County, California

Dear Ms. Sayers:

LSA Associates has retained Solano Archaeological Services (SAS) to conduct a cultural resources inventory of an approximately 107-acre project area located near Potrero Avenue in the City of El Cerrito (the City) in Alameda County, California. The City was awarded a State Coastal Conservancy grant with which to conduct forest revitalization activities, and as such the Project is subject to California Environmental Quality Act requirements. The project area is situated in the San Pablo Land Grant in projected Township 1 North, Range 4 East, as depicted on the attached *Richmond, California* USGS 7.5' topographic quadrangle map.

The cultural investigation will include an intensive field survey and we would like to know if you have any knowledge of cultural resources in the vicinity. For your information, the Native American Heritage Commission conducted a search of the Sacred Lands File and identified a previously documented culturally sensitive site or property within or near the project area. If you have any concerns with the proposed Project or know of any potentially significant properties in the area, I would appreciate hearing from you.

If you have any questions, feel free to contact me by email at brian@solanoarchaeology, or via phone at 530-417-7007.

Regards,

Brian Ludwig, Ph.D.
Principal Investigator

P.O. Box 367
Elmira, CA 95625

707-718-1416 ▲ Fax 707-451-4775
www.solanoarchaeology.com

August 30th, 2023

Guidiville Rancheria
Bunny Tarin, Tribal Administrator
P.O. Box 339
Talmage, CA 95481

Re: Hillside Natural Area Fire Resilience and Forest Conservation Management Plan Project, City of El Cerrito, Alameda County, California

Dear Ms. Tarin:

LSA Associates has retained Solano Archaeological Services (SAS) to conduct a cultural resources inventory of an approximately 107-acre project area located near Potrero Avenue in the City of El Cerrito (the City) in Alameda County, California. The City was awarded a State Coastal Conservancy grant with which to conduct forest revitalization activities, and as such the Project is subject to California Environmental Quality Act requirements. The project area is situated in the San Pablo Land Grant in projected Township 1 North, Range 4 East, as depicted on the attached *Richmond, California* USGS 7.5' topographic quadrangle map.

The cultural investigation will include an intensive field survey and we would like to know if you have any knowledge of cultural resources in the vicinity. For your information, the Native American Heritage Commission conducted a search of the Sacred Lands File and identified a previously documented culturally sensitive site or property within or near the project area. If you have any concerns with the proposed Project or know of any potentially significant properties in the area, I would appreciate hearing from you.

If you have any questions, feel free to contact me by email at brian@solanoarchaeology, or via phone at 530-417-7007.

Regards,

Brian Ludwig, Ph.D.
Principal Investigator

P.O. Box 367
Elmira, CA 95625

707-718-1416 ▲ Fax 707-451-4775
www.solanoarchaeology.com

August 30th, 2023

Muwekma Ohlone Indian Tribe of the San Francisco Bay Area
Charlene Nijmeh, Chair
20885 Redwood Rd.
Suite 232
Castro Valley, CA 94546

Re: Hillside Natural Area Fire Resilience and Forest Conservation Management Plan Project, City of El Cerrito, Alameda County, California

Dear Ms. Nijmeh:

LSA Associates has retained Solano Archaeological Services (SAS) to conduct a cultural resources inventory of an approximately 107-acre project area located near Potrero Avenue in the City of El Cerrito (the City) in Alameda County, California. The City was awarded a State Coastal Conservancy grant with which to conduct forest revitalization activities, and as such the Project is subject to California Environmental Quality Act requirements. The project area is situated in the San Pablo Land Grant in projected Township 1 North, Range 4 East, as depicted on the attached *Richmond, California* USGS 7.5' topographic quadrangle map.

The cultural investigation will include an intensive field survey and we would like to know if you have any knowledge of cultural resources in the vicinity. For your information, the Native American Heritage Commission conducted a search of the Sacred Lands File and identified a previously documented culturally sensitive site or property within or near the project area. If you have any concerns with the proposed Project or know of any potentially significant properties in the area, I would appreciate hearing from you.

If you have any questions, feel free to contact me by email at brian@solanoarchaeology, or via phone at 530-417-7007.

Regards,

Brian Ludwig, Ph.D.
Principal Investigator

P.O. Box 367
Elmira, CA 95625

707-718-1416 ▲ Fax 707-451-4775
www.solanoarchaeology.com

August 30th, 2023

Confederated Villages of Lisjan Nation
Cheyenne Gould
10926 Edes Ave.
Oakland, CA 94603

Re: Hillside Natural Area Fire Resilience and Forest Conservation Management Plan Project, City of El Cerrito, Alameda County, California

Dear Ms. Gould:

LSA Associates has retained Solano Archaeological Services (SAS) to conduct a cultural resources inventory of an approximately 107-acre project area located near Potrero Avenue in the City of El Cerrito (the City) in Alameda County, California. The City was awarded a State Coastal Conservancy grant with which to conduct forest revitalization activities, and as such the Project is subject to California Environmental Quality Act requirements. The project area is situated in the San Pablo Land Grant in projected Township 1 North, Range 4 East, as depicted on the attached *Richmond, California* USGS 7.5' topographic quadrangle map.

The cultural investigation will include an intensive field survey and we would like to know if you have any knowledge of cultural resources in the vicinity. For your information, the Native American Heritage Commission conducted a search of the Sacred Lands File and identified a previously documented culturally sensitive site or property within or near the project area. If you have any concerns with the proposed Project or know of any potentially significant properties in the area, I would appreciate hearing from you.

If you have any questions, feel free to contact me by email at brian@solanoarchaeology, or via phone at 530-417-7007.

Regards,

Brian Ludwig, Ph.D.
Principal Investigator

P.O. Box 367
Elmira, CA 95625

707-718-1416 ▲ Fax 707-451-4775
www.solanoarchaeology.com

August 30th, 2023

Confederated Villages of Lisjan Nation
Corrina Gould, Chair
10926 Edes Ave.
Oakland, CA 94603

Re: Hillside Natural Area Fire Resilience and Forest Conservation Management Plan Project, City of El Cerrito, Alameda County, California

Dear Ms. Gould:

LSA Associates has retained Solano Archaeological Services (SAS) to conduct a cultural resources inventory of an approximately 107-acre project area located near Potrero Avenue in the City of El Cerrito (the City) in Alameda County, California. The City was awarded a State Coastal Conservancy grant with which to conduct forest revitalization activities, and as such the Project is subject to California Environmental Quality Act requirements. The project area is situated in the San Pablo Land Grant in projected Township 1 North, Range 4 East, as depicted on the attached *Richmond, California* USGS 7.5' topographic quadrangle map.

The cultural investigation will include an intensive field survey and we would like to know if you have any knowledge of cultural resources in the vicinity. For your information, the Native American Heritage Commission conducted a search of the Sacred Lands File and identified a previously documented culturally sensitive site or property within or near the project area. If you have any concerns with the proposed Project or know of any potentially significant properties in the area, I would appreciate hearing from you.

If you have any questions, feel free to contact me by email at brian@solanoarchaeology, or via phone at 530-417-7007.

Regards,

Brian Ludwig, Ph.D.
Principal Investigator

P.O. Box 367
Elmira, CA 95625

707-718-1416 ▲ Fax 707-451-4775
www.solanoarchaeology.com

August 30th, 2023

Confederated Villages of Lisjan Nation
Deja Gould
10926 Edes Ave.
Oakland, CA 94603

Re: Hillside Natural Area Fire Resilience and Forest Conservation Management Plan Project, City of El Cerrito, Alameda County, California

Dear Ms. Gould:

LSA Associates has retained Solano Archaeological Services (SAS) to conduct a cultural resources inventory of an approximately 107-acre project area located near Potrero Avenue in the City of El Cerrito (the City) in Alameda County, California. The City was awarded a State Coastal Conservancy grant with which to conduct forest revitalization activities, and as such the Project is subject to California Environmental Quality Act requirements. The project area is situated in the San Pablo Land Grant in projected Township 1 North, Range 4 East, as depicted on the attached *Richmond, California* USGS 7.5' topographic quadrangle map.

The cultural investigation will include an intensive field survey and we would like to know if you have any knowledge of cultural resources in the vicinity. For your information, the Native American Heritage Commission conducted a search of the Sacred Lands File and identified a previously documented culturally sensitive site or property within or near the project area. If you have any concerns with the proposed Project or know of any potentially significant properties in the area, I would appreciate hearing from you.

If you have any questions, feel free to contact me by email at brian@solanoarchaeology, or via phone at 530-417-7007.

Regards,

Brian Ludwig, Ph.D.
Principal Investigator

P.O. Box 367
Elmira, CA 95625

707-718-1416 ▲ Fax 707-451-4775
www.solanoarchaeology.com

August 30th, 2023

The Ohlone Indian Tribe
Desiree Vigil
1775 Marco Polo Way, Apt. 21
Burlingame, CA 94010

Re: Hillside Natural Area Fire Resilience and Forest Conservation Management Plan Project, City of El Cerrito, Alameda County, California

Dear Ms. Vigil:

LSA Associates has retained Solano Archaeological Services (SAS) to conduct a cultural resources inventory of an approximately 107-acre project area located near Potrero Avenue in the City of El Cerrito (the City) in Alameda County, California. The City was awarded a State Coastal Conservancy grant with which to conduct forest revitalization activities, and as such the Project is subject to California Environmental Quality Act requirements. The project area is situated in the San Pablo Land Grant in projected Township 1 North, Range 4 East, as depicted on the attached *Richmond, California* USGS 7.5' topographic quadrangle map.

The cultural investigation will include an intensive field survey and we would like to know if you have any knowledge of cultural resources in the vicinity. For your information, the Native American Heritage Commission conducted a search of the Sacred Lands File and identified a previously documented culturally sensitive site or property within or near the project area. If you have any concerns with the proposed Project or know of any potentially significant properties in the area, I would appreciate hearing from you.

If you have any questions, feel free to contact me by email at brian@solanoarchaeology, or via phone at 530-417-7007.

Regards,

Brian Ludwig, Ph.D.
Principal Investigator

P.O. Box 367
Elmira, CA 95625

707-718-1416 ▲ Fax 707-451-4775
www.solanoarchaeology.com

August 30th, 2023

Amah Mutsun Tribal Band of Mission San Juan Bautista
Irene Zwierlein, Chair
3030 Soda Bay Rd.
Lakeport, CA 95453

Re: Hillside Natural Area Fire Resilience and Forest Conservation Management Plan Project, City of El Cerrito, Alameda County, California

Dear Ms. Zwierlein:

LSA Associates has retained Solano Archaeological Services (SAS) to conduct a cultural resources inventory of an approximately 107-acre project area located near Potrero Avenue in the City of El Cerrito (the City) in Alameda County, California. The City was awarded a State Coastal Conservancy grant with which to conduct forest revitalization activities, and as such the Project is subject to California Environmental Quality Act requirements. The project area is situated in the San Pablo Land Grant in projected Township 1 North, Range 4 East, as depicted on the attached *Richmond, California* USGS 7.5' topographic quadrangle map.

The cultural investigation will include an intensive field survey and we would like to know if you have any knowledge of cultural resources in the vicinity. For your information, the Native American Heritage Commission conducted a search of the Sacred Lands File and identified a previously documented culturally sensitive site or property within or near the project area. If you have any concerns with the proposed Project or know of any potentially significant properties in the area, I would appreciate hearing from you.

If you have any questions, feel free to contact me by email at brian@solanoarchaeology, or via phone at 530-417-7007.

Regards,

Brian Ludwig, Ph.D.
Principal Investigator

P.O. Box 367
Elmira, CA 95625

707-718-1416 ▲ Fax 707-451-4775
www.solanoarchaeology.com

August 30th, 2023

Indian Canyon Mutsun Band of Costanoan
Kanyon Sayers-Roods
P.O. Box 28
Hollister, CA 95024

Re: Hillside Natural Area Fire Resilience and Forest Conservation Management Plan Project, City of El Cerrito, Alameda County, California

Dear Ms. Sayers-Roods:

LSA Associates has retained Solano Archaeological Services (SAS) to conduct a cultural resources inventory of an approximately 107-acre project area located near Potrero Avenue in the City of El Cerrito (the City) in Alameda County, California. The City was awarded a State Coastal Conservancy grant with which to conduct forest revitalization activities, and as such the Project is subject to California Environmental Quality Act requirements. The project area is situated in the San Pablo Land Grant in projected Township 1 North, Range 4 East, as depicted on the attached *Richmond, California* USGS 7.5' topographic quadrangle map.

The cultural investigation will include an intensive field survey and we would like to know if you have any knowledge of cultural resources in the vicinity. For your information, the Native American Heritage Commission conducted a search of the Sacred Lands File and identified a previously documented culturally sensitive site or property within or near the project area. If you have any concerns with the proposed Project or know of any potentially significant properties in the area, I would appreciate hearing from you.

If you have any questions, feel free to contact me by email at brian@solanoarchaeology, or via phone at 530-417-7007.

Regards,

Brian Ludwig, Ph.D.
Principal Investigator

P.O. Box 367
Elmira, CA 95625

707-718-1416 ▲ Fax 707-451-4775
www.solanoarchaeology.com

August 30th, 2023

Guidiville Rancheria
Michael Derry, Historian
P.O. Box 339
Talmage, CA 95481

Re: Hillside Natural Area Fire Resilience and Forest Conservation Management Plan Project, City of El Cerrito, Alameda County, California

Dear Mr. Derry:

LSA Associates has retained Solano Archaeological Services (SAS) to conduct a cultural resources inventory of an approximately 107-acre project area located near Potrero Avenue in the City of El Cerrito (the City) in Alameda County, California. The City was awarded a State Coastal Conservancy grant with which to conduct forest revitalization activities, and as such the Project is subject to California Environmental Quality Act requirements. The project area is situated in the San Pablo Land Grant in projected Township 1 North, Range 4 East, as depicted on the attached *Richmond, California* USGS 7.5' topographic quadrangle map.

The cultural investigation will include an intensive field survey and we would like to know if you have any knowledge of cultural resources in the vicinity. For your information, the Native American Heritage Commission conducted a search of the Sacred Lands File and identified a previously documented culturally sensitive site or property within or near the project area. If you have any concerns with the proposed Project or know of any potentially significant properties in the area, I would appreciate hearing from you.

If you have any questions, feel free to contact me by email at brian@solanoarchaeology, or via phone at 530-417-7007.

Regards,

Brian Ludwig, Ph.D.
Principal Investigator

P.O. Box 367
Elmira, CA 95625

707-718-1416 ▲ Fax 707-451-4775
www.solanoarchaeology.com

August 30th, 2023

Muwekma Ohlone Indian Tribe of the San Francisco Bay Area
Monica Arellano
20885 Redwood Rd.
Suite 232
Castro Valley, CA 94546

Re: Hillside Natural Area Fire Resilience and Forest Conservation Management Plan Project, City of El Cerrito, Alameda County, California

Dear Ms. Arellano:

LSA Associates has retained Solano Archaeological Services (SAS) to conduct a cultural resources inventory of an approximately 107-acre project area located near Potrero Avenue in the City of El Cerrito (the City) in Alameda County, California. The City was awarded a State Coastal Conservancy grant with which to conduct forest revitalization activities, and as such the Project is subject to California Environmental Quality Act requirements. The project area is situated in the San Pablo Land Grant in projected Township 1 North, Range 4 East, as depicted on the attached *Richmond, California* USGS 7.5' topographic quadrangle map.

The cultural investigation will include an intensive field survey and we would like to know if you have any knowledge of cultural resources in the vicinity. For your information, the Native American Heritage Commission conducted a search of the Sacred Lands File and identified a previously documented culturally sensitive site or property within or near the project area. If you have any concerns with the proposed Project or know of any potentially significant properties in the area, I would appreciate hearing from you.

If you have any questions, feel free to contact me by email at brian@solanoarchaeology, or via phone at 530-417-7007.

Regards,

Brian Ludwig, Ph.D.
Principal Investigator

P.O. Box 367
Elmira, CA 95625

707-718-1416 ▲ Fax 707-451-4775
www.solanoarchaeology.com

August 30th, 2023

The Ohlone Indian Tribe
Vincent Medina
17365 Via Del Rey
San Lorenzo, CA 94580

Re: Hillside Natural Area Fire Resilience and Forest Conservation Management Plan Project, City of El Cerrito, Alameda County, California

Dear Mr. Medina:

LSA Associates has retained Solano Archaeological Services (SAS) to conduct a cultural resources inventory of an approximately 107-acre project area located near Potrero Avenue in the City of El Cerrito (the City) in Alameda County, California. The City was awarded a State Coastal Conservancy grant with which to conduct forest revitalization activities, and as such the Project is subject to California Environmental Quality Act requirements. The project area is situated in the San Pablo Land Grant in projected Township 1 North, Range 4 East, as depicted on the attached *Richmond, California* USGS 7.5' topographic quadrangle map.

The cultural investigation will include an intensive field survey and we would like to know if you have any knowledge of cultural resources in the vicinity. For your information, the Native American Heritage Commission conducted a search of the Sacred Lands File and identified a previously documented culturally sensitive site or property within or near the project area. If you have any concerns with the proposed Project or know of any potentially significant properties in the area, I would appreciate hearing from you.

If you have any questions, feel free to contact me by email at brian@solanoarchaeology, or via phone at 530-417-7007.

Regards,

Brian Ludwig, Ph.D.
Principal Investigator

ATTACHMENT C

Representative Project Area Photographs

Photo 0718. Project area overview, view to north

Photo 0913. Project area overview, view to west

Photo 2404. Representative photo, steep slope

Photo 0927. Enhanced drainage in project area, view to NE

Photo 5720. HNA nature trail, view to south

Photo 3822. 1332 Navellier St., view to northeast