SEQUOIA
Ecological Consulting, Inc.

Sonoma County Public Infrastructure
Adobe Road and Main Street Intersection Improvement Project
Penngrove, Sonoma County, California

Biological Resources Report

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Prepared on Behalf of:

Sonoma County Public Infrastructure
2300 County Center Drive, Suite B 100
Santa Rosa, CA 95403
(707) 565-1593

Prepared by:

Sequoia Ecological Consulting, Inc.
1342 Creekside Drive
Walnut Creek, CA 94596
(925) 855-5500

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1 INTRODUCTION

Sequoia Ecological Consulting, Inc. (Sequoia) has prepared this Biological Resources Report for the proposed Adobe Road and Main Street Intersection Improvement Project (Project) located in Penngrove, Sonoma County, California (Figures 1 and 2). Our analysis provides a description of existing biological resources on the project site and identifies potential impacts that could occur to sensitive biological resources from the proposed project.

Biological resources include plant and animal species, and special-status plants and animals as designated by the U.S. Fish and Wildlife Service (USFWS), California Department of Fish and Wildlife (CDFW), National Marine Fisheries Service (NMFS), and other resource organizations, including the California Native Plant Society (CNPS). Biological resources also include Waters of the United States and State of California, as regulated by the U.S. Army Corps of Engineers (USACE), California Regional Water Quality Control Board (RWQCB), and CDFW. Preliminary construction details for the proposed project are provided as Appendix A.

In accordance with the California Environmental Quality Act (CEQA) checklist, this Biological Resources Report also provides mitigation measures for "potentially significant" impacts that could occur to biological resources pursuant to CEQA (Pub. Resources Code §§ 21000 et seq.; 14 Cal. Code Regs §§ 15000 et seq). The prescribed mitigation measures would reduce potential impacts to levels considered "less than significant" pursuant to CEQA. Accordingly, this Biological Resources Report is suitable for review or inclusion in a review by Sonoma County for the proposed project pursuant to CEQA.

2 LOCATION AND SETTING

The project site is located at the intersection of Adobe Road and Main Street in Penngrove, a census-designated place in Sonoma County, California (Figures 1 and 2; Appendix A). The project site is bordered by Penngrove Elementary School to the northwest, residential development to the northeast and southwest, and commercial development to the southeast.

The project site is characterized as highly disturbed and developed, consisting primarily of two major thoroughfares—Adobe Road and Main Street—and their respective roadway shoulders. The project site is comprised of ruderal/developed, non-native annual grassland, and riparian woodland communities.

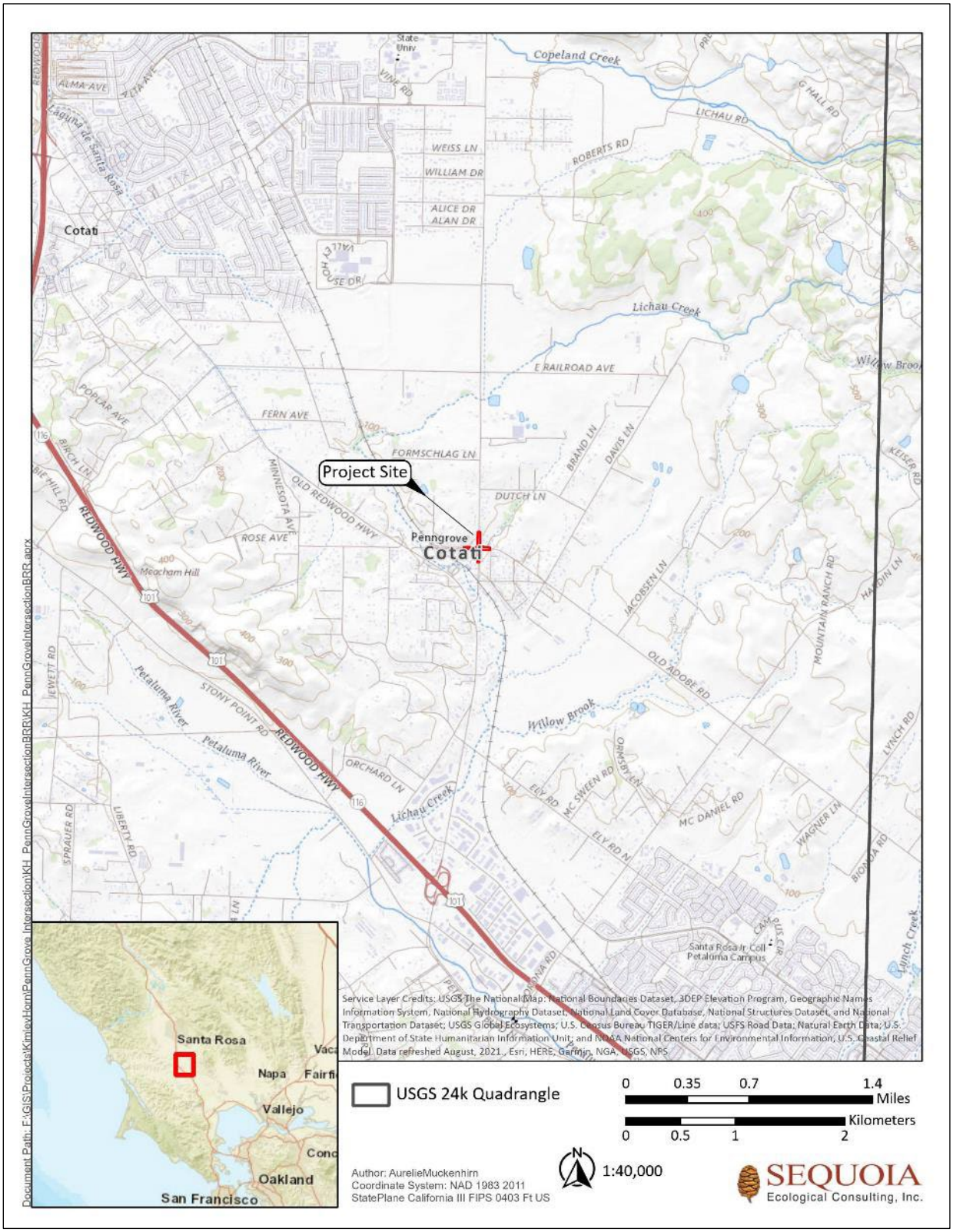

Figure 1. Regional Map of the Adobe Road and Main Street Intersection Improvement Project Site

Figure 2. Location Map of the Adobe Road and Main Street Intersection Improvement Project Site

3 PROJECT DESCRIPTION

3.1 Purpose and Need

The proposed project has the following purposes:

- Improve intersection operations and reduce travel time delay
- Improve pedestrian accessibility at the intersection
- Enhance overall safety of the facility

The proposed project is needed to address the following:

- Travel time delay and queuing resulting due to insufficient intersection capacity
- Improve pedestrian facilities to meet the latest Americans with Disabilities Act (ADA) requirements
- Facilitate pedestrian and bicycle circulation at the intersection

3.2 Project Location

The project is located at the intersection of Adobe Road and Main Street in the Penngrove Community of unincorporated Sonoma County intersection (Figures 1 and 2; Appendix A).

3.3 Project Description

Adobe Road is an east-west major collector roadway with a posted speed limit of 40 mph within the intersection area. Heading north from Adobe Road is Petaluma Hill Road, a major collector roadway with a posted speed limit of 40 mph. Running south of Adobe Road is Main Street, a major collector roadway with a posted speed limit of 25 mph. The Penngrove Elementary School located in the northwest quadrant of the project intersection.

The proposed project would modify the existing signalized intersection to:

- Construct a dedicated westbound to northbound right-turn lane on Adobe Road at the northeast quadrant
- Construct a dedicated northbound to westbound left-turn lane on Main Street (south leg)
- Construct pedestrian curb ramps and install signal equipment that comply with ADA
- Construct signal improvements and evaluate signal phasing and timing

Within the intersection, three crosswalks are present on the north, south and west legs. There are two existing Sonoma County Transit bus stops located on both sides of Main Street south of the intersection that would remain. The existing on-street parking on the west side of Main Street approximately 100 feet south of the existing crosswalk may be affected by this project. An existing midblock crossing located approximately 600 feet west of the intersection on Adobe Road would remain.

In order to minimize impacts to existing wetland areas and private properties, a retaining wall is proposed on the north side of Adobe Road, east of the intersection, to accommodate the roadway widening for a dedicated right-turn lane. The existing box culvert running through the intersection

would be extended at the northeast corner as part of the intersection widening. Overhead utilities would be relocated to accommodate the retaining wall construction. The project would modify the existing signal, pave the intersection and install pavement delineation and markings. Additional right-of-way would be required in the northeast corner of the intersection to accommodate the construction the proposed dedicated westbound right-turn lane and retaining wall. Approximately 0.035 acres of additional right-of-way would be required in this area.

3.3.1 Construction

Project construction would occur in one phase and occur over a period of 6 months beginning in the second quarter of 2025. The project would involve import of 626.25 cubic yards of soil.

4 REGULATORY SETTING

Regulatory authority over biological resources is shared by federal, state, and local agencies under a variety of laws, ordinances, regulations, and statutes. Primary authority for biological resources lies within the land use control and planning authority of local jurisdictions (in this instance, Sonoma County). A summary of these regulatory authorities and a brief discussion of their applicability to the proposed project are provided below. More in-depth analyses are provided in Section 6 (Results) and Section 7 (Discussion and Impacts Assessment).

4.1 Federal

4.1.1 Federal Endangered Species Act

The Federal Endangered Species Act (FESA) provides protection for federally listed endangered and threatened species and their habitats. A project may obtain permission to take federally listed species in one of two ways: a Section 10 Habitat Conservation Plan (HCP) issued to a non-federal entity, or a Section 7 Biological Opinion from the USFWS and/or the National Oceanic and Atmospheric Administration (NOAA) issued to another federal agency that funds or permits an action (e.g., USACE). Under either Section of the FESA, adverse impacts to protected species are avoided, minimized, and mitigated. Both cases require consultation with the USFWS and/or NMFS, which ultimately issues a Biological Opinion determining whether the federally listed species may be incidentally taken pursuant to the proposed action and authorizing incidental take.

Section 7 of FESA requires that federal agencies develop a conservation program for listed species (FESA 7(a)(a)) and that they avoid actions that will jeopardize the continued existence of the species or result in the destruction or adverse modification of the species' designated critical habitat (FESA 7(a)(2)). FESA Section 9 prohibits all persons and agencies from take of threatened and endangered species (though the prohibition on taking listed plants only applies to plants taken from "areas under Federal jurisdiction" or plants taken "in knowing violation of any law or regulation of any State or in the course of any violation of a State criminal trespass law"). Those who violate this mandate face civil and criminal penalties, including civil fines of up to $25,000 per violation, as well as criminal penalties of up to

$50,000 and imprisonment for one year. Section 10 of FESA regulates a wide range of activities affecting fish and wildlife designated as endangered or threatened and the habitats on which they rely. Section 10 prohibits activities affecting these protected fish and wildlife species and their habitats unless authorized by a permit from USFWS or NMFS. These permits may include incidental take permits, enhancement of survival permits, or recovery and interstate commerce permits. HCPs under Section 10(a)(1)(B) provide for partnerships with non-federal parties to conserve the ecosystems upon which listed species depend. HCPs are required as part of an application for an incidental take permit under Section 10. They describe the anticipated effects of the proposed take, how those impacts will be minimized or mitigated, and how the HCP will be funded.

4.1.1.1 Responsible Agency

FESA gives regulatory authority to USFWS for federally listed terrestrial species and non-anadromous fish. NMFS has regulatory authority over federally listed marine mammals and anadromous fish.

4.1.1.2 Applicability to the Proposed Project

There are no federally listed plant species anticipated to occur on the project site; therefore, no impacts to federally listed plant species are anticipated as a result of the proposed project (Table 1). Habitats that are present are highly disturbed and are not suitable for federally listed plants and none were detected during surveys conducted on May 26 and August 31, 2022 (USFWS 2005). In addition, the project site is located *outside* of federally designated critical habitat (Figure 3).

Several federally listed animal species are known to occur in the region of the project site (Table 2); however, none of these species are likely to be present within the project footprint. That said, California red-legged frog (*Rana draytonii*) is known to occur within the vicinity of the project site and may utilize the unnamed intermittent drainage as migration/dispersal habitat (Figure 4); this feature occurs immediately adjacent to the project site footprint and runs northeast to southwest and beneath the intersection of Adobe Road and Main Street. Accordingly, preconstruction surveys and appropriate avoidance and minimization measures will be implemented; thus, potential impacts to federally listed species—specifically, California red-legged frog—will be avoided (see Section 7).

4.1.2 Migratory Bird Treaty Act of 1918

The Migratory Bird Treaty Act (MBTA) (16 USC §§ 703–711), as administered by the USFWS, makes it unlawful to "pursue, hunt, take, capture, kill, attempt to take, capture or kill, offer for sale, sell, offer to purchase, purchase, deliver for shipment, ship, cause to be shipped, deliver for transportation, transport, cause to be transported, carry, or cause to be carried by any means whatever, receive for shipment, transportation or carriage, or export at any time, or in any manner, any migratory bird, or any part, nest, or egg of any such bird." This includes direct and indirect acts, except for harassment and habitat modification, which are not included unless they result in direct loss of birds, nests, or eggs.

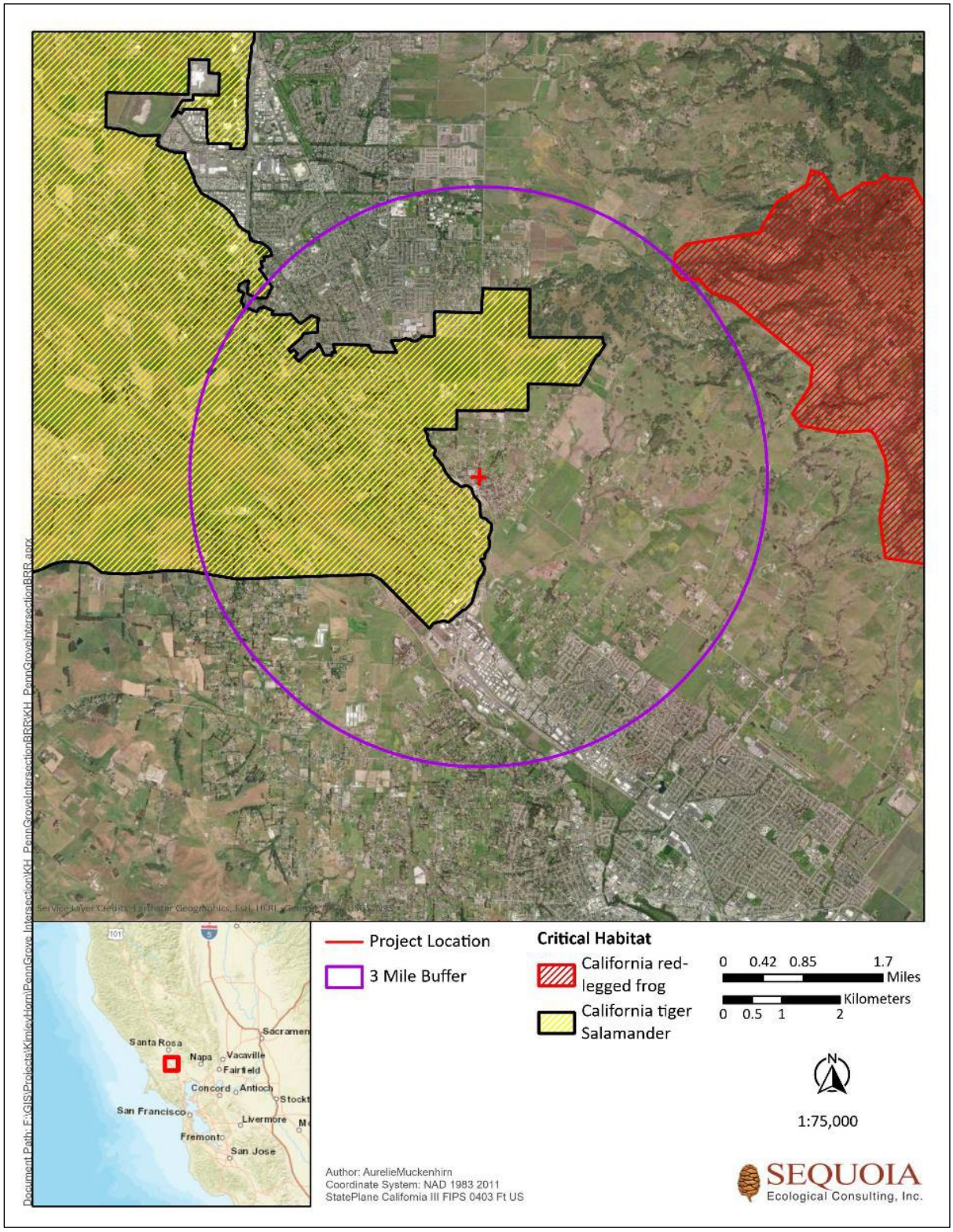

Figure 3. USFWS Critical Habitat in the Vicinity of the Adobe Road and Main Street Intersection Improvement Project Site

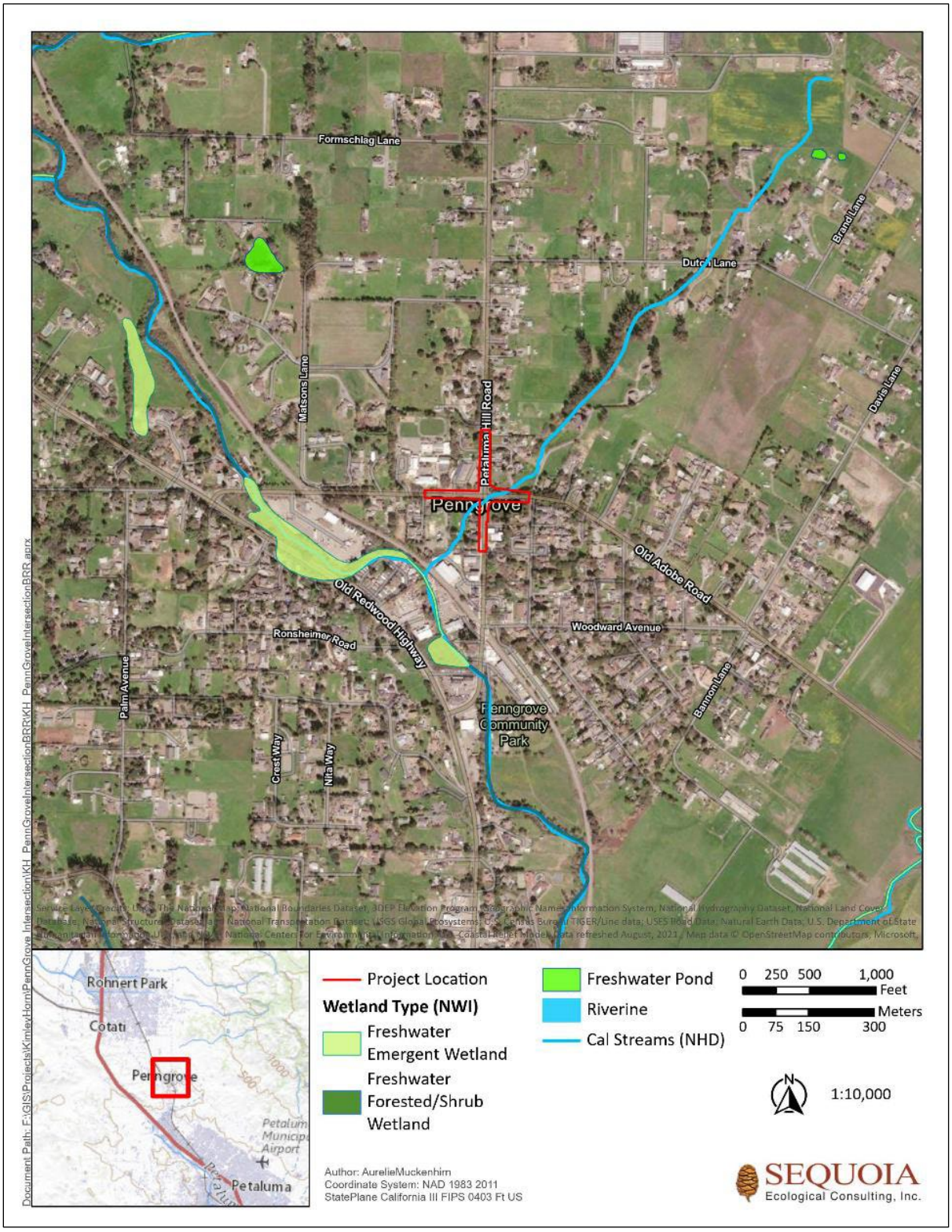

Figure 4. USFWS National Wetland Inventory on the Adobe Road and Main Street Intersection Improvement Project Site

4.1.2.1 Applicability to the Proposed Project

The project site provides marginally suitable nesting habitat for common passerine (songbird) and raptor (bird of prey) species. These birds are protected pursuant to the MBTA. Prior to commencement of Project-related activities, a preconstruction survey would be performed in areas on the project site and within a zone of influence of project-related activities, and active nests detected would be provided with appropriately sized non-disturbance buffers (see Section 7).

4.1.3 Bald and Golden Eagle Protection Act of 1940

The Bald and Golden Eagle Protection Act (BGEPA; 16 USC. 668-668c) prohibits anyone from taking, possessing, or transporting a bald eagle (*Haliaeetus leucocephalus*) or golden eagle (*Aquila chrysaetos*), or the parts, nests, or eggs of such birds without prior authorization. This includes inactive nests as well as active nests. Take means to pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, destroy, molest, or disturb. Activities that directly or indirectly lead to take are prohibited without a permit.

4.1.3.1 Applicability to the Proposed Project

The project site does not provide suitable foraging or nesting habitat for bald or golden eagle. Accordingly, no impacts to eagles will occur as a result of the proposed project.

4.1.4 Magnuson-Stevens Fishery Conservation and Management Act

Pursuant to the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act), Lichau Creek which occurs approximately 0.10 miles southwest and downstream of the unnamed intermittent drainage is designated as Essential Fish Habitat (EFH) for coho (*Oncorhynchus kisutch*) and Chinook salmon (*Oncorhynchus tshawytscha*; U.S. Geologic Survey [USGS] Hydrologic Unit Code 18050002). Lichau Creek eventually flows into the Petaluma River which empties into San Pablo Bay. Effective November 14, 2008, the NMFS issued this final rule that provides EFH identifications and descriptions for freshwater and marine habitats of Pacific salmon managed under the Salmon Fishery Management Plan, including coho, Chinook, and pink salmon (*Oncorhynchus gorbuscha*). The term EFH means those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity (U.S.C. 1853 95-354, 99-659, 101-627, 104-297).

4.1.4.1 Applicability to the Proposed Project

Although the unnamed intermittent drainage is not designated as EFH, it is hydrologically connected to downstream waterways that are protected pursuant to the Magnuson-Stevenson Act. That said, all work will be conducted above ordinary high-water mark and outside of the flow of this drainage feature. In addition, appropriate avoidance and minimization measures will be implemented; thus, potential indirect impacts to EFH will be avoided.

4.1.5 U.S. Army Corps of Engineers – Clean Water Act – Section 404

USACE regulates activities within "waters of the United States" pursuant to congressional acts: Section 404 of the CWA (1977, as amended) and Section 10 of the Rivers and Harbors Act of 1899. Section 404 of the CWA requires a permit for discharge of dredged or fill material into waters of the United States. Under Section 404, waters of the United States are defined as all waters that are used currently, or were used in the past, or may be used in the future for interstate or foreign commerce, including waters subject to the ebb and flow of the tide up to the high tide line. Additionally, areas such as wetlands, rivers, and streams (including intermittent streams and tributaries) are considered waters of the United States. The extent of wetlands is determined by examining the presence of hydrophytic vegetation, hydric soils, and wetland hydrology. Under normal circumstances, all three of these parameters must be satisfied for an area to be considered a jurisdictional wetland under Section 404 of the CWA. Fill within wetlands is regulated under the CWA through the Nationwide Permit Program and Individual Permit Program.

4.1.5.1 Applicability to the Proposed Project

An unnamed intermittent drainage runs northeast to southwest through the project site and beneath the intersection of Adobe Road and Main Street (Figure 4; Appendix B). This feature would be regulated by the USACE pursuant to Section 404 of the CWA. Thus, prior authorization from USACE pursuant to Section 404 of the CWA would be required if the proposed project were to impact this feature. The results of the formal delineation of "waters of the United States," conducted on May 26 and August 31, 2022 by Sequoia are detailed in Section 5 and Appendix B.

4.2 State

4.2.1 California Environmental Quality Act

CEQA requires public agencies in California to analyze and disclose potential environmental impacts associated with a proposed discretionary project that the agency will carry out, fund, or approve. Any significant impact must be mitigated to the extent feasible, below the threshold of significance.

4.2.1.1 Applicability to the Proposed Project

This document is suitable for use by the CEQA Lead Agency (Sonoma County) for preparation of any CEQA review document prepared for the proposed project. This report has been prepared as a Biology Section suitable for incorporation into an Initial Study or the Biology Section of a Mitigated Negative Declaration or Environmental Impact Report.

4.2.2 California Endangered Species Act

The CDFW is responsible for administering the California Endangered Species Act (CESA). Section §2080 of the California Fish and Wildlife Code prohibits take of any species that the Fish and Wildlife

Commission determines to be an endangered species or a threatened species. However, CESA does allow for take that is incidental to otherwise lawful development projects. Sections §2081(b) and (c) of CESA allow the CDFW to issue an incidental take permit for a state listed threatened and endangered species only if specific criteria are met (i.e., the effects of the authorized take are minimized and fully mitigated). The measures required to meet this obligation shall be roughly proportional in extent to the impact of the authorized taking on the species. Where various measures are available to meet this obligation, the measures required shall maintain the Applicant's objectives to the greatest extent possible. All required measures shall be capable of successful implementation.

4.2.2.1 Applicability to the Proposed Project

There are no state listed plant species anticipated to occur on the project site; therefore, no impacts to state listed plant species are anticipated as a result of the proposed project (Table 1). Habitats that are present are highly disturbed and are not suitable for state listed plants and none were detected during surveys performed by Sequoia on May 26 and August 31, 2022 (Table 3).

Several state listed animal species are known to occur in the region of the project site (Tables 2); however, none of these species are likely to be present within the project footprint. That said, foothill yellow-legged frog (*Rana boylii*) and western pond turtle (*Emys marmorata*) are known to occur within the vicinity of the project site and may utilize the unnamed intermittent drainage as migration/dispersal habitat (Figure 4); this feature occurs immediately adjacent to the project site footprint and runs northeast to southwest and beneath the intersection of Adobe Road and Main Street. Accordingly, preconstruction surveys and appropriate avoidance and minimization measures will be implemented; thus, potential impacts to state listed species—specifically, foothill yellow-legged frog and western pond turtle—will be avoided (see Section 7).

4.2.3 California Fish and Game Code – Lake or Streambed Alteration Agreement

The CDFW regulates activities within watercourses, lakes, and in-stream reservoirs. Under Section §1602 of the California Fish and Game Code (CFGC)—often referred to as the Lake or Streambed Alteration Agreement (LSAA)—the CDFW regulates activities that would alter the flow or change or use any material from the bed, channel, or bank of any perennial, intermittent, or ephemeral river, stream, or lake. Each of these activities requires a Section §1602 permit. Section §1602 requires the CDFW to be notified of any activity that might affect lakes and streams. It also identifies the process through which an applicant can come to an agreement with the state regarding the protection of these resources, both during and following construction.

4.2.3.1 Applicability to the Proposed Project

An unnamed intermittent drainage runs northeast to southwest through the project site and beneath the intersection of Adobe Road and Main Street (Figure 4). This feature would be regulated by CDFW pursuant to Section §1602 of the CFGC. As such, a Section §1602 Agreement, or Streambed Alteration Agreement, from

CDFW would be required for the proposed project if the bed, bank, or channel, or associated riparian vegetation were impacted as a result of project-related activities.

4.2.4 California Fish and Game Code – Nesting Birds

CFGC Section §3503 states that it is unlawful to take, possess, or needlessly destroy the nests or eggs of any bird, except as otherwise provided by the CFGC or any regulation made pursuant thereto. CFGC Section §3503.5 protects all birds of prey (raptors) and their eggs and nests. Section §3513 states that it is unlawful to take or possess any migratory non-game bird as designated in the MBTA. These regulations could require that elements of a project (specifically vegetation removal or construction near nest trees) be reduced or eliminated during critical phases of the nesting cycle unless surveys by a qualified biologist demonstrate that nests, eggs, or nesting birds will not be disturbed, which may be subject to approval by the CDFW and/or the USFWS.

4.2.4.1 Applicability to the Proposed Project

The project site provides suitable nesting habitat for migratory birds. A preconstruction survey would be performed in the areas on the project site and within a zone of influence of project-related activities, and active nests detected would be provided with an appropriately sized non-disturbance buffer (see Section 7). This mitigation measure would help comply with CFGC Section §3500 and the MBTA.

4.2.5 California Fish and Game Code – Fully Protected Species, Species of Special Concern, and Non-Game Mammals

The classification of “fully protected” was the CDFW’s initial effort to identify and provide additional protection to those animals that were rare or faced possible extinction. CFGC sections (birds at §3503 and §3511, mammals at §4150 and §4700, amphibians and reptiles at §5050, and fish at §5515) dealing with “fully protected” species state that these species “may not be taken or possessed at any time and no provision of this code or any other law shall be construed to authorize the issuance of permits or licenses to take any fully protected species;” however, take may be authorized for necessary scientific research.

California Species of Special Concern are defined as animals not listed under the CESA or FESA. These species are of concern to CDFW because of rapid decline in populations that could result in listing or because they historically occurred in low numbers and known threats to their continued existence are present. This designation is intended to result in special consideration for these animals by CDFW, project proponents, consultants, among others, and is also intended to encourage collection of additional information on these species and risks to their persistence. Although these species are afforded no special legal status, they are provided special consideration under the CEQA during project review.

Sections §4150-4155 of the CFGC protects non-game mammals, including bats. Section §4150 states “A mammal occurring naturally in California that is not a game mammal, fully protected mammal, or

furbearing mammal is a nongame mammal. Non-game mammals that may be taken or possessed are primarily those that cause crop or property damage. Bats are classified as a non-game mammal and are protected under the CFGC.

4.2.5.1 Applicability to the Proposed Project

The project site provides suitable roosting/maternity habitat for bats protected pursuant to CFGC Section §4150 and suitable migration/dispersal habitat for amphibians and reptiles listed as California Species of Special Concern—specifically, California red-legged frog, foothill yellow-legged frog, and western pond turtle—protected pursuant to CFGC Section §5050. As such, preconstruction surveys for these species would need to be conducted prior to project commencement to ensure no direct mortality of these species occurs as a result of the proposed project (see Section 7).

4.2.6 Regional Water Quality Control Board – Clean Water Act – Section 401 and Porter-Cologne Water Quality Control Act

The SWRCB and RWQCB regulate activities in "waters of the state" (which includes wetlands) through two sources of legal authority: Section 401 of the CWA and the Porter-Cologne Water Quality Control Act (Porter-Cologne Act) (Wat. Code, Div. 7, § 13000 et seq.). The Section 401 water quality certification program allows the state to ensure that activities requiring a federal permit or license comply with state water quality standards. Though similar to Section 404 and 401 requirements, the Porter-Cologne Act applies to all “waters of the state” rather than to the portions thereof below the ordinary high-water mark. “waters of the state” is defined as any surface water or groundwater, including saline waters, within the boundaries of the state (Water Code §13050[e]).

The Porter-Cologne Act requires any person discharging waste or proposing to discharge waste in any region that could affect the quality of the “waters of the state” to file a report of waste discharge. Pursuant to the Porter-Cologne Act, the RWQCB also regulates “isolated wetlands.” Functionally, the RWQCB typically evaluates whether an additional waste discharge requirement is necessary for the balance between federal and state jurisdictional boundaries during the 401 certification process. The RWQCB issues a permit or waiver that includes implementing water quality control plans that reflect the beneficial uses to be protected. Waters of the state subject to RWQCB regulation extend to the top of bank, as well as isolated water/wetland features.

On April 2, 2019, the SWRCB adopted Resolution 2019-0015, thereby adopting a document entitled, “State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to waters of the state” (“Procedures”) for inclusion in the Water Quality Control Plans for Inland Surface Waters, Enclosed Bays, and Estuaries of California.

In taking this action, the SWRCB noted that under the Porter-Cologne Act, discharges of dredged or fill material to waters of the state are subject to waste discharge requirements or waivers thereof. The SWRCB further explained that “although the state has historically relied primarily on requirements in the CWA to protect wetlands, U.S. Supreme Court rulings reducing the jurisdiction of the CWA over wetland

areas by limiting the definition of 'waters of the United States' have necessitated the use of California's independent authorities under the Porter-Cologne Act to protect these vital resources."

The Office of Administrative Law (OAL) approved the Procedures on August 28, 2019. Pursuant to the Procedures, the effective date is nine months upon OAL approval. Accordingly, the Procedures became effective May 28, 2020.

By adopting the Procedures, the SWRCB mandated and standardized the evaluation of impacts and protection of waters of the state from impacts due to dredge and fill activities. The Procedures include: 1) a wetland definition; 2) a jurisdictional framework for determining if a feature that meets the wetland definition is a water of the state; 3) wetland delineation procedures; and 4) procedures for application submittal, and the review and approval of dredge or fill activities.

The Procedures define an area as a wetland if it meets three criteria: wetland hydrology, wetland soils, and (if vegetated) wetland plants. An area is a wetland if: (1) the area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both; (2) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and (3) the area's vegetation is dominated by hydrophytes, or the area lacks vegetation.

Waters of the state, by definition, includes more aquatic features than waters of the United States, which defines the jurisdiction of the federal government. Waters of the state are not so limited. In addition, the federal definition of a wetland requires a prevalence of wetland vegetation under normal circumstances. To account for wetlands in arid portions of the state, the SWRCB's definition differs from the federal definition in that an area may be a wetland even if it does not support vegetation. If vegetation is present, however, the SWRCB's definition requires that the vegetation be wetland vegetation. The SWRCB's definition clarifies that vegetated and unvegetated wetlands will be regulated in the same manner.

The Procedures also include a jurisdictional framework that applies to aquatic features that meet the wetland definition. The jurisdictional framework will guide applicants and staff in determining whether an aquatic feature that meets the wetland definition will be regulated as a water of the state. The jurisdictional framework is intended to exclude from regulation any artificially created, temporary features, such as tire ruts or other transient depressions caused by human activity, while still capturing small, naturally occurring features, such as seasonal wetlands and small vernal pools that may be outside of federal jurisdiction. The Procedures do not expand the SWRCB's jurisdiction beyond areas already under SWRCB's jurisdiction.

The Procedures exclude the following agricultural features from the protections accorded to wetlands: (1) ditches with ephemeral flow that are not a relocated water of the state or excavated in a water of the state; (2) ditches with intermittent flow that are not a relocated water of the state or excavated in a water of the state, or that do not drain wetlands other than any wetlands described in (4) or (5) below; (3) ditches that do not flow, either directly or through another water, into another water of the state; (4) artificially irrigated areas that would revert to dry land should application of waters to that area

cease; or (5) artificial, constructed lakes and ponds created in dry land such as farm and stock watering ponds, irrigation ponds, and settling basins.

The Procedures clarify what information and analysis the Applicant needs to submit to have a complete application. The Procedures standardize when an alternative analysis needs to be conducted and set a minimum mitigation ratio for any permanent impacts to Waters of the state resulting from dredge and fill activities.

When an alternatives analysis is required, the Applicant must demonstrate that the proposed alternative is the Least Environmentally Damaging Practicable Alternative (LEDPA). The term practicable means available and capable of being done after taking into consideration cost, existing technology, and other logistics in light of the overall project purpose.

4.2.6.1 Applicability to the Proposed Project

The unnamed intermittent drainage and the roadside ditch feature west of the intersection of Adobe Road and Main Street on the project site likely fall under the RWQCB/SWRCB's jurisdiction pursuant to Section 401 of the CWA (Figure 4; Appendix B). Thus, prior authorization from the RWQCB/SWRCB pursuant to Section 401 of the CWA would be required if the proposed project were to impact these features. Impacts to waters of the state would require mitigation to the satisfaction of the RWQCB prior to issuance of a permit for impacts to these features. The results of the formal delineation of "waters of the United States," conducted on May 26, 2022 by Sequoia are detailed in Section 5 and Appendix B.

To further comply with the Porter-Cologne Act, adequate pre- and post-construction Best Management Practices (BMPs) will be planned and incorporated into project implementation plans to protect downstream waterways. In addition, the Project will develop a Storm Water Pollution Prevention Plan (SWPPP) that will be submitted to Sonoma County as a condition of project approval demonstrating BMPs that will be installed/implemented prior to project commencement. Stormwater protection and treatment measures will be implemented to ensure that the proposed project remains in compliance with the Porter-Cologne Act.

4.3 Local

4.3.1 Sonoma County Heritage or Landmark Tree Ordinance

Chapter 26D of the Sonoma County Code of Ordinances protects heritage and landmark trees, and requires any person or entity proposing to remove or damage a heritage or landmark tree to obtain a tree permit. "Heritage tree" means a tree or grove of trees so designated by the Sonoma County Board of Supervisors because of historical interest or significance. "Landmark tree" means a tree or grove of trees so designated by the Sonoma County Board of Supervisors because of its outstanding characteristics in terms of size, age, rarity, shape or location.

4.3.1.1 Applicability to the Proposed Project

If heritage or landmark trees would be removed or damaged as a result of the proposed project, Chapter 26D would require a permit from the County of Sonoma.

5 METHODS

Sequoia performed various desktop and in-field assessments. Using those results, Sequoia conducted several further site assessments to evaluate the presence of and/or likelihood of occurrence of sensitive resources on the project site.

5.1 Definitions

5.1.1 Special-Status Species

For the purposes of this document, special-status species include:

- Plant, fish, and wildlife species listed as Threatened or Endangered under FESA (50 CFR 17), and candidates for listing under the statute.
- Species protected by the CFGC, including nesting birds and Fully Protected species.
- Plant, fish, and wildlife species listed as Threatened or Endangered under CESA; and the laws and regulations for implementing CESA as defined in CFGC §2050 et seq. and the California Code of Regulations (CCR) 14 CCR §670.1 et seq., and candidates for listing under the statute (CFGC §2068).
- Species meeting the definition of 'Rare' or 'Endangered' under CEQA Guidelines 14 CCR §15125 (c) and/or 14 CCR §15380, including plants listed on CNPS Lists 1A, 1B, 2A, and 2B, 3, and 4. Plants occurring on CNPS Ranks 3 and 4 are "plants about which more information is necessary," and "plants of limited distribution" (CNPS 2001). These plants may be included as special-status species on a case-by-case basis due to local significance or recent biological information (see additional definition information below);
- USFWS Birds of Conservation Concern;
- Fully Protected species, as designated by the CDFW (CFGC 3511, 4700, 5050, and 5515);
- Species of Special Concern, as designated by the CDFW and required by 14 CCR §15380; and/or
- Avian species protected under the MBTA of 1918.

Additional information regarding these definitions is provided below:

5.1.1.1 Federally Threatened or Endangered Species

A species listed as Threatened or Endangered under the FESA is protected from unauthorized "take" (that is, harass, harm, pursue, hunt, shoot, trap) of that species. If it is necessary to take a federally listed

Threatened or Endangered species as part of an otherwise lawful activity, it would be necessary to receive permission from the USFWS prior to initiating the take.

5.1.1.2 State Threatened or Endangered Species

A species listed as Threatened or Endangered under the CESA is protected from unauthorized "take" (that is, harass, pursue, hunt, shoot, trap) of that species. If it is necessary to "take" a state Threatened or Endangered species as part of an otherwise lawful activity, it would be necessary to receive permission from CDFW prior to initiating the "take."

5.1.1.3 CDFW Species of Special Concern

California Species of Special Concern are species in which their California breeding populations are seriously declining and extirpation from all or a portion of their range is possible. This designation affords no legally mandated protection; however, some of these species could be considered "rare" and must therefore be considered in any project that will, or is currently, undergoing CEQA review, and/or that must obtain an environmental permit(s) from a public agency.

5.1.1.4 CNPS Rank Species

The CNPS maintains an *inventory* of special-status plant species. This inventory has four lists of plants with varying rarity. These lists are Rank 1, Rank 2, Rank 3, and Rank 4. Although plants on these lists have no formal legal protection (unless they are also state or federally listed species), CDFW requests the inclusion of Rank 1 species in environmental documents. In addition, other state and local agencies may request the inclusion of species on other lists as well. Rank 1 and 2 species are defined below:

- Rank 1A: Presumed extinct in California;
- Rank 1B: Rare, threatened, or endangered in California and elsewhere;
- Rank 2A: Plants presumed extirpated in California, but more common elsewhere;
- Rank 2B: Rare, threatened, or endangered in California, but more common elsewhere.

Under the CEQA review process only CNPS Rank 1 and 2 species are considered due to meeting CEQA's definition of "rare" or "endangered." Rank 3 and 4 species are not regarded as significant pursuant to CEQA.

5.1.1.5 Fully Protected Birds

Fully Protected birds are protected under CFGC 3511 and may not be "taken" or possessed (i.e., kept in captivity) at any time.

5.2 Desktop Review

Sequoia reviewed relevant databases and literature for baseline information regarding biological resources occurring and potentially occurring on the project site and in the immediate vicinity. The review included the following sources:

- USFWS Information for Planning and Consultation (IPaC) search (USFWS 2022a), and Critical Habitat Portal (USFWS 2022b; Appendix C, Figure 3);
- USFWS NWI (Figure 4);
- U.S. Department of Agriculture Natural Resources Conservation Service (NRCS 2022) Web Soil Survey (Figure 5);
- CNPS Online Inventory of Rare and Endangered Plants of California for the Cotati USGS 7.5-minute quadrangle and eight surrounding quadrangles (CNPS 2022);
- NMFS Online Species List query (NMFS 2022, Appendix D);
- CDFW California Natural Diversity Database (CNDDB) search for the project polygon and a 3-mile buffer (CNDDB 2022); and,
- Aerial photographs (Google Earth 2022).

5.3 Site Assessment and Special-Status Plant Surveys

Sequoia conducted surveys on the project site on May 26 and August 31, 2022, to record biological resources, including conducting protocol-level special-status plant surveys, and to assess if areas potentially regulated by resource agencies occur on the project site. Surveys involved searching all habitats and recording all plant and animal species observed. Sequoia cross-referenced the habitats occurring on the project site with the habitat requirements of regional special-status species to determine if the proposed project could directly or indirectly impact these species. Any special-status species or suitable habitat was documented.

Tables 1 and 2 present the potential for occurrence of special-status plant and animal species known to occur in the vicinity of the project site, along with their habitat requirements, occurrence classification, and basis for occurrence classification. Tables 3 and 4 present all plant and animal species observed on the project site.

5.4 Wetland Delineation

A complete formal aquatic resources delineation was performed on the proposed project site on May 26, 2022 to determine aquatic resource areas within state and federal jurisdiction (Appendix B). All features exhibiting wetland characteristics as defined by the USACE were mapped within the project area (Appendix B). The wetland delineation was conducted according to the USACE's 1987 *Wetlands Delineation Manual* (USACE 1987) in conjunction with the *Regional Supplement for the Arid West Region* (USACE 2008). A separate stand-alone report will be submitted for this aquatic resources delineation.

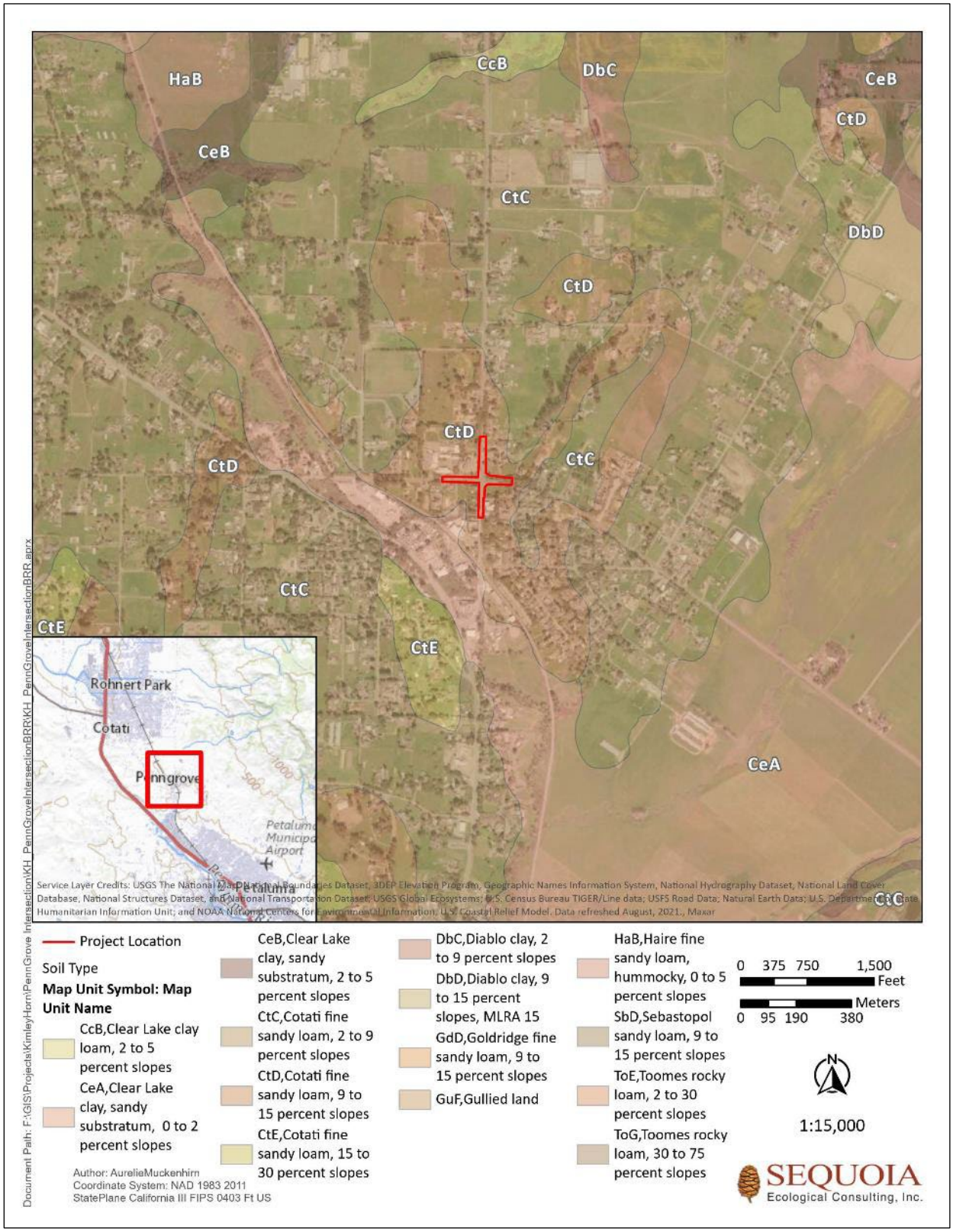

Figure 5. Soil Types on the Adobe Road and Main Street Intersection Improvement Project Site

5.5 Habitat Assessments

During the surveys conducted on May 26 and August 31, 2022, Sequoia surveyed the project site for special-status species listed during the desktop review. Any special-status species or suitable habitats were documented.

Potential to Occur

Following the site assessment, potential for special-status species to occur on the project site was evaluated according to the following criteria:

- *No Potential.* Habitat on and adjacent to the site is clearly unsuitable for the species' requirements (foraging, breeding, cover, substrate, elevation, hydrology, plant community, site history, disturbance regime).
- *Unlikely.* Few of the habitat components meeting the species' requirements are present, and/or the majority of habitat on and adjacent to the site is unsuitable or of very poor quality. The species is not likely to be found on the site.
- *Moderate Potential.* Some of the habitat components meeting the species' requirements are present, and/or only some of the habitat on or adjacent to the site is unsuitable. The species has a moderate probability of being found on the site.
- *High Potential.* All of the habitat components meeting the species' requirements are present and/or most of the habitat on or adjacent to the site is highly suitable. The species has a high probability of being found on the site.
- *Present.* Species is observed on the site or has been recorded (i.e., CNDDB, other reports) on the site recently.

6 RESULTS

The results of the desktop review and site assessment conducted are presented below.

6.1 Topography and Hydrology

The project site is predominately flat and slightly slopes from northeast to southwest. Elevation on the project site ranges from 84 to 120 feet above mean sea level. Two (2) aquatic features occur on or immediately adjacent to the project site. These features consist of a roadside ditch along the northern shoulder of Adobe Road west of its intersection with Main Street and an unnamed intermittent drainage that flows northeast to southwest and beneath the intersection of Adobe Road and Main Street (Figure 4).

The climate of the project site is Mediterranean (i.e., dry-summer subtropical) with warm, dry summers with average highs in the 70s and 80s Fahrenheit, and cool, wet winters with average highs in the 50s and 60s and average lows in the 30s and 40s Fahrenheit. The average annual precipitation is

approximately 31.43 inches, falling primarily between November and March (U.S. Climate Data 2022).

6.2 Plant Communities and Associated Wildlife Habitats

On May 26 and August 31, 2022, Sequoia biologist and wetland scientist Andrew Ford conducted surveys of the project site and characterized the vegetation present. During the surveys, plant and animal species observed on the project site were documented (Tables 3 and 4). Nomenclature used for plant names follows *The Jepson Manual, Second Edition* (Baldwin 2012), while nomenclature used for animals follows CDFW's *Complete list of amphibian, reptile, bird, and mammal species in California* (2016). Plant communities that occur on the project site (Sawyer et al. 2009) are described below.

6.2.1 Ruderal/Developed

The project site is dominated by ruderal herbaceous vegetation along the shoulders of Adobe Road and Main Street. Ruderal communities are groupings of plants that thrive in areas disturbed by human activity. Ruderal vegetation is adapted to high levels of disturbance and endures for long periods of time in areas that have continual disturbance. Dominant grass and forb species observed within the ruderal community on the project site include wild oat (*Avena fatua*), English ivy (*Hedera helix*), hemlock (*Conium maculatum*), and Himalayan blackberry (*Rubus armeniacus*). Additionally, trees including blackwood acacia (*Acacia melanoxylon*), plum (*Prunus* sp.), and elm (*Ulnus* sp.) are present within this habitat.

Wildlife species observed within the ruderal/developed communities on the project site include California scrub-jay (*Aphelocoma californica*), American crow (*Corvus brachyrhynchos*), and black phoebe (*Sayornis nigricans*).

6.2.2 Non-Native Annual Grassland

Non-native annual grassland occurs immediately southeast of the intersection of Adobe Road and Main Street. Non-native annual grassland communities are comprised primarily of plant species that mature in spring and early summer, before spreading seed and dying in late summer and fall. Dominant grass and forb species observed within the non-native annual grassland community on the project site include wild oat, ripgut brome (*Bromus diandrus*), compact brome (*Bromus madritensis*), and annual bluegrass (*Poa annua*). A few oak trees, including black oak (*Quercus kelloggii*) and coast live oak (*Quercus agrifolia*), occur along within the grasslands on the project site.

Wildlife species observed within the non-native annual grassland community on the project site include song sparrow (*Melospiza melodia*), California towhee (*Melozone crissalis*), and dark-eyed junco (*Junco hyemalis*).

6.2.3 Riparian Woodland

Riparian woodland is present along the unnamed intermittent drainage which runs northeast to southwest and beneath the intersection of Adobe Road and Main Street. Riparian woodland is dominated by a canopy of red willow (*Salix laevigata*) and an understory of Himalayan blackberry (*Rubus armeniacus*), spear-leaved ornache (*Artiplex prostrata*), and curly dock (*Rumex crispus*).

Wildlife species observed within the riparian woodland community on the project site include song sparrow, bushtit (*Psaltriparus minimus*), and black phoebe.

6.2.4 Wildlife Corridors

Wildlife corridors are habitats that provide connectivity between natural communities otherwise separated by urbanization and other development. Wildlife corridors provide access for animals to travel between these communities for seasonal migration, access to overwintering/summering habitat, breeding, etc. They also allow animals a route to move away from natural disasters and other forms of habitat loss, as well as to recolonize habitats previously extirpated. Wildlife corridors provide opportunities to breed, forage, migrate/emigrate, disperse, and forage (Beier and Loe 1992).

The proposed project may temporarily interfere with the movement of native wildlife. The unnamed intermittent drainage that flows northeast to southwest and beneath the intersection of Adobe Road and Main Street functions as a wildlife corridor. Active construction within the bed, bank, or channel of this feature may temporarily interfere with the movement of native wildlife within this corridor; however, no permanent barriers to movement along this drainage will occur as a result of the proposed project.

6.3 Special-Status Plants

Figures 6 provides a graphical illustration of special-status plant species occurrences within 3 miles of the project site. Table 1 provides an assessment of special-status plant species' potential to occur on the project site. A total of 66 special-status plants have been previously documented in the vicinity of the project site (CNPS 2022; CNDDB 2022; USFWS 2022a); however, no special-status plants have been observed or mapped on the project site.

Sequoia analyzed the potential for these plant species to occur, as well as species included in CNPS, CNDDB, and IPaC resource lists during the desktop review (Table 1; Figure 6). The majority of these species require specialized habitats such as vernal pools, marshes and swamps, chaparral, forest, and/or serpentinite soils, among others, which are not found on the project site. Project activities extending beyond current infrastructure include the construction of a retaining wall and widening of Adobe Road within an area containing riparian canopy. Due to the lack of suitable habitat and/or historic occurrences within the project site footprint, no impacts to special-status plants are anticipated as a result of the proposed project (Table 1).

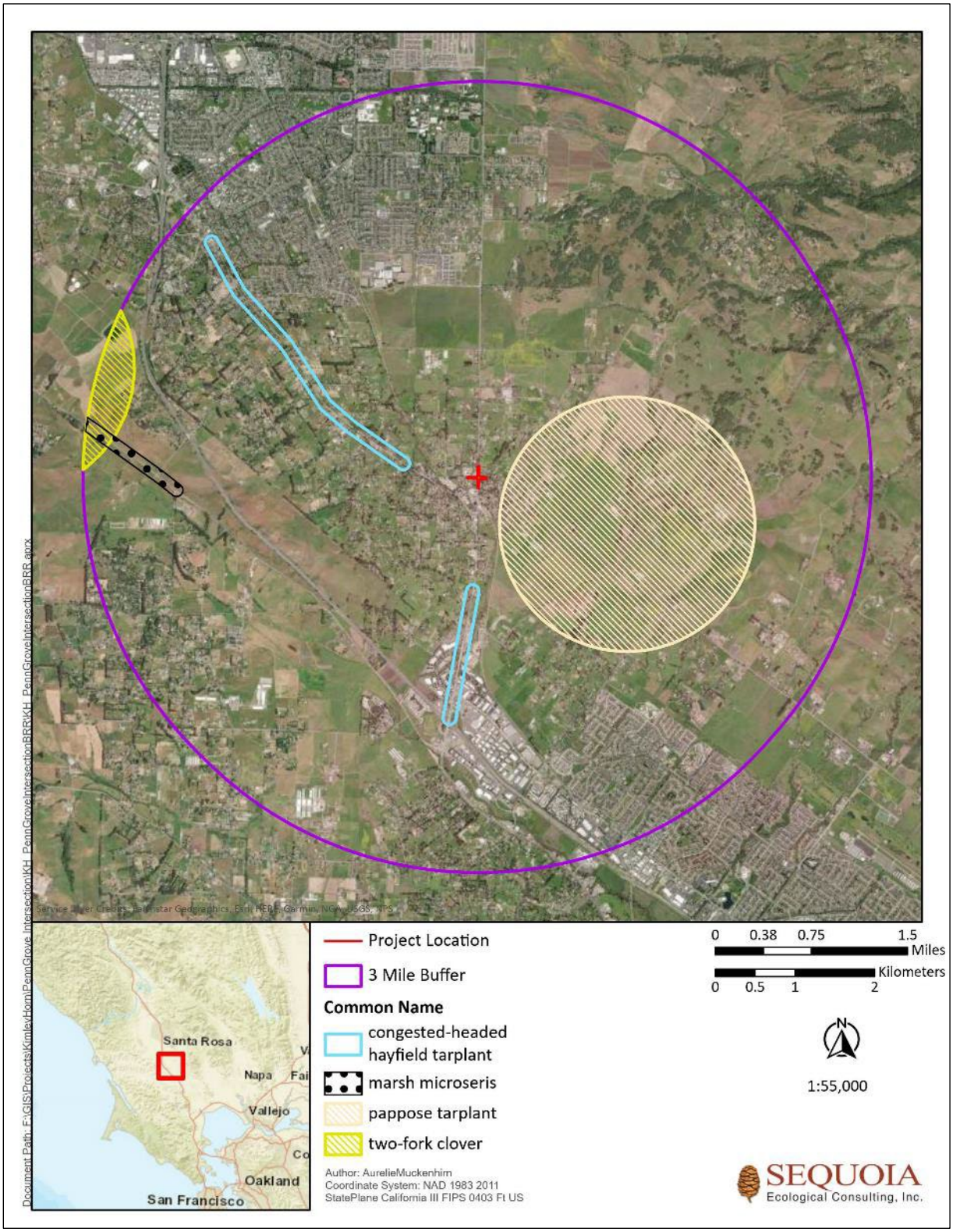

Figure 6. Closest Known Records for Special-Status Plant Species Within 3 Miles of the Adobe Road and Main Street Intersection Improvement Project Site

Table 1. Special-Status Plant Species with Potential to Occur on the Adobe Road and Main Street Intersection Improvement Project Site

Scientific Name	Common Name	Listed Status	Habitat Requirements	Potential for Occurrence
Allium peninsulare var. *franciscanum*	Franciscan onion	1B.2	Occurs in valley grassland, foothill grassland, and coastal chaparral at elevations of up to 3600 feet.	No Potential. No suitable habitat occurs on the project site.
Alopecurus aequalis var. *sonomensis*	Sonoma alopecurus	FE, 1B.1	Occurs in freshwater marshes, swamps, and riparian scrub at elevations of up to 1200 feet.	No Potential. No suitable habitat occurs on the project site.
Amorpha californica var. *napensis*	Napa false indigo	1B.2	Occurs in broad-leafed upland forest (openings), chaparral, and cismontane woodland at elevations of 400 to 6,500 feet.	No Potential. No suitable habitat occurs on the project site.
Amsinckia lunaris	bent-flowered fiddleneck	1B.2	Occurs in coastal bluff scrub, cismontane woodland, and valley and foothill grassland at elevations of 10 to 1,600 feet.	No Potential. No suitable habitat occurs on the project site.
Arctostaphylos densiflora	Vine Hill manzanita	CE, 1B.1	Occurs in chaparral (acid marine sand) at elevations of 160 to 400 feet.	No Potential. No suitable habitat occurs on the project site.
Arctostaphylos stanfordiana ssp. *decumbens*	Rincon Ridge manzanita	1B.1	Occurs in chaparral and clay barrens at elevations of up to 300 feet.	No Potential. No suitable habitat occurs on the project site.
Astragalus claranus	Clara Hunt's milk-vetch	FE, CE, 1B.1	Occurs in chaparral (openings), cismontane woodland, and valley and foothill grassland at elevations of 250 to 900 feet.	No Potential. No suitable habitat occurs on the project site.
Astragalus tener var. *tener*	alkali milk-vetch	1B.2	Occurs in coastal dunes, bluffs, and coastal terrace grasslands.	No Potential. No suitable habitat occurs on the project site.
Balsamorhiza macrolepis	big-scale balsamroot	1B.2	Occurs in chaparral, cismontane woodland, and valley and foothill grassland at elevations of 150 to 5,100 feet.	No Potential. No suitable habitat occurs on the project site.
Blennosperma bakeri	Sonoma sunshine	FE, CE, 1B.1	Occurs in valley and foothill grassland (mesic) and vernal pools at elevations of 30 to 360 feet.	No Potential. No suitable habitat occurs on the project site.

Scientific Name	Common Name	Listed Status	Habitat Requirements	Potential for Occurrence
Brodiaea leptandra	narrow-anthered brodiaea	1B.2	Occurs in broad-leafed upland forest, chaparral, cismontane woodland, lower montane coniferous forest, and valley and foothill grassland at elevations of 360 to 3,000 feet.	No Potential. No suitable habitat occurs on the project site.
Calamagrostis crassiglumis	Thurber's reed grass	2B.1	Occurs in coastal scrub (mesic) and marshes and swamps (freshwater) at elevations of 30 to 200 feet.	No Potential. No suitable habitat occurs on the project site.
Campanula californica	swamp harebell	1B.2	Occurs in bogs and fens, closed-cone coniferous forest, coastal prairie, meadows and seeps, marshes and swamps (freshwater), and North Coast coniferous forest at elevations of 0 to 1,300 feet.	No Potential. No suitable habitat occurs on the project site.
Castilleja uliginosa	Pitkin Marsh paintbrush	CE, 1A	Occurs in marshes and swamps (freshwater) at an elevation of approximately 785 feet.	No Potential. No suitable habitat occurs on the project site.
Ceanothus confuses	Rincon Ridge ceanothus	1B.1	Occurs in volcanic or serpentinite soils in closed-cone coniferous forest, chaparral, and cismontane woodland at elevations of 245 to 3,495 feet.	No Potential. No suitable habitat occurs on the project site.
Ceanothus divergens	Calistoga ceanothus	1B.2	Occurs in chaparral (serpentinite or volcanic, rocky) at elevations from 550 to 3,100 feet.	No Potential. No suitable habitat occurs on the project site.
Ceanothus foliosus var. *vineatus*	Vine Hill ceanothus	1B.1	Occurs in chaparral at elevations of 150 to 1,000 feet.	No Potential. No suitable habitat occurs on the project site.
Ceanothus masonii	Mason's ceanothus	CR, 1B.2	Occurs in coastal chaparral and windblown bluffs. This species is endemic to Marin County.	No Potential. No suitable habitat occurs on the project site.
Ceanothus purpureus	holly-leaved ceanothus	1B.2	Occurs in chaparral and cismontane woodland at elevations of 400 to 2,100 feet.	No Potential. No suitable habitat occurs on the project site.
Ceanothus sonomensis	Sonoma ceanothus	1B.2	Occurs in chaparral (sandy, serpentinite or volcanic) at elevations of 700 to 2,600 feet.	No Potential. No suitable habitat occurs on the project site.
Centromadia parryi ssp. *parryi*	pappose tarplant	1B.2	Occurs in chaparral, coastal prairie, meadows and seeps, marshes and swamps (coastal salt), and valley and	No Potential. No suitable habitat occurs on the project site.

Scientific Name	Common Name	Listed Status	Habitat Requirements	Potential for Occurrence
			foothill grassland (vernally mesic) at elevations of 0 to 1,400 feet.	
Chloropyron maritimum ssp. *Palustre*	Point Reyes salty bird's-beak	1B.2	Occurs in sandy substrates along salt marshes.	No Potential. No suitable habitat occurs on the project site.
Chloropyron molle ssp. *molle*	soft salty bird's-beak	FE, CR, 1B.2	Occurs in coastal salt marshes and swamps.	No Potential. No suitable habitat occurs on the project site.
Chorizanthe valida	Sonoma spineflower	FE, CE, 1B.1	Occurs in coastal prairies comprised of deep, sandy soils.	No Potential. No suitable habitat occurs on the project site.
Cirsium andrewsii	Franciscan thistle	1B.2	Occurs in coastal habitats such as sea bluffs and canyons containing serpentine soils.	No Potential. No suitable habitat occurs on the project site.
Clarkia imbricata	Vine Hill clarkia	FE, CE, 1B.1	Occurs in chaparral and valley and foothill grassland at elevations of 160 to 250 feet.	No Potential. No suitable habitat occurs on the project site.
Cuscuta obtusiflora var. *glandulosa*	Peruvian dodder	2B.2	Occurs in marshes and swamps (freshwater) at elevations of 50 to 920 feet.	No Potential. No suitable habitat occurs on the project site.
Delphinium bakeri	Baker's larkspur	FE, CE, 1B.1	Occurs in decomposed shale, often mesic, broad-leafed upland forest, coastal scrub, and valley and foothill grassland at elevations of 260 to 1,000 feet.	No Potential. No suitable habitat occurs on the project site.
Delphinium luteum	golden larkspur	FE, CR, 1B.1	Occurs in chaparral, coastal prairie, and coastal scrub at elevations of 0 to 330 feet.	No Potential. No suitable habitat occurs on the project site.
Downingia pusilla	dwarf downingia	2B.2	Occurs in valley and foothill grassland (mesic) and vernal pools at elevations from 3 to 1,460 feet.	No Potential. No suitable habitat occurs on the project site.
Eriogonum luteolum var. *caninum*	Tiburon buckwheat	1B.2	Occurs in flats, mixed grassland and chaparral communities, and oak and pine woodlands containing serpentine soils.	No Potential. No suitable habitat occurs on the project site.
Fritillaria lanceolata var. *tristulis*	Marin checker lily	1B.1	Occurs in coastal bluff scrub and prairies at elevations from 50 to 490 feet.	No Potential. No suitable habitat occurs on the project site.

Scientific Name	Common Name	Listed Status	Habitat Requirements	Potential for Occurrence
Fritillaria liliacea	fragrant fritillary	1B.2	Occurs in cismontane woodland, coastal prairie, coastal scrub, and valley and foothill grassland at elevations of 10 to 1,340 feet.	No Potential. No suitable habitat occurs on the project site.
Gilia capitata ssp. *tomentosa*	woolly-headed gilia	1B.1	Occurs in coastal bluff scrub and valley and foothill grassland at elevations of 30 to 720 feet.	No Potential. No suitable habitat occurs on the project site.
Hemizonia congesta ssp. *congesta*	congested-headed hayfield tarplant	1B.2	Occurs in valley and foothill grassland or chaparral on mostly serpentine soils at elevations of 65 to 1,835 feet.	No Potential. No suitable habitat occurs on the project site.
Hesperolinon congestum	Marin western flax	FT, CT, 1B.1	Occurs on serpentine soils with grassland and chaparral habitats at elevations less than 600 feet.	No Potential. No suitable habitat occurs on the project site.
Horkelia tenuiloba	thin-lobed horkelia	1B.2	Occurs in broad-leafed upland forest, chaparral, and valley and foothill grassland at elevations of 160 to 1,600 feet.	No Potential. No suitable habitat occurs on the project site.
Lasthenia burkei	Burke's goldfields	FE, CE, 1B.1	Occurs in meadows and seeps (mesic) and vernal pools at elevations of 50 to 1,970 feet.	No Potential. No suitable habitat occurs on the project site.
Lasthenia californica ssp. *bakeri*	Baker's goldfields	1B.2	Occurs in closed-cone coniferous forest (openings), coastal scrub, meadows and seeps, and marshes and swamps at elevations of 200 to 1,640 feet.	No Potential. No suitable habitat occurs on the project site.
Lasthenia conjugens	Contra Costa goldfields	FE, 1B.1	Occurs in vernal pool habitats at elevations less than 100 feet.	No Potential. No suitable habitat occurs on the project site.
Layia septentrionalis	Colusa layia	1B.2	Occurs in serpentine or sandy soils at elevations of 300 to 2700 feet.	No Potential. No suitable habitat occurs on the project site.
Legenere limosa	legenere	1B.1	Occurs in vernal pools at elevations of 3 to 2,900 feet.	No Potential. No suitable habitat occurs on the project site.
Leptosiphon jepsonii	Jepson's leptosiphon	1B.2	Occurs in chaparral, cismontane woodland, and valley and foothill grassland, usually in volcanic soils at elevations of 325 to 1,640 feet.	No Potential. No suitable habitat occurs on the project site.

Scientific Name	Common Name	Listed Status	Habitat Requirements	Potential for Occurrence
Lilium pardalinum ssp. *pitkinense*	Pitkin Marsh lily	FE, CE, 1B.1	Occurs in cismontane woodland, meadows and seeps, and marshes and swamps (freshwater) at elevations of 115 to 215 feet.	No Potential. No suitable habitat occurs on the project site.
Limnanthes vinculans	Sebastopol meadowfoam	FE, CE, 1B.1	Occurs in meadows and seeps, valley and foothill grassland, and vernal pools at elevations of 50 to 1,000 feet.	No Potential. No suitable habitat occurs on the project site.
Lomatium repostum	Napa lomatium	1B.2	Occurs in chaparral and cismontane woodland (serpentinite) at elevations from 295 to 3,380 feet.	No Potential. No suitable habitat occurs on the project site.
Microseris paludosa	marsh microseris	1B.2	Occurs in closed-cone coniferous forest, cismontane woodland, coastal scrub, and valley and foothill grassland at elevations of 15 to 1,165 feet.	No Potential. No suitable habitat occurs on the project site.
Navarretia leucocephala ssp. *bakeri*	Baker's navarretia	1B.1	Occurs in cismontane woodland, lower montane coniferous forest, meadows and seeps, valley and foothill grassland, and vernal pools at elevations of 15 to 5,700 feet.	No Potential. No suitable habitat occurs on the project site.
Penstemon newberryi var. *sonomensis*	Sonoma beardtongue	1B.3	Occurs in chaparral (rocky) at elevations of 2,300 to 4,500 feet.	No Potential. No suitable habitat occurs on the project site.
Plagiobothrys mollis var. *vestitus*	Petaluma popcornflower	1A	Occurs in coastal salt marshes, valley grasslands, and riparian wetlands.	No Potential. No suitable habitat occurs on the project site.
Pleuropogon hooverianus	North Coast semaphore grass	CT, 1B.1	Occurs in open, mesic areas within broad-leafed upland forest and North Coast coniferous forest, as well as meadows and seeps at elevations of 30 to 2,200 feet.	No Potential. No suitable habitat occurs on the project site.
Potentilla uliginosa	Cunningham Marsh cinquefoil	1A	Occurs in Cunningham Marsh, a perennial wetland in southern Sonoma County.	No Potential. No suitable habitat occurs on the project site.
Rhynchospora alba	white beaked-rush	2B.2	Occurs in bogs and fens, meadows and seeps, and marshes and swamps (freshwater) at elevations of 200 to 6,700 feet.	No Potential. No suitable habitat occurs on the project site.

Scientific Name	Common Name	Listed Status	Habitat Requirements	Potential for Occurrence
Rhynchospora californica	California beaked-rush	1B.1	Occurs in bogs and fens, lower montane coniferous forest, meadows and seeps, and marshes and swamps (freshwater) at elevations of 150 to 3,300 feet.	No Potential. No suitable habitat occurs on the project site.
Rhynchospora capitellata	brownish beaked-rush	2B.2	Occurs in lower montane coniferous forest, meadows and seeps, marshes and swamps, and upper montane coniferous forest at elevations of 150 to 3,300 feet.	No Potential. No suitable habitat occurs on the project site.
Rhynchospora globularis	round-headed beaked-rush	2B.1	Occurs in marshes and swamps (freshwater) at elevations of 150 to 200 feet.	No Potential. No suitable habitat occurs on the project site.
Sidalcea calycosa ssp. *rhizomata*	Point Reyes checkerbloom	1B.2	Occurs in coastal marshes, swamps, and vernal pools.	No Potential. No suitable habitat occurs on the project site.
Sidalcea oregana ssp. *valida*	Kenwood Marsh checkerbloom	FE, CE, 1B.1	Occurs in marshes and swamps (freshwater) at elevations of 375 to 500 feet.	No Potential. No suitable habitat occurs on the project site.
Streptanthus anomalus	Mount Burdell jewelflower	1B.1	Occurs on serpentine soils in the vicinity of Mount Burdell in Marin County.	No Potential. No suitable habitat occurs on the project site.
Trichostema ruygtii	Napa bluecurls	1B.2	Occurs in chaparral, oak woodland, mixed evergreen forest, and vernal pools in grasslands.	No Potential. No suitable habitat occurs on the project site.
Trifolium amoenum	two-fork clover	FE, 1B.1	Occurs in coastal bluff scrub and valley and foothill grassland (sometimes serpentinite) at elevations of 15 to 1,360 feet.	No Potential. No suitable habitat occurs on the project site.
Trifolium buckwestiorum	Santa Cruz clover	1B.1	Occurs in gravelly soils along margins of broad-leafed upland forest, cismontane woodland, and coastal prairie at elevations of 340 to 2,000 feet.	No Potential. No suitable habitat occurs on the project site.
Trifolium hydrophilum	saline clover	1B.2	Occurs in marshes and swamps, valley and foothill grassland (mesic, alkaline), and vernal pools at elevations of 0 to 985 feet.	No Potential. No suitable habitat occurs on the project site.

Scientific Name	Common Name	Listed Status	Habitat Requirements	Potential for Occurrence
Trifolium polyodon	Pacific Grove clover	CR, 1B.1	Occurs in closed-cone coniferous forests, coastal prairies, meadows and seeps, and valley and foothill grasslands.	No Potential. No suitable habitat occurs on the project site.
Triquetrella californica	coastal triquetrella	1B.2	Occurs in coastal bluff scrub and coastal scrub at elevations of 32 to 330 feet.	No Potential. No suitable habitat occurs on the project site.
Viburnum ellipticum	oval-leaved viburnum	2B.3	Occurs in chaparral, cismontane woodland, and lower montane coniferous forest at elevations of 705 to 4,595 feet.	No Potential. No suitable habitat occurs on the project site.

Key to status:
FE=Federally listed as endangered species
FT=Federally listed as threatened species
CE=California listed as endangered species
CT=California listed as threatened species
CR=California listed as rare species
CNPS Rare Plant Rank
1A=Plants presumed extirpated in California, and either rare or extinct elsewhere
1B=Plants rare, threatened, or endangered in California, or elsewhere
2A=Plants presumed extirpated in California but common elsewhere
2B=Plants rare, threatened, or endangered in California but more common elsewhere
Note: CNPS ranks 3 and 4 excluded from this analysis.

6.4 Special-Status Animals

Figures 7 provides a graphical illustration of special-status animal species occurrences within 3 miles of the project site. Table 2 provides an assessment of the potential for special-status animal species to occur on the project site. A total of 14 special-status animal species have been previously documented in the vicinity of the project site (CNDDB 2022; USFWS 2022a; NMFS 2022); however, no special-status animals have been observed or mapped on the project site.

Sequoia analyzed the potential to occur for these animal species, as well as species included in NMFS and IPaC resource lists during the desktop review (Table 2; Figure 7). A number of these species require specialized habitats such as vernal pools, marshes, ponds, lakes, rivers, ocean, forest, and caves, among others, which are not found on the project site. Due to lack of suitable habitat and/or lack of recent occurrences in the project vicinity, 11 of these special-status animal species are not anticipated to occur and are therefore not discussed further in this analysis (Table 2). Descriptions and discussion of potential for occurrence for the remaining three (3) special-status animal species—California red-legged frog, foothill yellow-legged frog, and western pond turtle—are provided in more detail below (Table 2; Figure 7).

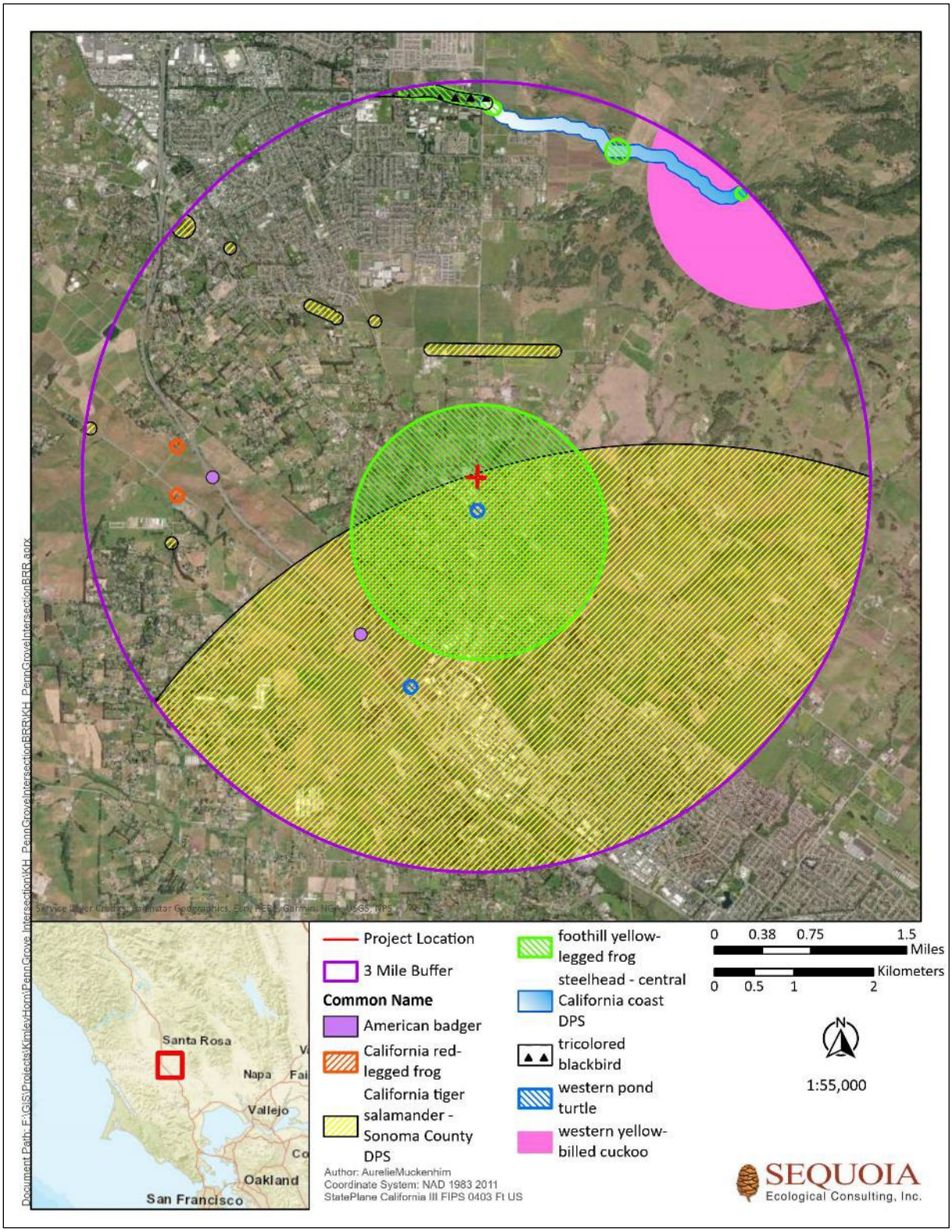

Figure 7. Closest Known Records for Special-Status Animal Species Within 3 Miles of the Adobe Road and Main Street Intersection Improvement Project Site

6.4.1 California Red-Legged Frog

The California red-legged frog was listed as a federally threatened species on May 23, 1996 (USFWS; 1996; 61 FR 25813), and is designated as a California Species of Special Concern (CDFW 2022). A recovery plan was published for the California red-legged frog on September 12, 2002 (USFWS 2002). Critical habitat was designated for this species on April 13, 2006 (71 FR 19244), and revisions to the critical habitat designation were published on March 17, 2010 (75 FR 12816). The project site is located *outside* of USFWS-designated critical habitat for California red-legged frog (Figure 3).

The California red-legged frog is distributed throughout 26 counties in California, but is most abundant in the San Francisco Bay Area (USFWS 2002). Populations have become isolated in the Sierra Nevada, northern coast, and northern Transverse Ranges (Jennings and Hayes 1994, Stebbins & McGinnis 2018). The species is believed to be extinct from the southern Transverse and Peninsular ranges, but is still present in Baja California, Mexico (USFWS 2017). California red-legged frogs predominantly inhabit permanent water sources such as streams, lakes, marshes, natural and man-made ponds, and ephemeral drainages in valley bottoms and foothills up to 4,900 feet in elevation (Jennings and Hayes 1994, Bulger et al. 2003, Stebbins & McGinnis 2018). Adults breed in a variety of aquatic habitats, while larvae and metamorphs use streams, deep pools, backwaters of streams and creeks, ponds, marshes, sag ponds, dune ponds, and lagoons. Stock ponds are frequently used for breeding when they provide a suitable hydroperiod, pond structure, vegetative cover, and are managed to control non-native predators such as bullfrogs and exotic fish. Breeding occurs between November and April within still or slow-moving water with light to dense, riparian or emergent vegetation, such as cattails (*Typha* spp.), tules (*Scirpus* spp.) or overhanging willows (*Salix* spp.) (Hayes and Jennings 1994). Egg masses are attached to vegetation below the surface and hatch after 6 to 14 days (Storer 1925, Jennings and Hayes 1994). Larvae undergo metamorphosis 3.5 to 7 months following hatching and reach sexual maturity at 2 to 3 years of age (Jennings and Hayes 1994). During the dry season, California red-legged frogs may use refugia in upland habitat, such as small mammal burrows or adjacent moist vegetation (USFWS 2002).

Tatarian (2008) noted that 57 percent of frogs fitted with radio transmitters in the Round Valley of eastern Contra Costa County stayed at their breeding pools, whereas 43 percent moved into adjacent upland habitat or to other aquatic sites. This study reported a peak of seasonal terrestrial movement in the fall months corresponding to 0.2 inches of precipitation that tapered off into spring. Upland movement activities ranged from 3 to 233 feet, averaging 80 feet, and were associated with a variety of refugia, including ground squirrel burrows at the bases of trees or rocks, logs, grass thatch, crevices, cow hoof prints, and a downed barn door; others were associated with upland sites lacking refugia (Tatarian 2008). The majority of terrestrial movements lasted from 1 to 4 days; however, one female was reported to remain in upland habitat for 50 days (Tatarian 2008). Uplands closer to aquatic sites were more often used and were more commonly associated with areas exhibiting higher object cover (e.g. small woody debris, rocks, and vegetative cover).

Most frogs move away from breeding ponds to upland areas. The distance moved is site dependent, though one recent study shows that only a few frogs move farther than the nearest suitable non-

breeding habitat (Fellers and Kleeman 2007). In this Marin County study, the furthest distance traveled was 0.87 miles and most dispersing frogs moved through grazed pastures to reach the nearest riparian habitat (Fellers and Kleeman 2007). Bulger et al. (2003) did not observe habitat preferences among frogs moving between ponds. They did note that when breeding ponds dry, California red-legged frogs use moist microhabitats of dense shrubs and herbaceous vegetation within approximately 330 feet of ponds.

The closest known occurrence of California red-legged frog is located approximately 2.25 miles west of the project site (CNDDB Occurrence No. 932; Figure 7). This 2009 occurrence is known from a constructed pond located on Stony Point Road adjacent to rangeland and horse corrals. Due to the absence of suitable California red-legged frog breeding or over-summering habitat on and/or adjacent to the project site and the extent of regular disturbance associated with the roadways and shoulders that make up the proposed project, it is very unlikely this species would occur on the project site. However, the unnamed intermittent drainage feature could potentially be used as migration/dispersal habitat. **Impacts to California red-legged frog would be significant pursuant to the CEQA; accordingly, preconstruction surveys will be conducted that confirm or negate this species' presence on the project site.** It should be noted that migration and dispersal of these species are temporally constrained activities that generally occur during the wet season; however, the proposed project will occur in the dry season, and work activities will occur during dry conditions. If California red-legged frogs are identified on or immediately adjacent to the project site, mitigation measures will be implemented that would reduce this impact to a level regarded as less than significant (see Section 7).

6.4.2 Foothill Yellow-Legged Frog – Northwest/North Coast Clade

The foothill yellow-legged frog is divided into five distinct clades in California based on genetic divergence and conservation concern (CDFW 2022). The Northwest/North Coast clade is the most intact population and is designated as a California Species of Special Concern. Historically, foothill yellow-legged frog occurred from west of the crest of the Cascade Mountains in Oregon south to the Transverse Ranges in Los Angeles County, and in the Sierra Nevada foothills south to Kern County (Zweifel 1955; Stebbins & McGinnis 2018). The current range now excludes coastal areas south of northern San Luis Obispo County and foothill areas south of Fresno County, where the species is considered extirpated (Jennings and Hayes 1994). In a 1994 report (Fellers 1994), healthy, reproducing populations were reported in suitable habitat throughout the Diablo Range in Alameda, western Stanislaus, Santa Clara, San Benito, and western Fresno counties. Foothill yellow-legged frogs are found in or near rocky streams in a variety of habitats, including valley foothill hardwood, valley-foothill riparian, coastal scrub, mixed conifer, mixed chaparral, and wet meadows (Zeiner et al. 1988). This species and aquatic habitat are considered sympatric, and they rarely migrate far from perennial or intermittent streams (Stebbins & McGinnis 2018). Foothill yellow-legged frog requires shallow, flowing water in small to moderate-sized streams containing some cobble-sized substrate and portions of open canopy important for basking (Hayes and Jennings 1988; Jennings 1988; Bourque 2008). Foothill yellow-legged frogs deposit their egg masses on the downstream side of cobbles and boulders over which a relatively thin, gentle flow of water exists (Storer 1925; Fitch 1936; Zweifel 1955; Kupferberg 1996).

The closest known occurrence of foothill yellow-legged frog is located approximately 0.34 miles south of the project site in Lichau Creek and dates to 2018 (CNDDB Occurrence No. 1837; Figure 7). Due to the absence of suitable foothill yellow-legged frog breeding on and/or adjacent to the project site and the extent of regular disturbance associated with the roadways and shoulders that make up the proposed project, it is very unlikely this species would occur on the project site. However, the unnamed intermittent drainage feature could potentially be used as migration/dispersal habitat. **Impacts to foothill yellow-legged frog would be significant pursuant to the CEQA; accordingly, preconstruction surveys will be conducted that confirm or negate this species' presence on the project site.** It should be noted that migration and dispersal of these species are temporally constrained activities that generally occur during the wet season; however, the proposed project will occur in the dry season, and work activities will occur during dry conditions. If foothill yellow-legged frogs are identified on or immediately adjacent to the project site, mitigation measures will be implemented that would reduce this impact to a level regarded as less than significant (see Section 7).

6.4.3 Western Pond Turtle

The western pond turtle, a California Species of Special Concern (CDFW 2022), is the only freshwater turtle native to greater California and is distributed along much of the western coast, from the Puget Sound in Washington south to the Baja Peninsula, Mexico (Storer 1930). Overall, western pond turtles are habitat generalists and have been observed in slow-moving rivers and streams (e.g., in oxbows), lakes, reservoirs, permanent and ephemeral wetlands, stock ponds, and sewage treatment plants. They prefer aquatic habitat with refugia, such as undercut banks and submerged vegetation (Holland 1994) and require emergent basking sites, such as mud banks, rocks, logs, and root wads to thermoregulate their body temperature (Holland 1994, Bash 1999). Pond turtles are omnivorous and feed on a variety of aquatic and terrestrial invertebrates, fish, amphibians, and aquatic plants.

Western pond turtles regularly utilize upland terrestrial habitats, most often during the summer and winter, especially for oviposition (females), overwintering, seasonal terrestrial habitat use, and overland dispersal (Reese 1996, Holland 1994). Females have been reported ranging as far as 1,640 feet from a watercourse to find suitable nesting habitat (Reese and Welsh 1997). Nest sites are most often situated on south- or west-facing slopes, are sparsely vegetated with short grasses or forbs, and are scraped in sands or hard-packed, dry silt or clay soils (Holland 1994, Rathbun et al. 1992, Holte 1998, Reese and Welsh 1997). Western pond turtles exhibit high site fidelity, returning in sequential years to the same terrestrial site to nest or overwinter (Reese 1996).

Females in southern and central California lay their clutch as early as late April to late July, although they predominantly lay in June and July. In the early morning or late afternoon, gravid females leave the water and move upland to nest (Holland 1994). Natural incubation times vary, ranging from 80 to 100+ days in California. In northern California and Oregon, hatchlings remain in the nest after hatching and overwinter, emerging in the spring. In southern and central California, those that do not overwinter emerge from the nest in the early fall (Holland 1994).

The closest known occurrence of western pond turtle is located approximately 0.20 miles south of the project site in Lichau Creek and dates to 2006 (CNDDB Occurrence No. 681; Figure 7). Due to the absence of suitable western pond turtle breeding and basking habitat on the project site and the extent of regular disturbance associated with the roadways and shoulders that make up the proposed project, it is very unlikely this species would occur on the project site. However, the unnamed intermittent drainage feature could potentially be used as migration/dispersal habitat for this species. **Impacts to western pond turtle would be significant pursuant to the CEQA; accordingly, preconstruction surveys will be conducted that confirm or negate this species' presence on the project site.** If western pond turtles are identified on or immediately adjacent to the project site, mitigation measures will be implemented that would reduce this impact to a level regarded as less than significant (see Section 7).

Table 2. Special-Status Animal Species with Potential to Occur on the Adobe Road and Main Street Intersection Improvement Project Site

Scientific Name	Common Name	Listed Status	Habitat Requirements	Potential for Occurrence
Mammals				
Taxidea taxus	American badger	SSC	Open grasslands with a supply of rodent prey. They may also occur in forest glades and meadows, mountain meadows, marshes, and deserts.	No Potential. No suitable habitat on the project site.
Amphibians/Reptiles				
Ambystoma californiense (Sonoma County DPS)	California tiger salamander	FE, CT, WL	Small ponds, lakes, or vernal pools in grasslands and oak woodlands for larvae; rodent burrows, rock crevices, or fallen logs for cover for adults and for summer dormancy.	No Potential. No breeding or over-summering habitat occurs on the project site and no ponds, lakes, or vernal pools in immediate vicinity. In addition, project site geographically isolated by major thoroughfares and development.
Chelonia mydas	green sea turtle	FT	Common in tropical and subtropical waters as well as coastal beaches. Forages in coastal areas with plentiful algae and sea grass.	No Potential. No suitable habitat on the project site.
Emys marmorata	western pond turtle	SSC	Occurs in rivers, ponds, and freshwater marshes, and nests in upland areas (sandy banks or grassy	Low Potential. Suitable dispersal

Scientific Name	Common Name	Listed Status	Habitat Requirements	Potential for Occurrence
			open fields) up to 1,640 feet from water.	habitat occurs within the project site.
Rana boylii	foothill yellow-legged frog – Northwest/North Coast clade	CE, SSC	Occurs in rocky streams, rivers containing rocky substrate and sometimes vegetated backwaters and shaded pools. Prefers open, sunny banks near water and adequate cover.	Low Potential. Suitable dispersal habitat occurs within the project site. Several historic occurrences are present near the project site.
Rana draytonii	California red-legged frog	FT, SSC	Occurs in semi-permanent or permanent water at least 2 feet deep, bordered by emergent or riparian vegetation, and upland grassland, forest, or scrub habitats for aestivation and dispersal.	Low Potential. Suitable dispersal habitat occurs within the project site.
Fish				
Oncorhynchus kisutch	coho salmon – Central California Coast ESU	FE, CE	Breed in cold, fresh water throughout central California. Lay eggs in coarse gravel substrates.	No Potential. No suitable habitat on the project site.
Oncorhynchus mykiss irideus	steelhead – Central California Coast DPS	FT	Occurs in fresh water, fast flowing, highly oxygenated, clear, cool streams where riffles tend to predominate pools; small streams with high elevation headwaters close to the ocean that have no impassible barriers; spawning and high elevation headwaters.	No Potential. No suitable habitat on the project site.
Oncorhynchus tshawytscha	Chinook salmon – California Coast ESU	FT	Adults return from the ocean to their spawning grounds from September through November. Females select spawning areas with fast flowing, cool water with medium sized gravel substrate. Require high levels of dissolved oxygen and low sedimentation. Juveniles rear in stream margins and estuaries.	No Potential. No suitable habitat on the project site.

Scientific Name	Common Name	Listed Status	Habitat Requirements	Potential for Occurrence
Birds				
Agelaius tricolor	tricolored blackbird	CT	Occurs in freshwater marshes dominated by cattails (*Typha* sp.) Adults have been observed breeding in a wider diversity of habitats including agricultural and upland communities close to water and abundant food sources.	No Potential. No suitable habitat on the project site.
Coccyzus americanus	yellow-billed cuckoo	FT, CE	Woodlands, thickets, orchards, and streamside groves. Breeds in dense deciduous stands and often in willow groves around marshes.	No Potential. No suitable habitat on the project site.
Strix occidentalis caurina	northern spotted owl	FT, CT	Older, mixed forests with moderate to high canopy closure and a high occurrence of large snags and cavities.	No Potential. No suitable habitat on the project site.
Invertebrates				
Syncaris pacifica	California freshwater shrimp	FE, CE	Occurs in slow flowing waterways 1 to 3 feet deep, containing ample exposed roots, edge vegetation, and debris at elevations less than 380 feet.	No Potential. No suitable habitat on the project site.
Danaus plexippus	monarch butterfly	FC	Migratory species, making massive migrations August-October to hibernate along the California coast and central Mexico. Feed on flower nectar from milkweeds, dogbane, lilac, red clover, thistles, goldenrods, blazing stars, ironweed, and tickseed flower. Found across fields, meadows, weedy areas, marshes, and roadsides.	No Potential. No suitable habitat on the project site.

Key to status:
FE=Federally listed as endangered species
FT=Federally listed as threatened species
FC=Federally listed as a candidate species for listing
CE=California listed as endangered species
CT=California listed as threatened species
FP=California listed as fully protected
SSC=California species of special concern
WL= CDFW Watch List

7 DISCUSSION AND IMPACTS ASSESSMENT

7.1 CEQA Checklist

	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 CDFW 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, or regulations, or by the CDFW 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?	☐	☐	☐	☒

7.2 Impacts Analysis

In this section we discuss potential impacts to sensitive biological resources including nesting birds and raptors, special-status wildlife, waters of the U.S./state, bats, and trees. We follow each impact with a mitigation prescription that when implemented would reduce impacts to a level considered less than significant pursuant to CEQA.

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 in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?

No special-status plant species are known to occur on or in the immediate vicinity of the proposed project site. In addition, Sequoia conducted reconnaissance level plant surveys in May 2022 and no special-status plant species were observed. Furthermore, plant communities present on the project site are routinely disturbed and suitable habitat for special-status plant species is not present. Accordingly, no impacts to special-status plant species are anticipated from the proposed project.

7.2.1 Impact BIO-1: Nesting Birds and Special-Status Animals

Common song birds (passerine birds) and raptors (birds of prey) could nest on the project site. These birds are protected under the MBTA (50 CFR 10.13), and their eggs and young are protected under CFGC Sections §3503, §3503.5. Any project-related impacts to these species would be considered a significant adverse impact. Potential impacts to these species from the proposed project include disturbance to nesting birds and raptors and potential death of adults and/or young. In the absence of survey results, it must be concluded that impacts to nesting birds and raptors from development of the proposed project would be considered significant pursuant to CEQA.

Based on the database and literature review conducted during the desktop review for the proposed project, 14 special-status animal species have been previously documented in the vicinity of the project site (see Tables 2, Figure 7). Due to lack of suitable habitat and/or lack of recent occurrences in the vicinity of the project site, 11 of these special-status animal species are not expected to occur on the project site. Potential constraints and mitigation measures associated with each of the three remaining species with potential to occur on project site are provided below. These species include California red-legged frog, foothill yellow-legged frog, and western pond turtle. In the absence of survey results, it must be concluded that impacts to these species from development of the proposed project would be considered significant pursuant to CEQA.

These impacts could be mitigated to a level considered less than significant.

Level of Significance before Mitigation: Potentially Significant

Mitigation Measures:

BIO-1a: Environmental Training

Prior to the commencement of project-related activities, a qualified biologist shall provide an environmental awareness training program to educate project personnel on relevant special-status species and their habitats, sensitive/regulated habitats, and applicable environmental laws and permits. The training shall include a description of the species and their habitats, importance of preserving species and habitats, penalties for unauthorized take, and the project limits.

BIO-1b: Nesting Birds and Raptors

Tree and vegetation clearing (removal, pruning, trimming, and mowing) shall be scheduled to occur outside the migratory bird nesting season (February 1 through August 31). However, if clearing and/or construction activities will occur during the migratory bird nesting season, then preconstruction surveys to identify active migratory bird and/or raptor nests shall be conducted by a qualified biologist within 14 days of construction initiation on the project site and within 300 feet (i.e., zone of influence) of project-related activities. The zone of influence includes areas outside the project site where birds could be disturbed by construction-related noise or earth-moving vibrations.

If active nest, roost, or burrow sites are identified within the project site, a no-disturbance buffer shall be established for all active nest sites prior to commencement of any proposed project-related activities to avoid construction or access-related disturbances to migratory bird nesting activities. A no-disturbance buffer constitutes a zone in which proposed project-related activities (e.g., vegetation removal, earth moving, and construction) cannot occur. A minimum buffer size of 50 feet for passerines and 300 feet for raptors shall be implemented; sizes of the buffers shall be determined by a qualified biologist based on the species, activities proposed near the nest, and topographic and other visual barriers. Buffers shall remain in place until the young have departed the area or fledged and/or the nest is inactive, as determined by the qualified biologist. If work is required within a buffer zone of an active bird nest, work may occur under the supervision of a qualified avian biologist. The qualified avian biologist monitoring the construction work shall have the authority to stop work and adjust buffers if any disturbance to nesting activity is observed.

BIO-1c: Special-Status Amphibians and Reptiles

A qualified biologist shall conduct preconstruction surveys for special-status amphibians and reptiles (California red-legged frog, foothill yellow-legged frog, and western pond turtle) within two days of project commencement.

In the event that California red-legged frog, foothill yellow-legged frog, or western pond turtle are found on the project site, the individual(s) shall be allowed to leave the area of their own volition. Prior to resumption of project-related activities, suitable wildlife exclusion fencing shall be installed along the outside edge of project work limits along the boundary with the unnamed intermittent drainage feature to ensure that individuals are precluded from entering active work areas. The fencing shall be monitored for routine maintenance and should be permanent enough to ensure that it remains in good condition throughout the duration of the construction period at the project site. In lieu of exclusion fencing, a qualified biologist shall conduct monitoring for the duration of project-related activities at the location and in the vicinity of the previous detection.

- To prevent inadvertent entrapment of amphibian and reptile species, all steep-walled excavations or trenches shall be covered or provided with a wildlife escape ramp at the end of each working day. Before these holes or trenches are filled, they shall be thoroughly inspected for entrapped wildlife by a qualified biologist.
- To prevent inadvertent entrapment of amphibian and reptile species, no plastic monofilament netting shall be allowed on the project site.
- All trash items shall be removed from the project site to reduce the potential for attracting predators of the California red-legged frog, foothill yellow-legged frog, and western pond turtle.

Level of Significance after Mitigation: Less than Significant

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

7.2.2 Impact BIO-2. Riparian Habitat

The bed, bank, and channel and associated riparian vegetation of the unnamed intermittent drainage running northeast to southwest through the project site and beneath the intersection of Adobe Road and Main Street is subject to CDFW jurisdiction pursuant to Section §1600 of the CFGC. In addition, areas within the riparian corridor and below top-of-bank is subject to RWQCB jurisdiction pursuant to the CWA and Porter-Cologne Act. Accordingly, prior to any impacts to the bed, bank, and/or channel and associated riparian vegetation/canopy of the intermittent drainage, authorization from CDFW/RWQCB shall be required prior to project commencement.

This impact could be mitigated to a level considered less than significant.

Level of Significance before Mitigation: Potentially Significant

Mitigation Measure:

BIO-2: Obtain CDFW Section §1600 Lake or Streambed Alteration Agreement

If project activities encroach on the riparian zone or below top-of-bank of the unnamed intermittent drainage, the project proponent shall submit a Section §1600 Notification of Lake or Streambed Alteration application to CDFW. The Notification shall include a description of impacts, including quantification of impacts to bed, bank, and channel, as well as individual trees, area and linear footage of riparian vegetation, and proposed mitigation for impacts.

It is likely that CDFW will require tree replacement mitigation compensation as a condition of the Lake or Streambed Alteration Agreement. Accordingly, the Applicant shall mitigate for any impacts to native trees greater than 4 inches in diameter at breast height (DBH) via on-site replacement at a 3:1 (replacement to impacts) ratio, or as otherwise agreed upon by the Applicant and CDFW. This tree replacement mitigation proposal to compensate for the Project's potential encroachment into the riparian canopy will likely satisfy mitigation requirements stipulated by CDFW. In consideration of overall project site aesthetics, replacement trees shall be planted near the intermittent drainage to contribute to the existing riparian canopy associated with this waterway.

The trees' health shall be monitored annually for 5 years by a qualified biologist or arborist and documented in annual monitoring reports. At the end of the 5-year monitoring period, at least 70 percent of planted trees shall be in good health. If survival is below 70 percent, additional trees shall be planted to bring the total number of planted trees up to 100 percent of the original number of trees planted. Irrigation and follow-up monitoring shall be established over an additional 3-year period following any replanting.

Level of Significance after Mitigation: Less than Significant

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

7.2.3 Impact BIO-3. Waters of the United States/State

As described above, the unnamed intermittent drainage and any other aquatic resources including wetlands are likely subject to state regulation pursuant to the CWA and Porter-Cologne Act. Furthermore, areas below ordinary high-water mark associated with the unnamed intermittent drainage are likely subject to federal regulation pursuant to the CWA. Accordingly, prior to any impacts to the bed, bank, and/or channel and associated riparian vegetation/canopy of the unnamed intermittent drainage and any wetlands,

specifically the roadside ditch feature on the northern shoulder of Adobe Road west of the intersection with Main Street, appropriate authorizations shall be required prior to project commencement.

This impact could be mitigated to a level considered less than significant.

Level of Significance before Mitigation: Potentially Significant

Mitigation Measure:

BIO 3: Obtain RWQCB CWA Section 401 and/or Porter-Cologne Authorization, Obtain USACE CWA Section 404

If project-related activities encroach on areas, including the riparian zone and canopy of the unnamed intermittent drainage, and below ordinary high-water mark of the drainage and/or roadside ditch features, or other areas potentially regulated by the RWQCB/USACE, the project proponent shall obtain the appropriate CWA Section 401 Water Quality Certification and/or Porter-Cologne Waste Discharge Requirement approval from the RWQCB and/or CWA Section 404 permit from USACE prior to the discharge of any dredged or fill material within jurisdictional waters of the United States/state.

In addition, the project proponent shall develop a SWPPP that will be submitted to Sonoma County as a condition of project approval demonstrating BMPs that shall be installed/implemented prior to project commencement. Stormwater protection and treatment measures shall be implemented to ensure that the proposed project remains in compliance with the Porter-Cologne Act and that discharges of dredged or fill material do not enter waters of the state.

Mitigation compensation wetlands shall be enhanced/created for replacement of wetlands permanently impacted by the proposed project. If feasible, wetlands shall be enhanced/created on site and shall resemble wetlands impacted by the proposed project (i.e., in-kind replacement with no net loss of habitat values and functions). If wetlands cannot be created in-kind and on site, in lieu of creating compensation wetlands, the Applicant may purchase mitigation credits from a RWQCB/USACE-approved mitigation bank—at a minimum 1:1 ratio or a higher ratio as otherwise required by the RWQCB/USACE upon issuance of permits. If wetlands can be created in-kind and on site, the project proponent would need to establish a monitoring program to monitor the wetland(s) progress toward established goals (i.e., hydrological/vegetative conditions) and provide annual monitoring reports to RWQCB, USACE, and other resource agencies that permitted the Project. To meet success criteria, mitigation wetlands would need to at a minimum:

- Exhibit comparable plant/wildlife habitat characteristics to existing wetlands.

- Remain inundated or saturated for a sufficient duration of time to support hydrophytic (i.e., wetland) vegetation.

Level of Significance after Mitigation: Less than Significant

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

7.2.3 Impact BIO-4: Bats

The trees on the project site may provide roosting and/or maternity habitat for bats. Potential impacts to bats from the proposed project include disturbance to and/or loss of maternity or roosting habitat, death of individual adult bats and/or young. In the absence of survey results, it must be concluded that impacts to bats from development of the proposed project would be considered significant pursuant to CEQA.

This impact could be mitigated to a level considered less than significant.

Level of Significance before Mitigation: Potentially Significant

Mitigation Measure:

BIO-4: Bats

A qualified biologist shall be hired to conduct surveys for roosting bats no more than two weeks prior to planned commencement of construction activities that have the potential to disturb bat day roosts or maternity roosts through elevated noise levels or removal of trees. If a visual survey is not sufficient to determine the presence/absence of bats, acoustic equipment (e.g., AnaBat) shall be used to determine potential occupancy type of species present.

If an active maternity roost is detected, a qualified biologist shall determine an appropriate avoidance buffer to be maintained from April 1 until young are flying (typically through August). If an active day roost is detected in a tree or structure planned for removal, or within a zone of influence (i.e., noise, vibration) that could result in roost abandonment, as determined by a qualified biologist, the bats shall be safely evicted under the guidance of a qualified biologist. Day roosts shall not be removed unless the daytime temperature is at least 50 degrees Fahrenheit and there is no precipitation. Mitigation for day roosts impacted by the Project will be achieved through the installation of bat houses on site to replace lost roosts at a 1:1 ratio. Replacement roosts will be placed at the discretion of the qualified biologist.

Level of Significance after Mitigation: Less than Significant

7.2.4 Impact BIO-5: Protected Trees

If heritage or landmark trees would be removed or damaged as a result of the proposed project, Chapter 26D (Heritage or Landmark Tree Ordinance) would require a permit from Sonoma County. Removal of any protected trees without a tree permit from Sonoma County would be considered significant pursuant to CEQA.

This impact could be mitigated to a level considered less than significant.

Level of Significance before Mitigation: Potentially Significant

Mitigation Measure:

BIO-5: Protected Trees

Any proposed tree removal and work within tree drip lines would be evaluated by the County's staff pursuant to the Heritage or Landmark Tree Ordinance. Any tree permit approved for the proposed project would include conditions of approval for the restitution of any tree approved to be removed, protection of remaining trees where work may occur within the driplines of the trees, and any other protection measures prescribed by the Project's arborist. In accordance with the Heritage and Landmark Tree Ordinance, any Heritage or Landmark trees found to be on site shall be appropriately fenced beyond the dripline if they are to remain, or clearly marked if they are to be removed.

Mitigation for the removal of any protected trees could include either the planting of native trees on the project site or planting trees at a location approved of by the County in agreement with the project Applicant. Mitigation ratios will be calculated by the DBH of removed trees, in accordance with the Sonoma County Tree Protection Ordinance. Alternatively, the Applicant may be allowed to pay an in-lieu fee to the County. This would be determined by the County at the time the Applicant applies for a permit.

Level of Significance after Mitigation: Less than Significant

e. 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?

Level of Significance before Mitigation: No Impact

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Table 3. Plant Species Observed on the Adobe Road and Main Street Intersection Improvement Project Site

Scientific Name	Common Name	Family Name	Native?
Acacia melanoxylon	blackwood acacia	Fabaceae	N
Alnus rhombifolia	white alder	Betulaceae	Y
Atriplex prostrata	fat-hen	Chenopodiaceae	N
Avena barbata	slender oat	Poaceae	N
Avena fatua	wild oat	Poaceae	N
Bromus diandrus	ripgut brome	Poaceae	N
Bromus hordeaceus	soft brome	Poaceae	N
Bromus madritensis	foxtail brome	Poaceae	N
Carduus pycnocephalus	Italian thistle	Asteraceae	N
Conium maculatum	hemlock	Apiaceae	N
Cyperus eragrostis	tall flatsedge	Cyperaceae	Y
Epilobium brachycarpum	annual fireweed	Onagraceae	Y
Epilobium ciliatum	fringed fireweed	Onagraceae	Y
Festuca perennis	Italian ryegrass	Poaceae	N
Galium aparine	cleavers	Rubiaceae	Y
Geranium dissectum	cutleaf geranium	Geraniaceae	N
Geranium robertianum	Robert's herb	Geraniaceae	N
Hedera helix	English ivy	Araliaceae	N
Helminthotheca echioides	bristly ox-tongue	Asteraceae	N
Hordeum murinum	wall barley	Poaceae	N
Hypochaeris radicata	flatweed	Asteraceae	N
Juncus bufonius	common toad rush	Juncaceae	Y
Lactuca serriola	prickly lettuce	Asteraceae	N
Lathyrus latifolius	everlasting pea	Fabaceae	N
Lysimachia arvensis	scarlet pimpernel	Primulaceae	N
Lythrum hyssopifolia	hyssop loosestrife	Lythraceae	N
Medicago polymorpha	bur clover	Fabaceae	N
Phalaris paradoxa	hood canarygrass	Poaceae	N
Poa annua	annual bluegrass	Poaceae	N
Polypogon monspeliensis	rabbitsfoot grass	Poaceae	

Scientific Name	Common Name	Family Name	Native?
Prunus sp.	plum	Rosaceae	-
Quercus agrifolia	coast live oak	Fagaceae	Y
Quercus kelloggii	black oak	Fagaceae	Y
Raphanus sativus	wild radish	Brassicaceae	N
Rubus armeniacus	Himalayan blackberry	Rosaceae	N
Rumex crispus	curly dock	Polygonaceae	N
Salix laevigata	red willow	Salicaceae	Y
Sequoia sempervirens	redwood	Cupressaceae	Y
Sonchus oleraceus	common sowthistle	Asteraceae	N
Typha latifolia	bulrush	Typhaceae	Y
Ulmus sp.	elm	Ulmaceae	Y
Vicia sativa	common vetch	Fabaceae	

Table 4. Wildlife Species Observed on the Adobe Road and Main Street Intersection Improvement Project Site

Scientific Name	Common Name
Aphelocoma californica	California scrub-jay
Baeolophus inornatus	oak titmouse
Cathartes aura	turkey vulture
Certhia americana	brown creeper
Corvus brachyrhynchos	American crow
Junco hyemalis	dark-eyed junco
Melospiza melodia	song sparrow
Melozone crissalis	California towhee
Psaltriparus minimus	bushtit
Sayornis nigricans	black phoebe

Appendix A.

Adobe Road and Main Street Intersection Improvement Project Preliminary Site Plan

ADOBE ROAD

MAIN STREET

PETALUMA HILL ROAD

OAK STREET

RANCHO ADOBE COURT

MODIFY CURB RETURN AND RAMPS

MODIFY CURB RETURN

MODIFY CURB RETURN

RELOCATE UTILITY WOOD POLE (BY OTHERS)

CONSTRUCT CURB RETURN

REMOVE OR RELOCATE UTILITY WOOD POLE (BY OTHERS)

RELOCATE UTILITY WOOD POLE (BY OTHERS)

RETAINING WALL

4' Min

11'

4'

FROM

TO

FROM

TO

25+00 26+00 27+00 28+00 29+00 30+00 31+00 32+00 33+00 34+00 35+00 36+00

55+00 56+00 57+00 58+00 59+00 60+00 61+00 62+00

N

LEGEND

- PAVEMENT WIDENING
- EXISTING RIGHT-OF-WAY / PARCEL LINE
- PERMANENT RIGHT-OF-WAY ACQUISITION
- TEMPORARY CONSTRUCTION EASEMENT
- MODIFY EXISTING SIGNAL
- EXISTING UTILITY WOOD POLE
- RELOCATED UTILITY WOOD POLE

0 40 80
GRAPHIC SCALE 1"=40'

COUNTY OF SONOMA
PUBLIC INFRASTRUCTURE
JOHANNES J. HOEVERTSZ, P.E., DIRECTOR

PROJECT OVERVIEW

ADOBE ROAD AND MAIN STREET INTERSECTION IMPROVEMENT PROJECT

Appendix B.

Aquatic Resources Delineation Map

Sample Points
Box Culvert
Drain Inlet
Control Points
CMP Culvert
Study Area (~ 2.7 Acres)
Roadside Ditch 1 (~132 Lin. Ft, 396 Sq. Ft, .009 Acre)
Intermittent Drainage 1 (~192 Lin. Ft, 2,360 Sq. Ft, .053 Acre)
Top-of-Bank / Edge Of Riparian Canopy

Control Point 38.301111, -122.666111

Penngrove
RONSHEIMER RD
MAIN ST

1B 1A 2B 2A Drain Inlet CMP Culvert 3A 3B Box Culvert

Box Culvert
Drain Inlet

4B 4A

Control Point 38.297778, -122.666389

0 50 100 200 Feet
0 15 30 60 Meters

Scale: 1 inch = 100 feet

1:1,200

Author: AurelieMuckenhirn
Coordinate System: NAD 1983 2011
StatePlane California III FIPS 0403 Ft US

SEQUOIA Ecological Consulting, Inc.

Service Layer Credits: USGS The National Map: National Boundaries Dataset, 3DEP Elevation Program, Geographic Names Information System, National Hydrography Dataset, National Land Cover Database, National Structures Dataset, and National Transportation Dataset; USGS Gap Analysis Program (GAP); TIGER/Line data; USFS Road Data; Natural Earth Data; U.S. Department of State Humanitarian Information Unit; and NOAA National Centers for Environmental Information U.S. Coastal Relief Model. Data refreshed August, 2021., Maxar, Microsoft

Document Path: F:\GIS\Projects\KimleyHorn\PennGrove IntersectionKH_PennGroveIntersectionBRR\KH_PennGroveIntersectionBRR.aprx

Appendix C.

USFWS Information for Planning and Consultation System Report

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Sacramento Fish And Wildlife Office
Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846
Phone: (916) 414-6600 Fax: (916) 414-6713

In Reply Refer To: June 01, 2022
Project Code: 2022-0048931
Project Name: Penngrove Intersection Improvements Project

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)

(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see https://www.fws.gov/birds/policies-and-regulations.php.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures see https://www.fws.gov/birds/bird-enthusiasts/threats-to-birds.php.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit https://www.fws.gov/birds/policies-and-regulations/executive-orders/e0-13186.php.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Sacramento Fish And Wildlife Office
Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846
(916) 414-6600

Project Summary

Project Code: 2022-0048931
Event Code: None
Project Name: Penngrove Intersection Improvements Project
Project Type: Road/Hwy - Maintenance/Modification
Project Description: The Adobe Road and Main Street/Petaluma Hill Rd Intersection Improvements project in Penngrove consists, in general of the widening and restriping of Main Street in order to add a left turn lane on the southern leg of the intersection, paving all the legs of the intersection with an asphalt concrete overlay, replacement of signal loop detectors and restriping of the entire intersection. The project may also include the addition of a paved walking path on the northern side of Adobe Rd on the western leg of the intersection from the intersection to the school driveway, which could require a retaining feature.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@38.29968945,-122.66597587145937,14z

Counties: Sonoma County, California

Endangered Species Act Species

There is a total of 12 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Birds

NAME	STATUS
Northern Spotted Owl *Strix occidentalis caurina* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/1123	Threatened
Yellow-billed Cuckoo *Coccyzus americanus* Population: Western U.S. DPS There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/3911	Threatened

Reptiles

NAME	STATUS
Green Sea Turtle *Chelonia mydas* Population: East Pacific DPS No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6199	Threatened

Amphibians

NAME	STATUS
California Red-legged Frog *Rana draytonii* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/2891	Threatened
California Tiger Salamander *Ambystoma californiense* Population: U.S.A. (CA - Sonoma County) There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/2076	Endangered

Insects

NAME	STATUS
Monarch Butterfly *Danaus plexippus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

Crustaceans

NAME	STATUS
California Freshwater Shrimp *Syncaris pacifica* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/7903	Endangered

Flowering Plants

NAME	STATUS
Burke's Goldfields *Lasthenia burkei* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4338	Endangered
Sebastopol Meadowfoam *Limnanthes vinculans* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/404	Endangered
Showy Indian Clover *Trifolium amoenum* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6459	Endangered
Sonoma Alopecurus *Alopecurus aequalis var. sonomensis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/557	Endangered
Sonoma Sunshine *Blennosperma bakeri* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1260	Endangered

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

IPaC User Contact Information

Agency: County of Sonoma
Name: Jesse Reebs
Address: 1342 Creekside Drive
City: Walnut Creek
State: CA
Zip: 94596
Email jesse.reebs@gmail.com
Phone: 9258555500

Appendix D.

NMFS Online Species List Query Report

Sonoma County Public Infrastructure Adobe Road and Main Street Intersection Improvements Project – NMFS Species Lists. Project occurs on the following USGS 7.5-minute quadrangle:

- • Cotati – 38122-C6

Quad Name **Cotati**

Quad Number **38122-C6**

ESA Anadromous Fish

SONCC Coho ESU (T) -

CCC Coho ESU (E) - **X**

CC Chinook Salmon ESU (T) - **X**

CVSR Chinook Salmon ESU (T) -

SRWR Chinook Salmon ESU (E) -

NC Steelhead DPS (T) -

CCC Steelhead DPS (T) - **X**

SCCC Steelhead DPS (T) -

SC Steelhead DPS (E) -

CCV Steelhead DPS (T) -

Eulachon (T) -

sDPS Green Sturgeon (T) -

ESA Anadromous Fish Critical Habitat

SONCC Coho Critical Habitat -

CCC Coho Critical Habitat - **X**

CC Chinook Salmon Critical Habitat -

CVSR Chinook Salmon Critical Habitat -

SRWR Chinook Salmon Critical Habitat -

NC Steelhead Critical Habitat -

CCC Steelhead Critical Habitat - **X**

SCCC Steelhead Critical Habitat -

SC Steelhead Critical Habitat -

CCV Steelhead Critical Habitat -

Eulachon Critical Habitat -

sDPS Green Sturgeon Critical Habitat -

ESA Marine Invertebrates

Range Black Abalone (E) -

Range White Abalone (E) -

ESA Marine Invertebrates Critical Habitat

Black Abalone Critical Habitat -

ESA Sea Turtles

East Pacific Green Sea Turtle (T) -

Olive Ridley Sea Turtle (T/E) -

Leatherback Sea Turtle (E) -

North Pacific Loggerhead Sea Turtle (E) -

ESA Whales

Blue Whale (E) -

Fin Whale (E) -

Humpback Whale (E) -

Southern Resident Killer Whale (E) -

North Pacific Right Whale (E) -

Sei Whale (E) -

Sperm Whale (E) -

ESA Pinnipeds

Guadalupe Fur Seal (T) -

Steller Sea Lion Critical Habitat -

Essential Fish Habitat

Coho EFH - **X**

Chinook Salmon EFH - **X**

Groundfish EFH -

Coastal Pelagics EFH -

Highly Migratory Species EFH -

MMPA Species (See list at left)

ESA and MMPA Cetaceans/Pinnipeds
See list at left and consult the NMFS Long Beach office
562-980-4000

MMPA Cetaceans -

MMPA Pinnipeds -