ALTA IRRIGATION DISTRICT

LONDON WEST POND PROJECT

DRAFT INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

TULARE COUNTY
DECEMBER 2025

PREPARED FOR:
Alta Irrigation District
289 N L St, Dinuba, CA 93618

PREPARED BY:
PROVOST & PRITCHARD CONSULTING GROUP
455 W FIR AVE, CLOVIS, CA 93611

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Report Prepared for:
Alta Irrigation District
289 N. L Street
Dinuba, CA 93618

Contact:
Chad Wegley, General Manager
(559) 591-0800

Report Prepared by:
Provost & Pritchard Consulting Group

Briza Grace Sholars, Principal Planner, Environmental Project Manager, QAQC
Kyler Dill, Assistant Planner, Lead Technical Writer
Wyatt Czeshinski, Associate Planner, Technical Writer
Ben Toews, Associate GIS Specialist, Figures
Jackie Lancaster, Senior Project Administrator, Document Preparation

Contact:
Briza Grace Sholars, Principal Environmental Planner
(559) 449-2700

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ACRONYMS AND ABBREVIATIONS

AB ..... Assembly Bill
AID ..... Alta Irrigation District
APE ..... Area of Potential Effect
BMP ..... Best Management Practices
BPS ..... Best Performance Standards
CAA ..... (federal) Clean Air Act
CalEEMod ..... California Emissions Estimator Modeling (software)
CARB ..... California Air Resources Board
CCAA ..... California Clean Air Act
CDFW ..... California Department of Fish and Wildlife
CEQA ..... California Environmental Quality Act
CFCs ..... Chlorofluorocarbons
CFR ..... Code of Federal Regulations
CH_4 ..... Methane
CHRIS ..... California Historical Resources Information System
CNDDB ..... California Natural Diversity Database
CNPS ..... California Native Plant Society
CO ..... Carbone Monoxide
CO_2 ..... Carbon dioxide
CO_2e ..... Carbon dioxide equivalent
County ..... Tulare County
CWA ..... Clean Water Act
District ..... Alta Irrigation District
DOC ..... Department of Conservation
DTSC ..... Department of Toxic Substances Control
EFH ..... Essential Fish Habitat
EIR ..... Environmental Impact Report
FEMA ..... Federal Emergency Management Agency
FMMP ..... Farmland Mapping and Monitoring Program
FPPA ..... Farmland Protection and Policy Act
GHG ..... Greenhouse Gas
GSA ..... Groundwater Sustainability Agency

GSP ..... Groundwater Sustainability Plan

GWP ..... Global Warming Potential

H_2S ..... Hydrogen Sulfide

HFCs ..... Hydrofluorocarbons

IPaC ..... U.S. Fish and Wildlife Service's Information for Planning and Consultation system

IS ..... Initial Study

IS/MND ..... Initial Study/Mitigated Negative Declaration

KREGSA ..... Kings River East Groundwater Sustainability Agency

MBTA ..... Migratory Bird Treaty Act

MMRP ..... Mitigation Monitoring and Reporting Program

MND ..... Mitigated Negative Declaration

MOA ..... Memorandum of Agreement

MRZ ..... Mineral Resource Zones

MT ..... Metric Tons

NAHC ..... Native American Heritage Commission

ND ..... Negative Declaration

N_2O ..... Nitrous Oxide

NO_2 ..... Nitrogen Dioxide

NOx ..... Nitrogen Oxides

NMFS ..... National Marine Fisheries Service

NRCS ..... Natural Resources Conservation Service

O_3 ..... Ozone

PFCs ..... Perfluorocarbons

PG&E ..... Pacific Gas & Electric Company

PM_{10} ..... particulate matter 10 microns in size

$PM_{2.5}$ ..... particulate matter 2.5 microns in size

ppb ..... parts per billion

ppm ..... parts per million

Project ..... London West Pond Project

ROG ..... Reactive Organic Gases

RWQCB ..... Regional Water Quality Control Board

SDWA ..... Safe Drinking Water Act

SF_6 ..... Sulfur Hexafluoride

SGMA.....Sustainable Groundwater Management Act

SHPO.....State Historic Preservation Office

SIP .....State Implementation Plan

SJVAB.....San Joaquin Valley Air Basin

SJVAPCD .....San Joaquin Valley Air Pollution Control District

SLF .....Sacred Lands File

SO_2 .....Sulfur Dioxide

SO_x .....Sulfur Oxides

SSA .....Sole Source Aquifer

SSJVIC .....Southern San Joaquin Valley Information Center

SR .....State Route

SWPPP .....Storm Water Pollution Prevention Plan

SWRCB.....State Water Resources Control Board

TCEHD.....Tulare County Environmental Health Division

USACE.....United States Army Corps of Engineers

USBR.....United States Bureau of Reclamation

USEPA.....United States Environmental Protection Agency

USFWS.....United States Fish and Wildlife Service

USGS.....United States Geological Survey

µg/m3.....micrograms per cubic meter

WEAP.....Worker Environmental Awareness Program

CHAPTER 1 INTRODUCTION

Provost & Pritchard Consulting Group (Provost & Pritchard) has prepared this Initial Study/Mitigated Negative Declaration (IS/MND) on behalf of Alta Irrigation District (District or AID) to address the environmental effects of the London Pond West Project (Project). This document has been prepared in accordance with the California Environmental Quality Act (CEQA), Public Resources Code Section 21000 et seq. The District is the CEQA lead agency for this Project.

The site and the Project are described in detail in Chapter 2 Project Description.

1.1 REGULATORY INFORMATION

An Initial Study (IS) is a document prepared by a lead agency to determine whether a project may have a significant effect on the environment. In accordance with California Code of Regulations Title 14 (Chapter 3, Section 15000, *et seq.*)-- also known as the CEQA Guidelines--Section 15064 (a)(1) states that an environmental impact report (EIR) must be prepared if there is substantial evidence in light of the whole record that the Project under review may have a significant effect on the environment and should be further analyzed to determine mitigation measures or project alternatives that might avoid or reduce project impacts to less than significant levels. A negative declaration (ND) may be prepared instead if the lead agency finds that there is no substantial evidence in light of the whole record that the project may have a significant effect on the environment. An ND is a written statement describing the reasons why a proposed Project, not otherwise exempt from CEQA, would not have a significant effect on the environment and, therefore, why it would not require the preparation of an EIR (CEQA Guidelines Section 15371). According to CEQA Guidelines Section 15070, a ND or *mitigated* ND shall be prepared for a project subject to CEQA when either:

a. *The IS shows there is no substantial evidence, in light of the whole record before the agency, that the proposed Project may have a significant effect on the environment, or*
b. *The IS identified potentially significant effects, but:*
    1. *Revisions in the project plans or proposals made by or agreed to by the applicant before the proposed MND and IS is released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur is prepared, and*
    2. *There is no substantial evidence, in light of the whole record before the agency, that the proposed Project as revised may have a significant effect on the environment.*

1.2 DOCUMENT FORMAT

This IS/MND contains six chapters. Chapter 1 Introduction, provides an overview of the Project and the CEQA process. Chapter 2 Project Description, provides a detailed description of proposed Project components and objectives. Chapter 3 Determination, the Lead Agency's determination based upon this initial evaluation. Chapter 4 Environmental Impact Analysis presents the CEQA checklist and environmental analysis for all impact areas, mandatory findings of significance, and feasible mitigation measures. If the Project does not have the potential to significantly impact a given issue area, the relevant section provides a brief discussion of the reasons why no impacts are expected. If the Project could have a potentially significant impact on a resource, the issue area discussion provides a description of potential impacts, and appropriate mitigation measures and/or permit requirements that would reduce those impacts to a less than significant level. Chapter 5 Mitigation, Monitoring, and Reporting Program (MMRP), provides the proposed mitigation measures, implementation timelines, and the entity/agency responsible for ensuring

implementation. Chapter 6 References, details the documents and reports this document relies upon to provide its analysis.

The California Emissions Estimator Modeling (CalEEMod) Output Files, Biological Evaluation, and Phase I Cultural Resources Assessment are provided as technical Appendix A, Appendix B, and Appendix C, respectively, at the end of this document.

CHAPTER 2 PROJECT DESCRIPTION

2.1 PROJECT BACKGROUND

2.1.1 PROJECT TITLE

London West Pond Project

2.1.2 LEAD AGENCY NAME AND ADDRESS

Alta Irrigation District
289 N. L Street
Dinuba, CA 93618

2.1.3 CONTACT PERSON AND PHONE NUMBER

Lead Agency Contact

Chad Wegley
General Manager
(559) 591-0800

CEQA Consultant

Provost & Pritchard Consulting Group
Briza Grace Sholars, Environmental Project Manager
(559) 449-2700

2.1.4 PROJECT LOCATION

The proposed Project is located northwest of the community of London, California, approximately 25 miles south of Fresno and about 75 miles north of Bakersfield (see Figure 2-1 and Figure 2-2). The Project site is located on Assessor's Parcel Numbers 043-020-010 and 043-020-025. The centroid of the Project site is 36° 29' 02" N, 119° 26' 59" W.

2.1.5 GENERAL PLAN DESIGNATION AND ZONING

Project Area	General Plan Designation	Zoning District
ONSITE	Agriculture-Rural Valley Lands Project, Mixed Use	Rural/AG: A-1, Rural/Ag: AE-40
ADJACENT LANDS	Agriculture-Rural Valley Lands Project, Mixed Use	Rural/AG: A-1, Rural/Ag: AE-40

2.1.6 DESCRIPTION OF PROJECT

2.1.6.1 DISTRICT BACKGROUND

The District was formed in 1888 under the California Wright Act of 1887. AID is located on the east side of the San Joaquin Valley in Tulare, Fresno, and Kings Counties. The towns of Dinuba and Reedley are within the District's boundaries. The District boundaries encompass approximately 129,000 acres, including 111,000 cropped acres.

The District operates approximately 250 miles of open canals and 75 miles of pipelines. The District's surface water supply is from the Kings River, with irrigation releases from Pine Flat Dam. Groundwater recharge is a major function of the District. The District uses terminal reservoirs at the ends of laterals where water is allowed to percolate, which helps to prevent spill. Recharge facilities are located throughout the District for groundwater recharge. The District relies on the conjunctive use of groundwater and surface water supplies to meet the irrigation demand within the District. In order to maintain a stable groundwater supply, AID depends on water recharge during wet periods to augment additional groundwater pumping during the dry cycles.

The District is a member of the Kings River East Groundwater Sustainability Agency (KREGSA) which has adopted a Groundwater Sustainability Plan (GSP) to meet the requirements of the Sustainable Groundwater Management Act (SGMA). To help reach sustainability, the District has included several groundwater sustainability projects within KREGSA's GSP, including the Proposed Action described herein.

2.1.6.2 PROJECT DESCRIPTION

The District proposes to develop an approximately 80-acre recharge facility known as the London West Pond located northwest of the community of London in Tulare County. The proposed Project would be situated immediately to the west of the existing London Pond recharge facility. The new 80-acre recharge facility would consist of several cells and would connect to the existing Kennedy Schoolhouse Ditch pipeline. The pipeline would be replaced with an open ditch through the site. The proposed Project also includes a diversion, or spillway, on the east side of the property to allow for spill to the existing London Pond recharge facility. There are two existing wells on the Project site that would be available for use as recovery or monitoring wells. Stone fruit trees are located in the northern and southern portions of the Project site which would be cleared, while the rest of the site is fallowed.

2.1.6.3 CONSTRUCTION

Construction of the recharge facility would be completed over approximately six months, with construction beginning in the spring of 2026. The Project site would be cleared of the existing stone fruit crops. Construction equipment would likely include the following:

- Excavators,
- Bulldozers,
- Skid steers,
- Dump trucks,
- Loaders,
- Concrete pump truck,
- Graders, and
- Water truck.

Post-construction activities would include system testing, commissioning, and site clean-up. Construction would require temporary staging and storage of materials and equipment. Staging areas would be located onsite.

2.1.6.4 OPERATION AND MAINTENANCE

The District's operation of the new recharge facility would be consistent with the District's other similar facilities in that groundwater conditions would be monitored to minimize negative impacts on the

surrounding areas (such as nearby wells, crops, and septic systems). Maintenance would be on an as needed basis.

2.1.7 OTHER PUBLIC AGENCIES WHOSE APPROVAL MAY BE REQUIRED

Ministerial approvals and permits that may be required:

- State Water Resources Control Board (SWRCB) – for National Pollution Discharge Elimination System Construction General Permit (Storm Water Pollution Prevention Plan (SWPPP))
- San Joaquin Valley Air Pollution Control District (SJVAPCD) – Rules and Regulations (Regulation VIII, Rule 9510, Rule 4641)

2.1.8 CONSULTATION WITH CALIFORNIA NATIVE AMERICAN TRIBES

Public Resources Code Section 21080.3.1, *et seq. (codification of Assembly Bill (AB) 52, 2013-14)*) requires that a lead agency, within 14 days of determining that it will undertake a project, must notify in writing any California Native American Tribe traditionally and culturally affiliated with the geographic area of the project if that Tribe has previously requested notification about projects in that geographic area. The notice must briefly describe the project and inquire whether the Tribe wishes to initiate request formal consultation. Tribes have 30 days from receipt of notification to request formal consultation. The lead agency then has 30 days to initiate the consultation, which then continues until the parties come to an agreement regarding necessary mitigation or agree that no mitigation is needed, or one or both parties determine that negotiation occurred in good faith, but no agreement will be made.

2.1.9 "CEQA–PLUS" ASSESSMENT

The District may apply to the Unites States Bureau of Reclamation (USBR) or the Unites States Department of Agriculture for financial assistance to implement the proposed Project.

In addition to meeting the requirements of CEQA, and because the financial assistance could originate from the Federal government (USBR, in this case), the proposed Project is also subject to "federal cross-cutting authority" requirements of other federal laws and Executive Orders that apply in federal financial assistance programs. (This process is frequently referred to as "CEQA-Plus".) Therefore, the District must also complete certain studies and analyses to satisfy various federal environmental requirements. Once the CEQA document is adopted by the District, it is then sent to the federal Lead Agency for review before National Environmental Policy Act kick-off.

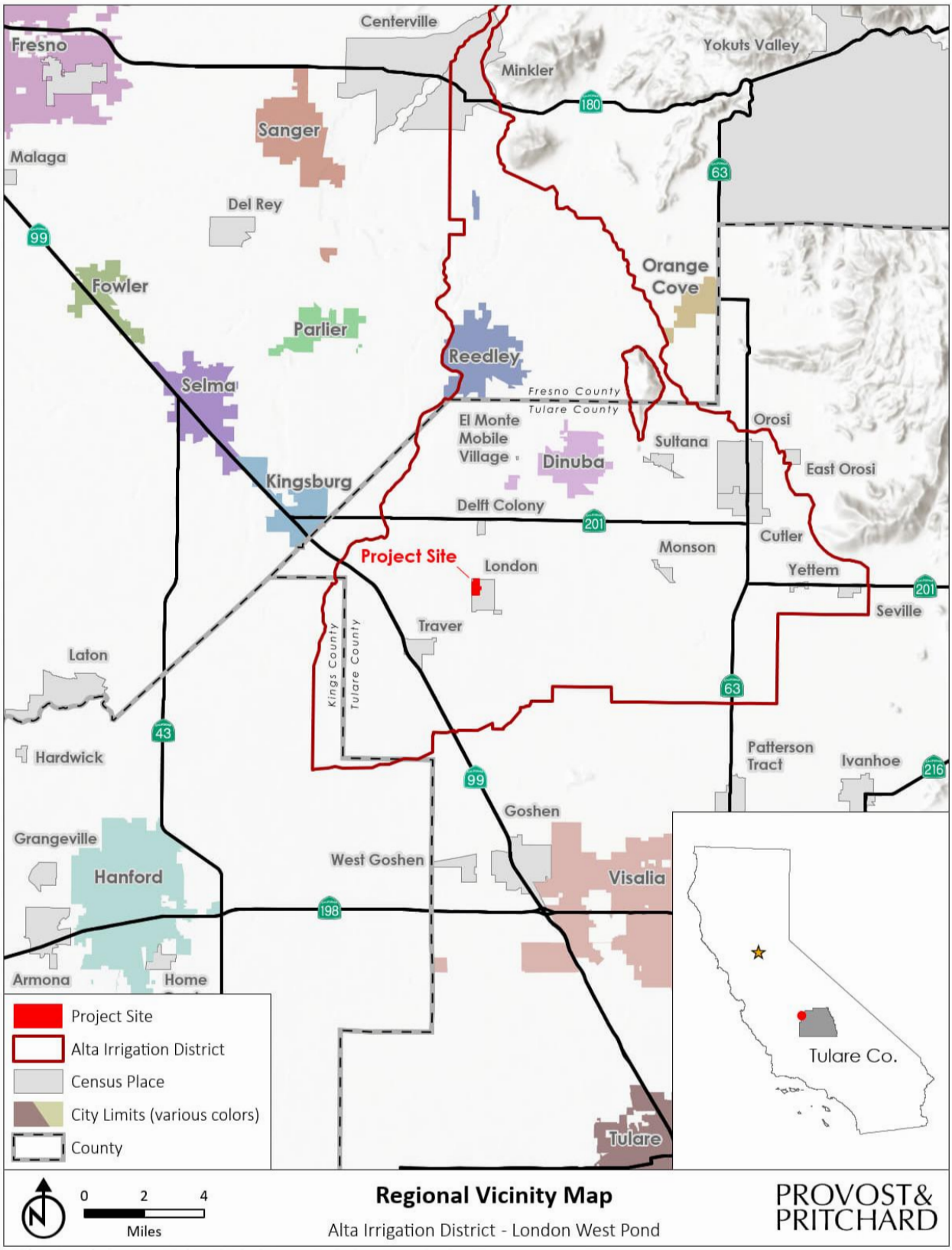

Figure 2-1: Regional Location Map

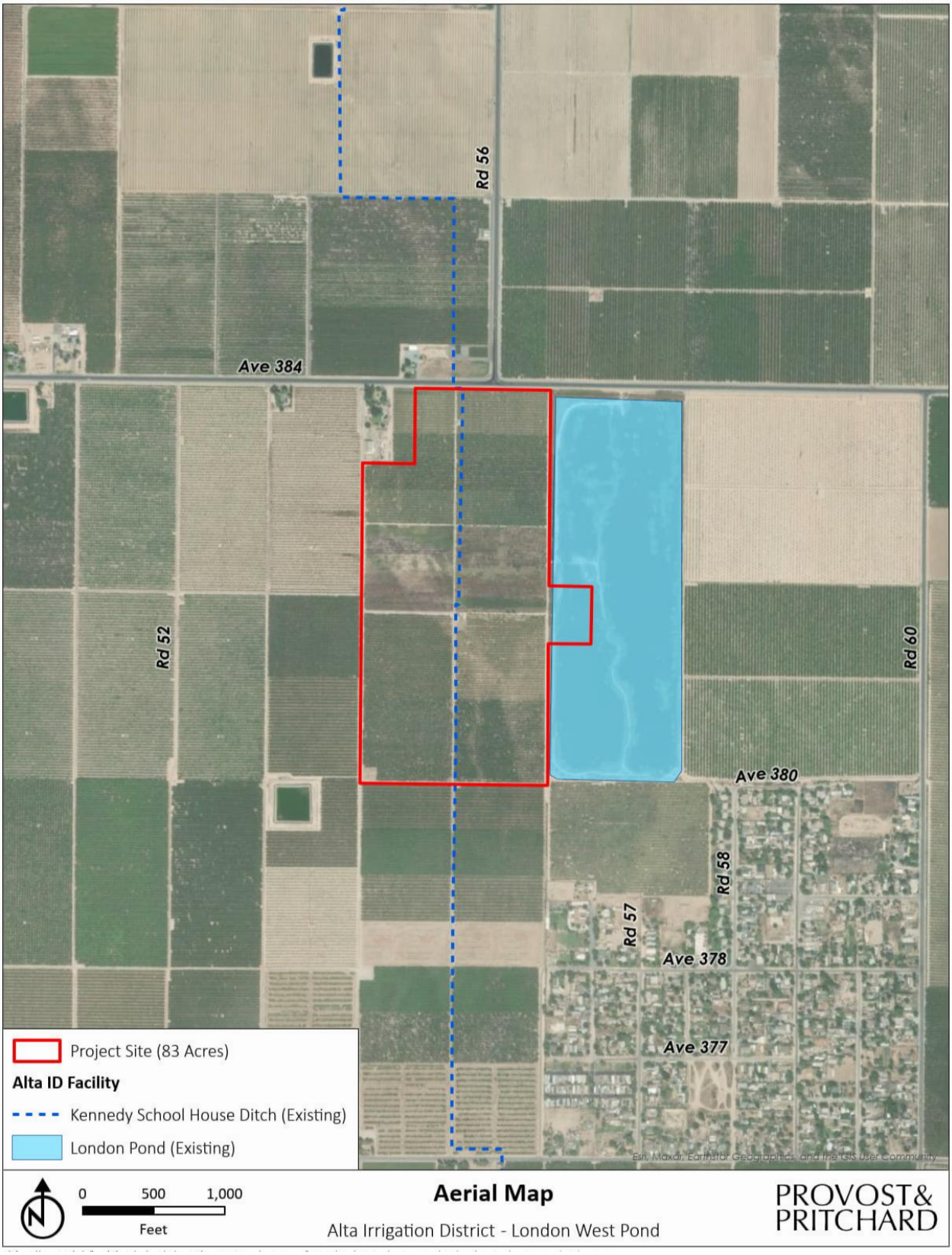

Figure 2-2: Aerial Map

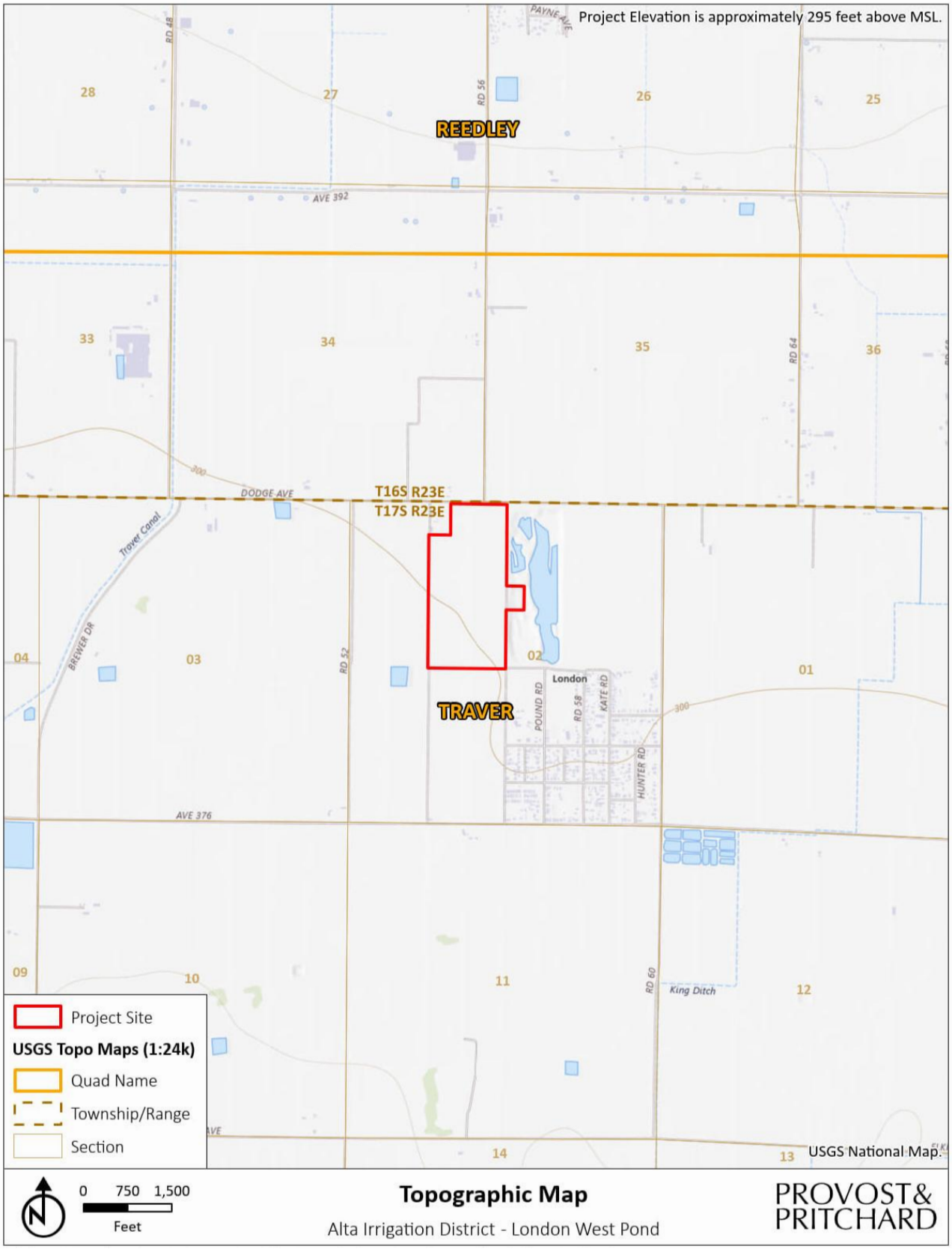

Figure 2-3: Topo Quad Map

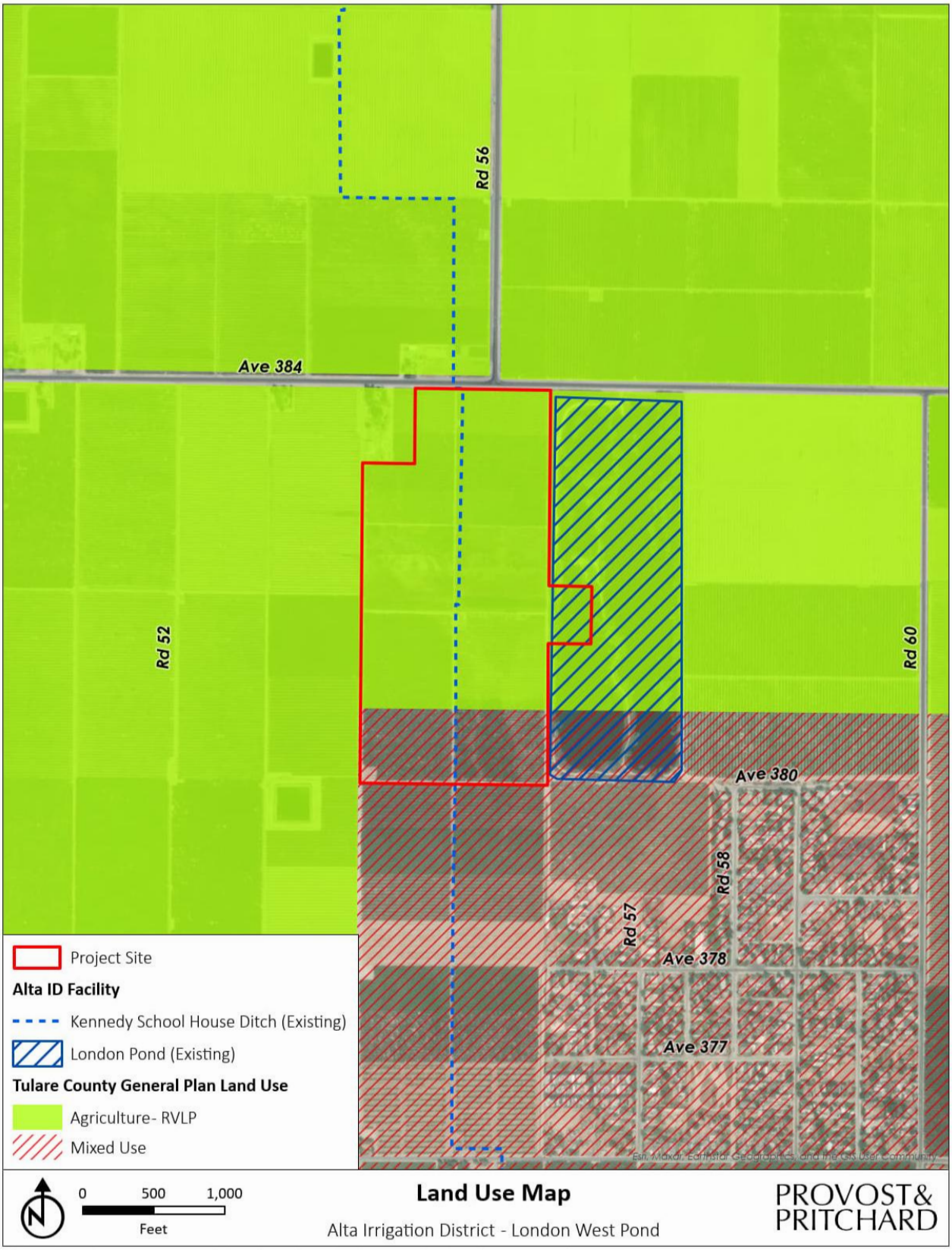

Figure 2-4: General Plan Land Use Designation Map

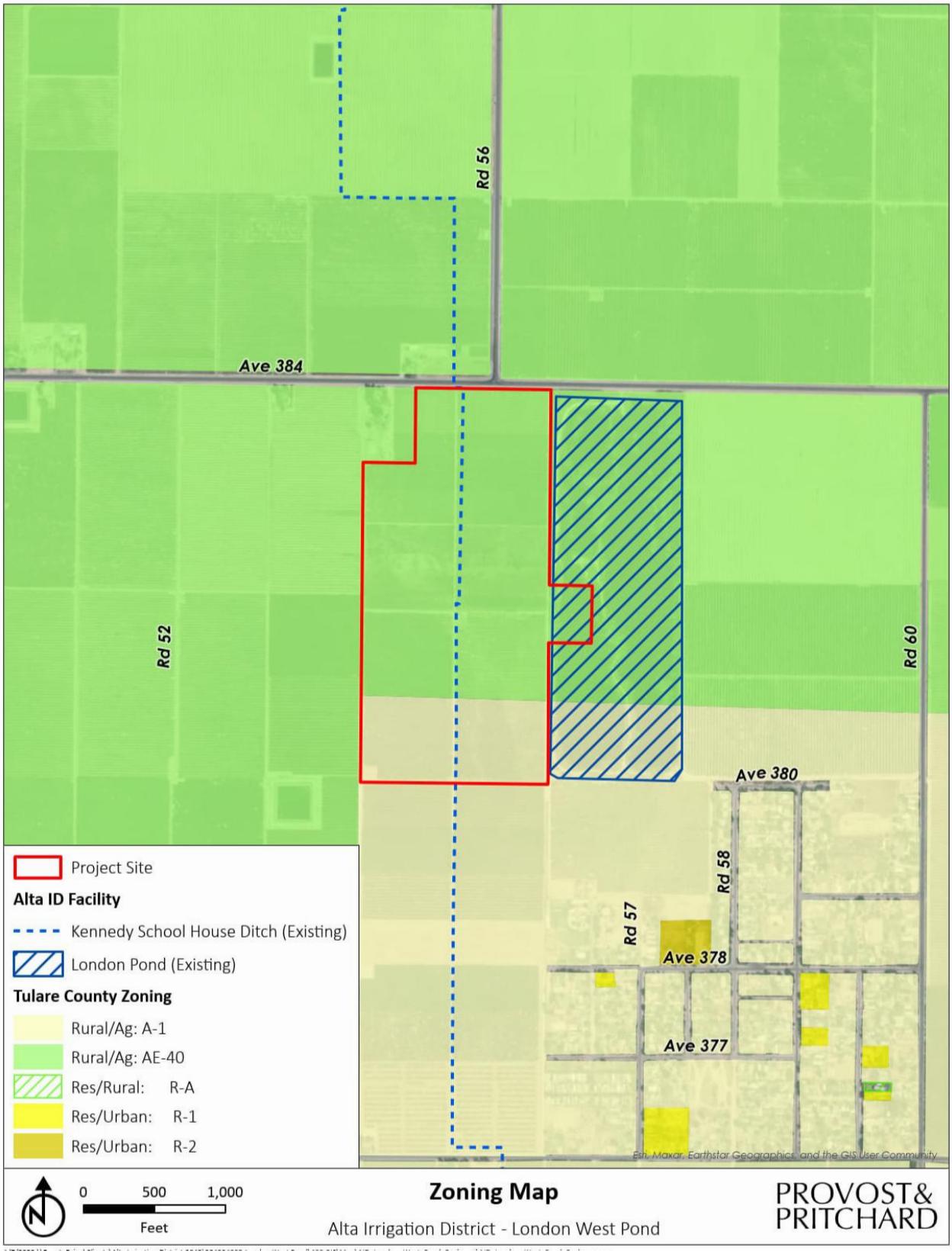

Figure 2-5: Zone District Map

CHAPTER 3 DETERMINATION

3.1 POTENTIAL ENVIRONMENTAL IMPACTS

As indicated by the discussions of existing and baseline conditions, and impact analyses that follow in this Chapter, environmental factors not checked below would have no impacts or less than significant impacts resulting from the project. Environmental factors that are. checked below would have potentially significant impacts resulting from the project. Mitigation measures are recommended for each of the potentially significant impacts that would reduce the impact to less than significant.

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

The analyses of environmental impacts in Chapter 4 Impact Analysis result in an impact statement, which shall have the following meanings.

Potentially Significant Impact. This category is applicable if there is substantial evidence that an effect may be significant, and no feasible mitigation measures can be identified to reduce impacts to a less than significant level. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

Less than Significant with Mitigation Incorporated. This category applies where the incorporation of mitigation measures would reduce an effect from a "Potentially Significant Impact" to a "Less than Significant Impact." The lead agency must describe the mitigation measure(s) and briefly explain how they would reduce the effect to a less than significant level (mitigation measures from earlier analyses may be cross-referenced).

Less than Significant Impact. This category is identified when the proposed Project would result in impacts below the threshold of significance, and no mitigation measures are required.

No Impact. This category applies when a project would not create an impact in the specific environmental issue area. "No Impact" answers do not require a detailed explanation if they are adequately supported by the information sources cited by the lead agency, which show that the impact does not apply to the specific project (e.g. the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g. the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

3.2 DETERMINATION

On the basis of this initial evaluation (to be completed by the Lead Agency):

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

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

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

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

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

Signature

12/7/2025
Date

Chad Wegley, General Manager
Printed Name/Position

CHAPTER 4 ENVIRONMENTAL IMPACT ANALYSIS

4.1 AESTHETICS

Table 4-1: Aesthetics Impacts

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

4.1.1 BASELINE CONDITIONS

The Project site is situated northwest of the community of London, in Tulare County (County), California. Lands in the proposed Project's vicinity consist of relatively flat, irrigated farmland and retired farmland, as well as the community of London. Scenic features in the area include the substantial expanse of agricultural uses in addition to distant views of the Sierra Nevada mountain range to the distant east.

According to the California Department of Transportation, the closest eligible and officially designated California State Scenic Highway is State Route (SR) 198, which is located approximately 12 miles to the southeast.[1] There are no known historic buildings in the immediate vicinity of the proposed recharge Project.

4.1.2 IMPACT ANALYSIS

a) Have substantial adverse effect on a scenic vista?

No Impact. The proposed Project includes construction of an approximately 80-acre recharge facility. Scenic features in the area include the vast expanse of agricultural uses. The proposed recharge facility would be constructed at approximately the same level as existing ground elevations in the areas, resulting in no potential views being obstructed. The proposed Project would be consistent with the overall

[1] (California Department of Transportation, 2018)

character of the surrounding areas and would not stand out in any remarkable manner. Additionally, an existing recharge facility is situated immediately to the east. As such, there would be no impact.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

No Impact. There are no identified scenic resources, trees, rock outcroppings, or historic buildings within the Project site. There would be no components of the proposed Project that would cause obstruction to the general public view of natural features, nor would the proposed Project have an adverse effect on a scenic view. The nearest scenic highway to the proposed Project is SR 198, which is situated approximately 12 miles from the Project site. As such the Project site is not visible from a designated scenic highway. There would be no impact.

c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Less than Significant Impact. The visual character of the Project area is mostly dominated by existing agricultural lands, rural infrastructure, and the rural community of London to the southeast. The recharge facility would be consistent with agricultural uses and other uses in the area, including the immediately adjacent existing recharge basin. Once construction activities are complete, the recharge facility would not substantially degrade the visual character of the area, fitting cohesively with adjacent farmland circumscribing the Project site. Moreover, the proposed recharge facility would be constructed at approximately the same level as existing ground elevations in the areas. There would be no impact.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

No Impact. There would not be any light fixtures being installed as part of the proposed Project. Vehicular traffic to the site after the facility is constructed would be limited to as needed daytime maintenance trips. Therefore, the proposed Project would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the area or be inconsistent with existing conditions. Therefore, there would be no impact.

4.1.3 FEDERAL CROSS-CUTTING TOPIC

4.1.3.1 WILD, SCENIC, AND RECREATIONAL RIVERS ACT

The National Wild and Scenic Rivers Act was established in 1968, to maintain the natural beauty, biology, and wildness of federally designated "wild," "scenic," or "recreational" rivers that may be threatened by construction of dams, diversions, and canals. The act seeks to preserve these designated rivers in their free-flowing condition, and to protect their immediate environments for the benefit and enjoyment of present and future generations. There are no "wild" or "scenic" rivers within or proximate to the Project site.

4.2 AGRICULTURE AND FORESTRY RESOURCES

Table 4-2: Agriculture and Forest Impacts

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

4.2.1 BASELINE CONDITIONS

The Project site is in a relatively flat area historically used for agriculture. The site is surrounded by land in agricultural use, including an existing recharge facility to the east. The land surrounding the Project site is zoned for agricultural use, with the majority being designated as Prime Farmland or Farmland of Statewide Importance, as well as nonagricultural or natural vegetation.

FARMLAND MAPPING AND MONITORING PROGRAM (FMMP): The California Department of Conservation's (DOC's) 2012 FMMP is a non-regulatory program that produces "Important Farmland" maps and statistical data used for analyzing impacts on California's agricultural resources. Agricultural land is rated according to soil quality and irrigation status; the best quality land is called Prime Farmland. The maps are updated every two years with the use of a computer mapping system, aerial imagery, public review, and field reconnaissance. The Important Farmland maps identify eight land use categories, five of which are agriculture related: Prime Farmland, Farmland of Statewide Importance, Unique Farmland, Farmland of Local Importance, and Grazing Land – rated according to soil quality and irrigation status. Each is summarized below:[2]

(State of California Department of Conservation, 2025)

- PRIME FARMLAND (P): Farmland with the best combination of physical and chemical features able to sustain long term agricultural production. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.
- FARMLAND OF STATEWIDE IMPORTANCE (S): Farmland similar to Prime Farmland but with minor shortcomings, such as greater slopes or less ability to store soil moisture. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.
- UNIQUE FARMLAND (U): Farmland of lesser quality soils used for the production of the state's leading agricultural crops. This land is usually irrigated but may include non-irrigated orchards or vineyards as found in some climatic zones in California. Land must have been cropped at some time during the four years prior to the mapping date.
- FARMLAND OF LOCAL IMPORTANCE (L): Land of importance to the local agricultural economy as determined by each county's board of supervisors and a local advisory committee.
- GRAZING LAND (G): Land on which the existing vegetation is suited to the grazing of livestock. The minimum mapping unit for Grazing Land is 40 acres.
- URBAN AND BUILT-UP LAND (D): Land occupied by structures with a building density of at least 1 unit to 1.5 acres, or approximately 6 structures to a 10-acre parcel. This land is used for residential, industrial, commercial, institutional, public administrative purposes, railroad and other transportation yards, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, water control structures, and other developed purposes.
- OTHER LAND (X): Land not included in any other mapping category. Common examples include low density rural developments; brush, timber, wetland, and riparian areas not suitable for livestock grazing; confined livestock, poultry or aquaculture facilities; strip mines, borrow pits; and water bodies smaller than 40 acres. Vacant and non-agricultural land surrounded on all sides by urban development and greater than 40 acres is mapped as Other Land.
- WATER (W): Perennial water bodies with an extent of at least 40 acres.

As demonstrated in Figure 4-1 depicting the FMMP for the Project site in the County, the Project site is Prime Farmland and Farmland of Statewide Importance.[3] Lands adjacent to the site are also designated as Prime Farmland and Farmland of Statewide Importance.

WILLIAMSON ACT: The Williamson Act, also known as the California Land Conservation Act of 1965, enables local governments to enter into contracts with private landowners for the purpose of restricting specific parcels of land to agricultural or related open space use. In return, landowners receive property tax assessments which are much lower than normal because they are based upon farming and open space uses as opposed to full market value.

The DOC assists all levels of government and landowners in the interpretation of the Williamson Act related government code. The DOC also researches, publishes, and disseminates information regarding the policies, purposes, procedures, and administration of the Williamson Act according to government code. Participating counties and cities are required to establish their own rules and regulations regarding implementation of the Act within their jurisdiction. These rules include, but are not limited to, enrollment guidelines, acreage minimums, enforcement procedures, allowable uses, and compatible uses. The Project site is presently under a Williamson Act Contract.

[3] Ibid.

4.2.2 IMPACT ANALYSIS

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

Less than Significant Impact. The Project site is designated as Prime Farmland and Farmland of Statewide Importance. The proposed Project would technically convert the land from its existing agricultural use to a use that is considered Urban and Built-Up Land pursuant to the FMMP; however, the main purpose of said conversion is to support ongoing agricultural endeavors by putting to use surface water that would have been lost to the service area and enhancing groundwater availability. The proposed Project would entail the construction of a recharge pond to utilize storm, flood, and other surface water that is not presently being put to use, which allows less groundwater to be pumped. The recharge facility would ultimately benefit water resources that may be used for agricultural lands in the vicinity and thereby prevent other agricultural lands from being fallowed due to inadequate or costly recovery of declining groundwater water or lack of surface water supplies. Since the Project site would continue to serve an agricultural purpose, implementation of the proposed Project would not result in the conversion of farmland to nonagricultural use. Additionally, groundwater replenishment associated with the proposed Project is consistent with the goals of the SGMA. Impacts would be less than significant

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

Less than Significant Impact. The California Government Code Section 53091(e) states, "[z]oning ordinances of a county or city shall not apply to the location or construction of facilities for the production, generation, storage, treatment, or transmission of water" and therefore cannot conflict with zoning for agricultural uses. The intent of the proposed Project is to store and recharge groundwater supplies, thereby sustaining agriculture. The proposed recharge facility would facilitate greater security of groundwater storage for District growers, inherently promoting the agricultural zoning in the County and Williamson Act intentions. As such, impacts would be less than significant.

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

d) Result in the loss of forest land or conversion of forest land to non-forest use?

c) and d) No Impact. There are no forests or timberland lands in the Project area or vicinity.[4] The proposed Project does not propose any rezoning; it would not convert forest land to non-forest use. There would be no impact.

e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

Less than Significant Impact. As previously mentioned, the proposed Project would convert the land from its existing agricultural use to a use that is considered Urban and Built-Up Land pursuant to the FMMP. Nonetheless, it would also benefit water resources that may be used for agricultural uses in the area. The proposed Project would likely result in continued farming on agricultural lands that might otherwise be fallowed due to lack of water. As such, impacts would be less than significant.

[4] (United States Forest Service)

4.2.3 FEDERAL CROSS-CUTTING TOPIC

4.2.3.1 FARMLAND PROTECTION ACT

The Farmland Protection and Policy Act (FPPA) was enacted in 1981 to minimize the loss of prime farmland and unique farmlands because of federal actions that converted these lands to non-agricultural uses. The act assures that federal programs are compatible with state and local governments, and private programs and policies to protect farmland.

As defined by the FPPA, prime farmland is farmland that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops, and also is available for these uses. A unique farmland is land other than prime farmland that is used for production of specific, high-value food and fiber crops; it has the special combination of soil quality, location, growing season, and moisture supply needed to economically produce sustained high quality or high yields of specific crops.

As previously concluded, the proposed Project is located on land classified by the DOC as Prime Farmland and Farmland of Statewide Importance. These classifications recognize a land's suitability for agricultural production by considering the physical and chemical characteristics of the soil, such as soil temperature range, depth of the groundwater table, flooding potential, rock fragment content, and rooting depth. The classifications also consider location, growing season, and moisture available to sustain high-yield crops. Together, Important Farmland and Grazing Land are defined by the DOC as "Agricultural Land."

The proposed Project would entail the construction of a recharge pond to replenish groundwater supplies by utilizing storm and flood water. Recharge ponds are exempt from the FPPA according to the FPPA Manual, Subpart B 523.11 C(iv) as the proposed Project involves a recharge pond that would help with water storage. The recharge pond would ultimately benefit water resources that may be used for agricultural lands in the vicinity and thereby prevent other agricultural lands from being unproductive or fallowed due to inadequate or costly recovery of declining groundwater water or lack of surface water supplies. Therefore, the proposed Project would not conflict with the FPPA or adversely affect prime or unique farmland.

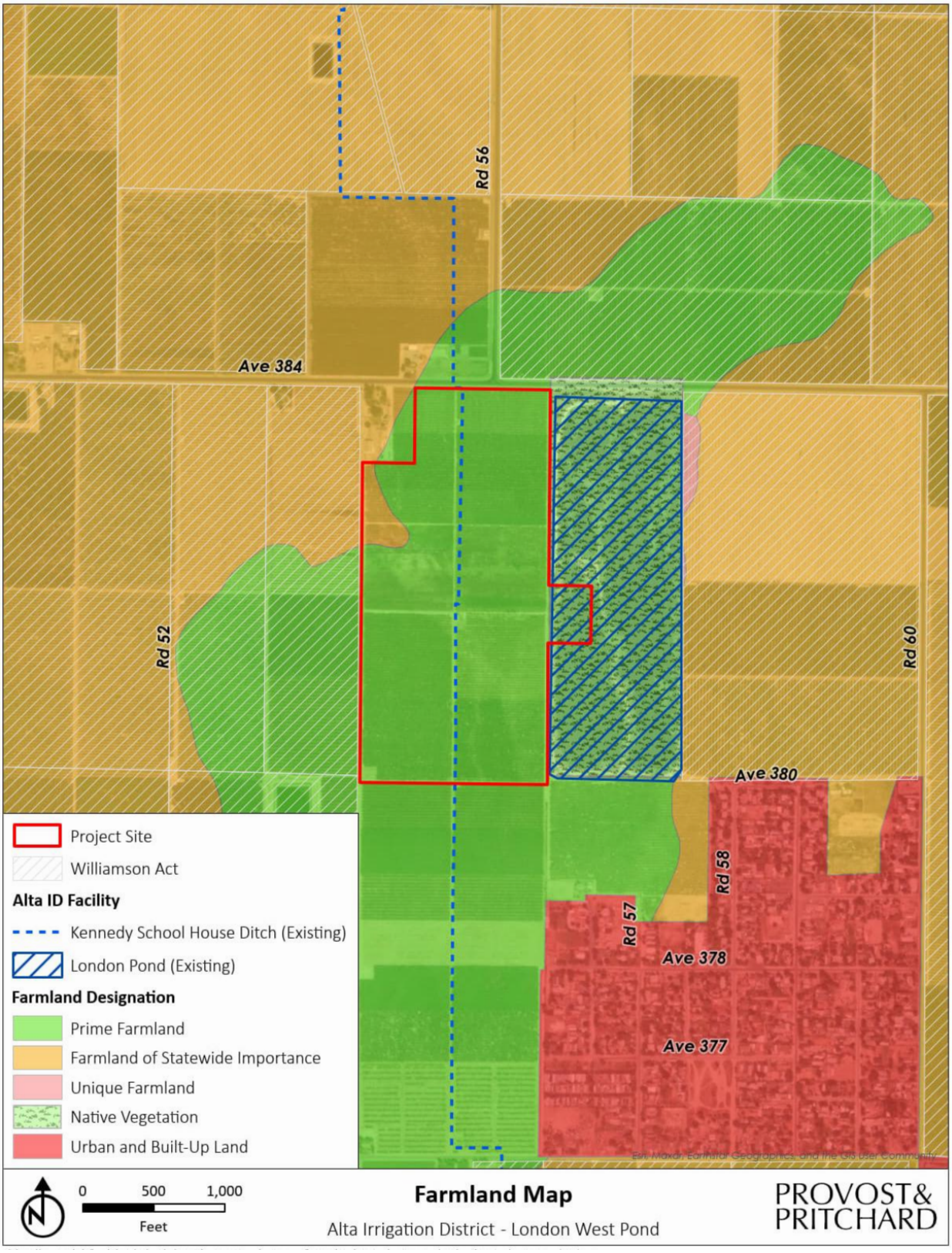

Figure 4-1: Farmland Designation Map

4.3 AIR QUALITY

Table 4-3: Air Quality Impacts

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

4.3.1 BASELINE CONDITIONS

The Project site is located within the boundaries of the San Joaquin Valley Air Pollution Control District (SJVAPCD) and the San Joaquin Valley Air Basin (SJVAB). The SJVAB is positioned within the San Joaquin Valley of California. The San Joaquin Valley is bounded by the Sierra Nevada Mountain Range to the east and the Coastal Mountain Range to the west. Wind within the SJVAB typically channels south-southwest during the summer months, while wind flows to the north-northwest during the winter months. Wind velocity for the region is considered low for an area of such size.[5] Due to a lack of strong wind and the natural confinement of the mountain ranges surrounding the SJVAB, the region experiences some of the worst air quality in the world.

Regulatory Attainment Designations

Under the California Clean Air Act (CCAA), the California Air Resources Board (CARB) is required to designate areas of the State as attainment, nonattainment, or unclassified with respect to applicable standards. An "attainment" designation for an area signifies that pollutant concentrations did not violate the applicable standard in that area. A "nonattainment" designation indicates that a pollutant concentration violated the applicable standard at least once, excluding those occasions when a violation was caused by an exceptional event, as defined in the criteria. Depending on the frequency and severity of pollutants exceeding applicable standards, the nonattainment designation can be further classified as serious nonattainment, severe nonattainment, or extreme nonattainment, with extreme nonattainment being the most severe of the classifications. An "unclassified" designation signifies that the data does not support either an attainment or nonattainment designation. The CCAA divides districts into moderate, serious, and severe air pollution categories, with increasingly stringent control requirements mandated for each category.

The United States Environmental Protection Agency (USEPA) designates areas for ozone (O_3), carbon monoxide (CO), and nitrogen dioxide (NO_2) as "does not meet the primary standards," "cannot be classified," or "better than national standards." For sulfur dioxide (SO_2), areas are designated as "does not meet the primary standards," "does not meet the secondary standards," "cannot be classified," or "better

[5] (San Joaquin Valley Air Pollution Control District, 2012)

than national standards." However, the CARB terminology of attainment, nonattainment, and unclassified is more frequently used. The USEPA uses the same sub-categories for nonattainment status: serious, severe, and extreme. In 1991, USEPA assigned new nonattainment designations to areas that had previously been classified as Group I, II, or III for particulate matter 10 microns in size (PM_{10}) based on the likelihood that they would violate national PM_{10} standards. All other areas are designated "unclassified."

According to the USEPA, Tulare County was in non-attainment for two pollutant concentrations, with particulate matter 2.5 microns in size $PM_{2.5}$ (2012) being classified as in serious non-attainment, and 8-hour Ozone (2015) classified as being in extreme non-attainment as of August 29th, 2025.[6]

Table 4-4: Summary of Ambient Air Quality Standards and Attainment Designation

Pollutant	Averaging Time	State Standard	Federal Standard	State Attainment Status	Federal Attainment Status
O_3	1 hour	0.09 ppm	N/A	Nonattainment/ Severe	N/A
	8 hours	0.070 ppm	0.070 ppm (4th highest in 3 years)	Nonattainment	Nonattainment/ Extreme
CO	1 hour	20 ppm	35 ppm	Attainment/ Unclassified	Attainment/ Unclassified
	8 hours	9.0 ppm	9 ppm	Attainment/ Unclassified	Attainment/ Unclassified
PM_{10}	24 hours	50 µg/m3	150 µg/m3 (expected number of days above standard < or equal to 1)	Nonattainment	Attainment
	Annual	20 µg/m3	N/A	Nonattainment	N/A
$PM_{2.5}$	24 hours	N/A	35 µg/m3	N/A	Nonattainment
	Annual	12 µg/m3	12.0 µg/m3	Nonattainment	
NO_2	1 hour	0.18 ppm	0.100 ppm	Attainment	Attainment/ Unclassified
	Annual	0.030 ppm	0.053 ppm		
SO_2	1 hour	0.25 ppm	0.075 ppm (99th percentile over 3 years)	Attainment	Attainment/ Unclassified
	3 hours	N/A	0.5 ppm	N/A	
	24 hours	0.04 ppm	0.14 ppm	Attainment	
	Annual	N/A	0.030 ppm	N/A	
LEAD	Monthly	1.5 µg/m3	N/A	Attainment	N/A
	Rolling 3-month average	N/A	0.15 µg/m3	N/A	Attainment/ Unclassified
SULFATES	24 hours	25 µg/m3	N/A	Attainment	N/A
H_2S	1 hour	0.03 ppm	N/A	Unclassified	N/A
VISIBILITY REDUCING PARTICLES (VRP)	8 hours	Visibility of 10 miles or more at relative humidity less than 70 %	N/A	Unclassified	N/A
VINYL CHLORIDE	24 hours	0.01 ppm	N/A	Attainment	N/A

** For more information on standards visit: https://ww3.arb.ca.gov/research/aaqs/aaqs2.pdf*
*** No Federal 1-hour standard. Reclassified extreme nonattainment for the Federal 8-hour standard August 29, 2025.*
****Secondary Standard*
Source: http://www.valleyair.org/aqinfo/attainment.htm. Accessed August 29, 2025.

[6] (United States Environmental Protection Agency, 2025)

Construction Generated Emissions

Construction of the proposed Project is assumed to be completed over approximately six months. Emissions associated with the Project were calculated using the CalEEMod Air Quality Model, Version 2022.1.1.30. The emissions modeling includes emissions generated by off-road equipment, haul trucks, and worker commute trips. Emissions were quantified based on anticipated construction schedules and the default parameters contained in the model. Localized air quality impacts associated with the proposed Project would be minor and were qualitatively assessed. Modeling assumptions and output files are included in Appendix A.

Thresholds of Significance

Air pollutant emissions have regional effects and localized effects. This analysis assesses the regional effects of the proposed Project's criteria pollutant emissions in comparison to SJVAPCD thresholds of significance for short-term construction activities of the proposed Project. Due to the passive nature of the Project, long-term operational emissions are considered negligible. Localized emissions from Project construction and operation are also assessed using concentration-based thresholds that determine if the proposed Project would result in a localized exceedance of any ambient air quality standards or would make a cumulatively considerable contribution to an existing exceedance.

The primary pollutants of concern during Project construction and operation are reactive organic gases (ROG), nitrogen oxides (NO_X), PM_{10}, and $PM_{2.5}$. The SJVAPCD Guide for Assessing and Mitigating Air Quality Impacts, adopted in 2015, contains thresholds for ROG and NO_X; Sulfur Oxides (SO_X), CO, PM_{10}, and $PM_{2.5}$.

Ozone is a secondary pollutant that can be formed miles away from the source of emissions through reactions of ROG and NO_X emissions in the presence of sunlight. Therefore, ROG and NO_X are termed ozone precursors. The SJVAB often exceeds the State and national ozone standards. Therefore, if the proposed Project emits a substantial quantity of ozone precursors, the Project may contribute to an exceedance of the ozone standard. The SJVAB also exceeds air quality standards for PM_{10}, and $PM_{2.5}$; therefore, substantial Project emissions may contribute to an exceedance for these pollutants.

The SJVAPCD adopted significance thresholds for construction-related and operational ROG, NO_X, PM, CO, and SO_X, these thresholds are included in Table 4-5.

Table 4-5: Project-Level Air Quality CEQA Thresholds of Significance

Pollutant	Significance Threshold	
	Construction Emissions (tons/year)	Operational Emissions (tons/year)
CO	100	100
NO_x	10	10
ROG	10	10
SO_x	27	27
PM_{10}	15	15
$PM_{2.5}$	15	15

Source: SJVAPCD. 2015. Guidance for Assessing and Mitigating Air Quality Impacts. Website: https://ww2.valleyair.org/media/g4nl3p0g/gamaqi.pdf. Accessed August 29, 2025.

4.3.2 IMPACT ANALYSIS

Short-Term Construction Generated Emissions

Estimated construction-generated emissions are summarized in Table 4-6.

Table 4-6: Unmitigated Short-Term Construction Generated Emissions of Criteria Air Pollutants

Source	Annual Emissions (Tons per Year)					
	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Maximum Annual Project Construction Emissions	0.21	1.86	1.92	<0.005	0.29	0.16
SJVAPCD Threshold	*10*	*10*	*100*	*27*	*15*	*15*
Threshold Exceeded?	No	No	No	No	No	No

Maximum Daily Emissions of Criteria Air Pollutants

Daily construction emissions generated by the proposed Project are summarized in Table 4-7.

Table 4-7: Maximum Daily Emissions of Criteria Air Pollutants

Source	Daily Emissions Maximum (in pounds)					
	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Construction – Summer	3.23	29.2	29.6	0.06	6.45	3.79
Construction – Winter	6.31	54.5	59.6	0.11	8.53	4.92
SJVAPCD Threshold	*100*	*100*	*100*	*100*	*100*	*100*
Threshold Exceeded?	No	No	No	No	No	No

a) Would the project conflict with or obstruct implementation of the applicable air quality plan?

No Impact. The proposed Project would not conflict with or obstruct implementation of any applicable air quality plan. The proposed Project would not exceed any threshold for air quality emissions that has been set by the SJVAPCD. Therefore, there would be no impact.

b) Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

Less than Significant Impact. The proposed Project would not result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is in non-attainment. As shown in Table 4-6, and Table 4-7, the proposed Project would not exceed an emissions threshold which has been set by the SJVAPCD for construction related emissions. Due to the passive nature of the proposed Project, operational emissions would be negligible. Therefore, impacts would be less than significant.

c) Would the project expose sensitive receptors to substantial pollutant concentrations?

Less than Significant Impact. Construction related emissions, shown in Table 4-6, and Table 4-7, would be temporary in nature and would cease upon Project construction. Short-term construction activities, however, could result in temporary increases in pollutant concentrations that could impact nearby sensitive receptors. Sensitive Receptors are groups that would be more affected by air, noise, and light pollution, pesticides, and other toxic chemicals than others. This includes infants, children under 16, elderly over 65, athletes, and people with cardiovascular and respiratory diseases. High concentrations of these groups would include daycares, residential areas, hospitals, elder care facilities, schools and parks. The proposed Project would be located in rural Tulare County, with some rural residential homes within the vicinity of the site. While the proposed Project would be located in an area near sensitive

receptors, the Project would not exceed the daily emission thresholds set by the SJVAPCD. Additionally, work completed as a part of the proposed Project would not be concentrated on one portion of the site, rather it would move about the site as construction progresses. This reduces the potential for any sensitive receptors to be significantly impacted by the proposed Project. Therefore, impacts would be less than significant.

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

Less than Significant Impact. During construction activities, construction equipment exhaust and other construction applications would temporarily emit odors. Construction would be completed on land within rural Tulare County and could have an effect on some rural residences that would be located near the construction area of the proposed Project. Construction of the proposed Project would be temporary, and odors would not remain after Project completion. Therefore, impacts would be less than significant.

4.3.3 FEDERAL CROSS-CUTTING TOPIC

4.3.3.1 CLEAN AIR ACT (CAA)

Under the federal CAA, federal actions conducted in air basins that are not in attainment with the federal ozone standard (such as the SJVAB) must demonstrate conformity with the State Implementation Plan (SIP). Conformity to a SIP is defined in the federal CAA as meaning conformity to a SIP's purpose of eliminating or reducing the severity and number of violations of the national standards and achieving an expeditious attainment of such standards. The SJVAPCD has published Regulation IX, Rule 9110 (referred as the General Conformity Rule) that indicates how most federal agencies can make such a determination.[7]

The SJVAPCD specifies that a project is conforming to the applicable attainment or maintenance plan if it:

- *complies with all applicable SJVAPCD rules and regulations,*
- *complies with all applicable control measures from the applicable plans, and*
- *is consistent with the growth forecast in the applicable plans.*

The SJVAPCD does not require a detailed quantification of construction emissions unless the project's indirect source emissions are expected to increase pollutant emissions of ROG or NO_X in excess of 10 tons per year. Because construction of the proposed Project would not exceed this threshold, the proposed Project would comply with the conformity criteria.

[7] The SJVAPCD's Rule 9110 is consistent with USEPA 's General Conformity Rule, Determining Conformity of General Federal Actions to State or Federal Implementation Plans (40 CFR, Part 93), available online at http://www.valleyair.org/rules/currntrules/r9110.pdf.

4.4 BIOLOGICAL RESOURCES

Table 4-8: Biological Resources Impacts

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☐	☐	☒
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☒	☐	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

4.4.1 BASELINE CONDITIONS

4.4.1.1 TOPOGRAPHY

The Project site is located within the United States Geological Survey (USGS) 7.5-minute *Traver* quadrangle within the northwest and northeast corners of Section 02, Township 17 South, Range 23 East. The topography of the Project site is relatively flat with elevations ranging from approximately 297 to 310 feet above mean sea level.



Figure 4-2: Project Site Photo



Figure 4-3:Project Site Photo



Figure 4-4: Project Site Photo



Figure 4-5: Project Site Photo

4.4.1.2 CLIMATE

Like most of California, the Project area experiences a Mediterranean climate. Warm, dry summers are followed by cool, moist winters. In the summer, average high temperatures range between 89- and 97-degrees Fahrenheit (°F), but do not often exceed 103 °F, and the humidity is generally low. Winter temperatures are often below 42°F during the day and rarely exceed 43°F. On average, the census-designated place of London receives approximately 13 inches of precipitation in the form of rain yearly, most of which occurs between October and April, and the Project site would be expected to receive similar amounts of precipitation.

4.4.1.3 HYDROLOGY

The nearest surface water to the Project site is the London Pond, a section of the pond to the east is part of the Project site, and Kennedy School House Ditch, which runs north to south through the middle portion of the Project site, which is also part of the proposed Project. London Pond receives its water from King's River. Stormwater and snowmelt runoff from upland areas of the Sierra Nevada Range supply the Kings River both above and below Pine Flat Lake. Water is directed through a series of irrigation canals before flowing into the Kennedy School House Ditch. London Pond is currently utilized as a detention basin for irrigation water.

4.4.1.4 SOILS

Two soil mapping units representing two soil types were identified within the Project site and are listed in Table 4-9. The soils are displayed with their core properties in the table below, according to the Major Land Resource Area of California. Both soils are primarily used for dairy and cattle production, building site development, cropland, and wildlife habitat.

Table 4-9: List of Soils Located on the APE and Their Basic Properties

Soil	Soil Map Unit	Percent of APE	Hydric Soil Category	Drainage	Permeability	Runoff
Calgro-Calgro	Saline-Sodic, complex, 0 to 2 percent slopes	3.2%	Predominantly nonhydric	Moderately well drained	Moderate permeability above the duripan, very slow in the duripan, and rapid below the duripan	Low or medium
Hanford	Sandy loam, 0 to 2 percent slopes	96.8%	Nonhydric	Well drained	Moderate rapid	Negligible to low

Hydric soils are defined as soils that are saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions such that under sufficiently wet conditions, hydrophytic vegetation can be supported. Hydric soil ratings are derived from specific soil properties as well as climate, parent material, vegetation, landform type, and biological activity of a certain location. None of the major but one of the minor soil mapping units located on the Project site was identified as hydric.

4.4.1.5 BIOTIC HABITATS WITHIN THE PROJECT AREA

Three biotic habitats were observed within the Project site and included orchard, pond, and ruderal. These habitats and their constituent plant and animal species are described in more detail in the following sections.

Orchard

The majority of the Project site consists of an approximately 57-acre peach (*Prunus persica*) orchard in the northern and southern portions of the site, with patches of vegetation growing around the tree trunks. Dirt roads ran through the middle and around the perimeter of the orchards. The Kennedy School House Ditch is an underground pipe that runs north to south through the middle of the site. There is also a utility line roughly 25 feet from the middle dirt road that also runs north to south through the Project site.

The survey resulted in the observation of the following plant species: barnyard grass (*Echinochloa crus-galli*), sprangletop (*Diplachne fusa*), and common sowthistle (*Sonchus oleraceus*). The survey resulted in the observation of the following wildlife species: California ground squirrel (*Otospermophilus beecheyi*), western kingbird (*Tyrannus verticalis*), black phoebe (*Sayornis nigricans*), desert cottontail (*Sylvilagus audubonii*), Eurasian collared dove (*Streptopelia decaocto*), and common raven (*Corvus corax*). The orchard habitat could serve as foraging and nesting habitat for a variety of birds, including raptors, during the day, as well as coyotes (*Canis latrans*), and other nocturnal animals at night.

Detention Pond

Approximately 2.5-acres of the eastern portion of the London Pond is a part of the proposed Project, where the proposed spillway will occur. The pond appears to hold water throughout the year and consists of a sandy access road, an embankment between the road with common and non-native vegetation growing on them. A few willow trees (*Salix sp.*) were located along the edges of the pond within the Project site, and one was located further east into the pond. The water depth appeared to vary between a few inches to several feet within the pond. Trash and debris were present throughout the site.

The survey resulted in the observation of the following plant species: turkey tangle (*Phyla nodiflora*), sacred datura (*Datura wrightii*), willows, Spanish clover (*Acmispon americanus*), Canadian horseweed (*Erigeron canadensis*), shortpod mustard (*Hirschfeldia incana*), curly dock (*Rumex crispus*), purpletop vervain (*Verbena bonariensis*), puncture vine (*Tribulus terrestris*), shepherd's purse (*Capsella bursa-pastoris*), telegraph weed (*Heterotheca grandiflora*), and Johnsongrass (*Sorghum halepense*). The survey resulted in the observation of the following wildlife and domestic species: western kingbird, turkey vulture (*Cathartes aura*), black phoebe, Cooper's hawk (*Accipiter cooperii*), American bullfrog (*Rana catesbeiana*), cliff swallow (*Petrochelidon pyrrhonota*), lesser goldfinch (*Spinus psaltria*), and domestic dog (*Canis familiaris*). The Project site could serve as foraging and nesting habitat to a variety of birds, including raptors, during the day, year-round habitat for reptiles and amphibians, such as the California red-sided gartersnake (*Thamnophis sirtalis infernalis*) and Sierran treefrog (*Pseudacris sierra*) as well as nocturnal species such as striped skunks (*Mephitis mephitis*).

Ruderal

Between the north and south sections of the orchard are two ruderal fields that make up approximately 17-acres of the Project site and are also separated on all sides by the dirt roads. The fields were disked relatively recently, so the ground had a thin layer of dry crust but was still soft underneath. The fields also had vegetation of common and non-native species of plants growing in both fields, and the utility lines continued north to south through the fields.

The plant species observed during the survey included common sunflower (*Helianthus annuus*), wire lettuce (*Stephanomeria pauciflora*), Bermuda grass (*Cynodon dactylon*), Canadian horseweed, and lamb's quarters (*Chenopodium album*). The Project site could serve as nesting habitat for ground-nesting birds,

such as mourning doves (*Zenaida macroura*), and foraging habitat for seed-eating birds, such as finches (*Spinus sp.*) and sparrows (*Melospiza sp.*).

4.4.1.6 NATURAL COMMUNITIES OF SPECIAL CONCERN AND RIPARIAN HABITAT

Natural communities of special concern are those that are of limited distribution, distinguished by significant biological diversity, or home to special status species. The California Department of Fish and Wildlife (CDFW) has classified and mapped all natural communities in California. Just as the special status plant and animal species, these natural communities of special concern can be found within the California Natural Diversity Database (CNDDB). No natural communities of special concern or riparian habitat were identified within the Project site or the surrounding area.

4.4.1.7 DESIGNATED CRITICAL HABITAT

The United States Fish and Wildlife Service (USFWS) often designates areas of "critical habitat" when it lists species as threatened or endangered. Critical habitat is a specific geographic area that contains features essential for the conservation of a threatened or endangered species, which may require special management and protection. According to USFWS's Information for Planning and Consultation system (IPaC), designated critical habitat is absent from the Project site and vicinity.

4.4.1.8 WILDLIFE MOVEMENT CORRIDORS AND NATIVE WILDLIFE NURSERY SITES

Wildlife movement corridors are routes that animals regularly and predictably follow during seasonal migration, dispersal from native ranges, daily travel within home ranges, and inter-population movements. Movement corridors in California are typically associated with valleys, ridgelines, and rivers and creeks supporting riparian vegetation. Native wildlife nursery sites were observed within the pond habitat of the Project site, which consisted of upland and aquatic habitats that could be used by western pond turtles as a nursery site. But no wildlife movement corridors were observed within the Project site.

4.4.1.9 SPECIAL STATUS PLANTS AND ANIMALS

California contains several rare plant and animal species. In this context, "rare" is defined as a species known to have low populations or limited distributions. Conversion of habitats to accommodate human population growth in turn reduces the already-limited suitable habitat for rare species. This results in rare and sensitive species becoming increasingly more vulnerable to extirpation. State and federal regulations have provided the CDFW and USFWS with mechanisms for conserving and protecting the diversity of plant and animal species native to California. Numerous native plants and animals have been formally designated as "threatened" or "endangered" under state and federal endangered species legislation. Other formal designations include "candidate" for listing or "species of special concern" by CDFW. The California Native Plant Society (CNPS) has its list of native plants considered rare, threatened, or endangered. Collectively these animals and plants are referred to as "special status species."

A query of the CNDDB for occurrences of special status plant and animal species was conducted for the *Traver* USGS 7.5-minute quadrangles that contains the Project site, and for the eight surrounding USGS quadrangles: *Burris Park*, *Monson*, *Remnoy*, *Goshen*, *Visalia*, *Orange Cove South*, *Reedley*, and *Selma*. A query of the IPaC was also completed for the Project site. These species, and their potential to occur within the Project site, are listed in Table 4-10 and Table 4-11, below. Other special status species that did not show up in the CNDDB query, but have the potential to occur in the vicinity, are also included in Table 4-11. Species lists obtained from CNDDB and IPaC are available in Appendix B. All relevant sources of information, as well as field observations, were used to determine if any special status species have the potential to occur within the Project site.

Table 4-10:List of Special Status Plants with Potential to Occur on the APE and/or in the Vicinity

Species	Status*	Habitat	Occurrence within the APE
Alkali-sink goldfields (*Lasthenia chrysantha*)	CNPS 1B	Found in vernal pool and wet saline flat habitats in the San Joaquin Valley region at elevations below 700 feet. Bloms February – April.	**Absent**. Vernal pools were not observed within the Project site.
Brittlescale (Atriplex depressa)	CNPS 1B	Found in the Central Valley in alkaline or clay soils, typically in meadow or annual grassland habitats at elevations below 1,100 feet. Sometimes associated with vernal pools. Blooms June – October.	**Absent**. Suitable habitat was not observed within the Project site.
California alkali grass (*Puccinellia simplex*)	CNPS 1B	Found in the San Joaquin Valley and other parts of California in saline flats and mineral springs within valley grassland and wetland-riparian communities at elevations below 3,000 feet. Blooms March – May.	**Absent**. Suitable habitat was not observed within the Project site.
California satintail (*Imperata brevifolia*)	CNPS 2B	Often found in wet springs, meadows, streambanks, and floodplains and can also be found in coastal scrub, riparian scrub, Mojavean desert scrub, chaparral, and alkali seeps at elevations below 1,600 feet. Blooms September – May.	**Absent**. Suitable habitat was not observed within the Project site.
Coulter's goldfields (*Lasthenia glabrata* ssp. *coulteri*)	CNPS 1B	Found on alkaline and saline soils in vernal pool and playas in grassland habitats at elevations below 4,500 feet. Blooms April – May.	**Absent**. Suitable habitat was not observed within the Project site.
Earlimart orache (Atriplex cordulata var. erecticaulis)	CNPS 1B	Found in the San Joaquin Valley in saline and alkaline soils, typically within valley grasslands at elevations below 400 feet. Blooms August – September.	**Absent**. Suitable habitat was not observed within the Project site.
Heartscale (Atriplex cordulata var. cordulata)	CNPS 1B	Found in the Central Valley in saline or alkaline soils within shadscale scrub, valley grassland, and wetland-riparian communities at elevations below 250 feet. Blooms June – July.	**Absent**. Suitable habitat was not observed within the Project site.
Hoover's spurge (*Euphorbia hooveri*)	FT, CNPS 1B	Found in vernal pools within valley grassland, freshwater wetland, and riparian communities at elevations below 800 feet. Blooms July – September.	**Absent**. Suitable habitat was not observed within the Project site.
Lesser saltscale (*Atriplex minuscula*)	CNPS 1B	Found in the San Joaquin Valley in sandy, alkaline soils in alkali scrub, valley and foothill grassland, and alkali sink communities at elevations below 750 feet. Blooms April – October.	**Absent**. Suitable habitat was not observed within the Project site.
Recurved larkspur (Delphinium recurvatum)	CNPS 1B	Occurs in chenopod scrub cismontane woodland, and grassland habitats on poorly drained, fine, alkaline soils; often in valley saltbush or valley chenopod scrub communities at elevations between 100 and 2,600 feet. Blooms March – June.	**Absent**. Suitable habitat was not observed within the Project site.

Species	Status*	Habitat	Occurrence within the APE
San Joaquin adobe sunburst (*Pseudobahia peirsonii*)	FT, CE, CNPS 1B	Found in the San Joaquin Valley and the Sierra Nevada foothills in bare, dark, clay soils in valley and foothill grassland and cismontane woodland communities at elevations between 300 and 3,000 feet. Blooms March – May.	**Absent**. Suitable habitat was not observed within the Project site.
San Joaquin Valley Orcutt grass (*Orcuttia inaequalis*)	FT, CE, CNPS 1B	Found in the eastern San Joaquin Valley and the Sierra Nevada foothills in vernal pools within valley grassland, freshwater wetland, and wetland-riparian communities at elevations below 2,600 feet. Blooms April – September.	**Absent**. Suitable habitat was not observed within the Project site.
Sanford's arrowhead (*Sagittaria sanfordii*)	CNPS 1B	This species is an aquatic plant and is found in the San Joaquin Valley and other parts of California in freshwater marshes, ponds, canals, and ditches at elevations below 1,000 feet. Blooms May – October.	**Unlikely**. While the existing pond has suitable habitat features, such as a shallow water line in some areas of the Project site, the survey took place during this species' blooming period, and the species was not observed during the survey. The nearest recorded observation occurred five miles north-northeast of the Project site in 2014.
Spiny-sepaled button-celery (*Eryngium spinosepalum*)	CNPS 1B	Found in the Sierra Nevada foothills and the San Joaquin Valley in vernal pools, swales, and roadside ditches. Often associated with clay soils in vernal pools within grassland communities. Occurs at elevations between 50 and 4,200 feet. Blooms April – July.	**Absent**. Suitable habitat was not observed within the Project site.
Subtle orache (Atriplex subtilis)	CNPS 1B	Found in the San Joaquin Valley in saline depressions in alkaline soils within valley and foothill grassland communities at elevations below 300 feet. Blooms June – October.	**Absent**. Suitable habitat was not observed within the Project site.
Winter's sunflower (*Helianthus winteri*)	CNPS 1B	Found in the Sierra Nevada foothills on steep, south-facing grassy slopes, rock outcrops, and road-cuts at elevations ranging from 600 to 1,500 feet. Blooms year-round.	**Absent**. Suitable habitat was not observed within the Project site.

Table 4-11: List of Special Status Animals with Potential to Occur on the APE and/or in the Vicinity

Species	Status*	Habitat	Occurrence within the APE
Burrowing owl (Athene cunicularia)	CCE, CSSC	Resides in open, dry grasslands, deserts, scrublands, and other areas with low growing vegetation. Nests and roosts underground in existing burrows created by mammals, most often by ground squirrels, and human-made structures.	**Unlikely**. No small mammal burrows suitable for this species were observed within the Project site. The nearest recorded observation of this species occurred four miles north-northeast of the Project site in 2006 in a fallow vineyard.
California tiger Salamander – central California DPS (*Ambystoma californiense*)	FT, CT	Requires vernal pools or seasonal ponds for breeding and small mammal burrows for aestivation. Generally found in grassland and oak	**Absent**. Suitable adult and breeding habitat, including small mammal burrows were not observed within the Project site. While the pond

Species	Status*	Habitat	Occurrence within the APE
		savannah plant communities in central California from sea level to 1,500 feet in elevation. Can migrate up to 1.3 miles to breed.	habitat might be suitable breeding habitat, there is no habitat for the adult of the species outside the breeding season.
Conservancy fairy shrimp (*Branchinecta conservatio*)	FE	Found in large, turbid freshwater vernal pools in the Central Valley, from Tehama County in the north to Merced County in the south, with one outlying population in Ventura County's Interior Coast Ranges.	**Absent**. Vernal pools were not observed within the Project site.
Crotch's bumble bee (*Bombus crotchii*)	CCE	Occurs throughout coastal California, as well as east to the Sierra Nevada-Cascade crest, and south into Mexico. Food plant genera include snapdragons, scorpionweeds, primroses, poppies, and buckwheats. Nests are often located underground in abandoned rodent nests, or above ground in tufts of grass, old bird nests, rock piles, or cavities in dead trees. This species overwinters under leaf litter or soft soil.	**Absent**. The Project site lacked any food source or small mammal burrows for this species.
Fresno kangaroo rate (Dipodomys nitratoides exilis)	FE, CE	An inhabitant of alkali sinks and open grassland habitats in Merced, Kings, Fresno, and Madera counties. Prefers bare, alkaline, clay-based soils subject to seasonal inundation with more friable soil mounds around shrubs and grasses. The most recent recorded observation of this species in California was in 1992 in Fresno County.	**Absent**. Suitable habitat and small mammal burrows were not observed within the Project site.
Loggerhead shrike (*Lanius ludovicianus*)	CSSC	Frequents open habitats with sparse shrubs and trees, other suitable perches, bare ground, and low herbaceous cover. In the Central Valley, this species nests in riparian areas, desert scrub, and agricultural hedgerows.	**Possible**. Suitable foraging and nesting habitat were observed throughout the Project site. The nearest recorded observation occurred four miles south-southeast of the Project site in 1992.
Monarch butterfly (*Danaus plexippus*)	FPT	Roosts in wind-protected tree groves (eucalyptus, Monterey pine, cypress), with nectar and water sources nearby. Larval host plants consist of milkweeds. Winter roost sites extend along the Pacific Coast from northern Mendocino to Baja California, Mexico.	**Absent**. Suitable overwintering and foraging habitat were not observed within the Project site.
Northern California legless lizard (*Anniella pulchra*)	CSSC	Found primarily underground, burrowing in loose, moist, and sandy soil. Forages in loose soil and leaf litter during the day. Occasionally observed on the surface at dusk and night.	**Unlikely**. The only sandy area of the Project site was the access road within the pond habitat, and thus, it can be presumed that ongoing disturbance would deter this species from utilizing these areas. The nearest recorded observation occurred 12 miles south-southeast of the Project site in 1934.
Northern leopard frog (*Lithobates pipiens*)	CSSC	Inhabits grassland, wet meadows, potholes, forests, woodland, brushlands, springs, canals, bogs,	**Absent**. The Project site is outside the current distribution of this species.

Species	Status*	Habitat	Occurrence within the APE
		marshes, and reservoirs in scattered locations in California. Generally, prefers permanent water with abundant riparian vegetation.	
Northwestern pond turtle (*Actinemys marmorata*)	FPT, CSSC	An aquatic turtle of ponds, marshes, slow-moving rivers, streams, and irrigation ditches with riparian vegetation. Requires adequate basking sites and sandy banks or grassy open fields to deposit eggs.	**Possible**. Suitable adult including basking locations, and nesting sites were observed in the pond habitat of the Project site. The nearest recorded observation occurred 12 miles south-southeast of the Project site in 1879.
Pallid bat (Antrozous pallidus)	CSSC	Found in grasslands, chaparral, and woodlands, where it feeds on ground- and vegetationdwelling arthropods, and occasionally takes insects in flight. Prefers to roost in rock crevices, but may also use tree cavities, caves, bridges, and other human-made structures.	**Unlikely**. The species may forage within the Project site, but no roosting habitat was observed within the Project site. The nearest recorded observation occurred five miles north-northwest of the Project site in 2001.
San Joaquin kit fox (*Vulpes macrotis mutica*)	FE, CT	Opportunistically forages in a variety of habitats. Dens in burrows within alkali sink, valley grassland, and woodland habitats in valleys and adjacent foothills and in human-made structures in cities, rangeland, and agricultural areas. Occurs in the San Joaquin Valley and other smaller valleys to the west.	**Absent**. Suitable habitat was not observed within the Project site.
Swainson's hawk (*Buteo swainsoni*)	CT	Nests in large trees in open areas adjacent to grasslands, grain or alfalfa fields, or livestock pastures suitable for supporting rodent populations.	**Possible**. Suitable nesting habitat and prey items were observed within half a mile of the Project site. The nearest recorded observation occurred 3.5 miles west-southwest of the Project site in 2017.
Tipton kangaroo rat (Dipodomys nitratoides nitratoides)	FE, CE	Inhabits saltbush scrub and sink scrub communities in the Tulare Lake Basin of the southern San Joaquin Valley. This species needs soft friable soils to burrow.	**Absent**. Suitable habitat and small mammal burrows were not observed within the Project site.
Valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*)	FT	Lives in mature elderberry shrubs in the Central Valley and adjacent foothills from Tehama County south through Merced and Mariposa Counties with two scattered populations in Madera and Fresno Counties. Adults are active from March to June.	**Absent**. Elderberry shrubs were absent from the Project site.
Vernal pool fairy shrimp (*Branchinecta lynchi*)	FT	Occupies vernal and seasonal pools, with clear to tea-colored water, in grass or mud-bottomed swales, and basalt depression pools.	**Absent**. Vernal pools were absent within the Project site.
Vernal pool tadpole shrimp (*Lepidurus packardi*)	FE	Occurs in vernal pools, clear to tea-colored water, in grass or mud-bottomed swales, and basalt depression pools.	**Absent**. Vernal pools were absent within the Project site.
Western mastiff bat (Eumops perotis californicus)	CSSC	Found in open, arid to semi-arid habitats, including dry desert washes, flood plains, chaparral, oak woodland,	**Absent**. Suitable roosting habitat was absent from the Project site and surrounding area.

Species	Status*	Habitat	Occurrence within the APE
		open ponderosa pine forest, grassland, and agricultural areas, where it feeds on insects in flight. Roosts are most commonly in crevices in cliff faces but may also use high buildings and tunnels.	
Western spadefoot (*Spea hammondii*)	FPT, CSSC	The majority of the time this species is terrestrial and occurs in small mammal burrows and soil cracks, sometimes in the bottom of dried pools. Prefers open areas with sandy or gravelly soils, in a variety of habitats including mixed woodlands, grasslands, coastal sage scrub, chaparral, sandy washes, lowlands, river floodplains, alluvial fans, playas, alkali flats, foothills, and mountains. Vernal or seasonal pools, that hold water for a minimum of three weeks, are necessary for breeding.	**Unlikely**. The only sandy area of the Project site was the access road within the pond habitat, and thus, conditions on-site are less than marginal for this species. The nearest recorded observation was four miles south-southeast of the Project site in 2018 within creek habitat.
Western yellow-billed cuckoo (Coccyzus americanus occidentalis)	FT, CE	Suitable nesting habitat in California includes dense riparian willow-cottonwood and mesquite habitats along a perennial river. Once common in the California Central Valley, as well as coastal valleys and riparian habitats east of the Sierra Nevada, habitat loss now constrains the California breeding population to small numbers of birds.	**Absent.** The Project site is outside the current range of the species.

***EXPLANATION OF OCCURRENCE DESIGNATIONS AND STATUS CODES**

Present:	Species observed on the APEs at time of field surveys or during recent past.
Likely:	Species not observed on the APEs, but it may reasonably be expected to occur there on a regular basis.
Possible:	Species not observed on the APEs, but it could occur there from time to time.
Unlikely:	Species not observed on the APEs, and would not be expected to occur there except, perhaps, as a transient.
Absent:	Species not observed on the APEs and precluded from occurring there due to absence of suitable habitat.

STATUS CODES

FE	Federally Endangered	CE	California Endangered
FT	Federally Threatened	CCE	California Endangered (Candidate)
FC	Federal Candidate	CT	California Threatened
FPT	Federally Threatened (Proposed)	CFP	California Fully Protected
		CSSC	California Species of Special Concern

CALIFORNIA NATIVE PLANT SOCIETY (CNPS) LISTING

1B	Plants rare, threatened, or endangered in California and elsewhere.	2B	Plants rare, threatened, or endangered in California, but more common elsewhere.

4.4.2 IMPACT ANALYSIS

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

Less than Significant Impact with Mitigation Incorporated. A reconnaissance-level field survey of the Project site was conducted on July 28, 2025, by Provost & Pritchard biologist. The survey consisted of walking and driving throughout the Project site and visually surveying areas outside of the Project site

while identifying and noting land uses, biological habitats and communities, and plant and animal species encountered. Habitats were also assessed to help with determining if they could be suitable for various rare or protected plant and animal species.

Of the 16 regionally occurring special status plant species, all 16 are considered absent from or unlikely to occur within the Project site due to past or ongoing disturbance and/or the absence of suitable habitat. Since it is unlikely that these species would occur onsite, implementation of the proposed Project should have no impact on these 16 special status species through construction mortality, disturbance, or loss of habitat. Mitigation measures are not warranted.

Of the 20 regionally occurring special status animal species, 17 are considered absent from or unlikely to occur within the Project site due to past or ongoing disturbance and/or the absence of suitable habitat. These species include: burrowing owl, California tiger salamander, conservancy fairy shrimp, Crotch's bumble bee, Fresno kangaroo rat, monarch butterfly, northern California legless lizard, northern leopard frog, pallid bat, San Joaquin kit fox, Tipton kangaroo rat, valley elderberry long horned beetle, vernal pool fairy shrimp, vernal pool tadpole shrimp, western mastiff bat, western spadefoot, and western yellow-billed cuckoo. Since it is unlikely that these species would occur onsite, implementation of the proposed Project should have no impact on these 17 special status species through construction mortality, disturbance, or loss of habitat. Discussion of the remaining regionally occurring special status animal species follows.

Project-Related Mortality and/or Nest Abandonment of Migratory Birds, Raptors, and Special Status Birds

The site and adjacent areas contain suitable nesting and foraging habitat for a variety of protected bird species, such as migratory birds, raptors, and special status birds, including loggerhead shrike and Swainson's hawk. It is anticipated that during the nesting bird season, protected birds could nest on the ground or in shrubs and trees within, and adjacent to, the site and forage within the site. Protected birds located within or adjacent to the site during construction have the potential to be injured or killed by project-related activities. In addition to the direct "take" of protected birds within the site and adjacent areas, these birds nesting in these areas could be disturbed by project-related activities resulting in nest abandonment. Projects that adversely affect the nesting success of protected birds or result in the mortality of these birds would be a violation of state and federal laws and considered a potentially significant impact under CEQA. The proposed Project may take some foraging habitat of migratory birds; however, there is regionally available habitat.

Mitigation measures are warranted and are identified in Section 4.4.4 below. Implementation of mitigation measures **BIO-1**, **BIO-2**, **BIO-3**, **BIO-4**, and **BIO-5** will reduce potential impacts to migratory birds, raptors, and special status birds to a less than significant level under CEQA.

Project-Related Mortality and/or Disturbance to Northwestern Pond Turtle

The Project site contained pond habitat, in the form of the existing London Pond, which could be used by northwestern pond turtle for dispersal, basking, and nesting. Potentially significant impacts associated with Project activities could include inadvertent entrapment or direct mortality. Project activities that impact northwestern pond turtles would be considered a potentially significant impact under CEQA. Project activities within the existing pond would result in increased potential habitat for the Northwestern pond turtle.

Mitigation measures are warranted and are identified in Section 4.4.4 below. Implementation of mitigation measures **BIO-1**, **BIO-2**, **BIO-6**, **BIO-7**, **BIO-8**, and **BIO-9** will reduce potential impacts to migratory birds, raptors, and special status birds to a less than significant level under CEQA.

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

No Impact. Riparian habitat is absent from the Project site and adjacent lands. There are no CNDDB-designated "natural communities of special concern" recorded within the Project site or surrounding lands. There would be no impact.

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

No Impact. Typical wetlands, vernal pools, and other waters were absent from the Project site. There are no designated wild and scenic rivers within the Project site; therefore, the proposed Project would not result in direct impacts to wild and scenic rivers. Since construction would involve ground disturbance over an area greater than one acre, the proposed Project would also be required to obtain a Construction Stormwater General Permit under the Storm Water Program administered by the Regional Water Quality Control Board (RWQCB). A prerequisite for this permit is the development of a Storm Water Pollution Prevention Plan (SWPPP), so activities do not adversely affect water quality. There would be no impact.

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?

Less than Significant Impact with Mitigation Incorporated. The pond habitat within the Project site has suitable features that could be used as native wildlife nursery sites. Project-related impacts to any native wildlife nursery sites would be considered a significant impact under CEQA. The potential impacts to species that could use the pond, ruderal, and orchard habitat as a nursery site have been addressed in Mitigation Measures **BIO-4** and **BIO-7**. Implementation of these mitigation measures will reduce potential impacts to native wildlife nursery sites to a less than significant level under CEQA.

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?

e) and f) No Impact. The proposed Project appears to be consistent with the goals and policies of the Tulare County General Plan. There are no known Habit Conservation Plans or Natural Community Conservation Plans in the Project vicinity. There would be no impact, and mitigation measures are not warranted.

4.4.3 FEDERAL CROSS-CUTTING TOPIC

4.4.3.1 FEDERAL ENDANGERED SPECIES ACT

Regulations in the federal Endangered Species Act of 1973 and subsequent amendments govern the conservation of endangered and threatened species and the ecosystems on which they depend. USFWS and the National Marine Fisheries Service (NMFS) oversee the act. USFWS has jurisdiction over plants,

wildlife, and resident fish, and NMFS has jurisdiction over anadromous fish, marine fish, and mammals. Section 7 requires federal agencies to consult with USFWS and NMFS if they determine that a proposed project may affect a listed species or destroy or adversely modify designated critical habitat. Under Section 7, the federal lead agency must obtain incidental take authorization or a letter of concurrence, stating that the project is not likely to adversely affect federally listed species. Section 7 requirements do not apply to nonfederal actions. Because the USEPA is the source of SRF monies that may be distributed to Tulare County, its distribution is a federal action covered by Section 7.

Appendix B presents a Biological Evaluation intended to provide the basis for compliance with Section 7 of the ESA.

Section 9 prohibits take of any fish or wildlife species listed as endangered, including the destruction of habitat that prevents the species' recovery. "Take" is defined as any action or attempt to hunt, harm, harass, pursue, shoot, wound, capture, kill, trap, or collect a species. Section 9 prohibitions also apply to threatened species unless a special rule governing take was defined at the time the species became listed.

The take prohibition in Section 9 applies only to fish and wildlife species. However, Section 9 also prohibits the unlawful removal and possession, or malicious damage or destruction, of any endangered plant from federal land. Section 9 prohibits acts to remove, cut, dig up, damage, or destroy an endangered plant species in non-federal areas in knowing violation of any State law or in the course of criminal trespass. Candidate species and species that are proposed for or under petition for listing receive no protection under Section 9.

See further discussion regarding how the proposed Project would mitigate impacts to bring them to less than significant under checklist item a.

4.4.3.2 FISH AND WILDLIFE CONSERVATION ACT

The Fish and Wildlife Conservation Act (Act), approved September 29, 1980, declares that fish and wildlife are of ecological, educational, esthetic, cultural, recreational, economic, and scientific value to the Nation. The Act acknowledges that historically, fish and wildlife conservation programs have focused on more recreationally and commercially important species within any particular ecosystem, without provisions for the conservation and management of nongame fish and wildlife. The purposes of this Act are to encourage all federal departments and agencies to utilize their statutory and administrative authority, to the maximum extent practicable and consistent with each agency's statutory responsibilities and to conserve and to promote conservation of non-game fish and wildlife and their habitats. The Act authorizes financial and technical assistance to the States for the development, revision, and implementation of conservation plans and programs for nongame fish and wildlife. The Act defines "nongame fish and wildlife" as wild vertebrate animals in an unconfined state, that are not ordinarily taken for sport, fur or food, not listed as endangered or threatened species, and not marine mammals within the meaning of the Marine Mammal Protection Act. The original Act authorized $5 million for each of Fiscal Years 1982 through 1985, for grants for development and implementation of comprehensive State nongame fish and wildlife plans and for administration of the Act.

See further discussion regarding how the proposed Project would mitigate impacts to bring them to less than significant or how the proposed Project would have no impact under checklist items a, b, and d above.

4.4.3.3 MIGRATORY BIRD TREATY ACT

The Migratory Bird Treaty Act (MBTA) (Title 16, Section 703 and following sections of the United States Code [16 USC 703 et seq.]), first enacted in 1918, provides protection of international migratory birds and

authorizes the Secretary of the Interior to regulate the taking of migratory birds. The MBTA states that it is unlawful, except as permitted by regulations, to pursue, take, or kill any migratory bird, or any part, nest, or egg of any such bird. The current list of species protected by the MBTA is found under Title 50, Section 10.13 of the CFR (50 CFR 10.13). The list includes nearly all birds native to the United States.

In December 2017, the U.S. Department of the Interior's Office of the Solicitor issued a revised legal interpretation (Opinion M-37050) of the MBTA's prohibition on the take of migratory bird species. Opinion M-37050 concludes that "consistent with the text, history, and purpose of the MBTA, the statute's prohibitions on pursuing, hunting, taking, capturing, killing, or attempting to do the same apply only to affirmative actions that have as their purpose the taking or killing of migratory birds, their nests, or their eggs" (DOI 2017). According to Opinion M-37050, take of a migratory bird, its nest, or eggs that is incidental to another lawful activity does not violate the MBTA, and the MBTA's criminal provisions do not apply to those activities. Opinion M-37050 may affect how the MBTA is interpreted but does not legally change the regulation itself.

The U.S. Court of Appeals for the Ninth Circuit, the controlling federal appellate court for California, also has held that habitat modification that harms migratory birds "does not 'take' them within the meaning of the MBTA (Seattle Audubon Soc. v. Evans, 952 F.2d 297, 303, 1981).

See further discussion regarding how the proposed Project would mitigate impacts to bring them to less than significant under checklist item a.

4.4.3.4 BALD AND GOLDEN EAGLE PROTECTION ACT

The Bald and Golden Eagle Protection Act affords additional legal protection to bald eagles and golden eagles. This law prohibits the take, sale, purchase, barter, offer of sale, purchase, or barter, transport, export or import, at any time or in any manner of any bald or golden eagle, alive or dead, or any part, nest, or egg thereof (16 U.S. Code [USC] 668---668d). The Bald and Golden Eagle Protection Act also defines take to include "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest, or disturb," and includes criminal and civil penalties for violating the statute. USFWS further defines the term "disturb" as agitating or bothering an eagle to a degree that causes or is likely to cause injury, or either a decrease in productivity or nest abandonment by substantially interfering with normal breeding, feeding, or sheltering behavior.

See further discussion regarding how the proposed Project would mitigate impacts to bring them to less than significant under checklist item a.

4.4.3.5 MAGNUSON-STEVENS FISHERY CONSERVATION AND MANAGEMENT ACT

The Magnuson-Stevens Fishery Conservation and Management Act, as amended (16 USC 180 l), requires that Essential Fish Habitat (EFH) be identified and described in federal fishery management plans. Federal agencies must consult with NMFS on any activity that they fund, permit, or carry out that may adversely affect EFH. The EFH regulations require that federal agencies obligated to consult on EFH also provide NMFS with a written assessment of the effects of any action on EFH (50 CFR 600.920). NMFS is required to provide EFH conservation and enhancement recommendations to federal agencies. The statute also requires federal agencies receiving NMFS EFH conservation recommendations to provide a detailed written response to NMFS within 30 days of receipt, detailing how they intend to avoid, mitigate, or offset the impact of activity on EFH (Section 305[b][4][B]).

EFH is defined as those waters and substrates necessary to fish for spawning, breeding, feeding, or growth to maturity. For the purposes of interpreting the definition of EFH, "waters" includes aquatic areas and

their associated physical, chemical, and biological properties that are used by fish, and may include areas historically used by fish where appropriate; "substrate" includes sediment, hard bottom, structures underlying the waters, and associated biological communities; "necessary" means habitat required to support a sustainable fishery and a healthy ecosystem; and "spawning, breeding, feeding, or growth to maturity" covers all habitat types used by a species throughout its life cycle. No EFH is on the Project site.

4.4.3.6 CLEAN WATER ACT

4.4.3.6.1 SECTION 404

Section 404 of the Clean Water Act (CWA) requires project proponents to obtain a permit from the United States Army Corps of Engineers (USACE) before performing any activity involving a discharge of dredged or fill material into waters of the U.S. Waters of the U.S. include:

- *Navigable waters of the U.S.;*
- *Interstate waters;*
- *All other waters where the use or degradation or destruction of the waters could affect interstate or foreign commerce;*
- *Tributaries to any of these waters; and*
- *Wetlands that meet any of these criteria, or that are adjacent to any of these waters or their tributaries.*

Many surface waters and wetlands in California meet the criteria for waters of the U.S.

4.4.3.6.2 SECTION 402

CWA Section 402 regulates construction-related stormwater discharges to surface waters through the National Pollutant Discharge Elimination System program, which is administered by USEPA. In California, the State Water Resources Control Board is authorized by USEPA to oversee the program through the RWQCBs – in this case, the Central Valley (Region 5) RWQCB.

4.4.3.6.3 SECTION 401

Under CWA Section 401(a)(1), the applicant for a federal license or permit to conduct an activity that may result in a discharge into waters of the U.S. must provide the federal licensing or permitting agency with a certification that any such discharge will not violate state water quality standards. The RWQCBs administer the Section 401 program to prescribe measures for projects that are necessary to avoid, minimize, and mitigate adverse effects on water quality and ecosystems.

No State or federally protected wetlands or waters are on the Project site.

4.4.4 MITIGATION

General Project-Related Impacts

BIO-1 (WEAP Training): Prior to initiating construction activities (including staging and mobilization), all personnel associated with Project construction will attend a mandatory Worker Environmental Awareness Program (WEAP) training, conducted by a qualified biologist (someone familiar with the identification and habitats of these species), to aid workers in identifying special status resources that may occur in the Project site. The specifics of this program will include identification of the sensitive species and suitable habitats, a description of the regulatory status and general ecological characteristics of

sensitive resources, and review of the limits of construction and mitigation measures required to reduce impacts to biological resources within the work area. This training will discuss special status species, describe the laws and regulations in place to provide protection of these species, identify the penalties for violation of applicable environmental laws and regulations, and include a list of required protective measures to avoid "take." A fact sheet summarizing this information, along with photographs or illustrations of sensitive species with potential to occur on the Project site, will also be prepared for distribution to all contractors, their employees, and all other personnel involved with construction of the proposed Project. All trainees will sign a form documenting that they have attended WEAP training and understand the information presented to them.

BIO-2 (BMPs): The Project proponent will require that all workers employ the following best management practices (BMPs) in order to avoid and minimize potential impacts to special status species:

- Vehicles will observe a 15-mph speed limit while on unpaved access routes.
- All open trenches, holes, sumps, and other excavations greater than 6-inches with sidewalls steeper than a 1:1 (45 degree) slope will have an escape ramp of earth or a non-slip material with a less than 1:1 slope or these will be covered with barrier material such that animals are unable to dig or squeeze under the barrier and become entrapped.
- Workers will inspect areas beneath parked vehicles, equipment, and materials prior to mobilization. If special status species are detected, the individual will either be allowed to leave of its own volition or will be captured by the qualified biologist (must possess appropriate collecting/handling permits) and relocated out of harm's way to the nearest suitable habitat beyond the influence of the Project work area. "Take" of a state or federal special status (rare, California Species of Special Concern, threatened, or endangered) species is prohibited without the necessary federal or state take permit(s).
- The presence of any special status species will be reported to the proposed Project's qualified biologist, who will submit the occurrence to the CNDDB. If necessary, the biologist will report the occurrence to CDFW and/or USFWS.

Project-Related Mortality and/or Nest Abandonment of Migratory Birds, Raptors, and Special Status Birds

BIO-3 (Avoidance): The proposed Project's construction activities will occur, if feasible, between September 16 and January 31 (outside of the nesting bird season) to avoid impacts to nesting birds.

BIO-4 (Pre-Construction Surveys): If activities must occur within nesting bird season (February 1 to September 15), a qualified biologist will conduct a pre-construction survey for Swainson's hawk nests onsite and within a 0.5-mile radius within ten calendar days prior to the start of construction. This survey will be conducted in accordance with the Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley (Swainson's Hawk Technical Advisory Committee 2000), or current guidance. The survey would also include inspecting for nesting migratory birds

within up to 100 feet outside of the Project site and for other nesting raptors within up to 500 feet outside of the Project site. All raptor nests would be considered "active" upon the nest-building stage. If no active nests are observed, no further mitigation is required. If Project activities are halted for ten (10) consecutive days during the nesting bird season, a follow-up survey shall be completed before work can resume.

BIO-5 (Avoidance Buffers): On discovery of any active nests or breeding colonies near work areas, a qualified biologist will determine appropriate avoidance buffer distances based on applicable CDFW and/or USFWS guidelines, the biology of the species, conditions of the nest(s), and the level of Project disturbance. If necessary, avoidance buffers will be identified with flagging, fencing, or other easily visible means, and will be maintained until the biologist has determined that the nestlings have fledged.

Project-Related Mortality and/or Disturbance to Northwestern Pond Turtle

BIO-6 (Focused Survey and Avoidance Buffers): Within two weeks prior to the start of Project activities, a qualified biologist (someone familiar with the identification and habitat of this species) will conduct three site visits for northwestern pond turtle within the Project site will be conducted in accordance with the Oregon Department of Fish and Wildlife statewide protocol guidelines for visual surveys (Samara Group and Oregon Native Turtle Working Group 2020). If no northwestern pond turtles are observed during the focused surveys, then construction activities may begin. If construction is delayed or halted for more than seven (7) days, another pre-construction survey for northwestern pond turtle will be conducted. If the survey results in the identification of a northwestern pond turtle, the qualified biologist will determine appropriate buffers to be implemented to avoid impacts to the individual(s).

BIO-7 (Nesting Survey): If it is determined that western pond turtles are occupying the pond habitat, an additional nesting pond turtle survey will be performed by a qualified biologist. Prior to ground disturbance activity within the pond area of the Project site, a pond turtle nesting survey will be completed within 24 hours. If any evidence of western pond turtle nests or eggs is discovered during the survey, ground disturbance will be postponed until the expected emergence period of hatchlings has ended.

BIO-8 (Monitor): If northwestern pond turtles are discovered at any point of the proposed Project, a qualified biologist will conduct a pre-activity clearance survey each day and remain on the site to oversee all vegetation clearing and ground disturbance activities until Project activities within the pond area are completed.

BIO-9 (Formal Consultation): Should northwestern pond turtles become listed in this area, and the project/qualified biologist needs to move an individual, consultation for protection plans and/or relocation plans with the appropriate agencies will be completed to avoid take.

4.5 CULTURAL RESOURCES

Table 4-12: Cultural Resources Impacts

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

4.5.1 BASELINE CONDITIONS

4.5.1.1 RECORDS SEARCH

On August 4, 2025, Taylored Archaeology requested a cultural resource records search from the Southern San Joaquin Valley Information Center (SSJVIC) of the California Historical Resources Information System (CHRIS) at California State University in Bakersfield, California. The purpose of this request was to identify and review prior cultural resource studies and previously recorded cultural resources on or near the Project site. The records search included prior cultural resources investigation reports conducted and previously recorded resources within the Project site and the 0.5-mile radius of the Project site. Also included in research were cultural resource records as well as the Historic Properties Directory of the Office of Historic Preservation list, General Land Office Maps, Archaeological Determinations of Eligibility list, and the California Inventory of Historic Resources list.

The SSJVIC provided the records search results in a letter dated September 18, 2025 (Records Search File No. 25-327). According to the CHRIS records results, there are no prior cultural resources studies conducted within the Project boundary. However, there were five cultural resources studies previously conducted within a 0.5-mile radius. In addition, the CHRIS search also reported that there are no previously recorded cultural resources within the Project boundary nor any previously recorded cultural resources within a 0.5-mile radius.

4.5.1.2 ARCHIVAL RESEARCH

A search of historical USGS topographic maps from 1927 to present and historic aerial imagery from 1956 to present covering the Project site resulted in the Kennedy Schoolhouse Ditch existing as of 1927 and the London Pond to the east being a gravel pit as of 1969. No significant changes could be seen for the past several decades from how the site is now.

4.5.1.3 ARCHAEOLOGICAL PEDESTRIAN SURVEY

On August 23, 2025, Taylored Archaeology conducted an archaeological pedestrian survey within the Project site identified as approximately 83 acres. The Project site consisted of primarily an orchard (walnuts and peaches) and agricultural field.

At the time of the survey, ground visibility within the Project boundary was generally good throughout the orchard portion ranging from 90 to 100 percent. The cutout at the London Pond was covered in high thick weeds and annual grass. A small dirt road ran along the fence line from north to south. The ground visibility was poor in areas with vegetation and obscured by water in the London Pond, ranging from 0 to 5 percent. No evidence was observed on the ground surface of the Kennedy Schoolhouse Ditch depicted on historic topographic maps.

No prehistoric cultural resources were encountered within the Project site during the survey. While past agricultural and development activities may have potentially destroyed or obscured ground surface evidence of archaeological resources within the Project site, intact archaeological resources may potentially exist below the ground surface.

4.5.1.4 NATIVE AMERICAN OUTREACH

Taylored Archaeology requested a Sacred Lands File (SLF) search from the Native American Heritage Commission (NAHC) on August 4, 2025. The objective of the SLF search was to identify any known places of spiritual, sacred activity, or traditional use or other resources of importance. The NAHC responded on August 4, 2025, via e-mail with an attached letter, regarding Taylored Archaeology's request. The letter stated a search of the SLF was negative. The NAHC also included contact information of local Native American representatives who may have knowledge or interest in sharing information of resources of sacred significance present in or near the Project site. Each Native American representative listed by the NAHC was sent an outreach letter and a map notifying them of the proposed Project and asking if they had any knowledge of the Project area or surrounding vicinity. Follow-up communication was performed via email and phone calls, as appropriate, and Tule River Tribe Environmental Director Kerri Vera responded acknowledging receipt of the outreach letter and stated she would respond later that week. As of the date of the report (September 16, 2025), no further responses were received.

4.5.2 IMPACT ANALYSIS

a) Would the project cause a substantial adverse change in the significance of a historical resource pursuant to in § 15064.5?

b) Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?

a) and b) Less than Significant Impact with Mitigation Incorporated. As previously mentioned, a cultural resources database search was conducted in August and September of 2025. This records search identified that no cultural resources nor cultural studies were previously recorded within the Project site. In addition, no archaeological sites, isolated artifacts, or features were encountered within the Project site during the archaeological pedestrian survey completed by Taylored Archaeology in August of 2025. While past agricultural and development activities may have potentially destroyed or obscured ground surface evidence of archaeological resources within the Project site, intact archaeological resources may potentially exist below the ground surface.

In the unlikely event that unidentified historical or archaeological resources are encountered during Project construction or operation, mitigation measures CUL-1 and CUL-2 would be implemented to reduce any impacts to less than significant.

c) Would the project disturb any human remains, including those interred outside of dedicated cemeteries?

Less than Significant Impact with Mitigation Incorporated. There is no evidence or record that the proposed Project has the potential to be an unknown burial site, or the site of buried human remains. In the unlikely event of such a discovery, mitigation shall be implemented. With incorporation of mitigation measure CUL-2 outlined below, impacts resulting from the discovery of remains interred on the proposed Project site would be less than significant.

4.5.3 FEDERAL CROSS-CUTTING TOPIC

4.5.3.1 NATIONAL HISTORIC PRESERVATION ACT

The National Historic Preservation Act of 1966 as amended created the National Register of Historic Places and extended protection to historic places of State, local, and national significance. It established the Advisory Council on Historic Preservation, State Historic Preservation Officer (SHPO), Tribal Preservation Officers, and a preservation grants-in-aid program. Section 106 directs federal agencies to take into account effects of their actions ("undertakings") on properties in or eligible for the National Register. Section 106 of the act is implemented by regulations of the Advisory Council on Historic Preservation (36 Code of Federal Regulations [CFR] Part 800).

The U.S. Department of the Interior criteria and procedures for evaluating a property's eligibility for inclusion in the National Register are at 36 CFR Part 60. The 36 CFR Part 800 regulations, implementing Section 106, call for consultation with the SHPO, Native American tribes, and interested members of the public throughout the Section 106 compliance process. The four principal steps are to:

- *Initiate the Section 106 process (36 CFR Part 800.3);*
- *Identify historic properties, cultural resources that are eligible for inclusion in the National Register of Historic Places (36 CFR Part 800.4);*
- *Assess the effects of the undertaking to historic properties within the area of potential effect (36 CFR Part 800.5); and*
- *Resolve adverse effects (36 CFR Part 800.6).*

Adverse effects on historic properties often are resolved through preparation of a Memorandum of Agreement (MOA), developed in consultation with Reclamation, the SHPO, Native American tribes, the Advisory Council on Historic Preservation, and interested members of the public. The MOA stipulates procedures that treat historic properties to mitigate adverse effects (36 CFR Part 800.14[b]).

No historic properties have been identified within the area of potential effects. Therefore, the proposed Project would not have an adverse effect on historic properties.

4.5.4 MITIGATION

CUL-1 (Archaeological Remains): Should archeological remains or artifacts be unearthed during any stage of project activities, work in the area of the discovery shall cease until the area is evaluated by a qualified archaeologist. If mitigation is warranted, the project proponent shall abide by recommendations of the archaeologist.

CUL-2 (Human Remains): In the event that human remains are discovered on the Project site, the Tulare County Coroner must be notified of that discovery (Health and Safety Code Section 7050.5) and all activities in the immediate area if the find or in any nearby area reasonably suspected of overlie adjacent human remains must cease until appropriate and lawful measures have been implemented. If the Coroner determines that the

remains are not recent, but rather of Native American origin, the Coroner shall notify the Native American Heritage Commission (NAHC) in Sacramento within 24 hours to permit the NAHC to determine the most likely descendent of the deceased Native American.

4.6 ENERGY

Table 4-13: Energy Impacts

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

4.6.1 BASELINE CONDITIONS

The Project site is situated northwest of the community of London, a rural residential and agricultural area in Tulare County. Pacific Gas & Electric Company (PG&E) supplies electricity to the Project area.[8] Southern California Gas Company supplies natural gas to the Project area.[9]

4.6.2 IMPACT ANALYSIS

a) Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Less than Significant Impact. Fuel consumed by construction equipment would be the primary energy resource expended over the course of Project construction. California Code of Regulations Title 13, Motor Vehicles, Section 2449(d)(2), Idling, limits idling times of construction vehicles to no more than five minutes, thereby precluding unnecessary and wasteful consumption of fuel because of unproductive idling of construction equipment. In addition, the energy consumption for construction activities would not be ongoing as they would be limited to the duration of Project construction.

Energy consumption of non-residential uses is currently governed by the 2022 California Building Code, Part 6 for structures, and Title 20 of the California Code of Regulations for appliances. Energy consumption is anticipated to decrease over time as more energy efficient standards take effect and energy-consuming equipment reaches its end-of-life and necessitates replacement. The proposed Project would comply with construction best management practices. Once completed, the proposed Project would be passive in nature and would not operate in a wasteful or inefficient manner that results in unnecessary consumption of energy resources. Therefore, impacts would be less than significant.

[8] (Pacific Gas & Electric Company, 2014)
[9] (Southern California Gas Company, 2023)

b) Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

No Impact. State and local authorities regulate energy use and consumption. These regulations at the State level are intended to reduce energy use and Greenhouse Gas (GHG) emissions. These include, among others, AB 1493 – Light-Duty Vehicle Standards; California Code of Regulations Title 24, Part 6 – Energy Efficiency Standards; and California Code of Regulations Title 24, Parts 6 and 11 – California Energy Code and Green Building Standards. The proposed Project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency. Therefore, there would be no impact.

4.7 GEOLOGY AND SOILS

Table 4-14: Geology and Soils Impacts

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

4.7.1 BASELINE CONDITIONS

4.7.1.1 GEOLOGY AND SOILS

The Project site is located in Tulare County, in the southern section of California's Great Valley Geomorphic Province, or Central Valley. The Sacramento Valley makes up the northern third and the San Joaquin Valley

makes up the southern two-thirds of the geomorphic province. Both valleys are watered by large rivers flowing west from the Sierra Nevada Range, with smaller tributaries flowing east from the Coast Ranges. Most of the surface of the Great Valley is covered by Quaternary (present day to 1.6 million years ago) alluvium. The sedimentary formations are steeply upturned along the western margin due to the uplifted Sierra Nevada Range.[10] From the time the Central Valley first began to form, sediments derived from erosion of igneous and metamorphic rocks and consolidated marine sediments in the surrounding mountains have been transported into the Central Valley by streams.

According to the United States Department of Agriculture Natural Resources Conservation Service (NRCS) soil survey of Tulare County, the Project site soils are almost entirely comprised of Hanford sandy loam with a small portion of the site consisting of Calgro-Calgro.[11] The soils present and their characteristics at the recharge facility location can be found in Section 4.4.1.4.

4.7.1.2 FAULTS AND SEISMICITY

The Project site is not located in an Alquist-Priolo Earthquake Fault Zone, and no known faults cut through the local soil at the site. There are no known active faults in Tulare County.[12] The closest known fault is an unnamed fault 41 miles southeast of the site, while the San Andreas Fault is approximately 68 miles southwest of the proposed Project.

4.7.1.3 LIQUEFACTION

The potential for liquefaction, which is the loss of soil strength due to seismic forces, is dependent on soil types and density, the groundwater table, and the duration and intensity of ground shaking. No specific liquefaction hazard areas have been identified in the County.[13]

4.7.1.4 SOIL SUBSIDENCE

There are two types of subsidence: land subsidence and hydrocompaction subsidence. Hydrocompaction subsidence occurs when a large land area settles due to over-saturation. These areas are typically composed of open-textured soils that become saturated, high in silt or clay content. Land subsidence occurs when an extensive amount of ground water, oil, or natural gas is withdrawn from below the ground surface. The San Joaquin Valley has become an area that has increasingly experienced subsidence due to excessive groundwater pumping activities lowering the water table.

4.7.1.5 DAM AND LEVEE FAILURE

According to the Federal Emergency Management Agency (FEMA), the closest 100-year flood zone is approximately 1.5 miles southeast of the Project site.[14] The Project site is not within a dam inundation zone; the closest such zone is the Terminus dam, approximately 2.8 miles southeast of the proposed Project.[15]

[10] Harden, D.R. 1998, California Geology, Prentice Hall, 479 pages.
[11] (United States Department of Agriculture)
[12] (Tulare County 2030 General Plan Update, 2010)
[13] (Department of Conservation, 2025)
[14] (Federal Emergency Management Agency, 2025)
[15] (California Department of Water Resources, 2015)

4.7.2 IMPACT ANALYSIS

a) Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

ii. Seismic-related ground failure, including liquefaction?

a-i) and a-ii) Less than Significant Impact. The Project site and the broader area are in an area traditionally characterized by relatively low seismic activity. Ground shaking intensity is largely a function of distance from the earthquake epicenter and underlying geology. The most common impact associated with strong ground shaking is damage to structures, and no habitable structures are associated with the proposed Project. The site is not located in an Alquist-Priolo Earthquake Fault Zone as established by the Alquist-Priolo Fault Zoning Act (Section 2622 of Chapter 7.5, Division 2 of the California Public Resource Code). No known faults cut through the local soil at the site. There are no known active faults in Tulare County.[16] The closest known fault is an unnamed fault 41 miles southeast of the site, while the San Andrea Fault is approximately 68 miles southwest of the proposed Project. Due to the geology of the Project area and its distance from active faults, the potential for loss of life, property damage, ground settlement, or liquefaction to occur in the Project area is considered minimal. Impacts would be less than significant

iii. Seismic-related ground failure, including liquefaction?

Less than Significant Impact. Liquefaction occurs when loose, water-saturated sediments lose strength and fail during strong ground shaking. In general, liquefiable areas are confined to the Central Valley floor covered by Quaternary-age alluvial deposits, Holocene soil deposits, current river channels, and active wash deposits and their historic floodplains, marshes, and dry lakes. Specific liquefaction hazard areas in the County have not been identified. Additionally, the proposed Project would be in compliance with the relevant land use plans and the goals and policies set forth in the Tulare County General Plan that would avoid or reduce the effects of these hazards. As such, this impact would be less than significant.

iv. Landslides?

No Impact. The proposed Project is located in a relatively flat area with little to no potential for landslides to occur. Construction of the proposed Project would not increase the likelihood for landslides to occur at the Project site. Therefore, there would be no impact.

b) Would the project result in substantial soil erosion or the loss of topsoil?

Less than Significant Impact. Earthmoving activities associated with the proposed Project would include excavation, trenching, and infrastructure and embankment construction. These activities could expose soils to erosion processes, and the extent of erosion would vary depending on slope steepness/stability, vegetation/cover, concentration of runoff, and weather conditions. Dischargers whose projects disturb one (1) or more acres of soil are required to obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity Construction General Permit Order 2009-0009-DWQ. Construction activity subject to this permit includes clearing, grading, and disturbances to the ground such as stockpiling, or excavation, but does not include regular maintenance activities performed to

[16] (Tulare County 2030 General Plan Update, 2010)

restore the original line, grade, or capacity of the facility. The Construction General Permit requires the development of SWPPP by a qualified sediment practitioner or a qualified sediment developer. Since the Project site has a relatively flat terrain with a low potential for soil erosion and would comply with the SWRCB requirements, impacts would be less than significant.

c) Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

Less than Significant Impact. The Project site and the immediate surrounding area do not have any substantial grade changes in the topography to the point where the proposed Project components would expose people or structures to potential substantial adverse effects on, or offsite, such as landslides, lateral spreading, or collapse. Earthquake-induced ground failures, such as ruptures, lateral spreading, ground lurching, seiches, or landslides, are unlikely to occur on the Project site because of its relatively stable geologic formation and lack of active faults. Any impacts would be less than significant.

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

Less than Significant Impact. Expansive soils are characterized by their potential "shrink-swell" behavior. Shrink-swell is the cyclic change in volume (expansion and contraction) that occurs in certain fine-grained clay sediments from the process of wetting and drying. Clay minerals such as smectite, bentonite, montmorillonite, beidellite, vermiculite, and others are known to expand with changes in moisture content. The higher the percentage of expansive minerals present in near surface soils, the higher the potential for significant expansion. Structural damage may result over a long period of time due to the placement of structures directly on expansive soils. According to the NRCS soil survey, the Project site soils consist of Hanford sandy loam and Calgro-Calgro – however, Hanford sandy loam makes up the overwhelming majority (96.8%) of the site. Hanford sandy loam is considered to be a stable soil type without as much "shrink-swell" potential as more clayey soils. Moreover, the proposed Project does not involve the construction of any habitable structures or require the presence of permanent on-site staff and would therefore not create substantial direct or indirect risks to life or property. Therefore, impacts would be less than significant

e) Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

No Impact. Septic installation or alternative wastewater disposal systems are not proposed or necessary for the proposed Project. Therefore, there would be no impact

f) Would the project directly or indirectly destroy a unique paleontological resource or site or unique geological feature?

No Impact. There are no known unique geological features on the Project site, and no unique paleontological resources have been identified. There would be no impact

4.8 GREENHOUSE GAS EMISSIONS

Table 4-15: Greenhouse Gas Emissions Impacts

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

4.8.1 BASELINE CONDITIONS

Commonly identified GHG emissions and sources include the following:

Carbon dioxide (CO_2) is an odorless, colorless natural greenhouse gas. CO_2 is emitted from natural and anthropogenic sources. Natural sources include the following: decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungus; evaporation from oceans; and volcanic out gassing. Anthropogenic sources include the burning of coal, oil, natural gas, and wood.

Methane (CH_4) is a flammable greenhouse gas. A natural source of methane is the anaerobic decay of organic matter. Geological deposits, known as natural gas fields, also contain methane, which is extracted for fuel. Other sources are from landfills, fermentation of manure, and ruminants such as cattle.

Nitrous oxide (N_2O), also known as laughing gas, is a colorless greenhouse gas. Nitrous oxide is produced by microbial processes in soil and water, including those reactions that occur in fertilizer containing nitrogen. In addition to agricultural sources, some industrial processes (fossil fuel-fired power plants, nylon production, nitric acid production, and vehicle emissions) also contribute to its atmospheric load.

Water vapor is the most abundant, and variable greenhouse gas. It is not considered a pollutant; in the atmosphere, it maintains a climate necessary for life.

Ozone (O_3) is known as a photochemical pollutant and is a greenhouse gas; however, unlike other greenhouse gases, ozone in the troposphere is relatively short-lived and, therefore, is not global in nature. O_3 is not emitted directly into the atmosphere but is formed by a complex series of chemical reactions between volatile organic compounds, nitrogen oxides, and sunlight.

Aerosols are suspensions of particulate matter in a gas emitted into the air through burning biomass (plant material) and fossil fuels. Aerosols can warm the atmosphere by absorbing and emitting heat and can cool the atmosphere by reflecting light.

Chlorofluorocarbons (CFCs) are nontoxic, nonflammable, insoluble, and chemically unreactive in the troposphere (the level of air at the earth's surface). CFCs were first synthesized in 1928 for use as

refrigerants, aerosol propellants, and cleaning solvents. CFCs destroy stratospheric ozone; therefore, their production was stopped as required by the Montreal Protocol in 1987.

Hydrofluorocarbons (HFCs) are synthetic chemicals that are used as a substitute for CFCs. Of all the greenhouse gases, HFCs are one of three groups (the other two are perfluorocarbons and sulfur hexafluoride) with the highest global warming potential. HFCs are human-made for applications such as air conditioners and refrigerants.

Perfluorocarbons (PFCs) have stable molecular structures and do not break down through the chemical processes in the lower atmosphere; therefore, PFCs have long atmospheric lifetimes, between 10,000 and 50,000 years. The two main sources of PFCs are primary aluminum production and semiconductor manufacture.

Sulfur hexafluoride (SF_6) is an inorganic, odorless, colorless, nontoxic, nonflammable gas. It has the highest global warming potential of any gas evaluated. Sulfur hexafluoride is used for insulation in electric power transmission and distribution equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas for leak detection.

There are uncertainties as to exactly what the climate changes will be in various local areas of the earth, and what the effects of clouds will be in determining the rate at which the mean temperature will increase. There are also uncertainties associated with the magnitude and timing of other consequences of a warmer planet: sea level rise, spread of certain diseases out of their usual geographic range, the effect on agricultural production, water supply, sustainability of ecosystems, increased strength and frequency of storms, extreme heat events, air pollution episodes, and the consequence of these effects on the economy.

Emissions of GHGs contributing to global climate change are largely attributable to human activities associated with the industrial/manufacturing, utility, transportation, residential, and agricultural sectors. About three-quarters of human emissions of CO_2 to the global atmosphere during the past 20 years are due to fossil fuel burning. Atmospheric concentrations of CO_2, CH_4, and N_2O have increased by at least 40 percent, 150 percent, and 20 percent respectively since the year 1750. GHG emissions are typically expressed in carbon dioxide-equivalents (CO_2e), based on the GHG's Global Warming Potential (GWP). The GWP is dependent on the lifetime, or persistence, of the gas molecule in the atmosphere. For example, one ton of CH_4 has the same contribution to the greenhouse effect as approximately 25 tons of CO_2. Therefore, CH_4 is a much more potent GHG than CO_2. In accordance with SJVAPCD's *CEQA Greenhouse Gas Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects*[17], proposed projects complying with Best Performance Standards (BPS) would be determined to have a less-than-significant impact. Projects not complying with BPS would be considered less than significant if operational GHG emissions would be reduced or mitigated by a minimum of 29 percent, in comparison to business-as-usual (year 2004) conditions. In addition, project-generated emissions complying with an approved plan or mitigation program would also be determined to have a less-than-significant impact.

4.8.2 IMPACT ANALYSIS

Project Related Emissions

Short-term construction emissions associated with the Project were calculated using CalEEMod, Version 2022.1.1.30. The emissions modeling includes emissions generated by off-road equipment, haul trucks, and worker commute trips. Emissions were quantified based on an anticipated construction schedule of approximately six months. Remaining assumptions were based on the default parameters contained in the

[17] (San Joaquin Valley Air Pollution Control District, 2009)

model. Modeling assumptions and output files are included in Appendix A. Estimated construction-generated related emissions are summarized in Table 4-16. Long-term operational emissions would be considered negligible due to the passive nature of the proposed Project. GHGs impact the environment over time as they increase and contribute to climate change.

Table 4-16: Short Term Construction Related GHG Emissions

	Emissions (MT CO2e) in Tons per Year
Maximum Annual Construction CO2e Emissions	390
AB 32 Consistency Threshold for Land-Use Development Projects*	1,100
AB 32 Consistency Threshold for Stationary Source Projects*	10,000
Threshold Exceeded?	No

* As published in the Bay Area Air Quality Management District's CEQA Air Quality Guidelines. Available online at http://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en. Accessed August 29, 2025.

Construction related generation of GHGs would be a maximum of 390 Metric Tons of Carbon Dioxide Equivalent (MT CO_2e) per year, while operational emissions would be negligible. The proposed Project would not exceed the AB 32 consistency threshold for land use projects for both short term construction emissions and long-term operational emissions as a result.

a) Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less than Significant Impact. The proposed Project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment. As shown in Table 4-16, the proposed Project is not expected to result in the generation of GHG emissions that would exceed the AB 32 consistency threshold of 1,100 MT CO_2e annually during both construction and operational activities. Therefore, impacts would be less than significant.

b) Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Less than Significant Impact. The proposed Project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. The proposed Project would be in compliance with all SJVAPCD policies and regulations and would not exceed an applicable threshold for GHG emissions. Therefore, there would be no impacts.

4.9 HAZARDS AND HAZARDOUS MATERIALS

Table 4-17: Hazards and Hazardous Materials Impacts

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

4.9.1 BASELINE CONDITIONS

4.9.1.1 HAZARDOUS MATERIALS

The Hazardous Waste and Substances Sites (Cortese) List is a planning document used by the State, local agencies, and developers to comply with CEQA requirements in providing information about the location of hazardous materials release sites. Government Code Section 65962.5 requires the California Environmental Protection Agency to develop at least annually an updated Cortese List. The Department of Toxic Substances Control (DTSC) is responsible for a portion of the information contained in the Cortese List. Other State and local government agencies are required to provide additional hazardous material

release information for the Cortese List. DTSC's EnviroStor database provides DTSC's component of Cortese List data (DTSC, 2010). In addition to the EnviroStor database, the SWRCB GeoTracker database provides information on regulated hazardous waste facilities in California, including underground storage tank cases and non- underground storage tank cleanup programs, including Spills-Leaks-Investigations-Cleanups sites, Department of Defense sites, and Land Disposal program. A search of the DTSC EnviroStor database and the SWRCB GeoTracker performed on August 5, 2025, determined that there are no known active hazardous waste generators or hazardous material spill sites within the Project site.[18] [19]

4.9.1.2 AIRPORTS

The nearest airport to the Project site is the Sequoia Field Airport, located outside of the City of Visalia, which is approximately 7.5 miles to the east. The nearest airstrip is the Trinkle Agricultural Flying airstrip situated about 3.8 miles west of the proposed Project.

4.9.1.3 EMERGENCY RESPONSE PLAN

Tulare County Environmental Health Division (TCEHD) is the local agency responsible for the implementation of the state-mandated Unified Hazardous Waste and Hazardous Materials Management Regulatory Program. Tulare County has prepared a Hazardous Materials Business Plan and a Multi-Jurisdictional Local Hazard Mitigation Plan which serves as the County's emergency response plan for hazardous materials emergency incidents. TCEHD provides three permanent Household Hazardous Waste drop-off facilities in the County and operates mobile collection events throughout the year.

4.9.1.4 SENSITIVE RECEPTORS

Potential sensitive receptors, such as a few residences to the north and northwest, are located in the area around the proposed Project. The community of London is approximately a quarter-mile to the southeast. The closest school is the Grand View Elementary School, situated approximately two miles northeast of the Project site.

4.9.2 IMPACT ANALYSIS

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

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

a) and b) Less than Significant Impact. There would be no transport, use, or disposal of hazardous materials associated with Project construction or operations, with the exception of diesel fuel for construction or routine maintenance equipment. Any potential accidental hazardous materials spills during Project construction or maintenance are the responsibility of the contractor to remediate in accordance with industry BMPs as well as State and County regulations. As such, any impacts would be less than significant.

[18] (California Department of Toxic Substances Control, 2025)
[19] (California State Water Resources Control Board, 2025)

c) Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

No Impact. The Project site is not located within one-quarter mile of an existing or proposed school. Grand View Elementary School is the nearest school and is located approximately two miles northeast of the proposed Project. Additionally, there would be no transport, use, or disposal of hazardous materials associated with Project construction or operations, with the exception of diesel fuel for construction or routine maintenance equipment. Therefore, the proposed Project would not emit hazardous emissions or involve the transport or handling of any hazardous materials within one-quarter mile of a school. There would be no impact.

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

Less than Significant Impact. The proposed Project does not involve land that is listed as an active hazardous materials site pursuant to Government Code Section 65962.5 and is not included on a list compiled by DTSC. Both the SWQCB's GeoTracker and DTSC's EnviroStor websites were queried on August 5, 2025, for contaminated groundwater or sites in the area. Moreover, there are no active sites within one mile of the proposed Project. Any impacts would be less than significant.

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

No Impact. There are no airports within two miles of the proposed Project. The Project site does not conflict with an airport land use plan. Therefore, there would be no impact.

f) Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Less than Significant Impact. The construction of the proposed Project would not impair or physically interfere with any adopted emergency response or emergency evacuation plan. Minimal traffic would be added temporarily during construction. After construction is completed, no roadways or emergency response and/or evacuation paths would be impeded. As such, impacts would be less than significant.

g) Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

No Impact. As discussed in further detail in the Section 4.20, the proposed Project would not expose people or structures either directly or indirectly to a significant loss, injury, or death involving wildland fires. The Project site is primarily in an agriculturally developed area of the County that is not considered susceptible to wildfire. Therefore, there would be no impact.

4.10 HYDROLOGY AND WATER QUALITY

Table 4-18: Hydrology and Water Quality Impacts

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

4.10.1 BASELINE CONDITIONS

The proposed Project is located in Tulare County, in the Central San Joaquin Valley. Like most of California, the San Joaquin Valley experiences a Mediterranean climate. Warm, dry summers are followed by cool, moist winters. Summer temperatures often reach above 90 degrees Fahrenheit, and the humidity is generally low. Winter temperatures are often below 60 degrees Fahrenheit during the day and rarely exceed 70 degrees. The Central Valley receives an average of 12 inches of precipitation in the form of rainfall yearly, most of which occurs between October and March.

The Project site is located within the Middle Cross Creek watershed, Hydrologic Unit Code 1803000712. The proposed Project lies entirely within the Kings Groundwater Subbasin of the San Joaquin Valley Groundwater Basin.[20] FEMA Flood Insurance Rate Map Panel No. 06107C0605E (effective 6/16/2009) indicates that the Project site is located out of the 100 Year Flood Zone with minimal flooding risk (see Figure 4-6).[21]

4.10.2 IMPACT ANALYSIS

a) Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Less than Significant Impact. The SWRCB requires a SWPPP be prepared for projects that disturb one (1) or more acres of soil. A SWPPP involves site planning and scheduling, limiting disturbed soil areas, and determining BMPs to minimize the risk of pollution and sediments being discharged from construction sites. Implementation of the SWPPP would minimize the potential for the proposed Project to substantially alter the existing drainage pattern in a manner that would result in substantial erosion or siltation onsite or offsite. Additionally, there would be no discharge to any surface source. Use of chemicals or surfactants would not be generated through the maintenance or operation of the proposed Project and as such, there would be no discharge directly associated with Project implementation that could impact water quality standards. The proposed Project would not violate any water quality standards and would not impact waste discharge requirements. The impact would be less than significant.

b) Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Less than Significant Impact. The proposed Project entails the construction of a recharge pond to improve groundwater supplies through recharge. No additional groundwater would be required compared to baseline conditions; therefore, the impacts would be less than significant.

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

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

Less than Significant Impact. The proposed Project would not alter the course of the flow of a stream or river in which substantial erosion or siltation could occur. In addition, the proposed Project would not result in an increase in the amount of surface runoff because the scope of this proposed Project does not include the conversion of any permeable surface into impermeable surfaces. Moreover, in order to minimize the possibility of substantial soil erosion or siltation, the proposed Project would use construction BMP's and complete a SWPPP. SWPPP's include mandated soil erosion control measures, which are developed to prevent significant impacts related to erosion caused by runoff during construction. Therefore, impacts would be less than significant.

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

[20] (California Department of Water Resources, 2018)
[21] (Federal Emergency Management Agency, 2025)

No Impact. The proposed Project would improve groundwater storage by reducing groundwater pumping in the area and prevent exceedances of storm water drainage systems or additional polluted runoff by providing a depressional space for surface water capture. As such, the proposed Project would not result in a substantial increase in the rate or amount of surface runoff that would result in flooding on- or off-site. Therefore, there would be no impact.

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

No Impact. The proposed Project would improve groundwater storage by reducing pumping in the area and prevent exceedances of storm water drainage systems or additional polluted runoff by providing a depressional space for surface water. There would be no impact.

iv. impede or redirect flood flows?

No Impact. The proposed Project would not impede or redirect flood flows. The proposed Project is designed to capture and temporarily store storm and flood flows and allow the water to infiltrate into the ground over a period of time, thereby facilitating recharge of the underlying aquifer. There would be no impact.

d) Would the project in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundations?

Less than Significant Impact. The proposed Project is not located in a flood hazard, tsunami, or seiche zone. The proposed Project is in the central San Joaquin Valley, especially isolated from opportunities for tsunami or seiche. The proposed Project is not within a dam inundation zone. There would be no employees required to be on site on a regular basis. As shown in Figure 4-6, the proposed Project is not within a 100-year flood zone. Additionally, operation of the recharge facility does not involve hazardous materials, which could lead to the release of pollutants. Impacts would be less than significant.

e) Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

No Impact. The proposed Project would not conflict with implementation of a water quality control plan. The proposed Project would help alleviate water supply issues during the irrigation season and capture portions of available storm or flood runoff to be used for groundwater recharge. Furthermore, construction activities would require implementation of a SWPPP and compliance with all Cal/OSHA regulations in order to reduce the potential for incidental release of pollutants or hazardous substances into surface water or groundwater. The proposed Project would be located within the boundaries of the KREGSA, of which the District is also serving as the Groundwater Sustainability Agency (GSA). The proposed Project would not conflict with the KREGSA. There would be no impacts.

4.10.3 FEDERAL CROSS-CUTTING TOPIC

4.10.3.1 FLOOD PLAIN MANAGEMENT- EXECUTIVE ORDER NUMBERS 11988, 12148, AND 13690

FEMA designates flood hazard and frequency for cities and counties on its Flood Insurance Rate Maps. The proposed Project area is not within a designated 100-year floodplain, on a floodplain map, or otherwise designated by FEMA.

4.10.3.2 RIVERS AND HARBORS ACT

The Rivers and Harbors Act of 1899 prohibits construction of any bridge, dam, dike, or causeway over or in navigable waterways of the U.S., without Congressional approval. Under Section 10 of the Act, the building of any wharfs, piers, jetties, and other structures is prohibited without Congressional approval, and excavation or fill within navigable waters requires the approval of the Chief of Engineers. The USACE is authorized to issue permits for the discharge of refuse matter into or affecting navigable waters under Section 13 of the act.

The proposed Project would not be constructed in a location that would affect a navigable waterway, requiring permit or approval by USACE.

4.10.3.3 SAFE DRINKING WATER ACT, SOLE SOURCE AQUIFER PROTECTION

The Safe Drinking Water Act (SDWA) required USEPA to establish criteria through which an aquifer may be declared a critical aquifer protection area. Since 1977, it has been used by communities to help prevent contamination of groundwater from federally funded projects. These aquifers are defined as "sole source aquifers." USEPA's Sole Source Aquifer (SSA) Program was established under Section 1424(e) of the SDWA. These are, essentially, aquifers that are the only drinking water supply for the population of a region.

SSA designation protects an area's groundwater resources by requiring USEPA to review all proposed projects within the designated area that will receive federal financial assistance. The SSA Program states that if USEPA determines an area to have an aquifer which is the sole or principal drinking water source for the area, that if contaminated would create a significant hazard to public health, a notice of that determination needs to be published in the Federal Register. After publication of any such notice, no commitment for federal financial aid may be applied for any project that the Administrator determines may contaminate the aquifer through a recharge zone, so as to create a significant hazard to public health (USEPA 2019).

The proposed Project is not located in an SSA.

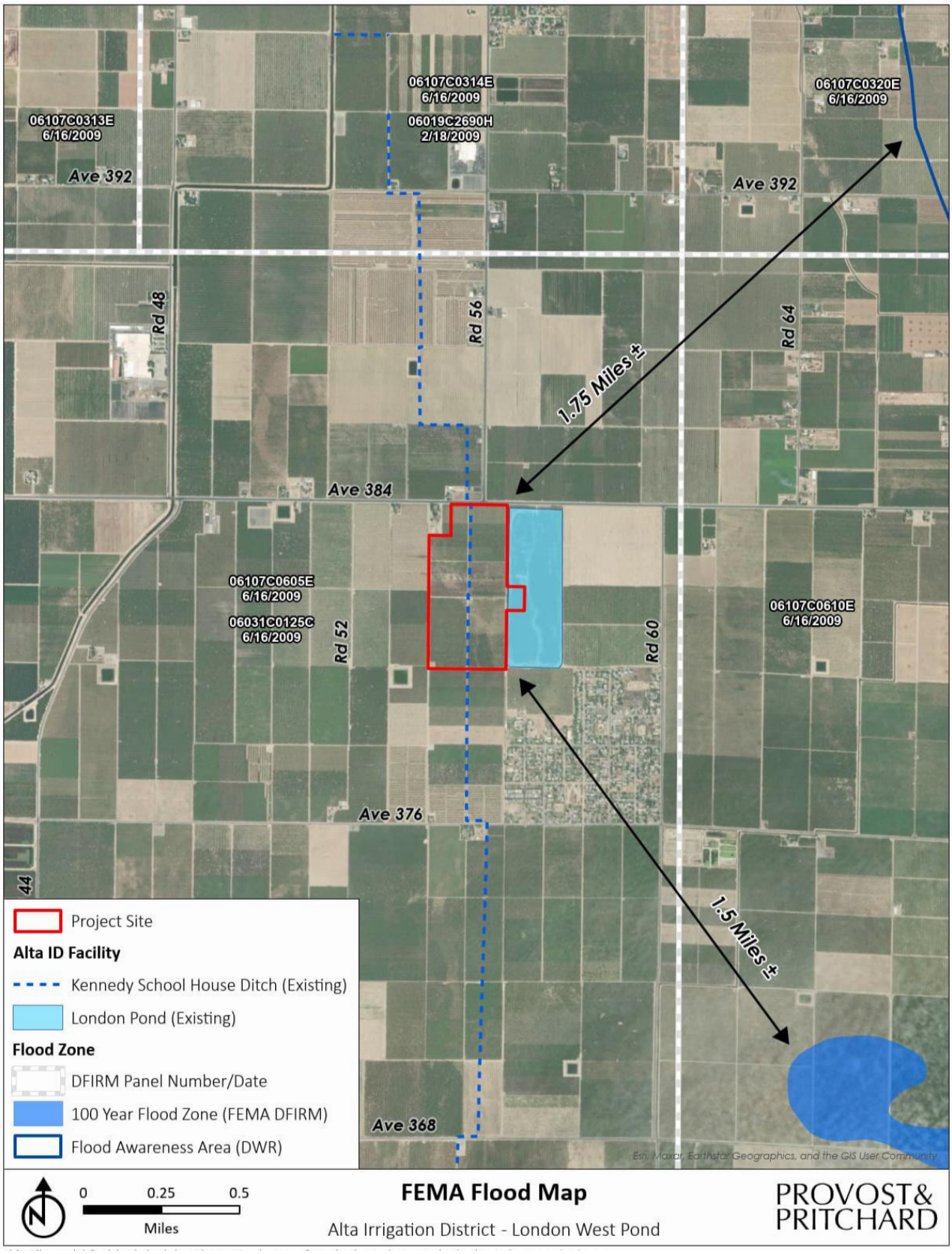

Figure 4-6: FEMA Flood Map

4.11 LAND USE AND PLANNING

Table 4-19: Land Use and Planning Impacts

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

4.11.1 BASELINE CONDITIONS

The proposed Project is situated northwest of the community of London in rural, unincorporated Tulare County. The area is dominated by lands in agricultural production. The Project site contains approximately 80 acres of farmland. Lands involving the Project site are zoned Agriculture Rural – A-1 and AE-40. The site is planned for Agriculture (Rural Valley Lands Plan) and Mixed Use.

4.11.2 IMPACT ANALYSIS

a) Would the project physically divide an established community?

No Impact. The Project site is located in an agricultural area northwest of the community of London in Tulare County. Surrounding land uses are agricultural; the proposed Project would not physically divide any established communities. There would be no impact.

b) Would the project cause a significant environmental conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

No Impact. The Project site is zoned Agriculture Rural – A-1 and AE-40 and has a land use designation of Agriculture and Mixed Use. The proposed Project involves the construction and operation of an approximately 80-acre recharge basin, which is consistent with the land uses within the vicinity. The proposed Project would convert the area into a recharge basin that would support agriculture through improved water supply reliability. In addition, Government Code Section 53091 (e) excludes the application of a city or county's zoning ordinances from applying to water projects that construct facilities for the production, generation, storage, treatment, or transmission of water. The proposed Project would not conflict with any land use plan, policy, or regulation adopted. There would be no impact.

4.11.3 FEDERAL CROSS-CUTTING TOPIC

4.11.3.1 COASTAL ZONE MANAGEMENT ACT

The Coastal Zone Management Act was enacted in 1972. This act, administered by the National Oceanic and Atmospheric Administration, provides management of the nation' s coastal resources. The California coastal zone generally extends 1,000 yards inland from the mean high tide line. The Project site is more

than 100 miles from the coastline. Therefore, the proposed Project would not conflict with the Coastal Zone Management Act.

4.12 MINERAL RESOURCES

Table 4-20: Mineral Resources Impacts

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

4.12.1 BASELINE CONDITIONS

According to the DOC's Mines Online map, there are sand, gravel, and decomposed granite resources throughout the County. There are no mineral resource locations located on the Project site.[22]

4.12.1.1 MINERAL RESOURCES ZONES

The California DOC, Division of Mines and Geology classifies Mineral Resource Zones in order to map areas throughout the state that contain regionally significant mineral resources. Mineral Resource Zones (MRZ) are defined as follows:

- MRZ-1 is classified as an area where adequate information indicates there are no significant mineral deposits present, or where there is little likelihood for mineral deposit presence.
- MRZ-2 is classified as an area with adequate information indicating significant mineral deposits are present and or a high likelihood for mineral deposit presence.
- MRZ-3 is classified as an area of undetermined mineral resource significance based on available data which may suggest or infer mineral occurrences.
- MRZ-4 is classified as an area of unknown mineral resource significance or no known mineral occurrence.

According to the California DOC's Mineral Land Classification map, the Project site is located in an MRZ-2 zone.

4.12.2 IMPACT ANALYSIS

a) Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

b) Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

[22] (California Department of Conservation, 2016)

a) and b) Less than Significant Impact. No known mineral resources are within the Project site. According to the California Department of Conservation's Mines Online mapping tool, there are no mines with the District boundary. Additionally, California's Division of Oil, Gas and Geothermal Resources has no records of closed or active oil or gas wells on the proposed Project site.[23] Therefore, construction of the proposed Project would not result in the loss of availability of a known mineral resource. As such, impacts would be less than significant.

[23] (California Department of Conservation Well Finder, 2020)

4.13 NOISE

Table 4-21: Noise Impacts

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

4.13.1 BASELINE CONDITIONS

The Project site is located in Tulare County in an area characterized by agriculture, as well as the community of London situated a quarter-mile to the southeast. Due to the seasonal nature of the agricultural industry, there are often extended periods of time when little noise is generated around the Project site, followed by short-term periods of intensive mechanical equipment usage and corresponding noise generation. The Tulare County General Plan sets forth the following goals and policies regarding noise, and which have potential relevance to the proposed Project's CEQA review:

- The County shall limit noise generating activities, such as construction, to hours of normal business operation (7 a.m. to 7 p.m.). No peak noise generating activities shall be allowed to occur outside of normal business hours without County approval.
- The County shall seek to limit the potential noise impacts of construction activities by limiting construction activities to the hours of 7 am to 7pm, Monday through Saturday when construction activities are located near sensitive receptors. No construction shall occur on Sundays or national holidays without a permit from the County to minimize noise impacts associated with development near sensitive receptors.

The County shall ensure that construction contractors implement best practices guidelines (i.e. berms, screens, etc.) as appropriate and feasible to reduce construction-related noise-impacts on surrounding land uses.

4.13.2 IMPACT ANALYSIS

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

Less than Significant Impact. Construction of the proposed Project would involve temporary noise sources, predominately from off-road equipment, such as excavators, backhoe/loader, scraper, dozer, concrete truck, and concrete pumper. The Project site is located adjacent to agricultural lands, accustomed to noises associated with farm equipment. The proposed Project would comply with the County's Noise Ordinance as put forth in the County's General Plan.[24] Operational maintenance activities would be on an as-needed basis with routine monitoring performed by existing staff and would not generate significant new noise. Any impacts would be temporary and therefore, less than significant.

b) Would the project result in generation of excessive ground borne vibration or ground borne noise levels?

Less than Significant Impact. The construction phase of the proposed Project would primarily consist of excavation and grading as part of development of the new recharge pond. The Project site is in an area with agricultural production. Agricultural production commonly includes the use of off-road equipment and ground-disturbing activities regularly. During construction, Project-related construction activities would not vary substantially from the baseline conditions routinely experienced on neighboring properties. Moreover, ground borne vibration and noise would be restricted to construction apart from minimal, periodic maintenance. Impacts would be less than significant.

c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

No Impact. The proposed Project is not located within an airport land use plan. The closest private airstrip or public airport is the Trinkle Agricultural Flying airstrip situated approximately 3.8 miles to the west of the proposed Project. The proposed Project does not involve the development of habitable structures or require the presence of permanent staff onsite. There would be no impact.

[24] (Tulare County 2030 General Plan Update, 2010)

4.14 POPULATION AND HOUSING

Table 4-22: Population and Housing Impacts

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

4.14.1 BASELINE CONDITIONS

The Project site is located within unincorporated Tulare County northwest of the community of London. The site is entirely circumscribed by existing farmland in addition to sparse residences; however, the community of London is situated approximately one quarter-mile away.

4.14.2 IMPACT ANALYSIS

a) Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

b) Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

a) and b) No Impact. The proposed Project would construct a new recharge basin in an effort to capture and utilize stormwater and flood flows. The proposed Project would not encourage population growth directly or indirectly. No residential structures would be built, and the proposed Project would not displace any number of people. Project activities would not alter housing or the existing community in a way that would result in the need for new housing to be constructed elsewhere. There would be no impacts to population and housing.

4.15 PUBLIC SERVICES

Table 4-23: Public Services

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

4.15.1 BASELINE CONDITIONS

Fire Protection: The Tulare County Fire Department provides fire safety services for residences within the Project area. The County Fire Department maintains a staff of 193 across 28 facilities in the County. The closest fire station (Tulare County Fire Department Kings River Fire Station 2) is 2.25 miles northwest of the site.

Police Protection: The Project site is served by the Tulare County Sheriff's Department. The Tulare County Sheriff's Department provides police protection services and investigates crimes in unincorporated areas of the County, including rural and semirural areas within the Project Area. The Sheriff's Department is headquartered on the County administrative campus in Visalia and has approximately 590 sworn staff and approximately 270 support staff. The closest Tulare County police station (Tulare County Sheriff's Office – Cutler-Orosi Substation) is 9.3 miles east of the site.

Schools: The closest school is the Grand View Elementary School, situated approximately two miles northeast of the Project site.

Parks: The County's Parks Division is responsible for the operation and maintenance of 11 parks countywide. The closest parks to the Project site are located in and around the nearby cities of Dinuba and Kingsburg, 4.5 and 5.5 miles away, respectively.

Landfills: The nearest landfill to the Project site is the City of Kingsburg Public Works's landfill approximately six miles west of the Project area.

4.15.2 IMPACT ANALYSIS

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

i. Fire Protection:

ii. Police Protection:

iii. Schools:

iv. Parks:

v. Other public facilities:

a. i-v) No Impact. The proposed Project would not result in an increase of population; no residential or office construction is proposed for this proposed Project. There are no recreational lands or public facilities within the proposed Project area. No additional public services would be needed because of the proposed Project. There would be no impact

4.16 RECREATION

Table 4-24: Recreation Impacts

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

4.16.1 BASELINE CONDITIONS

The Project site and surrounding area are characterized by land in agricultural use as well as sparse residences. There are no parks or recreational facilities within one-half mile of the Project site. The closest parks to the Project site are located in and around the nearby cities of Dinuba and Kingsburg, 4.5 and 5.5 miles away, respectively.

4.16.2 IMPACT ANALYSIS

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

No Impact. The proposed recharge facility would not increase the use or demand of any existing neighborhood, regional parks, or other recreational facilities of any kind. No population growth is anticipated or associated with the proposed Project. There would be no impact.

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

No Impact. The proposed Project would not include recreational facilities as part of the proposed Project components, nor does it propose the expansion of any existing recreational facilities. The proposed Project would construct a recharge basin to provide recharge through the sustainable management of groundwater. There would be no impact.

4.17 TRANSPORTATION

Table 4-25: Transportation Impacts

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

4.17.1 BASELINE CONDITIONS

The Project area is characterized by agricultural uses and sparse residences, as well as the community of London to the southeast. Avenue 384 runs along the northern portion of the Project site, and Road 56 meets Avenue 384 along that part of the Project site. Highway 99 runs north to south about three miles west of the Project site.

4.17.2 IMPACT ANALYSIS

a) Would the project conflict with a plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

Less than Significant Impact. Construction associated with the proposed Project would be restricted to the Project site. The Project surrounding area lacks pedestrian and bicycle facilities, and transit service does not stop near the Project site. Any construction-related impacts would be temporary, such as an increase in vehicles and traffic congestion in the surrounding transportation network during times of active construction. Construction hazards would be minimized with signage and enforcement of proper personal protective equipment worn by contractors and inspectors. This also may include signage, cones, and flagging to reduce any hazards during construction. Impacts to the existing roadway traffic would be temporary, and partial access would still occur during the construction phase of the proposed Project. The proposed Project would thus not conflict with plans, policies, or ordinances addressing the circulation system. Therefore, impacts would be less than significant.

b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3 subdivision (b)?

Less than Significant Impact. Project operations would not generate additional vehicle miles traveled, as operations and maintenance trips are not anticipated to increase as part of the proposed Project. Project construction trips would be generated but would be substantially below the County's significance

threshold of 500 daily trips. For the County, projects that generate less than 500 trips per day can be presumed to have a less than significant impact.[25] Impacts would be less than significant.

c) Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

No Impact. The proposed Project does not involve geometric roadway features or propose incompatible uses. No additional public roads would be constructed as a result of the proposed Project. Therefore, there would be no impact.

d) Would the project result in inadequate emergency access?

Less than Significant Impact. The proposed Project does not propose new roadway design features or permanent alterations to public roadways at the site of the new recharge facility. All potential disturbances to roadways during construction would be temporary. Road closures and detours are not anticipated as part of the construction phase of the proposed Project. The operational phase of the proposed Project would have no effect on public roadways or emergency access. Therefore, overall potential Project-related impacts to emergency access on local roadways would be considered less than significant.

[25] (County of Tulare, 2020)

4.18 TRIBAL CULTURAL RESOURCES

Table 4-26: Tribal Cultural Resources Impacts

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

4.18.1 BASELINE CONDITIONS

The Project site is in the Southern Valley Yokuts ethnographic territory of the San Joaquin Valley. The Yokuts were generally divided into three major groups, the Northern Valley Yokuts, the Southern Valley Yokuts, and the Foothill Yokuts. Much of the research from ethnographers focuses on the central Yokuts tribes due to the northernmost tribes being impacted by Euro-Americans during the California Gold Rush of the mid 1800s and by the southernmost tribes often being removed and relocated by the Spanish to various Bay Area or coastal missions. The central Yokuts tribes, and especially the western Sierra Nevada foothill tribes, were the most intact at the time of ethnographic study.

The most detailed ethnographic information gathered regarding Native American group territories in Central California is located within maps of Southern and Central Yokuts, which show the Project area within the Telamni Yokuts territory. The main ethnographic village for this area was Waitatahulul, which was approximately five miles to the south of the Project site along Packwood Creek. Primary Yokuts villages were typically located along lakeshores and major stream courses, with scattered secondary or temporary camps and settlements located near gathering areas in the foothills. Yokuts were organized into local tribes, with one or more linked villages and smaller settlements within a territory.

Prior to Euro-American contact, there was an abundance of natural resources within the greater Tulare Lake area. Due to these resources, Yokuts maintained some of the largest populations in North America west of the continental divide.

4.18.1.1 NATIVE AMERICAN OUTREACH

The NAHC in Sacramento was contacted in August 2025 to perform a search of the SLF to determine if any Native American resources have been recorded in the immediate Project area. The response letter showed results were negative and confirms there are no known records associated with the Project (see Appendix C). The NAHC also provided a list of Native American tribes who may also have knowledge of cultural resources in the area, which is shown in Section 4.5.1. .

4.18.2 IMPACT ASESSMENT

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

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

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

Less than Significant Impact with Mitigation Incorporated. As discussed in Section 4.5.1, an SLF search completed for the Project area, dated August 4, 2025, did not identify any tribal cultural resources within the Project area. Additionally, a records search was conducted by the SSJVIC at California State University, Bakersfield. This search also determined that tribal cultural resources were not present on-site.

Outreach letters and follow-up emails were sent to tribal organizations using the NAHC list to further identify Native American interests and concerns in the Project area. The following Native American organizations/individuals were contacted from the list provided by NAHC below:

1. *Chairperson Delia Dominguez of Kitanemuk and Yowlumne Tejon Indians*
2. *Cultural Specialist II Samantha McCarty of the Santa Rosa Rancheria Tachi Yokut Tribe*
3. *Cultural Specialist I Nichole Escalon of the Santa Rosa Rancheria Tachi Yokut Tribe*
4. *Tribal Historic Preservation Officer Shana Powers of the Santa Rosa Rancheria Tachi Yokut Tribe*
5. *Chairperson Michelle Heredia-Cordova of Table Mountain Rancheria*
6. *Cultural Resource Director Bob Pennell of Table Mountain Rancheria*
7. *Environmental Department Director Kerri Vera of the Tule River Tribe*
8. *Chairperson Neil Peyron of the Tule River Indian Tribe*
9. *Chairperson Kenneth Woodrow of the Wuksachi Indian Tribe/Eshom Valley Band*

As part of this archaeological investigation, nongovernmental outreach letters and location maps were sent to each individual listed above on August 26, 2025. The letter was followed up via email on September 8, 2025. Tule River Tribe Environmental Director Kerri Vera responded acknowledging receipt of the outreach letter.As of the date of the report (September 16, 2025), no further responses were

received. There is little chance the Project would cause a substantial adverse change to the significance of a tribal cultural resource as defined. With the implementation of mitigation measures CUL-1 and CUL-2, described in Section 4.5.4, any impacts to Tribal Cultural Resources would be less than significant

4.18.3 MITIGATION

See CUL-1 and CUL-2 outlined above in Section 4.5.4.

4.19 UTILITIES AND SERVICE SYSTEMS

Table 4-27: Utilities and Service Systems Impacts

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

4.19.1 BASELINE CONDITIONS

4.19.1.1 WATER SUPPLY

The proposed Project is located within the Tule Groundwater Subbasin of the San Joaquin Valley Groundwater Basin, as defined by the California Department of Water Resources Groundwater Bulletin 118. Declines in groundwater basin storage and groundwater overdraft are recurring problems in the County. Measures for ensuring the continued availability of groundwater for municipal needs have been identified and planned in several areas of the County. The measures include groundwater conservation and recharge as well as supplementing or replacing groundwater surfaces for irrigation with surface water.

4.19.1.2 WASTEWATER COLLECTION AND TREATMENT

The nearest wastewater treatment facility is located in the City of Dinuba about 3.5 miles north-northeast of the site.

4.19.1.3 LANDFILLS

The nearest landfill to the Project site is the City of Kingsburg Public Works's landfill approximately six miles west of the Project area.

4.19.1.4 ELECTRICITY, NATURAL GAS, AND TELECOMMUNICATIONS

PG&E is the primary energy provider in the Project area. Neither natural gas pipelines nor telecommunications infrastructure are present on the Project site.

4.19.2 IMPACT ANALYSIS

a) Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Less than Significant Impact. The new 80-acre recharge facility would connect to the existing Kennedy Schoolhouse Ditch pipeline. The pipeline would be replaced with an open ditch through the site, but it would not cause significant environmental effects related to utilities as the proposed Project would follow all required standards and policies. Additionally, the proposed Project would likely increase water supply, improve groundwater conditions, reduce costs to produce groundwater, increase diversification and availability of water supplies, and facilitate compliance with SGMA. No wastewater or storm water drainage, electric power, natural gas, or telecommunication facilities would require or result in relocation or construction as part of the proposed Project. Impacts would be less than significant.

b) Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

No Impact. The proposed Project consists of the construction of an 80-acre recharge pond that would capture available surface water for recharge. The water would be used in the District's and GSA's efforts to achieve groundwater sustainability. Project operation would be passive and would not reduce the area's available water supply under any scenario. There would be no impact.

c) Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

No Impact. The proposed Project does not require or propose any wastewater collection or treatment and therefore would not create or increase any wastewater demand on any wastewater treatment provider. There would be no impact.

d) Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Less than Significant Impact. The proposed Project would generate some solid waste during construction; however, it would be temporary and properly disposed of during construction and upon completion. Operation of the recharge facility would not generate solid waste. Any impacts with regard to solid waste would be less than significant.

e) Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Less than Significant Impact. The proposed Project operations are not anticipated to produce any solid waste. However, the proposed Project is required and would be expected to comply with any federal, State, and local regulations regarding solid waste management during the construction period. There would be no impact.

4.20 WILDFIRE

Table 4-28: Wildfire Impacts

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrollable spread of wildfire?	☐	☐	☐	☒
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☐	☒
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	☒

4.20.1 BASELINE CONDITIONS

The Project site is located approximately 11 miles west of the nearest State Responsibility Area (SRA) and approximately 11 miles west of the nearest High or Very High Fire Hazard Severity Area according to CalFIRE.[26] The Project site is not located in an area known for wildfires.

4.20.2 IMPACT ANALYSIS

a) If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project substantially impair an adopted emergency response plan or emergency evacuation plan?

b) If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project due to slope, prevailing winds, and other factors, exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

c) If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

[26] (CalFIRE, 2023)

d) If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

a-d) No Impact. The Project site is not located in or near an SRA nor located on lands classified as very high fire hazard severity zones. The nearest SRA fire Hazard Zone is located approximately 11 miles west of the Project site. Construction or implementation of the recharge pond would not impede any existing or future emergency response plans. The Project site and the surrounding lands mostly consist of agricultural and related infrastructure on relatively flat and open land. Additionally, the proposed Project does not include the construction of any residential components or structures of any kind, nor would it require any employees to be stationed permanently at the site on a daily basis. There would be no impact.

4.21 CEQA MANDATORY FINDINGS OF SIGNIFICANCE

Table 4-29: CEQA Mandatory Findings of Significance

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

4.21.1 STATEMENT OF FINDINGS

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

Less than Significant Impact with Mitigation Incorporated. The analysis conducted in this IS/MND results in a determination that the proposed Project, with incorporation of mitigation measures, would have a less than significant effect on the environment. The potential for impacts to biological resources, cultural resources, and tribal cultural resources through the implementation of the proposed Project would be less than significant with the incorporation of the mitigation measures identified in this analysis. Accordingly, the proposed Project would involve no potential for significant impacts through the degradation of the quality of the environment, the reduction in the habitat or population of fish or wildlife, including endangered plants or animals, the elimination of a plant or animal community or eliminate important examples of the major periods of California history or prehistory. The analysis conducted in this IS/MND results in a determination that the proposed Project, with incorporation of mitigation measures discussed above and outlined in Chapter 5 Mitigation, Monitoring, and Reporting Program, would have a less than significant effect on the environment.

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

Less than Significant Impact. CEQA Guidelines Section 15064(i) States that a Lead Agency shall consider whether the cumulative impact of a project is significant and whether the effects of the project are cumulatively considerable. The assessment of the significance of the cumulative effects of a project must, therefore, be conducted in connection with the effects of past projects, other current projects, and probable future projects. The proposed Project includes construction of an approximately 80-acre recharge pond, the effects of which would not result in significant cumulatively considerable impacts. Implementation of the proposed Project would not result in significant cumulative impacts and all potential impacts would be less than significant through the implementation of basic regulatory requirements and Project design.

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Less than Significant Impact. The analysis conducted in this IS/MND results in a determination that the proposed Project would have a less than significant effect on the environment. All potential impacts to human beings have been found to be unsubstantial and would be considered less than significant.

CHAPTER 5 MITIGATION, MONITORING, AND REPORTING PROGRAM

This Mitigation Monitoring and Reporting Program (MMRP) has been formulated based upon the findings of the Initial Study/Mitigated Negative Declaration (IS/MND) for the proposed Project in the District. The MMRP lists mitigation measures recommended in the IS/MND for the proposed Project and identifies monitoring and reporting requirements.

Table 5-1: Mitigation, Monitoring, and Reporting Program presents the mitigation measures identified for the proposed Project. Each mitigation measure is numbered with a symbol indicating the topical section to which it pertains, a hyphen, and the impact number. For example, AIR-2 would be the second mitigation measure identified in the Air Quality analysis of the IS/MND.

The first column of Table 5-1: Mitigation, Monitoring, and Reporting Program identifies the mitigation measure. The second column, entitled "When Monitoring is to Occur," identifies the time the mitigation measure should be initiated. The third column, "Frequency of Monitoring," identifies the frequency of the monitoring of the mitigation measure. The fourth column, "Agency Responsible for Monitoring," names the party ultimately responsible for ensuring that the mitigation measure is implemented. The last columns will be used by the Lead and Responsible Agencies to ensure that individual mitigation measures have been complied with and monitored.

Table 5-1: Mitigation, Monitoring, and Reporting Program

Mitigation, Monitoring, and Reporting Program						
Item	Mitigation Measure	When Monitoring is to Occur	Frequency of Monitoring	Agency Responsible for Monitoring	Method to Verify Compliance	Verification of Compliance
Biological Resources						
BIO-1	(WEAP Training): Prior to initiating construction activities (including staging and mobilization), all personnel associated with Project construction will attend a mandatory Worker Environmental Awareness Program (WEAP) training, conducted by a qualified biologist (someone familiar with the identification and habitats of these species), to aid workers in identifying special status resources that may occur in the Project site. The specifics of this program will include identification of the sensitive species and suitable habitats, a description of the regulatory status and general ecological characteristics of sensitive resources, and review of the limits of construction and mitigation measures required to reduce impacts to biological resources within the work area. This training will discuss special status species, describe the laws and regulations in place to provide protection of these species, identify the penalties for violation of applicable environmental laws and regulations, and include a list of required protective measures to avoid "take." A fact sheet summarizing this information, along with photographs or illustrations of sensitive species with potential to occur on the Project site, will also be prepared for distribution to all contractors, their employees, and all other personnel involved with construction of the proposed Project. All trainees will sign a form documenting that they have attended WEAP training and understand the information presented to them.	Prior to construction activities	Prior to construction activities	District		
BIO-2	(BMPs): The Project proponent will require that all workers employ the following best management	During construction activities	Throughout construction activities	District		

Mitigation, Monitoring, and Reporting Program						
Item	Mitigation Measure	When Monitoring is to Occur	Frequency of Monitoring	Agency Responsible for Monitoring	Method to Verify Compliance	Verification of Compliance
	practices (BMPs) in order to avoid and minimize potential impacts to special status species: - Vehicles will observe a 15-mph speed limit while on unpaved access routes. - All open trenches, holes, sumps, and other excavations greater than 6-inches with sidewalls steeper than a 1:1 (45 degree) slope will have an escape ramp of earth or a non-slip material with a less than 1:1 slope or these will be covered with barrier material such that animals are unable to dig or squeeze under the barrier and become entrapped. - Workers will inspect areas beneath parked vehicles, equipment, and materials prior to mobilization. If special status species are detected, the individual will either be allowed to leave of its own volition or will be captured by the qualified biologist (must possess appropriate collecting/handling permits) and relocated out of harm's way to the nearest suitable habitat beyond the influence of the Project work area. "Take" of a state or federal special status (rare, California Species of Special Concern, threatened, or endangered) species is prohibited without the necessary federal or state take permit(s). - The presence of any special status species will be reported to the proposed Project's qualified biologist, who will submit the occurrence to the CNDDB. If necessary, the biologist will report the occurrence to CDFW and/or USFWS.					
BIO-3	(Avoidance): The proposed Project's construction activities will occur, if feasible, between September	Prior to construction activities	Prior to construction activities	District with assistance of a qualified biologist	n/a	

Mitigation, Monitoring, and Reporting Program						
Item	Mitigation Measure	When Monitoring is to Occur	Frequency of Monitoring	Agency Responsible for Monitoring	Method to Verify Compliance	Verification of Compliance
	16 and January 31 (outside of the nesting bird season) to avoid impacts to nesting birds.					
BIO-4	(Pre-Construction Surveys): If activities must occur within nesting bird season (February 1 to September 15), a qualified biologist will conduct a pre-construction survey for Swainson's hawk nests onsite and within a 0.5-mile radius within ten calendar days prior to the start of construction. This survey will be conducted in accordance with the Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley (Swainson's Hawk Technical Advisory Committee 2000), or current guidance. The survey would also include inspecting for nesting migratory birds within up to 100 feet outside of the Project site and for other nesting raptors within up to 500 feet outside of the Project site. All raptor nests would be considered "active" upon the nest-building stage. If no active nests are observed, no further mitigation is required. If Project activities are halted for ten (10) consecutive days during the nesting bird season, a follow-up survey shall be completed before work can resume.	Prior to construction activities	Prior to construction activities	District with assistance of a qualified biologist	Precon Survey Memo	
BIO-5	(Avoidance Buffers): On discovery of any active nests or breeding colonies near work areas, a qualified biologist will determine appropriate avoidance buffer distances based on applicable CDFW and/or USFWS guidelines, the biology of the species, conditions of the nest(s), and the level of Project disturbance. If necessary, avoidance buffers will be identified with flagging, fencing, or other easily visible means, and will be maintained until the biologist has determined that the nestlings have fledged.	Prior to construction activities	Prior to construction activities	District with assistance of a qualified biologist	Site Inspection to verify construction of buffers.	
BIO-6	(Focused Survey and Avoidance Buffers): Within two weeks prior to the start of Project activities, a qualified biologist (someone familiar with the	Prior to construction activities	Prior to construction activities	District with assistance of a qualified biologist	Focused Survey memo. Site	

Mitigation, Monitoring, and Reporting Program						
Item	Mitigation Measure	When Monitoring is to Occur	Frequency of Monitoring	Agency Responsible for Monitoring	Method to Verify Compliance	Verification of Compliance
	identification and habitat of this species) will conduct three site visits for northwestern pond turtle within the Project site will be conducted in accordance with the Oregon Department of Fish and Wildlife statewide protocol guidelines for visual surveys (Samara Group and Oregon Native Turtle Working Group 2020). If no northwestern pond turtles are observed during the focused surveys, then construction activities may begin. If construction is delayed or halted for more than seven (7) days, another pre-construction survey for northwestern pond turtle will be conducted. If the survey results in the identification of a northwestern pond turtle, the qualified biologist will determine appropriate buffers to be implemented to avoid impacts to the individual(s).				Inspection to verify construction of buffers.	
BIO-7	(Nesting Survey): If it is determined that western pond turtles are occupying the pond habitat, an additional nesting pond turtle survey will be performed by a qualified biologist. Prior to ground disturbance activity within the pond area of the Project site, a pond turtle nesting survey will be completed within 24 hours. If any evidence of western pond turtle nests or eggs is discovered during the survey, ground disturbance will be postponed until the expected emergence period of hatchlings has ended.	Prior to construction activities	Prior to construction activities	District with assistance of a qualified biologist		
BIO-8	(Monitor): If northwestern pond turtles are discovered at any point of the proposed Project, a qualified biologist will conduct a pre-activity clearance survey each day and remain on the site to oversee all vegetation clearing and ground disturbance activities until Project activities within the pond area are completed.	Prior to and during construction activities	Prior to and during construction activities	District with assistance of a qualified biologist		
BIO-9	(Formal Consultation): Should northwestern pond turtles become listed in this area, and the project/qualified biologist needs to move an	Prior to construction activities	Prior to construction activities	District with assistance of a qualified biologist		

Mitigation, Monitoring, and Reporting Program						
Item	Mitigation Measure	When Monitoring is to Occur	Frequency of Monitoring	Agency Responsible for Monitoring	Method to Verify Compliance	Verification of Compliance
	individual, consultation for protection plans and/or relocation plans with the appropriate agencies will be completed to avoid take.					
Cultural Resources						
CUL-1	(Archaeological Remains): Should archeological remains or artifacts be unearthed during any stage of project activities, work in the area of the discovery shall cease until the area is evaluated by a qualified archaeologist. If mitigation is warranted, the project proponent shall abide by recommendations of the archaeologist.	During construction activities	Daily	District	Memo summarizing discovery	
CUL-2	(Human Remains): In the event that human remains are discovered on the Project site, the Tulare County Coroner must be notified of that discovery (Health and Safety Code Section 7050.5) and all activities in the immediate area if the find or in any nearby area reasonably suspected of overlie adjacent human remains must cease until appropriate and lawful measures have been implemented. If the Coroner determines that the remains are not recent, but rather of Native American origin, the Coroner shall notify the Native American Heritage Commission (NAHC) in Sacramento within 24 hours to permit the NAHC to determine the most likely descendent of the deceased Native American.	During construction activities	Daily	District	Memo summarizing discovery	
Tribal Cultural Resources						
See **CUL-1** and **CUL-2**.						

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London West Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	London West
Construction Start Date	3/2/2026
Operational Year	2026
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	1.90
Precipitation (days)	23.2
Location	36.484893785065424, -119.44962280543895
County	Tulare
City	Unincorporated
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2716
EDFZ	5
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Southern California Gas
App Version	2022.1.1.30

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Other Non-Asphalt Surfaces	83.0	Acre	83.0	0.00	0.00	—	—	—

Road Construction	0.02	Mile	0.02	0.00	—	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.83	3.23	29.2	29.6	0.06	1.24	5.21	6.45	1.14	2.65	3.79	—	6,717	6,717	0.28	0.06	0.42	6,741
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	7.49	6.31	54.5	59.6	0.11	2.33	6.20	8.53	2.14	2.78	4.92	—	12,062	12,062	0.50	0.11	0.03	12,108
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.38	1.16	10.2	10.5	0.02	0.42	1.15	1.58	0.39	0.50	0.89	—	2,347	2,347	0.10	0.02	0.07	2,356
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.25	0.21	1.86	1.92	< 0.005	0.08	0.21	0.29	0.07	0.09	0.16	—	389	389	0.02	< 0.005	0.01	390

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

2026	3.83	3.23	29.2	29.6	0.06	1.24	5.21	6.45	1.14	2.65	3.79	—	6,717	6,717	0.28	0.06	0.42	6,741
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	7.49	6.31	54.5	59.6	0.11	2.33	6.20	8.53	2.14	2.78	4.92	—	12,062	12,062	0.50	0.11	0.03	12,108
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.38	1.16	10.2	10.5	0.02	0.42	1.15	1.58	0.39	0.50	0.89	—	2,347	2,347	0.10	0.02	0.07	2,356
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.25	0.21	1.86	1.92	< 0.005	0.08	0.21	0.29	0.07	0.09	0.16	—	389	389	0.02	< 0.005	0.01	390

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.56	0.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.56	0.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.56	0.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.10	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	0.56	0.56	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	0.56	0.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	0.56	0.56	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	0.56	0.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	0.56	0.56	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	0.56	0.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Area	0.10	0.10	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	0.10	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3. Construction Emissions Details

3.1. Site Preparation (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.74	3.14	29.2	28.8	0.05	1.24	—	1.24	1.14	—	1.14	—	5,298	5,298	0.21	0.04	—	5,316
Dust From Material Movement	—	—	—	—	—	—	5.11	5.11	—	2.63	2.63	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.74	3.14	29.2	28.8	0.05	1.24	—	1.24	1.14	—	1.14	—	5,298	5,298	0.21	0.04	—	5,316

Dust From Material Movement	—	—	—	—	—	—	5.11	5.11	—	2.63	2.63	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.34	0.28	2.64	2.60	< 0.005	0.11	—	0.11	0.10	—	0.10	—	479	479	0.02	< 0.005	—	481
Dust From Material Movement	—	—	—	—	—	—	0.46	0.46	—	0.24	0.24	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.48	0.48	< 0.005	0.02	—	0.02	0.02	—	0.02	—	79.3	79.3	< 0.005	< 0.005	—	79.6
Dust From Material Movement	—	—	—	—	—	—	0.08	0.08	—	0.04	0.04	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.09	0.05	0.77	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	103	103	0.01	< 0.005	0.37	105
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.06	0.60	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	91.5	91.5	0.01	< 0.005	0.01	93.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.58	8.58	< 0.005	< 0.005	0.01	8.73
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.42	1.42	< 0.005	< 0.005	< 0.005	1.45
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Grading (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.62	3.04	27.2	27.6	0.06	1.12	—	1.12	1.03	—	1.03	—	6,599	6,599	0.27	0.05	—	6,621
Dust From Material Movement	—	—	—	—	—	—	2.39	2.39	—	0.95	0.95	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.98	0.83	7.38	7.48	0.02	0.30	—	0.30	0.28	—	0.28	—	1,790	1,790	0.07	0.01	—	1,796
Dust From Material Movement	—	—	—	—	—	—	0.65	0.65	—	0.26	0.26	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	0.15	1.35	1.36	< 0.005	0.06	—	0.06	0.05	—	0.05	—	296	296	0.01	< 0.005	—	297
Dust From Material Movement	—	—	—	—	—	—	0.12	0.12	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.05	0.88	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	118	118	0.01	0.01	0.42	120
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.02	0.19	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	29.4	29.4	< 0.005	< 0.005	0.05	29.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	4.87	4.87	< 0.005	< 0.005	0.01	4.95
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Linear, Grubbing & Land Clearing (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.44	0.37	3.22	3.48	< 0.005	0.19	—	0.19	0.17	—	0.17	—	490	490	0.02	< 0.005	—	492
Dust From Material Movement	—	—	—	—	—	—	0.14	0.14	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.34	1.34	< 0.005	< 0.005	—	1.35
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.22	0.22	< 0.005	< 0.005	—	0.22
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.17	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	26.1	26.1	< 0.005	< 0.005	< 0.005	26.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.07	0.07	< 0.005	< 0.005	< 0.005	0.08

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.01	0.01	< 0.005	< 0.005	< 0.005	0.01
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Linear, Grading & Excavation (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.52	2.96	25.2	29.1	0.06	1.09	—	1.09	1.00	—	1.00	—	6,495	6,495	0.26	0.05	—	6,517
Dust From Material Movement	—	—	—	—	—	—	0.83	0.83	—	0.09	0.09	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.07	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	17.8	17.8	< 0.005	< 0.005	—	17.9

Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.95	2.95	< 0.005	< 0.005	—	2.96
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.13	0.10	1.03	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	157	157	0.01	0.01	0.02	159
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	21.1	21.1	< 0.005	< 0.005	< 0.005	22.1
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.45	0.45	< 0.005	< 0.005	< 0.005	0.45
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.06	0.06	< 0.005	< 0.005	< 0.005	0.06
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.07	0.07	< 0.005	< 0.005	< 0.005	0.08

Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.01	0.01	< 0.005	< 0.005	< 0.005	0.01
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Linear, Drainage, Utilities, & Sub-Grade (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.85	2.39	21.2	23.3	0.05	0.83	—	0.83	0.76	—	0.76	—	5,693	5,693	0.23	0.05	—	5,712
Dust From Material Movement	—	—	—	—	—	—	0.69	0.69	—	0.07	0.07	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	15.6	15.6	< 0.005	< 0.005	—	15.6
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.58	2.58	< 0.005	< 0.005	—	2.59
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.11	0.09	0.86	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	131	131	0.01	0.01	0.01	133
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.37	0.37	< 0.005	< 0.005	< 0.005	0.38
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.06	0.06	< 0.005	< 0.005	< 0.005	0.06
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Linear, Paving (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.00	0.84	7.37	10.8	0.01	0.30	—	0.30	0.28	—	0.28	—	1,619	1,619	0.07	0.01	—	1,625
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.44	4.44	< 0.005	< 0.005	—	4.45
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.73	0.73	< 0.005	< 0.005	—	0.74
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.06	0.60	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	91.5	91.5	0.01	< 0.005	0.01	93.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.26	0.26	< 0.005	< 0.005	< 0.005	0.26
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.04	0.04	< 0.005	< 0.005	< 0.005	0.04
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.28	0.28	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.28	0.28	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.56	0.56	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.28	0.28	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.28	0.28	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.56	0.56	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.05	0.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.05	0.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Landsca Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.10	0.10	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	3/2/2026	4/15/2026	5.00	33.0	—
Grading	Grading	4/17/2026	9/2/2026	5.00	99.0	—
Linear, Grubbing & Land Clearing	Linear, Grubbing & Land Clearing	3/2/2026	3/2/2026	5.00	1.00	—
Linear, Grading & Excavation	Linear, Grading & Excavation	3/3/2026	3/3/2026	5.00	1.00	—
Linear, Drainage, Utilities, & Sub-Grade	Linear, Drainage, Utilities, & Sub-Grade	3/4/2026	3/4/2026	5.00	1.00	—
Linear, Paving	Linear, Paving	3/5/2026	3/5/2026	5.00	1.00	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37

Linear, Grubbing & Land Clearing	Crawler Tractors	Diesel	Average	1.00	8.00	87.0	0.43
Linear, Grubbing & Land Clearing	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Linear, Grubbing & Land Clearing	Signal Boards	Electric	Average	0.00	8.00	6.00	0.82
Linear, Grading & Excavation	Crawler Tractors	Diesel	Average	1.00	8.00	87.0	0.43
Linear, Grading & Excavation	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Linear, Grading & Excavation	Graders	Diesel	Average	1.00	8.00	148	0.41
Linear, Grading & Excavation	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Linear, Grading & Excavation	Rubber Tired Loaders	Diesel	Average	1.00	8.00	150	0.36
Linear, Grading & Excavation	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Linear, Grading & Excavation	Signal Boards	Electric	Average	0.00	8.00	6.00	0.82
Linear, Grading & Excavation	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Linear, Drainage, Utilities, & Sub-Grade	Air Compressors	Diesel	Average	1.00	8.00	37.0	0.48
Linear, Drainage, Utilities, & Sub-Grade	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Linear, Drainage, Utilities, & Sub-Grade	Graders	Diesel	Average	1.00	8.00	148	0.41
Linear, Drainage, Utilities, & Sub-Grade	Plate Compactors	Diesel	Average	1.00	8.00	8.00	0.43
Linear, Drainage, Utilities, & Sub-Grade	Pumps	Diesel	Average	1.00	8.00	11.0	0.74
Linear, Drainage, Utilities, & Sub-Grade	Rough Terrain Forklifts	Diesel	Average	1.00	8.00	96.0	0.40

Linear, Drainage, Utilities, & Sub-Grade	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Linear, Drainage, Utilities, & Sub-Grade	Signal Boards	Electric	Average	0.00	8.00	6.00	0.82
Linear, Drainage, Utilities, & Sub-Grade	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Linear, Paving	Pavers	Diesel	Average	1.00	8.00	81.0	0.42
Linear, Paving	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36
Linear, Paving	Rollers	Diesel	Average	3.00	8.00	36.0	0.38
Linear, Paving	Signal Boards	Electric	Average	0.00	8.00	6.00	0.82
Linear, Paving	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	7.70	LDA,LDT1,LDT2
Site Preparation	Vendor	—	6.80	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	7.70	LDA,LDT1,LDT2
Grading	Vendor	—	6.80	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Linear, Grubbing & Land Clearing	—	—	—	—
Linear, Grubbing & Land Clearing	Worker	5.00	7.70	LDA,LDT1,LDT2
Linear, Grubbing & Land Clearing	Vendor	0.00	6.80	HHDT,MHDT

Linear, Grubbing & Land Clearing	Hauling	0.00	20.0	HHDT
Linear, Grubbing & Land Clearing	Onsite truck	—	—	HHDT
Linear, Grading & Excavation	—	—	—	—
Linear, Grading & Excavation	Worker	30.0	7.70	LDA,LDT1,LDT2
Linear, Grading & Excavation	Vendor	1.00	6.80	HHDT,MHDT
Linear, Grading & Excavation	Hauling	0.00	20.0	HHDT
Linear, Grading & Excavation	Onsite truck	—	—	HHDT
Linear, Drainage, Utilities, & Sub-Grade	—	—	—	—
Linear, Drainage, Utilities, & Sub-Grade	Worker	25.0	7.70	LDA,LDT1,LDT2
Linear, Drainage, Utilities, & Sub-Grade	Vendor	0.00	6.80	HHDT,MHDT
Linear, Drainage, Utilities, & Sub-Grade	Hauling	0.00	20.0	HHDT
Linear, Drainage, Utilities, & Sub-Grade	Onsite truck	—	—	HHDT
Linear, Paving	—	—	—	—
Linear, Paving	Worker	17.5	7.70	LDA,LDT1,LDT2
Linear, Paving	Vendor	0.00	6.80	HHDT,MHDT
Linear, Paving	Hauling	0.00	20.0	HHDT
Linear, Paving	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	—	—	49.5	0.00	—
Grading	—	—	297	0.00	—
Linear, Grubbing & Land Clearing	—	—	0.02	0.00	—
Linear, Grading & Excavation	—	—	0.02	0.00	—
Linear, Drainage, Utilities, & Sub-Grade	—	—	0.02	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	3	74%	74%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Other Non-Asphalt Surfaces	83.0	0%
Road Construction	0.02	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2026	0.00	204	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	0.00	0.00	216,929

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Other Non-Asphalt Surfaces	0.00	204	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Other Non-Asphalt Surfaces	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Other Non-Asphalt Surfaces	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	34.6	annual days of extreme heat
Extreme Precipitation	1.05	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	5	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	5	1	1	4
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	91.1
AQ-PM	96.0
AQ-DPM	34.0
Drinking Water	96.9
Lead Risk Housing	79.9

Pesticides	96.2
Toxic Releases	54.0
Traffic	47.9
Effect Indicators	—
CleanUp Sites	78.0
Groundwater	96.9
Haz Waste Facilities/Generators	4.94
Impaired Water Bodies	33.2
Solid Waste	0.00
Sensitive Population	—
Asthma	67.9
Cardio-vascular	49.5
Low Birth Weights	83.3
Socioeconomic Factor Indicators	—
Education	94.5
Housing	66.5
Linguistic	93.3
Poverty	98.1
Unemployment	87.7

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	1.539843449
Employed	10.13730271
Median HI	5.363788015
Education	—

Bachelor's or higher	3.836776594
High school enrollment	100
Preschool enrollment	49.22366226
Transportation	—
Auto Access	20.53124599
Active commuting	32.74733735
Social	—
2-parent households	41.58860516
Voting	19.14538689
Neighborhood	—
Alcohol availability	36.28897729
Park access	2.194276915
Retail density	2.117284743
Supermarket access	4.837674836
Tree canopy	13.29398178
Housing	—
Homeownership	33.85089183
Housing habitability	19.63300398
Low-inc homeowner severe housing cost burden	38.36776594
Low-inc renter severe housing cost burden	56.70473502
Uncrowded housing	8.879763891
Health Outcomes	—
Insured adults	4.850506865
Arthritis	0.0
Asthma ER Admissions	59.6
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0

Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	69.1
Cognitively Disabled	54.2
Physically Disabled	41.1
Heart Attack ER Admissions	64.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	19.6
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	9.5
Elderly	85.6
English Speaking	5.5
Foreign-born	80.0
Outdoor Workers	0.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	93.5
Traffic Density	42.7

Traffic Access	0.0
Other Indices	—
Hardship	98.5
Other Decision Support	—
2016 Voting	25.5

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	97.0
Healthy Places Index Score for Project Location (b)	4.00
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	Construction Schedule

Appendix B: Biological Evaluation

ALTA IRRIGATION DISTRICT

LONDON WEST POND PROJECT BIOLOGICAL EVALUATION

LONDON, CALIFORNIA
SEPTEMBER 2025

PREPARED FOR:
Alta Irrigation District
289 North L Street, Dinuba, CA 93618

PREPARED BY:
PROVOST & PRITCHARD CONSULTING GROUP
455 W Fir Avenue, Clovis, CA 93611

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Report Prepared for:

Alta Irrigation District
289 North L Street
Dinuba, CA 93618

Contact:

Chad Wegely, General Manager
(559) 591-0800

Report Prepared by:

Provost & Pritchard Consulting Group
Preparer: Jenny McCarthy, Biologist
Project Manager: Briza Grace Sholars, Principal Environmental Planner
QA/QC: Mary Beth Bourne, Senior Biologist
GIS Support: Ben Toews, GIS Specialist
Administrative Support: Jackie Lancaster, Senior Project Administrator

Contact:

Briza Grace Sholars
(559) 449-2700

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ACRONYMS AND ABBREVIATIONS

BMP ..... Best Management Practices
CDFW..... California Department of Fish and Wildlife
CEQA ..... California Environmental Quality Act
CNDDB..... California Natural Diversity Database
CNPS..... California Native Plant Society
County ..... Tulare County
District ..... Alta Irrigation District
ECOS..... United States Fish and Wildlife Service's Environmental Conservation Online System
EPA ..... Environmental Protection Agency
°F..... degrees Fahrenheit
HCP ..... Habitat Conservation Plan
IPaC ..... United States Fish and Wildlife Service's Information for Planning and Consultation system
MBTA..... Migratory Bird Treaty Act
NCCP..... Natural Community Conservation Plan
NPDES..... National Pollutant Discharge Elimination System
NRCS..... Natural Resources Conservation Service
NWI ..... National Wetlands Inventory
OHWM ..... Ordinary High Water Mark
Project ..... London Pond West Project
Provost & Pritchard..... Provost & Pritchard Consulting Group
RWQCB..... Regional Water Quality Control Board
SWPPP ..... Storm Water Pollution Prevention Plan
SWRCB..... State Water Resources Control Board
USACE..... United States Army Corps of Engineers
USC ..... United States Code
USDA ..... United States Department of Agriculture
USFWS..... United States Fish and Wildlife Service
USGS..... United States Geological Survey

1 INTRODUCTION

This Biological Evaluation, prepared by Provost & Pritchard Consulting Group (Provost & Pritchard) in compliance with the California Environmental Quality Act (CEQA), includes descriptions of the biological resources present or with potential to occur within the Lond West Pond Project (or "Project") and surrounding areas, potential project-related impacts to those resources, and mitigation measures to reduce these impacts to a less-than-significant level under CEQA.

1.1 PROJECT DESCRIPTION

The London West Project (Project) is located in the San Joaquin Valley, south of the census-designated place of London and north-northeast of the City of Dinuba, in the northern portion of Tulare County, California (see Figure 1). The Project site area is approximately 80 acres and includes an orchard and a portion of the existing London Pond, recharge facility (see Figure 2).

Alta Irrigation District (AID or District) proposes to develop an approximately 80-acre recharge facility which would consist of approximately four cells and would connect to the existing Kennedy Schoolhouse Ditch pipeline. The pipeline would be replaced with an open ditch through the site. The Project also includes a diversion, or spillway, in the middle of the property on the east side to allow for spill to the existing London Pond recharge facility. There are two existing wells on the Project site that would be available for use as recovery or monitoring wells.

The Project parcel would be cleared of the existing stone fruit crops. Construction equipment would likely include the following equipment used during construction:

- Excavators,
- Bulldozers,
- Skid steers,
- Dump trucks,
- Loaders,
- Concrete pump truck,
- Graders, and
- Water truck.

1.2 REPORT OBJECTIVES

Construction activities such as those proposed by the Project could potentially change biological resources or habitats that are critical for sensitive plant and wildlife species. In cases such as these, development may be regulated by state or federal agencies, and/or addressed by local regulatory agencies.

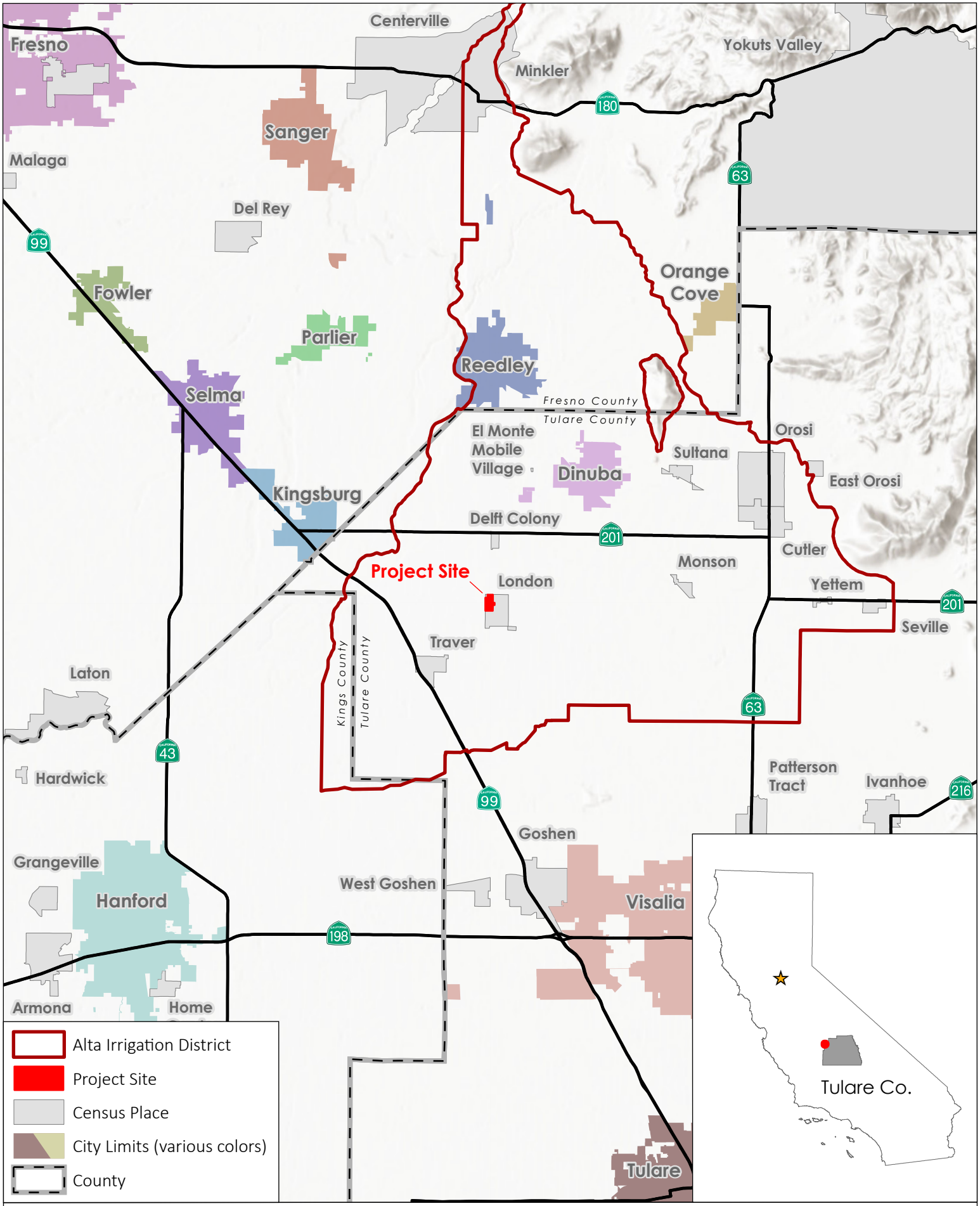
This report addresses issues related to the following:

- The presence of sensitive biological resources within the Project site, or those with the potential to occur within the Project site.
- The federal, state, and local regulations regarding these resources.
- Mitigation measures that may be required to reduce the magnitude of anticipated impacts and/or comply with permit requirements of state and federal resource agencies.

Therefore, the objectives of this report are to:

- Summarize all Project site-specific information related to existing biological resources.

- Make reasonable inferences about the biological resources that could occur on the Project site based on habitat suitability and the proximity of the Project site to a species' known range.
- Summarize all State and federal natural resource protection laws that may be relevant to implementation of the project.
- Identify and discuss project impacts and effects to biological resources likely to occur onsite within the context of CEQA, and/or State or federal laws.
- Identify and prescribe a set of avoidance and minimization measures that would reduce impacts to a less-than-significant level (as identified by CEQA) and are generally consistent with recommendations of the resource agencies for affected biological resources.



Regional Vicinity Map

Alta Irrigation District - London West Pond

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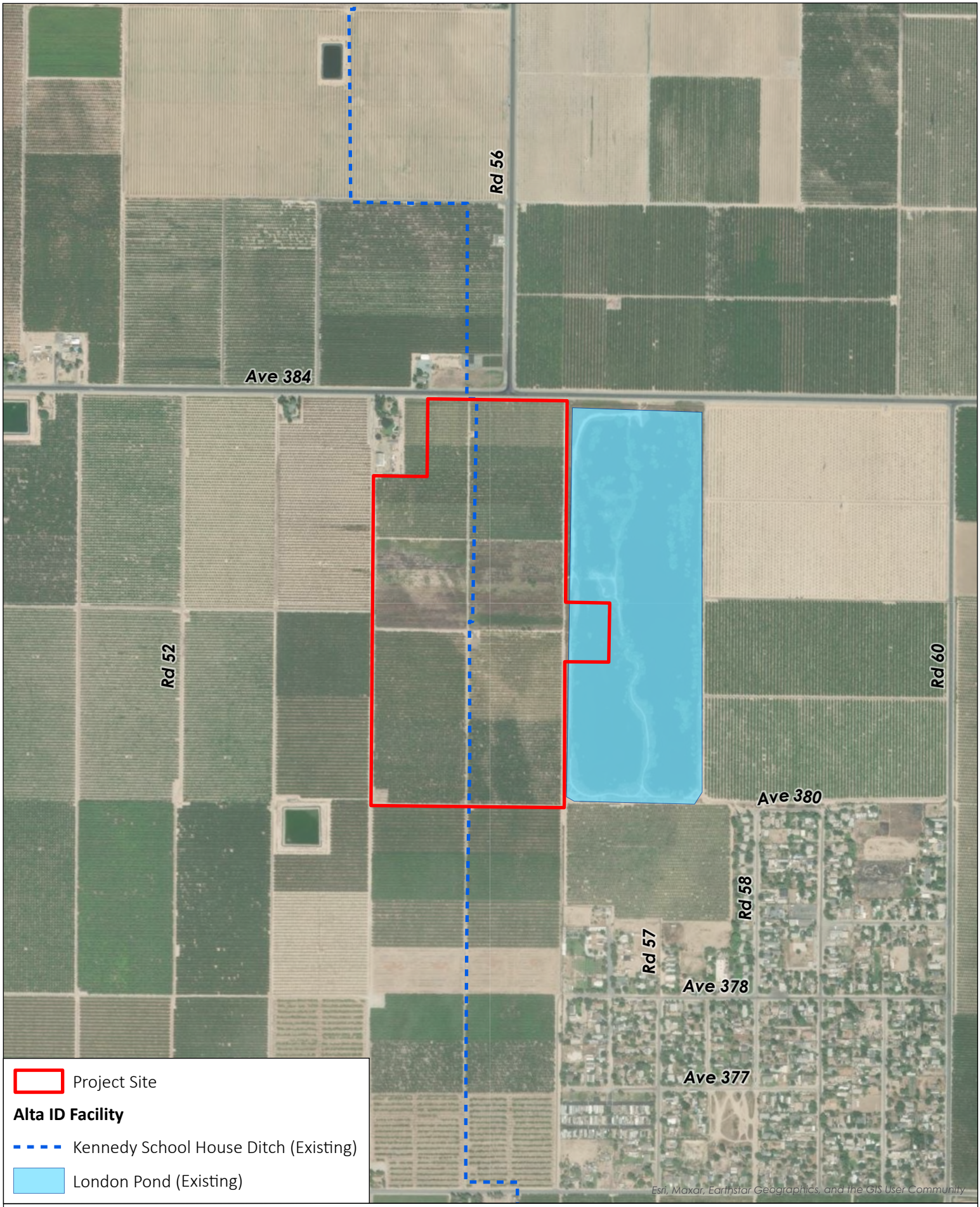
Fig. 1 Page 1-3



Aerial Map

Alta Irrigation District - London West Pond

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Fig. X2Page 1-4

1.3 STUDY METHODOLOGY

A reconnaissance-level field survey of the Project site was conducted on July 28, 2025, by Provost & Pritchard biologist, Jenny McCarthy. The survey consisted of walking and driving throughout the Project site and visually surveying areas outside of the Project site while identifying and noting land uses, biological habitats and communities, and plant and animal species encountered. Habitats were also assessed to help with determining if they could be suitable for various rare or protected plant and animal species. Representative photographs of the site were taken and are presented in Appendix A.

Ms. McCarthy then utilized the results of the field survey to analyze potential project-related impacts to biological resources based on the resources known to occur or with the potential to occur within the Project site. Sources of information used in preparation of this analysis included: CDFW's California Natural Diversity Database (CNDDB; see Appendix B for the species list) and California Wildlife Habitat Relationships (CWHR) database; California Native Plant Society's (CNPS) Online Inventory of Rare and Endangered Vascular Plants of California; CalFlora's online database of California native plants; Jepson Herbarium's online database (i.e., Jepson eFlora); United States Fish and Wildlife Service's (USFWS) Environmental Conservation Online System (ECOS), Information for Planning and Consultation (IPaC; see Appendix C for the species list) system, and National Wetlands Inventory (NWI); iNaturalist; NatureServe Explorer's online database; United States Department of Agriculture (USDA) Natural Resources Conservation Service's (NRCS) Web Soil Survey (see Appendix D for the Web Soil Survey Report); California Herps website; and various manuals, reports, and references related to plants and animals of the San Joaquin Valley region.

The field survey did not include focused surveys for special status species. The field survey conducted included the appropriate level of detail to assess the significance of potential impacts to sensitive biological resources resulting from implementing the project. Furthermore, the field survey was sufficient to generally describe aquatic features of the project site that could be claimed as jurisdictional by federal and/or state agencies, such as the United States Army Corps of Engineers (USACE), California Department of Fish and Wildlife (CDFW), Regional Water Quality Control Board (RWQCB), and the State Water Resources Control Board (SWRCB). If project activities resulted in impacts to aquatic resources and aquatic habitats, this report would be sufficient to support required permit applications, if needed, for the project.

2 EXISTING CONDITIONS

2.1 REGIONAL SETTINGS

2.1.1 TOPOGRAPHY

The Project site is located within the *Traver* U.S. Geological Survey (USGS) 7.5-minute quadrangle within the northwest and northeast corners of Section 02, Township 17 South, Range 23 East. The topography of the Project site is relatively flat with elevations ranging from approximately 297 to 310 feet above mean sea level (see Figure 3).

2.1.2 CLIMATE

Like most of California, the Project area experiences a Mediterranean climate. Warm, dry summers are followed by cool, moist winters. In the summer, average high temperatures range between 89- and 97-degrees Fahrenheit (°F), but do not often exceed 103 °F, and the humidity is generally low. Winter temperatures are often below 42°F during the day and rarely exceed 43°F. On average, the census-designated place of London receives approximately 13 inches of precipitation in the form of rain yearly, most of which occurs between October and April (Weatherspark), and the Project site would be expected to receive similar amounts of precipitation.

2.1.3 HYDROLOGY

The nearest surface water to the Project site is the London Pond, a section of the pond to the east is part of the Project site, and Kennedy School House Ditch, which runs north to south through the middle portion of the Project site, which is also part of the Project. London Pond receives its water from King's River. Stormwater and snowmelt runoff from upland areas of the Sierra Nevada Range supply the Kings River both above and below Pine Flat Lake. Water is directed through a series of irrigation canals before flowing into the Kennedy School House Ditch. London Pond is currently utilized as a detention basin for irrigation water.

2.1.4 SOILS

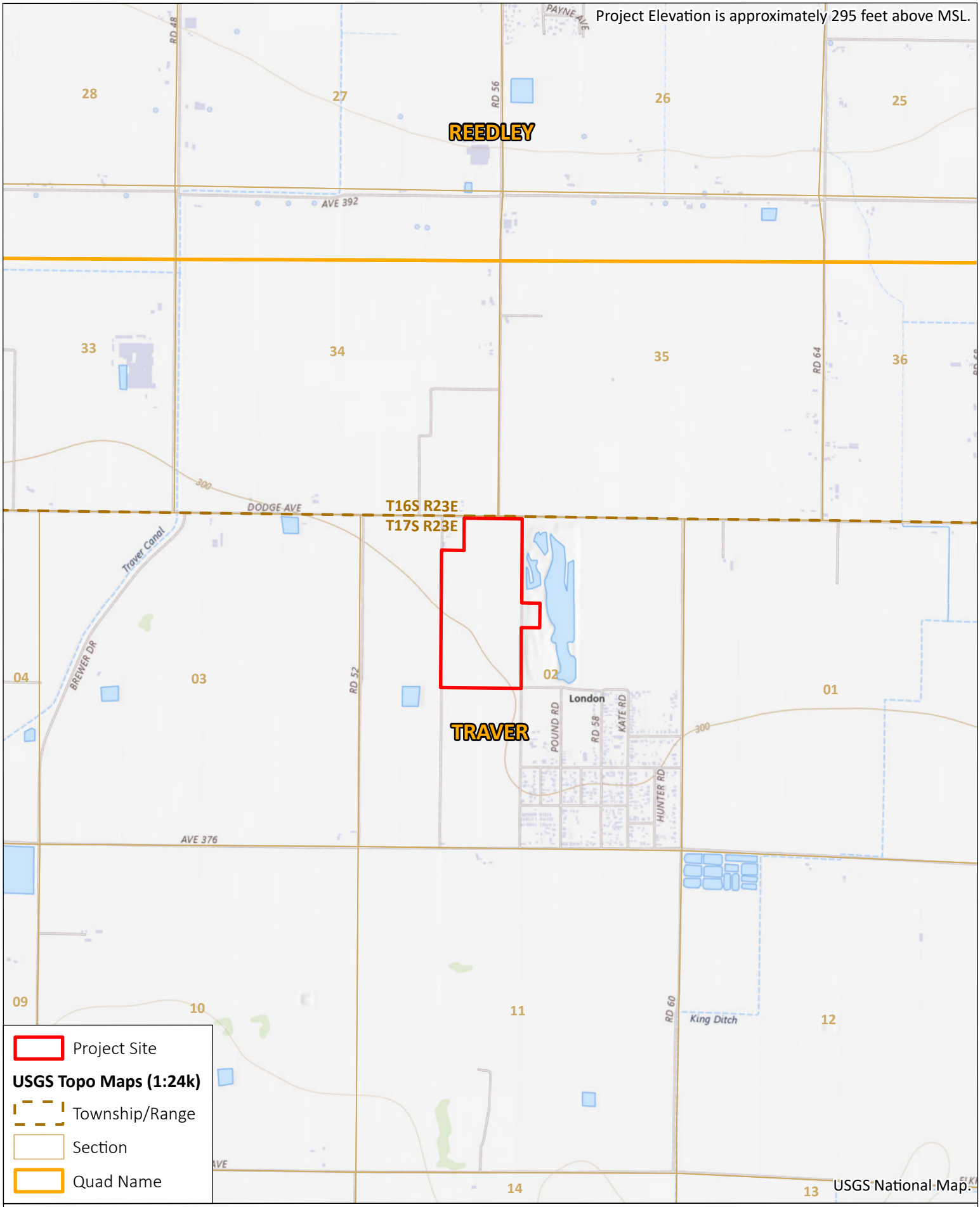
Two soil mapping units representing two soil types were identified within the Project site and are listed in Table 1 (see Appendix D for the Web Soil Survey Report). The soils are displayed with their core properties in the table below, according to the Major Land Resource Area of California. Both soils are primarily used for dairy and cattle production, building site development, cropland, and wildlife habitat.

Table 1: List of Soils Located on the Site and Their Basic Properties

Soil	Soil Map Unit	Percent of Site	Hydric Soil Category	Drainage	Permeability	Runoff
Calgro-Calgro	Saline-Sodic, complex, 0 to 2 percent slopes	3.2%	Predominantly Nonhydric	Moderately well drained	Moderate permeability above the duripan, very slow in the duripan, and rapid below the duripan	Low or medium
Hanford	Sandy loam, 0 to 2 percent slopes	96.8%	Nonhydric	Well drained	Moderate rapid	Negligible to low

Hydric soils are defined as soils that are saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions such that under sufficiently wet conditions, hydrophytic vegetation

can be supported. Hydric soil ratings are derived from specific soil properties as well as climate, parent material, vegetation, landform type, and biological activity of a certain location. None of the major but one of the minor soil mapping units located on the Project site was identified as hydric.



Topographic Map

Alta Irrigation District - London West Pond

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2.2 BIOTIC HABITATS

Three biotic habitats were observed within the Project site and included orchard, pond, and ruderal (see Figure 4). These habitats and their constituent plant and animal species are described in more detail in the following sections.

2.2.1 ORCHARD

The majority of the Project site consisted of a approximately 57-acre peach (*Prunus persica*) orchard in the northern and southern portions of the site, with patches of vegetation growing around the tree trunks. Dirt roads ran through the middle and around the perimeter of the orchards. The Kennedy School House Ditch is an underground pipe that runs north to south through the middle of the site. There is also a utility line roughly 25 feet from the middle dirt road that also runs north to south through the Project site.

The survey resulted in the observation of the following plant species; barnyard grass (*Echinochloa crus-galli*), sprangletop (*Diplachne fusa*), and common sowthistle (*Sonchus oleraceus*).

The survey resulted in the observation of the following wildlife species; California ground squirrel (*Otospermophilus beecheyi*), western kingbird (*Tyrannus verticalis*), black phoebe (*Sayornis nigricans*), desert cottontail (*Sylvilagus audubonii*), Eurasian collared dove (*Streptopelia decaocto*), and common raven (*Corvus corax*).

The orchard habitat could serve as foraging and nesting habitat for a variety of birds, including raptors, during the day, as well as coyotes (*Canis latrans*), and other nocturnal animals at night.

2.2.2 DETENTION POND

Approximately 2.5-acres of the eastern portion of the London Pond is a part of the Project, where the proposed spillway will occur. The pond appears to hold water throughout the year and consisted of a sandy access road, an embankment between the road with common and non-native vegetation growing on them. A few willow trees (*Salix sp.*) were located along the edges of the pond within the Project site, and one was located further east into the pond. The water depth appeared to vary between a few inches to several feet within the pond. Trash and debris were present throughout the site.

The survey resulted in the observation of the following plant species; turkey tangle (*Phyla nodiflora*), sacred datura (*Datura wrightii*), willows, Spanish clover (*Acmispon americanus*), Canadian horseweed (*Erigeron canadensis*), shortpod mustard (*Hirschfeldia incana*), curly dock (*Rumex crispus*), purpletop vervain (*Verbena bonariensis*), puncture vine (*Tribulus terrestris*), shepherd's purse (*Capsella bursa-pastoris*), telegraph weed (*Heterotheca grandiflora*), and Johnsongrass (*Sorghum halepense*).

The survey resulted in the observation of the following wildlife and domestic species; western kingbird, turkey vulture (*Cathartes aura*), black phoebe, Cooper's hawk (*Accipiter cooperii*), American bullfrog *(Rana catesbeiana*), cliff swallow (*Petrochelidon pyrrhonota*), lesser goldfinch (*Spinus psaltria*), and domestic dog (*Canis familiaris*).

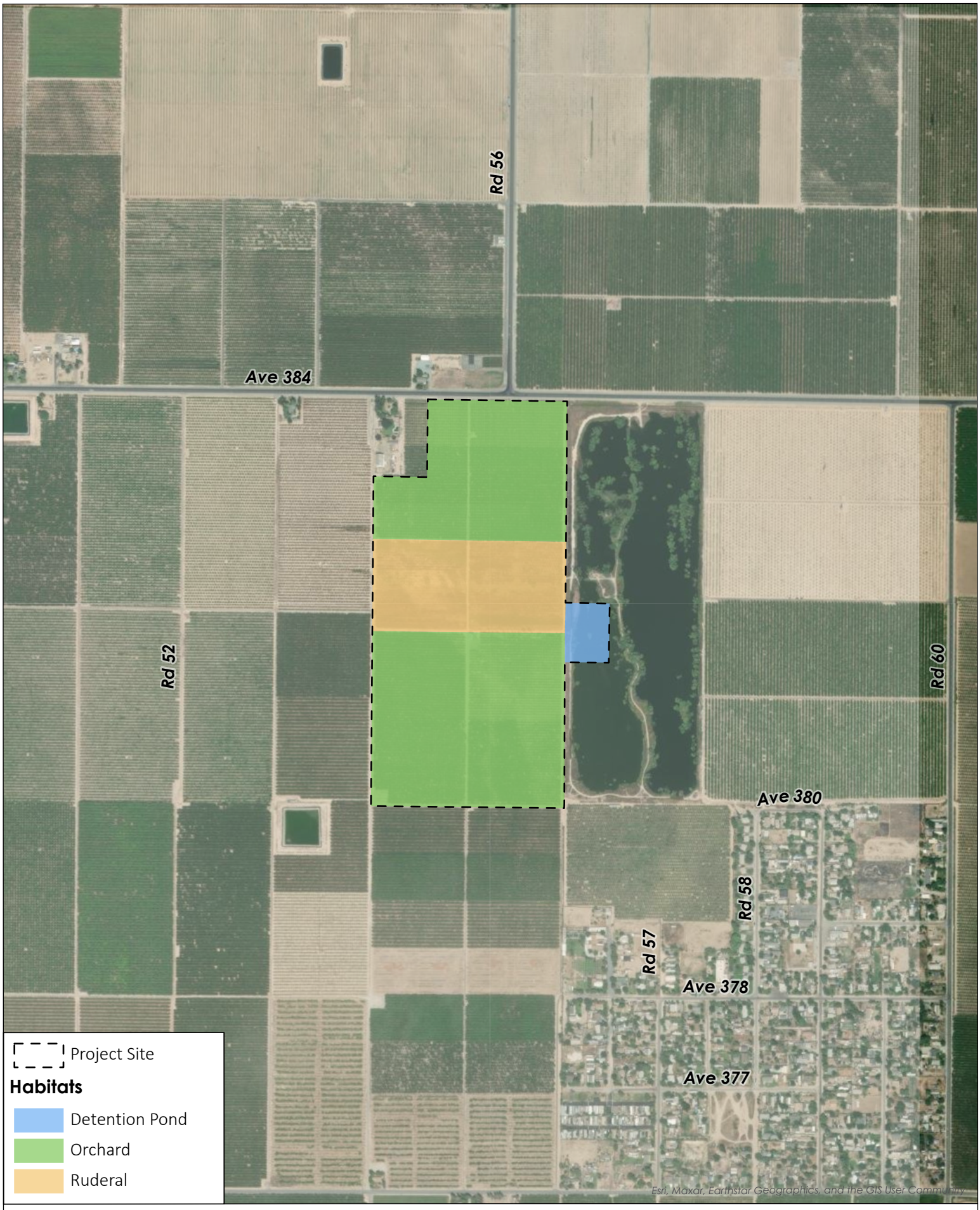
The Project site could serve as foraging and nesting habitat to a variety of birds, including raptors, during the day, year-round habitat for reptiles and amphibians, such as the California red-sided gartersnake (*Thamnophis sirtalis infernalis*) and Sierran treefrog (*Pseudacris sierra*) as well as nocturnal species such as striped skunks (*Mephitis mephitis*).

2.2.3 RUDERAL

Between the north and south sections of the orchard are two ruderal fields that make up approximately 17-acres of the Project site and are also separated on all sides by the dirt roads. The fields were disked semi-recently, so the ground had a thin layer of dry crust but was still soft underneath. The fields also had vegetation of common and non-native species of plants growing in both fields, and the utility lines continuing north to south through the fields.

The plant species observed during the survey included common sunflower (*Helianthus annuus*), wire lettuce (*Stephanomeria pauciflora*), Bermuda grass (*Cynodon dactylon*), Canadian horseweed, and lamb's quarters (*Chenopodium album*).

The Project site could serve as nesting habitat for ground-nesting birds, such as mourning doves (*Zenaida macroura*), and foraging habitat for seed-eating birds, such as finches (*Spinus sp.)* and sparrows (*Melospiza sp*.).



Habitats Map

Alta Irrigation District - London West Pond

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Fig. 4 Page 2-6

2.3 NATURAL COMMUNITIES OF SPECIAL CONCERN AND RIPARIAN HABITAT

Natural communities of special concern are those that are of limited distribution, distinguished by significant biological diversity, or home to special status species. CDFW has classified and mapped all natural communities in California. Just as the special status plant and animal species (see Section 3.6), these natural communities of special concern can be found within the CNDDB.

No natural communities of special concern or riparian habitat were identified within the Project site or the surrounding area.

2.4 DESIGNATED CRITICAL HABITAT

The USFWS often designates areas of "critical habitat" when it lists species as threatened or endangered. Critical habitat is a specific geographic area that contains features essential for the conservation of a threatened or endangered species, which may require special management and protection. According to the IPaC, designated critical habitat is absent from the Project site and vicinity.

2.5 WILDLIFE MOVEMENT CORRIDORS AND NATIVE WILDLIFE NURSERY SITES

Wildlife movement corridors are routes that animals regularly and predictably follow during seasonal migration, dispersal from native ranges, daily travel within home ranges, and inter-population movements. Movement corridors in California are typically associated with valleys, ridgelines, and rivers and creeks supporting riparian vegetation.

Native wildlife nursery sites were observed within the pond habitat of the Project site, which consisted of upland and aquatic habitats that could be used by western pond turtles as a nursery site. But no wildlife movement corridors were observed within the Project site.

2.6 SPECIAL STATUS PLANTS AND ANIMALS

California contains several rare plant and animal species. In this context, "rare" is defined as a species known to have low populations or limited distributions. Conversion of habitats to accommodate human population growth in turn reduces the already-limited suitable habitat for rare species. This results in rare and sensitive species becoming increasingly more vulnerable to extirpation. State and federal regulations have provided the CDFW and USFWS with mechanisms for conserving and protecting the diversity of plant and animal species native to California. Numerous native plants and animals have been formally designated as "threatened" or "endangered" under state and federal endangered species legislation. Other formal designations include "candidate" for listing or "species of special concern" by CDFW. The CNPS has its list of native plants considered rare, threatened, or endangered. Collectively these animals and plants are referred to as "special status species."

A query of the CNDDB for occurrences of special status plant and animal species was conducted for the *Traver* USGS 7.5-minute quadrangles that contains the Project site, and for the 8 surrounding USGS quadrangles: Burris Park, Monson, Remnoy, Goshen, Visalia, Orange Cove South, Reedley, and Selma. A query of the IPaC was also completed for the Project site. These species, and their potential to occur within the Project site, are listed in Table 2 and Table 3, below. Other special status species that did not show up in the CNDDB query, but have the potential to occur in the vicinity, are also included in Table 3. Species lists obtained from CNDDB and IPaC are available in Appendix B and Appendix C, respectively. All relevant sources of information, as discussed in the Study Methodology section of this report, as well as field observations, were used to determine if any special status species have the potential to occur within the Project site.

Table 2: List of Special Status Plants with Potential to Occur on the Site and/or in the Vicinity

Species	Status*	Habitat	Occurrence within the Site
Alkali-sink goldfields (*Lasthenia chrysantha*)	CNPS 1B	Found in vernal pool and wet saline flat habitats in the San Joaquin Valley region at elevations below 700 feet. Blooms February – April.	**Absent.** Vernal pools were not observed within the Project site.
Brittlescale (*Atriplex depressa*)	CNPS 1B	Found in the Central Valley in alkaline or clay soils, typically in meadow or annual grassland habitats at elevations below 1,100 feet. Sometimes associated with vernal pools. Blooms June – October.	**Absent.** Suitable habitat was not observed within the Project site.
California alkali grass (*Puccinellia simplex*)	CNPS 1B	Found in the San Joaquin Valley and other parts of California in saline flats and mineral springs within valley grassland and wetland-riparian communities at elevations below 3,000 feet. Blooms March – May.	**Absent.** Suitable habitat was not observed within the Project site.
California satintail (*Imperata brevifolia*)	CNPS 2B	Often found in wet springs, meadows, streambanks, and floodplains, and can also be found in coastal scrub, riparian scrub, Mojavean desert scrub, chaparral, and alkali seeps at elevations below 1,600 feet. Blooms September – May.	**Absent.** Suitable habitat was not observed within the Project site.
Coulter's goldfields (*Lasthenia glabrata* ssp. *coulteri*)	CNPS 1B	Found on alkaline and saline soils in vernal pool and playas in grassland habitats at elevations below 4,500 feet. Blooms April – May.	**Absent.** Suitable habitat was not observed within the Project site.
Earlimart orache (*Atriplex cordulata* var. *erecticaulis*)	CNPS 1B	Found in the San Joaquin Valley in saline and alkaline soils, typically within valley grasslands at elevations below 400 feet. Blooms August – September.	**Absent.** Suitable habitat was not observed within the Project site.
Heartscale (*Atriplex cordulata* var. *cordulata*)	CNPS 1B	Found in the Central Valley in saline or alkaline soils within shadscale scrub, valley grassland, and wetland-riparian communities at elevations below 250 feet. Blooms June – July.	**Absent.** Suitable habitat was not observed within the Project site.
Hoover's spurge (*Euphorbia hooveri*)	FT, CNPS 1B	Found in vernal pools within valley grassland, freshwater wetland, and riparian communities at elevations below 800 feet. Blooms July – September.	**Absent.** Suitable habitat was not observed within the Project site.

Species	Status*	Habitat	Occurrence within the Site
Lesser saltscale (*Atriplex minuscula*)	CNPS 1B	Found in the San Joaquin Valley in sandy, alkaline soils in alkali scrub, valley and foothill grassland, and alkali sink communities at elevations below 750 feet. Blooms April – October.	**Absent.** Suitable habitat was not observed within the Project site.
Recurved larkspur (*Delphinium recurvatum*)	CNPS 1B	Occurs in chenopod scrub, cismontane woodland, and grassland habitats on poorly drained, fine, alkaline soils; often in valley saltbush or valley chenopod scrub communities at elevations between 100 and 2,600 feet. Blooms March – June.	**Absent.** Suitable habitat was not observed within the Project site.
San Joaquin adobe sunburst (*Pseudobahia peirsonii*)	FT, CE, CNPS 1B	Found in the San Joaquin Valley and the Sierra Nevada foothills in bare, dark, clay soils in valley and foothill grassland and cismontane woodland communities at elevations between 300 and 3,000 feet. Blooms March – May.	**Absent.** Suitable habitat was not observed within the Project site.
San Joaquin Valley Orcutt grass (*Orcuttia inaequalis*)	FT, CE, CNPS 1B	Found in the eastern San Joaquin Valley and the Sierra Nevada foothills in vernal pools within valley grassland, freshwater wetland, and wetland-riparian communities at elevations below 2,600 feet. Blooms April – September.	**Absent.** Suitable habitat was not observed within the Project site.
Sanford's arrowhead (*Sagittaria sanfordii*)	CNPS 1B	This species is an aquatic plant and is found in the San Joaquin Valley and other parts of California in freshwater marshes, ponds, canals, and ditches at elevations below 1,000 feet. Blooms May – October.	**Unlikely.** While the existing pond has suitable habitat features, such as a shallow water line in some areas of the Project site, the survey took place during this species blooming period, and the species was not observed during the survey. The nearest recorded observation occurred five miles north-northeast of the Project site in 2014.
Spiny-sepaled button-celery (*Eryngium spinosepalum*)	CNPS 1B	Found in the Sierra Nevada foothills and the San Joaquin Valley in vernal pools, swales, and roadside ditches. Often associated with clay soils in vernal pools within grassland communities. Occurs at elevations between 50 and 4,200 feet. Blooms April – July.	**Absent.** Suitable habitat was not observed within the Project site.
Subtle orache (*Atriplex subtilis*)	CNPS 1B	Found in the San Joaquin Valley in saline depressions in alkaline	**Absent.** Suitable habitat was not observed within the Project site.

Species	Status*	Habitat	Occurrence within the Site
		soils within valley and foothill grassland communities at elevations below 300 feet. Blooms June – October.	
Winter's sunflower (*Helianthus winteri*)	CNPS 1B	Found in the Sierra Nevada foothills on steep, south-facing grassy slopes, rock outcrops, and road-cuts at elevations ranging from 600 to 1,500 feet. Blooms year-round.	**Absent.** Suitable habitat was not observed within the Project site.

Table 3: List of Special Status Animals with Potential to Occur on the Site and/or in the Vicinity

Species	Status*	Habitat	Occurrence within the Site
Burrowing owl (*Athene cunicularia*)	CCE, CSSC	Resides in open, dry grasslands, deserts, scrublands, and other areas with low growing vegetation. Nests and roosts underground in existing burrows created by mammals, most often by ground squirrels, and human-made structures.	**Unlikely.** No small mammal burrows suitable for this species were observed within the Project site. The nearest recorded observation of this species occurred four miles north-northeast of the Project site in 2006 in a fallow vineyard.
California tiger salamander – central California DPS (*Ambystoma californiense*)	FT, CT	Requires vernal pools or seasonal ponds for breeding and small mammal burrows for aestivation. Generally found in grassland and oak savannah plant communities in central California from sea level to 1,500 feet in elevation. Can migrate up to 1.3 miles to breed.	**Absent.** Suitable adult and breeding habitat, including small mammal burrows were not observed within the Project site. While the pond habitat might be suitable breeding habitat, there is no habitat for the adult of the species outside the breeding season.
Conservancy fairy shrimp (*Branchinecta conservatio*)	FE	Found in large, turbid freshwater vernal pools in the Central Valley, from Tehama County in the north to Merced County in the south, with one outlying population in Ventura County's Interior Coast Ranges.	**Absent.** Vernal pools were not observed within the Project site.
Crotch's bumble bee (*Bombus crotchii*)	CCE	Occurs throughout coastal California, as well as east to the Sierra Nevada-Cascade crest, and south into Mexico. Food plant genera include snapdragons, scorpionweeds, primroses, poppies, and buckwheats. Nests are often located underground in abandoned rodent nests, or above ground in tufts of grass, old bird nests, rock piles, or cavities in dead trees. This species overwinters under leaf litter or soft soil.	**Absent.** The Project site lacked any food source or small mammal burrows for this species.

Species	Status*	Habitat	Occurrence within the Site
Fresno kangaroo rat (*Dipodomys nitratoides exilis*)	FE, CE	An inhabitant of alkali sinks and open grassland habitats in Merced, Kings, Fresno, and Madera counties. Prefers bare, alkaline, clay-based soils subject to seasonal inundation with more friable soil mounds around shrubs and grasses. The most recent recorded observation of this species in California was in 1992 in Fresno County.	**Absent.** Suitable habitat and small mammal burrows were not observed within the Project site.
Loggerhead shrike (*Lanius ludovicianus*)	CSSC	Frequents open habitats with sparse shrubs and trees, other suitable perches, bare ground, and low herbaceous cover. In the Central Valley, this species nests in riparian areas, desert scrub, and agricultural hedgerows.	**Possible.** Suitable foraging and nesting habitat were observed throughout the Project site. The nearest recorded observation occurred four miles south-southeast of the Project site in 1992.
Monarch butterfly (*Danaus plexippus*)	FPT	Roosts in wind-protected tree groves (eucalyptus, Monterey pine, cypress), with nectar and water sources nearby. Larval host plants consist of milkweeds. Winter roost sites extend along the Pacific Coast from northern Mendocino to Baja California, Mexico.	**Absent.** Suitable overwintering and foraging habitat were not observed within the Project site.
Northern California legless lizard (*Anniella pulchra*)	CSSC	Found primarily underground, burrowing in loose, moist, and sandy soil. Forages in loose soil and leaf litter during the day. Occasionally observed on the surface at dusk and night.	**Unlikely.** The only sandy area of the Project site was the access road within the pond habitat, and thus, it can be presumed that ongoing disturbance would deter this species from utilizing these areas. The nearest recorded observation occurred 12 miles south-southeast of the Project site in 1934.
Northern leopard frog (*Lithobates pipiens*)	CSSC	Inhabits grassland, wet meadows, potholes, forests, woodland, brushlands, springs, canals, bogs, marshes, and reservoirs in scattered locations in California. Generally, prefers permanent water with abundant riparian vegetation.	**Absent.** The Project site is outside the current distribution of this species.
Northwestern pond turtle (*Actinemys marmorata*)	FPT, CSSC	An aquatic turtle of ponds, marshes, slow-moving rivers, streams, and irrigation ditches with riparian vegetation. Requires adequate basking sites and sandy banks or grassy open fields to deposit eggs.	**Possible.** Suitable adult including basking locations, and nesting sites were observed in the pond habitat of the Project site. The nearest recorded observation occurred 12 miles south-southeast of the Project site in 1879.

Species	Status*	Habitat	Occurrence within the Site
Pallid bat (*Antrozous pallidus*)	CSSC	Found in grasslands, chaparral, and woodlands, where it feeds on ground- and vegetation-dwelling arthropods, and occasionally takes insects in flight. Prefers to roost in rock crevices, but may also use tree cavities, caves, bridges, and other human-made structures.	**Unlikely.** The species may forage within the Project site, but no roosting habitat was observed within the Project site. The nearest recorded observation occurred five miles north-northwest of the Project site in 2001.
San Joaquin kit fox (*Vulpes macrotis mutica*)	FE, CT	Opportunistically forages in a variety of habitats. Dens in burrows within alkali sink, valley grassland, and woodland habitats in valleys and adjacent foothills and in human-made structures in cities, rangeland, and agricultural areas. Occurs in the San Joaquin Valley and other smaller valleys to the west.	**Absent.** Suitable habitat was not observed within the Project site.
Swainson's hawk (*Buteo swainsoni*)	CT	Nests in large trees in open areas adjacent to grasslands, grain or alfalfa fields, or livestock pastures suitable for supporting rodent populations.	**Possible.** Suitable nesting habitat and prey items were observed within half a mile of the Project site. The nearest recorded observation occurred 3.5 miles west-southwest of the Project site in 2017.
Tipton kangaroo rat (*Dipodomys nitratoides nitratoides*)	FE, CE	Inhabits saltbush scrub and sink scrub communities in the Tulare Lake Basin of the southern San Joaquin Valley. This species needs soft friable soils to burrow.	**Absent.** Suitable habitat and small mammal burrows were not observed within the Project site.
Valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*)	FT	Lives in mature elderberry shrubs in the Central Valley and adjacent foothills from Tehama County south through Merced and Mariposa Counties with two scattered populations in Madera and Fresno Counties. Adults are active from March to June.	**Absent.** Elderberry shrubs were absent from the Project site.
Vernal pool fairy shrimp (*Branchinecta lynchi*)	FT	Occupies vernal and seasonal pools, with clear to tea-colored water, in grass or mud-bottomed swales, and basalt depression pools.	**Absent.** Vernal pools were absent within the Project site.
Vernal pool tadpole shrimp (*Lepidurus packardi*)	FE	Occurs in vernal pools, clear to tea-colored water, in grass or mud-bottomed swales, and basalt depression pools.	**Absent.** Vernal pools were absent within the Project site.
Western mastiff bat (*Eumops perotis californicus*)	CSSC	Found in open, arid to semi-arid habitats, including dry desert washes, flood plains, chaparral, oak woodland, open ponderosa pine forest, grassland, and	**Absent.** Suitable roosting habitat was absent from the Project site and surrounding area.

Species	Status*	Habitat	Occurrence within the Site
		agricultural areas, where it feeds on insects in flight. Roosts are most commonly in crevices in cliff faces but may also use high buildings and tunnels.	
Western spadefoot (*Spea hammondii)*	FPT, CSSC	The majority of the time this species is terrestrial and occurs in small mammal burrows and soil cracks, sometimes in the bottom of dried pools. Prefers open areas with sandy or gravelly soils, in a variety of habitats including mixed woodlands, grasslands, coastal sage scrub, chaparral, sandy washes, lowlands, river floodplains, alluvial fans, playas, alkali flats, foothills, and mountains. Vernal or seasonal pools, that hold water for a minimum of three weeks, are necessary for breeding.	**Unlikely.** The only sandy area of the Project site was the access road within the pond habitat, and thus, conditions on-site are less than marginal for this species. The nearest recorded observation was four miles south-southeast of the Project site in 2018 within creek habitat.
Western yellow-billed cuckoo (*Coccyzus americanus occidentalis*)	FT, CE	Suitable nesting habitat in California includes dense riparian willow-cottonwood and mesquite habitats along a perennial river. Once common in the California Central Valley, as well as coastal valleys and riparian habitats east of the Sierra Nevada, habitat loss now constrains the California breeding population to small numbers of birds.	**Absent.** The Project site is outside the current range of the species.

***EXPLANATION OF OCCURRENCE DESIGNATIONS AND STATUS CODES**

Possible: Species not observed on the Site, but it could occur there from time to time.
Unlikely: Species not observed on the site, and would not be expected to occur there except, perhaps, as a transient.
Absent: Species not observed on the Site and precluded from occurring there due to absence of suitable habitat.

STATUS CODES

FE	Federally Endangered	CE	California Endangered
FT	Federally Threatened	CCE	California Endangered (Candidate)
FPT	Federally Threatened (Proposed)	CT	California Threatened
		CSSC	California Species of Special Concern

CNPS LISTING

1B	Plants rare, threatened, or endangered in California and elsewhere	2B	Plants rare, threatened, or endangered in California, but more common elsewhere

3 IMPACTS AND MITIGATION

3.1 SIGNIFICANCE CRITERIA

3.1.1 CEQA

General plans, area plans, and specific projects are subject to the provisions of CEQA. The purpose of CEQA is to assess the impacts of proposed projects on the environment prior to project implementation. Impacts to biological resources are just one type of environmental impact assessed under CEQA and vary from project to project in terms of scope and magnitude. Projects that require removal of vegetation may result in the mortality or displacement of animals associated with this vegetation. Animals adapted to humans, roads, buildings, and pets may replace those species formerly occurring on a site. Plants and animals that are rare may be destroyed or displaced. Sensitive habitats such as wetlands and riparian woodlands may be altered or destroyed. Such impacts may be considered either "significant" or "less than significant" under CEQA. According to *CEQA Statute and Guidelines* (AEP 2023), "significant effect on the environment" means a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic interest. Specific project impacts to biological resources may be considered "significant" if they would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS;
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS;
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (CWA) (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- 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;
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or
- Conflict with the provisions of an adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or other approved local, regional, or state HCP.

Furthermore, CEQA Guidelines Section 15065(a) states that a project may trigger the requirement to make a "mandatory finding of significance" if the project has the potential to:

> "Substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of an endangered, rare or threatened species, or eliminate important examples of the major periods of California history or prehistory."

3.2 RELEVANT GOALS, POLICIES, AND LAWS

3.2.1 TULARE COUNTY ORDINANCE

The Tulare County General Plan (Tulare County General Plan 2012) contains the following goals and policies related to the project:

8.1 Biological Resources

ERM-1: To preserve and protect sensitive significant habitats, enhance biodiversity, and promote healthy ecosystems throughout the County.

EMR-1.1 Protection of Rare and Endangered Species
The County shall ensure the protection of environmentally sensitive wildlife and plant life, including those species designated as rare, threatened, and/or endangered by State and/or Federal government, through compatible land use development.

ERM-1.16 Cooperate with Wildlife Agencies
The County shall cooperate with State and federal wildlife agencies to address linkages between habitat areas.

Water Resources

WR-2.3 Best Management Practices (BMPs)
The County shall continue to require the use of feasible BMPs and other mitigation measures designed to protect surface water and groundwater from the adverse effects of construction activities, agricultural operations requiring a County Permit and urban runoff in coordination with the Water Quality Control Board.

WR-3.4 Water Resource Planning
The County shall continue participation in State, regional, and local water resource planning efforts affecting water resource supply and quality.

WR-3.6 Water Use Efficiency
The County shall support educational programs targeted at reducing water consumption and enhancing groundwater recharge.

WR-3.11 Policy Impacts to Water Resources
The County shall monitor actions taken at the federal and State level which impact water resources in order to evaluate the effects of these actions on the County's resources.

3.2.2 THREATENED AND ENDANGERED SPECIES

Permits may be required from CDFW and/or USFWS if activities associated with a project have the potential to result in the "take" of a species listed as threatened or endangered under the California Endangered Species Act (CESA) and/or Endangered Species Act (ESA), respectively. Take is defined by CESA as, "to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture or kill" (California Fish and Game Code, Section 86). Take is more broadly defined by the ESA to include "harm" (16 USC, Section 1532(19), 50 CFR, Section 17.3). CDFW and USFWS are responsible agencies under CEQA and NEPA. Both agencies review CEQA and NEPA documents in order to determine the adequacy of the treatment of endangered species issues and to make project-specific recommendations for their conservation.

3.2.3 DESIGNATED CRITICAL HABITAT

When species are listed as threatened or endangered, the USFWS often designates areas of "critical habitat" as defined by section 3(5)(A) of the ESA. Critical habitat is a term defined in the ESA as a specific geographic area that contains features essential for the conservation of a threatened or endangered species and that may require special management and protection. Critical habitat is a tool that supports the continued conservation of imperiled species by guiding cooperation with the federal government.

Designations only affect federal agency actions or federally funded or permitted activities. Critical habitat does not prevent activities that occur within the designated area. Only activities that involve a federal permit, license, or funding and are likely to destroy or adversely modify critical habitat will be affected.

3.2.4 MIGRATORY BIRDS

The Migratory Bird Treaty Act (MBTA: 16 USC 703-712) prohibits killing, possessing, or trading in any bird species covered in one of four international conventions to which the United States is a party, except in accordance with regulations prescribed by the Secretary of the Interior. The name of the act is misleading, as it covers almost all bird's native to the United States, even those that are non-migratory. The MBTA encompasses whole birds, parts of birds, and bird nests and eggs. Additionally, California Fish and Game Code makes it unlawful to take or possess any non-game birds covered by the MBTA (Section 3513), as well as any other native non-game birds (Section 3800).

3.2.5 BIRDS OF PREY

Birds of prey are protected in California under provisions of California Fish and Game Code (Section 3503.5), which states that it is unlawful to take, possess, or destroy any birds in the order Falconiformes (hawks and eagles) or Strigiformes (owls), as well as their nests and eggs. The bald eagle and golden eagle are afforded additional protection under the Bald and Golden Eagle Protection Act (16 USC 668), which makes it unlawful to kill birds or their eggs, or take feathers or nests, without a permit issued by the U.S. Secretary of the Interior.

3.2.6 NESTING BIRDS

In California, protection is afforded to the nests and eggs of all birds. California Fish and Game Code (Section 3503) states that it is "unlawful to take, possess, or needlessly destroy the nest or eggs of any bird except as otherwise provided by this code or any regulation adopted pursuant thereto." Breeding-season disturbance that causes nest abandonment and/or loss of reproductive effort is considered a form of "take" by the CDFW.

3.2.7 WETLANDS AND OTHER "JURISDICTIONAL WATERS"

Aquatic resources, including wetlands, streams, rivers, and lakes, are among the important biological resources that are protected by local, state, and federal laws and regulations. Activities that impact these "jurisdictional waters" may be regulated and require permits which aim to avoid or minimize adverse impacts to "jurisdictional waters" to the greatest extent possible. The definition of a jurisdictional water may vary depending on the regulatory agency, and the limits of jurisdiction for each agency are described below.

The USACE, pursuant to Section 404 of the Clean Water Act (CWA), upholds a set of guidelines to regulate activities that could result in the discharge of pollutants into "waters of the United States" ("WOTUS"). The legal definition of WOTUS has significantly evolved since the passage of the CWA in 1972 as a result of administrative rulings and litigation involving federal jurisdiction over water resources. Thus, the reach and extent of USACE and United States Environmental Protection Agency (EPA) jurisdiction over aquatic features has continually been subject to revision.

The current administrative definition of WOTUS is described in the Biden Administration's 2023 "Conforming Rule." The extent of jurisdiction has been defined in the Code of Federal Regulations (CFR) but is also subject to interpretation by the federal courts. Jurisdictional waters generally include the following categories defined by section 328.3, subdivision (a) of title 33 of the CFR:

1) *Traditional Navigable Waters, the territorial seas, or interstate waters (not including interstate wetlands);*

2) *Impoundments of waters of the United States;*
3) *Tributaries of:*
    a. *Traditional Navigable Waters, territorial seas, or interstate waters (not including interstate wetlands); or*
    b. *Impoundments of water of the United States when the tributaries meet the relatively permanent standard.*
4) *Wetlands:*
    a. *Adjacent to Traditional Navigable Waters, the territorial seas, or interstate waters;*
    b. *Adjacent to and with a continuous surface connection to relatively permanent impoundments of waters of the United States*
    c. *Adjacent to and with a continuous surface connection to relatively permanent jurisdictional tributaries.*
5) *Intrastate lakes and ponds not identified in items 1 through 4 of this section that are relatively permanent, standing or continuously flowing bodies of water with a continuous surface connection to the waters identified in items 1 or 3 above.*

Exclusions under the new definition include the following:

1) *Waste treatment systems, including treatment ponds or lagoons, designed to meet the requirements of the CWA;*
2) *Prior converted cropland designated by the Secretary of Agriculture. The exclusion would cease upon a change of use, which means that the area is no longer available for the production of agricultural commodities. Notwithstanding the determination of an area's status as prior converted cropland by any other Federal agency, for the purposes of the CWA, the final authority regarding CWA jurisdiction remains with USEPA;*
3) *Ditches (including roadside ditches) excavated wholly in and draining only dry land and that do not carry a relatively permanent flow of water;*
4) *Artificially irrigated areas that would revert to dry land if the irrigation ceased;*
5) *Artificial lakes or ponds created by excavating or diking dry land to collect and retain water and which are used exclusively for such purposes as stock watering, irrigation, settling basins, or rice growing;*
6) *Artificial reflecting or swimming pools or other small ornamental bodies of water created by excavating or diking dry land to retain water for primarily aesthetic reasons;*
7) *Waterfilled depressions created in dry land incidental to construction activity and pits excavated in dry land for the purpose of obtaining fill, sand, or gravel unless and until the construction or excavation operation is abandoned and the resulting body of water meets the definition of waters of the United States; and*
8) *Swales and erosional features (e.g., gullies, small washes) characterized by low volume, infrequent, or short duration flow.*

The Department of the Army, acting through the USACE, regulates the filling or excavation of jurisdictional waters and is authorized to issue permits for activities within WOTUS under the authority of Section 404 of the CWA. The extent of jurisdiction is defined by an “ordinary high-water mark” (OHWM) on opposing channel banks.

The State of California also asserts jurisdiction over drainages, wetlands, and other aquatic features. The limits of State jurisdiction differ from those of the EPA and USACE, often being more inclusive of water resources. The California Department of Fish and Wildlife has jurisdiction over the bed and bank of rivers, natural drainages, streams, and lakes and regulates alteration to these features pursuant to the provisions of Section 1601 and 1602 of the California Fish and Game Code. Activities to alter these features would

require a Lake or Streambed Alteration Agreement from CDFW, which could include mitigation measures for aquatic and biological resources that could be affected by project activities.

The State Water Resources Control Board, under the Porter-Cologne Water Quality Control Act of 1969, holds regulatory authority over activities affecting water quality of all surface water and groundwater in California, collectively known as "waters of the state." Discharges into waters of the state that are also WOTUS require a CWA Section 401 Water Quality Certification from the appropriate regional office as a prerequisite to obtaining certain federal permits, such as a CWA Section 404 permit. Discharges into all Waters of the State, even those that are not also WOTUS, require waste discharge requirements (WDRs), or waivers of WDRs, from the RWQCB. The RWQCB also administers the Construction Storm Water Program and the federal National Pollution Discharge Elimination System (NPDES) program. Projects that disturb one acre or more of soil must obtain a Construction General Permit under the Construction Storm Water Program. A prerequisite for this permit is the development of a Storm Water Pollution Prevention Plan (SWPPP) by a certified Qualified SWPPP Developer. Projects that discharge wastewater, storm water, or other pollutants into a WOTUS may require an NPDES permit.

3.3 POTENTIALLY SIGNIFICANT PROJECT-RELATED IMPACTS AND MITIGATION

Species protected by California Fish and Game Code, CDFW, USFWS, or CEQA, that have the potential to be impacted by project activities include: loggerhead shrike, northwestern pond turtle, and Swainson's hawk. Other sensitive resources that have the potential to be impacted by the project include jurisdictional waters and native wildlife nursery sites. Corresponding mitigation measures can be found below.

3.3.1 GENERAL PROJECT-RELATED IMPACTS

The Project has the potential to impact a number of sensitive resources, as described in more detail in the following sections. Impacts to these resources would be a violation of state and federal laws or considered a potentially significant impact under CEQA. Implementation of the following measures will help reduce potential impacts to these resources to a less than significant level under CEQA and will help with complying with state and federal laws protecting these resources:

> Mitigation Measure BIO-1a (*WEAP Training*): Prior to initiating construction activities (including staging and mobilization), all personnel associated with project construction will attend a mandatory Worker Environmental Awareness Program (WEAP) training, conducted by a qualified biologist (someone familiar with the identification and habitats of these species), to aid workers in identifying special status resources that may occur in the Project site. The specifics of this program will include identification of the sensitive species and suitable habitats, a description of the regulatory status and general ecological characteristics of sensitive resources, and review of the limits of construction and mitigation measures required to reduce impacts to biological resources within the work area. This training will discuss special status species, describe the laws and regulations in place to provide protection of these species, identify the penalties for violation of applicable environmental laws and regulations, and include a list of required protective measures to avoid "take." A fact sheet summarizing this information, along with photographs or illustrations of sensitive species with potential to occur on the Project site, will also be prepared for distribution to all contractors, their employees, and all other personnel involved with construction of the project. All trainees will sign a form documenting that they have attended WEAP training and understand the information presented to them.
>
> Mitigation Measure BIO-1b (*BMPs*): The project proponent will require that all workers employ the following best management practices (BMPs) in order to avoid and minimize potential impacts to special status species:

- Vehicles will observe a 15-mph speed limit while on unpaved access routes.
- All open trenches, holes, sumps, and other excavations greater than 6-inches with sidewalls steeper than a 1:1 (45 degree) slope will have an escape ramp of earth or a non-slip material with a less than 1:1 slope or these will be covered with barrier material such that animals are unable to dig or squeeze under the barrier and become entrapped.
- Workers will inspect areas beneath parked vehicles, equipment, and materials prior to mobilization. If special status species are detected, the individual will either be allowed to leave of its own volition or will be captured by the qualified biologist (must possess appropriate collecting/handling permits) and relocated out of harm's way to the nearest suitable habitat beyond the influence of the project work area. "Take" of a state or federal special status (rare, California Species of Special Concern, threatened, or endangered) species is prohibited without the necessary federal or state take permit(s).
- The presence of any special status species will be reported to the project's qualified biologist, who will submit the occurrence to the CNDDB. If necessary, the biologist will report the occurrence to CDFW and/or USFWS.

3.3.2 PROJECT-RELATED MORTALITY AND/OR NEST ABANDONMENT OF MIGRATORY BIRDS, RAPTORS, AND SPECIAL STATUS BIRDS

The site and adjacent areas contain suitable nesting and foraging habitat for a variety of protected bird species, such as migratory birds, raptors, and special status birds, including loggerhead shrike and Swainson's hawk. It is anticipated that during the nesting bird season, protected birds could nest on the ground or in shrubs and trees within, and adjacent to, the site and forage within the site. Protected birds located within or adjacent to the site during construction have the potential to be injured or killed by project-related activities. In addition to the direct "take" of protected birds within the site and adjacent areas, these birds nesting in these areas could be disturbed by project-related activities resulting in nest abandonment. Projects that adversely affect the nesting success of protected birds or result in the mortality of these birds would be a violation of state and federal laws and considered a potentially significant impact under CEQA. The Project may take some foraging habitat of migratory birds; however, there is regionally available habitat.

Implementation of the following measures will reduce potential impacts to protected nesting birds to a less than significant level under CEQA and will help the project comply with State and federal laws protecting these bird species.

Mitigation Measure BIO-2a (*Avoidance*): The project's construction activities will occur, if feasible, between September 16 and January 31 (outside of the nesting bird season) to avoid impacts to nesting birds.

Mitigation Measure BIO-2b (*Pre-construction Surveys*): If activities must occur within nesting bird season (February 1 to September 15), a qualified biologist will conduct a pre-construction survey for Swainson's hawk nests onsite and within a 0.5-mile radius within ten calendar days prior to the start of construction. This survey will be conducted in accordance with the *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley* (Swainson's Hawk Technical Advisory Committee 2000), or current guidance. The survey would also include inspecting for nesting migratory birds within up to 100 feet outside of the Project site and for other nesting raptors within up to 500 feet outside of the Project site. All raptor nests would be considered "active" upon the nest-building stage. If no active nests are observed, no further mitigation is required. If Project activities are halted for ten (10) consecutive days during the nesting bird season, a follow-up survey shall be completed before work can resume.

Mitigation Measure BIO-2c (*Avoidance Buffers*): On discovery of any active nests or breeding colonies near work areas, a qualified biologist will determine appropriate avoidance buffer distances based on applicable CDFW and/or USFWS guidelines, the biology of the species, conditions of the nest(s), and the level of project disturbance. If necessary, avoidance buffers will be identified with flagging, fencing, or other easily visible means, and will be maintained until the biologist has determined that the nestlings have fledged.

3.3.3 PROJECT-RELATED MORTALITY AND/OR DISTURBANCE TO NORTHWESTERN POND TURTLE

The Project site contained pond habitat, in the form of the existing London Pond, which could be used by northwestern pond turtle for dispersal, basking, and nesting. Potentially significant impacts associated with project activities could include inadvertent entrapment or direct mortality. Project activities that impact northwestern pond turtles would be considered a potentially significant impact under CEQA. Project activities within the existing pond would result in increased potential habitat for the Northwestern pond turtle.

The following measures will be implemented prior to the start of construction and will reduce impacts to northwestern pond turtle to a less than significant level under CEQA:

Mitigation Measure BIO-3a (*Focused Survey and Avoidance Buffers*): Within two weeks prior to the start of Project activities, a qualified biologist (someone familiar with the identification and habitat of this species) will conduct three site visits for northwestern pond turtle within the Project site will be conducted in accordance with the Oregon Department of Fish and Wildlife statewide protocol guidelines for visual surveys (Samara Group and Oregon Native Turtle Working Group 2020). If no northwestern pond turtles are observed during the focused surveys, then construction activities may begin. If construction is delayed or halted for more than seven (7) days, another pre-construction survey for northwestern pond turtle will be conducted. If the survey results in the identification of a northwestern pond turtle, the qualified biologist will determine appropriate buffers to be implemented to avoid impacts to the individual(s).

Mitigation Measure BIO-3b (*Nesting Survey*): If it is determined that western pond turtles are occupying the pond habitat, an additional nesting pond turtle survey will be performed by a qualified biologist. Prior to ground disturbance activity within the pond area of the Project site, a pond turtle nesting survey will be completed within 24 hours. If any evidence of western pond turtle nests or eggs is discovered during the survey, ground disturbance will be postponed until the expected emergence period of hatchlings has ended.

Mitigation Measure BIO-3c (*Monitor*): If northwestern pond turtles are discovered at any point of the Project, a qualified biologist will conduct a pre-activity clearance survey each day and remain on the site to oversee all vegetation clearing and ground disturbance activities until Project activities within the pond area are completed.

Mitigation Measure BIO-3d (*Formal Consultation*): Should northwestern pond turtles become listed in this area, and the project/qualified biologist needs to move an individual, consultation for protection plans and/or relocation plans with the appropriate agencies will be completed to avoid take.

3.3.4 PROJECT-RELATED IMPACTS TO WILDLIFE MOVEMENT CORRIDORS AND NATIVE WILDLIFE NURSERY SITES

The pond habitat within the Project site has suitable features that could be used as native wildlife nursery sites. Project-related impacts to any native wildlife nursery sites would be considered a significant impact under CEQA.

The potential impacts to species that could use the pond habitat, ruderal, and orchard habitat as a nursery site have been addressed in Mitigation Measure, BIO-3b, and BIO-4b. Implementation of these will reduce potential impacts to native wildlife nursery sites to a less-than-significant level under CEQA. Implementation of theabove mitigation measures would reduce potential impacts to wildlife movement corridors to less than significant.

3.4 LESS THAN SIGNIFICANT PROJECT-RELATED IMPACTS

3.4.1 PROJECT-RELATED IMPACTS TO SPECIAL STATUS PLANT SPECIES ABSENT FROM, OR UNLIKELY TO OCCUR ON, THE PROJECT SITE

Of the 16 regionally occurring special status plant species, all 16 are considered absent from or unlikely to occur within the Project site due to past or ongoing disturbance and/or the absence of suitable habitat. Since it is unlikely that these species would occur onsite, implementation of the project should have no impact on these 16 special status species through construction mortality, disturbance, or loss of habitat. Mitigation measures are not warranted.

3.4.2 PROJECT-RELATED IMPACTS TO SPECIAL STATUS ANIMAL SPECIES ABSENT FROM, OR UNLIKELY TO OCCUR ON, THE PROJECT SITE

Of the 20 regionally occurring special status animal species, 17 are considered absent from or unlikely to occur within the Project site due to past or ongoing disturbance and/or the absence of suitable habitat. These species include: burrowing owl, California tiger salamander, conservancy fairy shrimp, Crotch's bumble bee, Fresno kangaroo rat, monarch butterfly, northern California legless lizard, northern leopard frog, pallid bat, San Joaquin kit fox, Tipton kangaroo rat, valley elderberry long horned beetle, vernal pool fairy shrimp, vernal pool tadpole shrimp, western mastiff bat, western spadefoot, and western yellow-billed cuckoo.

Since it is unlikely that these species would occur onsite, implementation of the Project should have no impact on these 17 special status species through construction mortality, disturbance, or loss of habitat. Mitigation measures are not warranted.

3.4.3 PROJECT-RELATED IMPACTS TO RIPARIAN HABITAT AND NATURAL COMMUNITIES OF SPECIAL CONCERN

Riparian habitat is absent from the Project site and adjacent lands. There are no CNDDB-designated "natural communities of special concern" recorded within the Project site or surrounding lands. Mitigation is not warranted.

3.4.4 PROJECT-RELATED IMPACTS TO REGULATED WATERS, WETLANDS, AND WATER QUALITY

Typical wetlands, vernal pools, and other waters were absent from the Project site. There are no designated wild and scenic rivers within the Project site; therefore, the project would not result in direct impacts to wild and scenic rivers. Mitigation measures are not warranted.

Since construction would involve ground disturbance over an area greater than one acre, the Project would also be required to obtain a Construction Stormwater General Permit under the Storm Water Program

administered by the RWQCB. A prerequisite for this permit is the development of a Storm Water Pollution Prevention Plan (SWPPP) so activities do not adversely affect water quality.

3.4.5 PROJECT-RELATED IMPACTS TO CRITICAL HABITAT

Designated critical habitat is absent from the Project site and surrounding lands. Therefore, there would be no impact to critical habitat, and mitigation measures are not warranted.

3.4.6 LOCAL POLICIES OR HABITAT CONSERVATION PLANS

The Project appears to be consistent with the goals and policies of the Tulare County General Plan. There are no known HCPs or NCCPs in the project vicinity. Mitigation measures are not warranted.

3.4.7 COASTAL ZONE AND COASTAL BARRIERS RESOURCES ACT

The Project would not be located within the coastal zone. The Project would not impact or be located within or near the Coastal Barrier Resources System or its adjacent wetlands, marshes, estuaries, inlets, and near-shore waters. Mitigation measures are not warranted.

4 REFERENCES

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APPENDIX A: REPRESENTATIVE PHOTOS OF THE PROJECT SITE



Photograph 1

Overview of the pond habitat.



Photograph 2

Another overview of the pond habitat.



Photograph 3

Overview of the orchard habitat.



Photograph 4

Another overview of the orchard habitat.



Photograph 5

Overview of the ruderal habitat.



Photograph 6

Another overview of the ruderal habitat.

APPENDIX B: CNDDB 9-QUAD SPECIES LIST

Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Traver (3611944) OR Burris Park (3611945) OR Monson (3611943) OR Remnoy (3611935) OR Goshen (3611934) OR Visalia (3611933) OR Orange Cove South (3611953) OR Reedley (3611954) OR Selma (3611955))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Actinemys marmorata northwestern pond turtle	ARAAD02031	Proposed Threatened	None	G2	SNR	SSC
Ambystoma californiense pop. 1 California tiger salamander - central California DPS	AAAAA01181	Threatened	Threatened	G2G3T3	S3	WL
Anniella pulchra Northern California legless lizard	ARACC01020	None	None	G3	S2S3	SSC
Antrozous pallidus pallid bat	AMACC10010	None	None	G4	S3	SSC
Athene cunicularia burrowing owl	ABNSB10010	None	Candidate Endangered	G4	S2	SSC
Atriplex cordulata var. cordulata heartscale	PDCHE040B0	None	None	G3T2	S2	1B.2
Atriplex cordulata var. erecticaulis Earlimart orache	PDCHE042V0	None	None	G3T1	S1	1B.2
Atriplex depressa brittlescale	PDCHE042L0	None	None	G2	S2	1B.2
Atriplex minuscula lesser saltscale	PDCHE042M0	None	None	G2	S2	1B.1
Atriplex subtilis subtle orache	PDCHE042T0	None	None	G1	S1	1B.2
Bombus crotchii Crotch's bumble bee	IIHYM24480	None	Candidate Endangered	G2	S2	
Bombus morrisoni Morrison bumble bee	IIHYM24460	None	None	G3	S1S2	
Bombus pensylvanicus American bumble bee	IIHYM24260	None	None	G3G4	S2	
Branchinecta lynchi vernal pool fairy shrimp	ICBRA03030	Threatened	None	G3	S3	
Buteo swainsoni Swainson's hawk	ABNKC19070	None	Threatened	G5	S4	
Coccyzus americanus occidentalis western yellow-billed cuckoo	ABNRB02022	Threatened	Endangered	G5T2T3	S1	
Delphinium recurvatum recurved larkspur	PDRAN0B1J0	None	None	G2?	S2	1B.2
Desmocerus californicus dimorphus valley elderberry longhorn beetle	IICOL48011	Threatened	None	G3T3	S3	
Eryngium spinosepalum spiny-sepaled button-celery	PDAPI0Z0Y0	None	None	G2	S2	1B.2

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Eumops perotis californicus western mastiff bat	AMACD02011	None	None	G4G5T4	S3S4	SSC
Euphorbia hooveri Hoover's spurge	PDEUP0D150	Threatened	None	G1	S1	1B.2
Helianthus winteri Winter's sunflower	PDAST4N260	None	None	G2?	S2?	1B.2
Imperata brevifolia California satintail	PMPOA3D020	None	None	G3	S3	2B.1
Lanius ludovicianus loggerhead shrike	ABPBR01030	None	None	G4	S4	SSC
Lasiurus cinereus hoary bat	AMACC05032	None	None	G3G4	S4	
Lasthenia chrysantha alkali-sink goldfields	PDAST5L030	None	None	G2	S2	1B.1
Lasthenia glabrata ssp. coulteri Coulter's goldfields	PDAST5L0A1	None	None	G4T2	S2	1B.1
Lepidurus packardi vernal pool tadpole shrimp	ICBRA10010	Endangered	None	G3	S3	
Linderiella occidentalis California linderiella	ICBRA06010	None	None	G2G3	S2S3	
Lithobates pipiens northern leopard frog	AAABH01170	None	None	G5	S2	SSC
Lytta hoppingi Hopping's blister beetle	IICOL4C010	None	None	G1G2	S2	
Lytta molesta molestan blister beetle	IICOL4C030	None	None	G2	S2	
Northern Claypan Vernal Pool Northern Claypan Vernal Pool	CTT44120CA	None	None	G1	S1.1	
Northern Hardpan Vernal Pool Northern Hardpan Vernal Pool	CTT44110CA	None	None	G3	S3.1	
Orcuttia inaequalis San Joaquin Valley Orcutt grass	PMPOA4G060	Threatened	Endangered	G1	S1	1B.1
Pseudobahia peirsonii San Joaquin adobe sunburst	PDAST7P030	Threatened	Endangered	G1	S1	1B.1
Puccinellia simplex California alkali grass	PMPOA53110	None	None	G2	S2	1B.2
Sagittaria sanfordii Sanford's arrowhead	PMALI040Q0	None	None	G3	S3	1B.2
Spea hammondii western spadefoot	AAABF02020	Proposed Threatened	None	G2G3	S3S4	SSC
Talanites moodyae Moody's gnaphosid spider	ILARA98020	None	None	G2G3	S2S3	

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Valley Sacaton Grassland	CTT42120CA	None	None	G1	S1.1	
Valley Sacaton Grassland						
Vulpes macrotis mutica	AMAJA03041	Endangered	Threatened	G4T2	S3	
San Joaquin kit fox						

Record Count: 42

APPENDIX C: IPAC SPECIES LIST

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: 09/10/2025 23:09:29 UTC
Project Code: 2025-0130034
Project Name: London West Pond

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 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 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:

https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.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 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/program/migratory-bird-permit/what-we-do.

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/library/collections/threats-birds.

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/partner/council-conservation-migratory-birds.

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: 2025-0130034
Project Name: London West Pond
Project Type: Water Supply Facility - Withdrawal - Surface
Project Description: The Alta Irrigation District (AID or District) proposes to develop an approximately 80-acre recharge facility that would include four cells and would connect to the existing underground Kennedy Schoolhouse Ditch pipe that will be converted into an open ditch. The Project would also include a connecting spillway into the existing London Pond recharge facility.

Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@36.4845034,-119.44923098726841,14z



Counties: Tulare County, California

ENDANGERED SPECIES ACT SPECIES

There is a total of 10 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.

MAMMALS

NAME	STATUS
Fresno Kangaroo Rat *Dipodomys nitratoides exilis* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5150	Endangered
San Joaquin Kit Fox *Vulpes macrotis mutica* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/2873	Endangered
Tipton Kangaroo Rat *Dipodomys nitratoides nitratoides* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/7247	Endangered

REPTILES

NAME	STATUS
Northwestern Pond Turtle *Actinemys marmorata* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1111	Proposed Threatened

AMPHIBIANS

NAME	STATUS
California Tiger Salamander *Ambystoma californiense* Population: U.S.A. (Central CA DPS) There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2076	Threatened
Western Spadefoot *Spea hammondii* Population: Northern DPS No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/5425	Proposed Threatened

INSECTS

NAME	STATUS
Monarch Butterfly *Danaus plexippus* There is **proposed** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/9743	Proposed Threatened

CRUSTACEANS

NAME	STATUS
Conservancy Fairy Shrimp *Branchinecta conservatio* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8246	Endangered

NAME	STATUS
Vernal Pool Fairy Shrimp *Branchinecta lynchi* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/498	Threatened
Vernal Pool Tadpole Shrimp *Lepidurus packardi* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2246	Endangered

CRITICAL HABITATS

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

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

IPAC USER CONTACT INFORMATION

Agency: Private Entity
Name: Jenny McCarthy
Address: 1518 Mill Rock Way, Suite 100
City: Bakersfield
State: CA
Zip: 93311
Email jmccarthy@ppeng.com
Phone: 7073842510

APPENDIX D: NRCS WEB SOIL SURVEY REPORT

United States Department of Agriculture

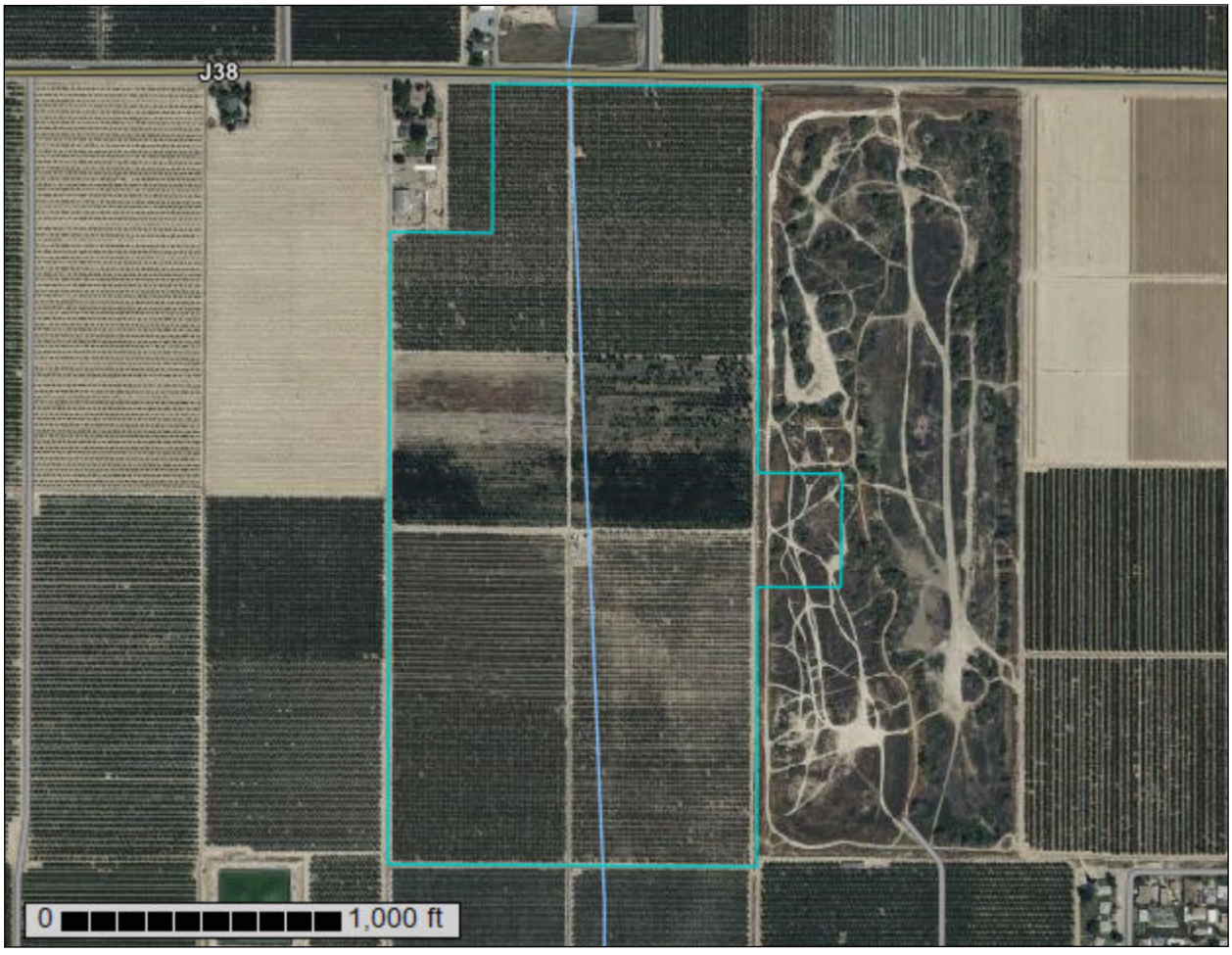
NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Tulare County, Western Part, California

London West Pond



July 24, 2025

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

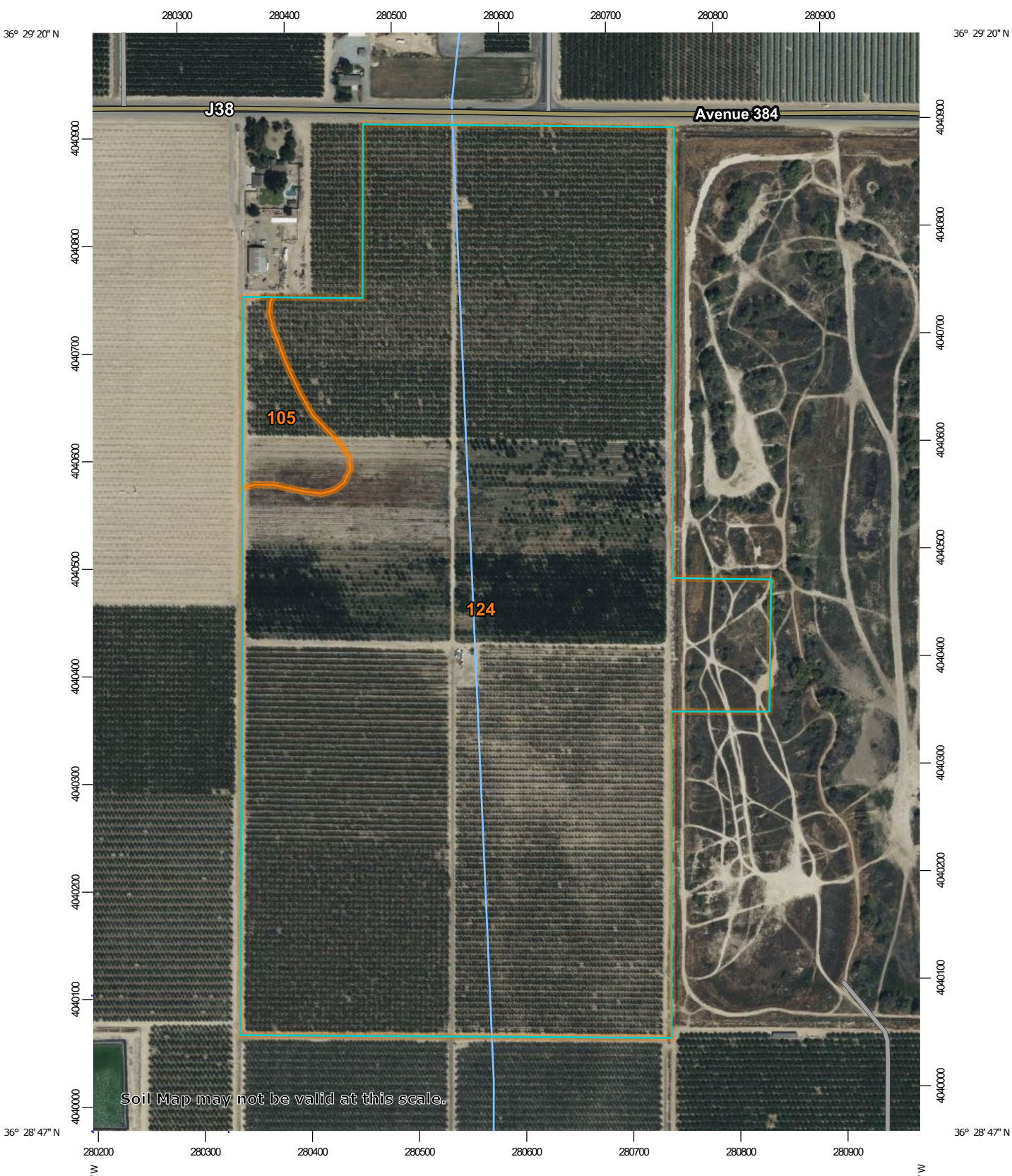
After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map



Map Scale: 1:4,980 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 50 100 200 300

Feet: 0 200 400 800 1200

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 11N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Tulare County, Western Part, California
Survey Area Data: Version 18, Aug 30, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 16, 2022—May 30, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
105	Calgro-Calgro, saline-Sodic, complex, 0 to 2 percent slopes	2.6	3.2%
124	Hanford sandy loam, 0 to 2 percent slopes	80.2	96.8%
Totals for Area of Interest		**82.8**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the

development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Tulare County, Western Part, California

105—Calgro-Calgro, saline-Sodic, complex, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: hp47
Elevation: 250 to 480 feet
Mean annual precipitation: 8 to 12 inches
Mean annual air temperature: 62 to 65 degrees F
Frost-free period: 250 to 300 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Calgro and similar soils: 60 percent
Calgro, saline-sodic, and similar soils: 25 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Calgro

Setting

Landform: Fan remnants
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from granite

Typical profile

Ap - 0 to 7 inches: sandy loam
Bw - 7 to 25 inches: sandy loam
2Bkqm - 25 to 33 inches: cemented
2Bkq - 33 to 53 inches: gravelly loamy sand
3Bkqm - 53 to 60 inches: cemented

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: 20 to 40 inches to duripan
Drainage class: Moderately well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Low to moderately high (0.01 to 0.20 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: Very rare
Frequency of ponding: None
Calcium carbonate, maximum content: 2 percent
Maximum salinity: Nonsaline to slightly saline (0.0 to 4.0 mmhos/cm)
Sodium adsorption ratio, maximum: 12.0
Available water supply, 0 to 60 inches: Low (about 3.6 inches)

Interpretive groups

Land capability classification (irrigated): 3s
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: C
Ecological site: R017XY902CA - Duripan Vernal Pools

Hydric soil rating: No

Description of Calgro, Saline-sodic

Setting

Landform: Fan remnants
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from granite

Typical profile

Ap - 0 to 8 inches: sandy loam
Bw - 8 to 24 inches: sandy loam
2Bkqm - 24 to 33 inches: cemented
2Bkq - 33 to 52 inches: gravelly loamy sand
3Bkqm - 52 to 60 inches: cemented

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: 20 to 40 inches to duripan
Drainage class: Moderately well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Low to moderately high (0.01 to 0.20 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: Very rare
Frequency of ponding: None
Calcium carbonate, maximum content: 4 percent
Maximum salinity: Slightly saline to strongly saline (4.0 to 16.0 mmhos/cm)
Sodium adsorption ratio, maximum: 100.0
Available water supply, 0 to 60 inches: Very low (about 3.0 inches)

Interpretive groups

Land capability classification (irrigated): 4s
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: C
Ecological site: R017XY902CA - Duripan Vernal Pools
Hydric soil rating: No

Minor Components

Colpien

Percent of map unit: 5 percent
Landform: Fan remnants
Hydric soil rating: No

Grangeville

Percent of map unit: 4 percent
Landform: Alluvial fans, flood plains
Hydric soil rating: No

Tujunga

Percent of map unit: 3 percent
Landform: Flood plains
Hydric soil rating: No

Exeter

Percent of map unit: 2 percent
Landform: Fan remnants
Hydric soil rating: No

Unnamed, ponded

Percent of map unit: 1 percent
Landform: Depressions
Hydric soil rating: Yes

124—Hanford sandy loam, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: hp4v
Elevation: 220 to 490 feet
Mean annual precipitation: 9 to 12 inches
Mean annual air temperature: 63 to 64 degrees F
Frost-free period: 250 to 280 days
Farmland classification: Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season

Map Unit Composition

Hanford and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Hanford

Setting

Landform: Alluvial fans, flood plains
Landform position (two-dimensional): Footslope, toeslope
Landform position (three-dimensional): Base slope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from granitic rock sources

Typical profile

Ap - 0 to 6 inches: sandy loam
C1 - 6 to 30 inches: fine sandy loam
C2 - 30 to 60 inches: sandy loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): High (2.00 to 6.00 in/hr)
Depth to water table: More than 80 inches

Frequency of flooding: Very rare
Frequency of ponding: None
Calcium carbonate, maximum content: 2 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 7.0
Available water supply, 0 to 60 inches: Moderate (about 6.6 inches)

Interpretive groups

Land capability classification (irrigated): 1
Land capability classification (nonirrigated): 3c
Hydrologic Soil Group: A
Ecological site: R017XY906CA - Non-Alkali San Joaquin Valley Desert
Hydric soil rating: No

Minor Components

Exeter

Percent of map unit: 5 percent
Landform: Fan remnants
Ecological site: R017XY904CA - Subirrigated Deep Alluvial Fans
Hydric soil rating: No

Tujunga

Percent of map unit: 5 percent
Landform: Flood plains
Ecological site: R017XY904CA - Subirrigated Deep Alluvial Fans
Hydric soil rating: No

Calgro

Percent of map unit: 3 percent
Landform: Fan remnants
Ecological site: R017XY904CA - Subirrigated Deep Alluvial Fans
Hydric soil rating: No

Yettem

Percent of map unit: 2 percent
Landform: Alluvial fans, flood plains
Ecological site: R017XY904CA - Subirrigated Deep Alluvial Fans
Hydric soil rating: No

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Appendix C: Phase I Cultural Resources Assessment

Phase I Cultural Resources Assessment for the Alta Irrigation District London West Pond Recharge Basin Project, Tulare County, California

Consuelo Y. Sauls

Prepared By

Taylored Archaeology
6083 N. Figarden Dr., Ste 616
Fresno, CA 93722

Prepared For
Provost & Pritchard Consulting Group
455 W. Fir Ave
Clovis, CA 93611

September 2025

USGS Traver 7.5' topographic quadrangle
82.7-acre project boundary; intensive pedestrian survey
Keywords: Negative Findings

MANAGEMENT SUMMARY

Taylored Archaeology completed a Phase I Cultural Resources Assessment for the Alta Irrigation District London West Pond Basin Project (Project) in London, Tulare County, California. The Project proposes to construct a new approximately 78-acre 4-cell recharge basin adjacent to the existing London Pond located to the east of the Project site. The recharge basin would connect to the existing Kennedy Schoolhouse Ditch. The Project site is approximately 82.7 acres. The Project is subject to the California Environmental Quality Act (CEQA), with the Alta Irrigation District as the lead agency under CEQA.

To meet state standards, Taylored Archaeology completed a cultural resources assessment under contract to Provost & Pritchard Consulting Group to identify potential cultural resources within the Project boundary. The investigation consisted of (1) a records search from the Southern San Joaquin Valley Information Center (SSJVIC) of the California Historical Resources Information System (CHRIS), (2) archival research, (3) a search of the Native American Heritage Commission's (NAHC) Sacred Lands File, a request for Native American local contact information, and nongovernmental Native American outreach; and (4) an archaeological pedestrian survey of the Project site.

A review of SSJVIC records revealed no previously recorded cultural resources within the Project boundary and a 0.5-mile radius. Additionally, the SSJVIC revealed the CHRIS records showed that there were no cultural investigations conducted within the Project boundary and five prior cultural investigations conducted within a 0.5-mile radius.

The NAHC Sacred Lands File search yielded negative results. Nongovernmental outreach was conducted to affiliated Native American representatives provided by the NAHC. As of the date of this report, only one response was received. Environmental Director Kerri Vera of the Tule River Tribe responded via email acknowledging receiving the letter and saying she will respond later. No additional comments were received from the other Native American representatives.

During the archaeological pedestrian survey, a single unnamed ditch was encountered along the eastern boundary of the Project site. Based on archival research, this ditch appears to have been realigned circa early 1980s. No further cultural resource investigation of this ditch is warranted. No cultural resources were identified during the pedestrian survey. The absence of cultural material on the ground surface does not, however, preclude the possibility of Project construction unearthing buried archaeological deposits.

Based on the results of this investigation, Taylored Archaeology recommends the following best management practices be implemented during Project construction:

- In the event of discovery of unidentified archaeological resources during development or ground-moving activities in Project site, all work shall be temporarily halted in the

immediate vicinity (100 feet) until a qualified archaeologist can identify the discovery and assess its significance.

- If human remains are uncovered during construction, the Tulare County Coroner is to be notified to investigate the remains and arrange proper treatment and disposition. If the remains are identified on the basis of archaeological context, age, cultural associations, or biological traits to be those of a Native American, California Health and Safety Code 7050.5 and PRC 5097.98 require that the coroner notify the NAHC within 24 hours of discovery. The NAHC will then identify the Most Likely Descendent who will be afforded an opportunity to make recommendations regarding the treatment and disposition of the remains.

A copy of this report will be provided to the SSJVIC for inclusion in the CHRIS statewide database.

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1
INTRODUCTION

Taylored Archaeology performed a Phase I cultural resources assessment for the Alta Irrigation District (AID) London West Pond Recharge Basin Project (Project) in Tulare County, California. As part of development approval process, the Alta Irrigation District as lead agency must comply with the California Environmental Quality Act (CEQA) (Public Resources Code [PRC] 21000 [g] mandate that the government agencies consider the impacts of a project on the environment, including cultural resources.

1.1 PROJECT LOCATION AND DESCRIPTION

The Project site covers approximately 82.7 acres of orchard within portions of Tulare County Assessor's Parcel Numbers 043-020-031 and 043-020-010. The Project site is 0.25 miles northwest of the community of London and is south of Avenue 384 (Figure 1-1). The Project area is within Section 2 of Township 17 South, Range 23 East, Mount Diablo Meridian of the Traver, California 7.5-minute USGS quadrangle (Figure 1-2).

The proposed Project involves constructing a new approximately 78-acre four-cell recharge basin adjacent to the existing London Pond located to the east of the Project site. The proposed basin would connect to the existing Kennedy Schoolhouse Ditch, a central canal for delivery running north to south in the middle of the Project site. The Project site is approximately 82.7 acres (Figure 1-3).

1.2 REGULATORY SETTING

In this report "cultural resources" are defined as prehistoric or historical archaeological sites as well as historical objects, buildings, or structures. In accordance with 30 Code of Federal Regulations (CFR) §60.4, "historical" in this report applies to cultural resources which are at least 50 years old. The significance or importance of a cultural resource is dependent upon whether the resource qualifies for inclusion at the local or state level in the California Register of Historical Resources (CRHR), or at the federal level in the National Register of Historic Places (NRHP). Cultural resources that are determined to be eligible for inclusion in the CRHR are called "historical resources" (California Code of Regulations [CCR] 15064.5[a]). Under this statue the determination of eligibility is partially based on the consideration of the criteria of significance as defined in 14 CCR 15064.5(a)(3). Cultural resources eligible for inclusion in the NRHP are deemed "historic properties".

1.2.1 CALIFORNIA ENVIRONMENTAL QUALITY ACT

Pursuant to CEQA, a historical resource is a resource listed in, or determined to be eligible for listing in, the CRHR. Historical resources may include, but are not limited to, "any object, building,

structure, site, area, place, record, or manuscript which a lead agency determines to be historically or archaeologically significant" (PRC §5020.1[j]). In addition, a resource included in a local register of historical resources or identified as significant in a local survey conducted in accordance with the state guidelines are also considered historic resources under California Public Resources Code (PRC) Section 5020.1.

CEQA details appropriate measures for the evaluation and protection of cultural resources in §15064.5 of the CEQA Guidelines. According to CEQA guidelines §15064.5 (a)(3), criteria for listing on the CRHR includes the following:

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

According to CEQA guidelines §21074 (a)(1), criteria for tribal cultural resources includes the following:

> *(1) Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:*
> *(A) included or determined to be eligible for inclusion in the California Register of Historical Resources.*
> *(B) included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.*

Protection of cultural resources within California is additionally regulated by PRC §5097.5, which prohibits destruction, defacing, or removal of any historic or prehistoric cultural features on land under the jurisdiction of State or local authorities.

1.3 PROFESSIONAL QUALIFICATIONS

Archaeologist Consuelo Y. Sauls (M.A.), a Registered Professional Archaeologist (RPA 41591505), managed the assessment and compiled this report for the Project. Ms. Sauls also conducted the archival research and literature review, prepared all maps and report graphics, requested a Sacred Lands File search, and performed the archaeological pedestrian field survey of the Project site. Ms. Sauls meets the Secretary of the Interior's Standards for Professional Qualifications in Archaeology. Statement of Qualifications for key personnel is provided in Appendix A.

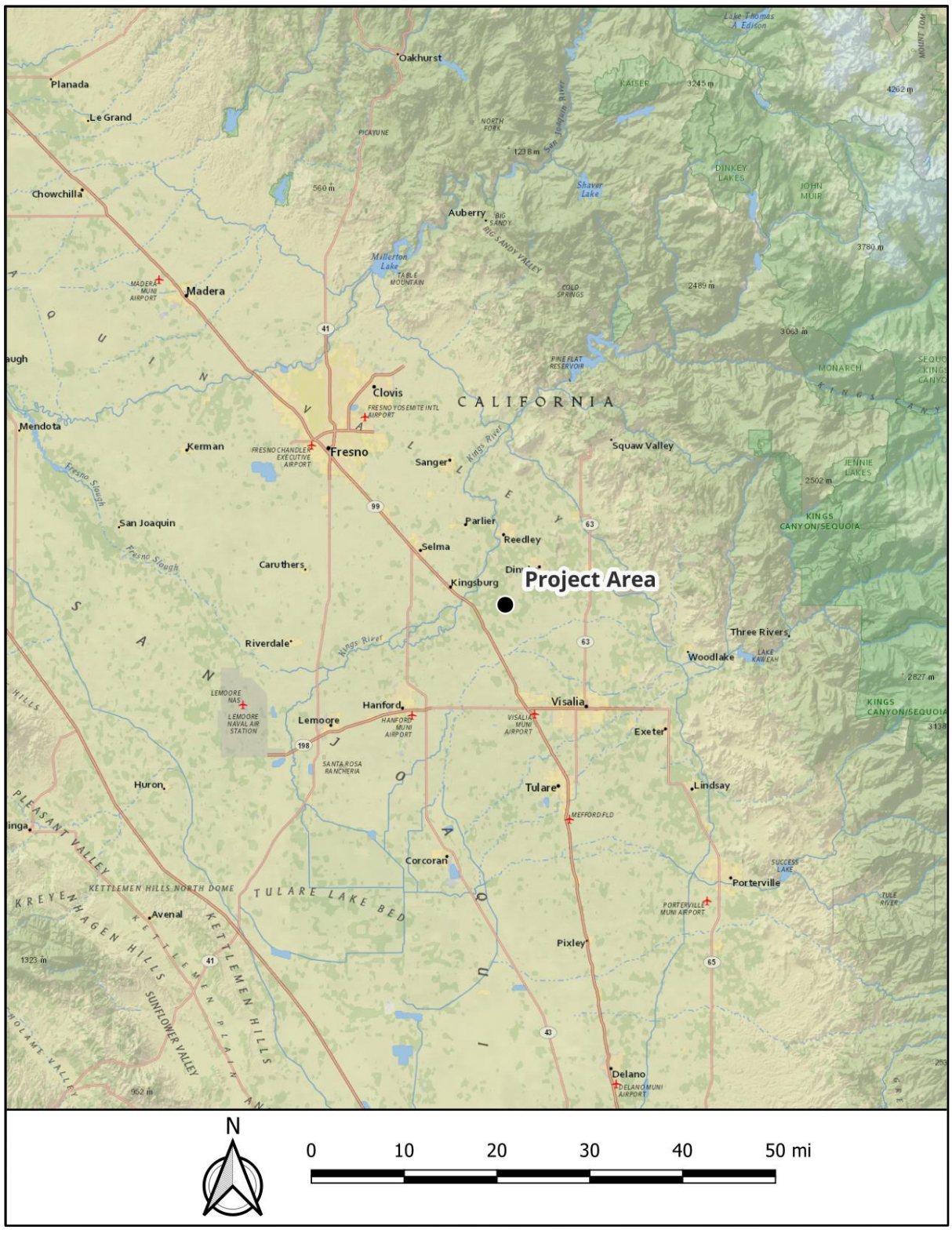

Figure 1-1 Project vicinity in Tulare County, California.

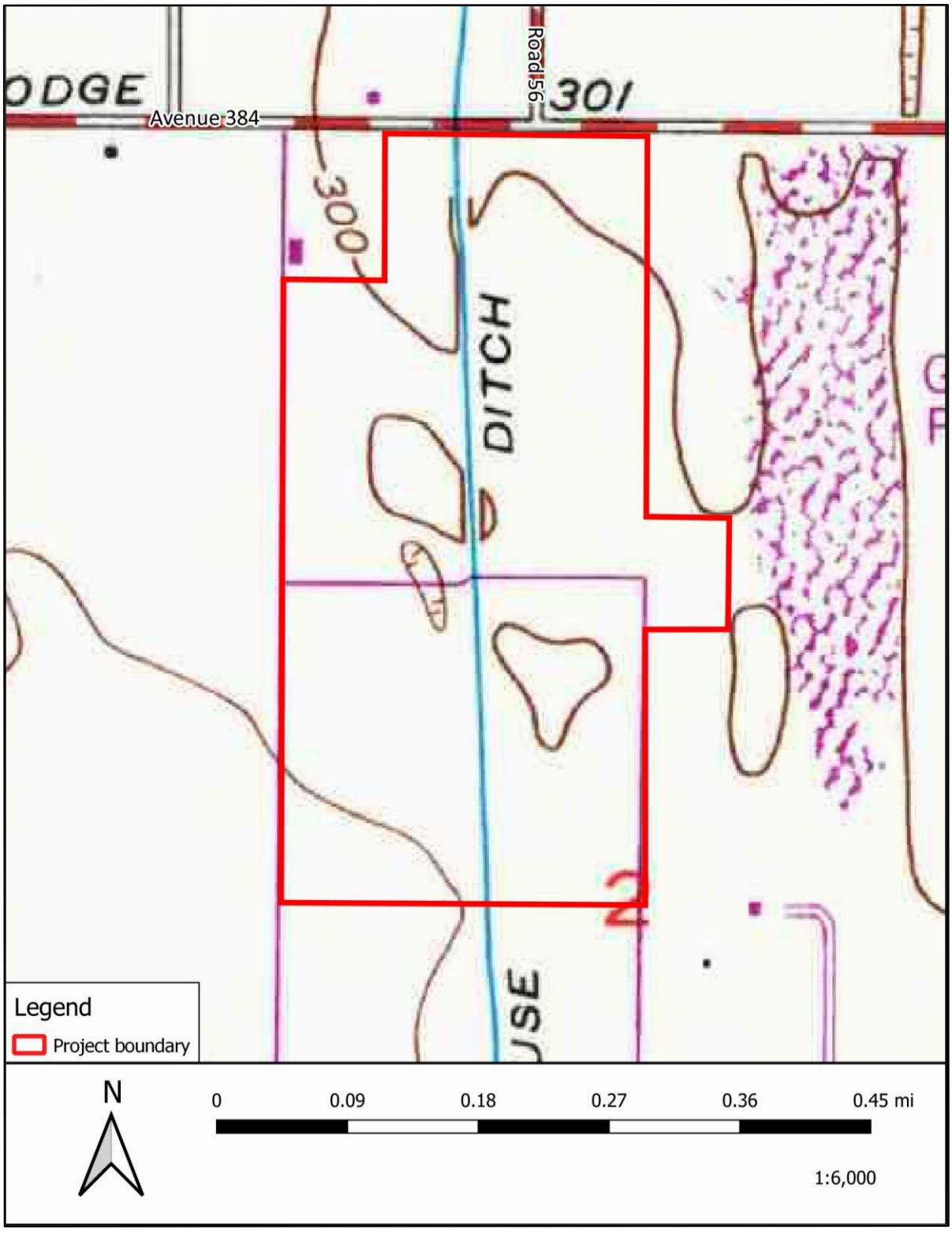

Figure 1-2 Project location on the USGS Traver, CA 7.5-minute quadrangle.

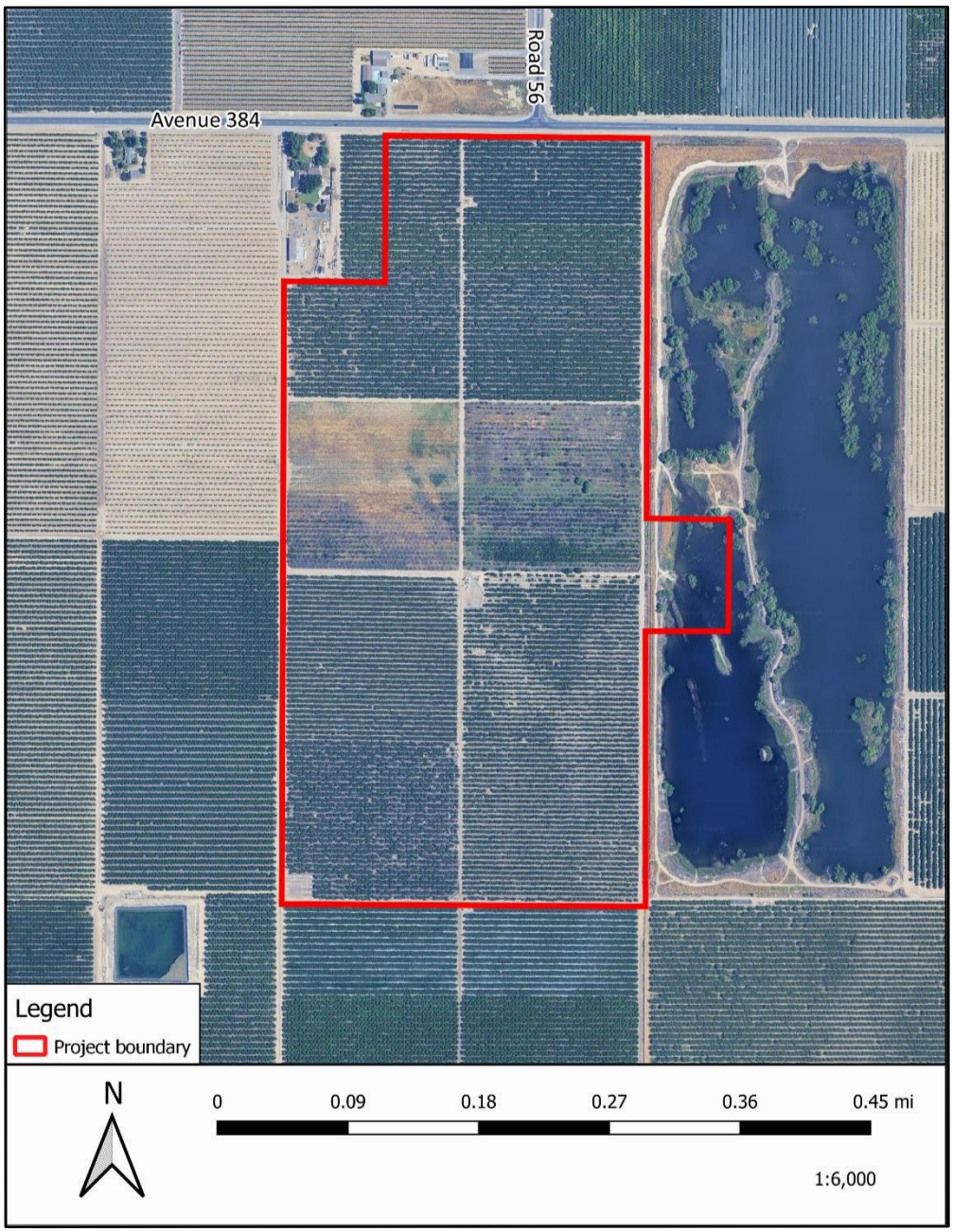

Figure 1-3 Aerial view of the Project site.

1.4 REPORT STRUCTURE

This report documents the results of a cultural resource assessment of the proposed Project area. In order to comply with California regulations for CEQA, the following specific tasks were completed: (1) requesting a records search from the Southern San Joaquin Information Center (SSJVIC) of the California Historical Resources Information System (CHRIS), at California State University, Bakersfield; (2) a review of site archives (3) requesting a Sacred Lands File Search and a list of interested parties from the Native American Heritage Commission (NAHC) and initiating outreach to local Native American individuals and tribal representatives; (4) conducting an archaeological pedestrian survey, and (5) preparing this technical report.

Taylored Archaeology prepared this report following the California Office of Historic Preservation standards in the 1990 Archaeological Resources Management Report Recommended Contents and Format. Chapter 1 describes the introduction of the Project and its location and identifies the key personnel involved in this report. Chapter 2 summarizes the Project setting, including the natural, prehistoric ethnography, and historic background for the Project site and surrounding area. Chapters 3 details the methods used for cultural records searches, local Native American outreach, and archaeological pedestrian survey. Chapter 4 summarizes the results of the cultural resource investigation. Chapter 5 discusses the Project findings and offers management recommendations. Chapter 6 is a bibliography of references cited within this report. The report also contains the following appendices: qualifications of key personnel (Appendix A), the CHRIS records search results (Appendix B), and Taylored Archaeology's nongovernmental Native American outreach (Appendix C).

2
PROJECT SETTING

2.1 NATURAL ENVIRONMENT

The Project area lies in the Central Valley of California, which is approximately 450 miles from north to south, and ranges in width east to west from 40 to 60 miles (Prothero 2017). The Central Valley is divided into two subunits, the Sacramento Valley in the north and the San Joaquin Valley in the south, which are each named after the primary rivers within each valley (Madden 2020). The Project is located approximately 298 feet above sea level on the open flat plains of the Southern San Joaquin Valley. Climate within the San Joaquin valley is classified as a 'hot Mediterranean climate', with hot and dry summers, and cool damp winters characterized by periods of dense fog known as 'tule fog' (Prothero 2017).

The San Joaquin Valley is a comprised of a structural trough created approximately 65 million years ago and is filled with nearly six miles of sediment (Bull 1964). The San Joaquin Valley ranges from Stockton and the San Joaquin-Sacramento River Delta in the north to Wheeler Ridge to the south, ranging nearly 60 miles wide at its widest (Zack 2017). It is split by late Pleistocene alluvial fans between the San Joaquin River hydrologic area in the north and the Tulare Lake Drainage Basin in the south (Rosenthal et al 2007). The Project site is located within the latter of the two hydrologic units. The Kaweah, Tule, Kern, and Kings rivers flowed into large inland lakes with no outflow except in high flood events, in which the lakes would flow through the Fresno Slough into the San Joaquin River. The largest of these inland lakes was Tulare Lake, which occupied a vast area of Tulare and Kings Counties and was the largest freshwater lake west of the Mississippi. These four rivers in the Tulare Lake Drainage Basin accounted for more than 95 percent of water discharged into Tulare Lake, with the remaining five percent sourced from small drainages originating in the Coast Ranges to the west (Adams et al. 2015).

Before the appearance of agriculture in the nineteenth century, the general Project location would have been comprised of prairie grasslands with scattered oak tree savannas near the foothills, and riparian forest along the various streams and drainages (Preston 1981).

Riparian environments would also have been present along various waterways, including drainages and marshes. Riparian forest vegetation would have been comprised of multiple layers of dense undergrowth. The upper canopy species would have consisted of Western sycamore (*Platanus racemosa*), willow (*Salix* spp.), valley oak (*Quercus lobata*), and Fremont cottonwood (*Populus fremonti*) (Katibah 1984). Intermediate layers were likely dominated by Oregon ash (*Fraxinus latifolia*), willow (*Salix* spp.), and California box elder (*Acernegundo* subsp. *californicum*), while riparian forest undergrowth would have included California wild grape (*Vitis californica*), poison oak (*Rhus diversiloba*), California mugwort (*Artemisia douglasiana*), California wild rose (*Rosa californica*), and blackberry (*Rubus* spp.) Drier portions of the southern end of the San Joaquin Valley would have been dominated by saltbrush (*Atriplex* spp.) desert. (Katibah 1984).

The region around the Project site was largely dominated by annual grasslands in drier upland habitat, and riparian forest, rivers and marshland near waterways. Historically, these habitats provided a lush environment for a variety of animals, including rodents, insects, reptiles, birds and other waterfowl, California grizzly bear (*Ursus arctos californicus*), tule elk (*Cervus canadensis nannodes*), pronghorn (*Antilocapra americana*), mule deer (*Odocoileus hemionus*), American black bear (*Ursus americanus*), and mountain lion (*Puma concolor*) (Preston 1981). Native trees and plants observed in the Project vicinity include various blue, live, and white oaks (*Quercus* spp.), cottonwood (*Populus spp.*), and willow (*Salix* spp.). The introduction of agriculture to the region resulted in large animals being forced out of their habitat. Common land mammals now include coyote (*Canis latrans*), bobcat (*Lynx rufus*), gray fox (*Urocyon cinereoargenteus*), kit fox (*Vulpes macrotis*), and rabbits (*Leporidae* spp.).

Rivers and lakes throughout the valley provide habitat for freshwater fish, including rainbow trout (*Oncorhynchus mykiss*), Sacramento sucker (*Catostomus occidentalis*), and Sacramento perch (*Archoplites interruptus*) (Preston 1981). Chinook salmon (*Oncorhynchus tshawytscha*) were also found throughout the valley, including as far south as the San Joaquin River, and occasionally the Kings River, though it is estimated that chinook salmon have lost as much as 72 percent of their original habitat throughout the Central Valley (Yoshiyama et al. 2001).

2.2 PREHISTORIC SETTING

Research into San Joaquin Valley prehistory began in the early 1900s with several archaeological investigations (Rosenthal et al. 2007). The Southern San Joaquin Valley is of one of the least understood areas within California due to a lack of well-grounded chronologies for large segments of the valley (Rosenthal et al. 2007). This is largely due to the valley floor being filled with thick alluvial deposits, and from human activity largely disturbing much of the valley floor due to a century and a half of agricultural use (Dillon 2002; Siefken 1999). Mound sites may have occurred as frequently as one every two or three miles along major waterways but studying such mounded occupations sites is difficult as most surface sites have been destroyed (Schenck and Dawson 1929). Much of the early to middle Holocene archaeological sites may be buried as deep as 10 meters due to millennia of erosion and alluvial deposits from the western Sierras (Moratto 1984).

Mass agricultural development has heavily disturbed and changed the landscape of the Southern San Joaquin Valley, from the draining of marshes and the vanishing of the extensive Tulare Lake, known as “Pa’ashi” meaning “Big Water” in the Yokut language, to grading nearly the entire valley for agricultural operations (Garone 2011). These activities have impacted or scattered much of the shallow surface deposits and mounds throughout the valley (Rosenthal et al 2007). Some researchers have suggested that potentially as much as 90 percent of all Central California archaeological sites have been destroyed from these activities (Riddell 2002).

The cultural traits and chronologies which are summarized below are largely based upon information discussed in multiple sources, including Fredrickson (1973, 1974), Garfinkel (2015), McGuire and Garfinkel (1980), Moratto (1984), and Rosenthal et al. (2007). The most recent comprehensive approach to compiling a chronology of the Southern San Joaquin Valley

prehistory is by Garfinkel in 2015, which builds off Rosenthal's 2007 previous work. Both Garfinkel's and Rosenthal's chronologies are calculated in years B.C. In the interest of maintaining cohesiveness with modern anthropological research, the dates of these chronologies have been adapted into years before present (B.P.).

The Paleo-Indian Period (13,500-10,600 cal B.P.) was largely represented by ephemeral lake sites which were characterized by atlatl and spear projectile points. Around 14,000 years ago, California was largely a cooler and wetter place, but with the retreat of continental Pleistocene glaciers, California largely experienced a warming and drying period. Lakes filled with glacial meltwater were in the valley floor and used by populations of now extinct large game animals. A few prehistoric sites were discovered near the southwestern shore of Tulare Lake (Garfinkel 2015). Foragers appear to have operated in small groups which migrated on a regular basis.

During the Lower Archaic Period (10,500-7450 cal B.P.), climate change created a largely different environment which led to the creation of larger alluvial fans and flood plains. Most of the archaeological records of the prior period wound up being buried by geological processes. During this time, cultural patterns appear to have emerged between the foothill and valley populations of the local people. The foothill sites were often categorized by dense flaked and ground stone assemblages, while the valley sites were instead characterized by a predominance of crescents and stemmed projectile points. Occupation within the area is represented mostly by isolated discoveries and along the former shoreline of Tulare Lake. Archaeological finds are typically characterized by chipped stone crescents, stemmed points, and other distinctive flakes stone artifacts (Rosenthal et al. 2007). Variations in consumption patterns emerged as well, with the valley sites more marked by consumption of waterfowl, mussels, and freshwater fish, while the foothills sites saw an increase in nuts, seeds, and a more narrowly focused diet than the valley sites.

The Middle Archaic (7450-2500 cal B.P.) saw an increase in semi-permanent villages along river and creek settings, with more permanent sites located along lakes with a more stable supply of water and wildlife. Due to the warmer and drier weather of this period, many lakes within the valley dramatically reduced in size, while some vanished completely (Garone 2011). Cultural patterns during this time saw an increase in stone tools, while a growth in shell beads, ornaments, and obsidian evidence an extensive and ever-growing long-distance trade network. Little is known of cultural patterns in the valley during the Upper Archaic (2500-850 B.P.), but large village structures appeared to be more common around local rivers. An overall reduction of projectile point size suggests changing bow and arrow technologies. Finally, the Emergent Period (850 cal B.P. - Historic Era) was generally marked by an ever-increasing specialization in tools, and the bow and arrow generally replaced the dominance of the dart and atlatl. Cultural traditions ancestral to those recorded during ethnographic research in the early 1900s are identifiable.

2.3 ETHNOGRAPHY

The Project boundary is in the Southern Valley Yokuts ethnographic territory of the San Joaquin Valley. The Yokuts were generally divided into three major groups, the Northern Valley Yokuts,

the Southern Valley Yokuts, and the Foothill Yokuts. The Yokuts are a sub-group of the Penutian language that covers much of coastal and central California and Oregon (Callaghan 1958). The Yokuts language contained multiple dialects spoken throughout the region, though many of them were mutually understandable (Merriam 1904).

The Yokuts have been extensively researched and recorded by ethnographers, including Powers (1877), Kroeber (1925), Gifford and Schenck (1926, 1929), Gayton (1930, 1945), Driver (1937), Harrington (1957), Latta (1977), and Wallace (1978). Much of the research from these ethnographers focuses on the central Yokuts tribes due to the northernmost tribes being impacted by Euro-Americans during the California Gold Rush of the mid 1800s, and by the southernmost tribes often being removed and relocated by the Spanish to various Bay Area or coastal missions. The central Yokuts tribes, and especially the western Sierra Nevada foothill tribes, were the most intact at the time of ethnographic study.

The most detailed ethnographic information gathered regarding Native American group territories in Central California is located within maps prepared by Kroeber. The information presented in Kroeber's map of Southern and Central Yokuts shows the Project area within the Nutunutu Yokuts territory (1925: Plate 47). The main ethnographic village for this area was *Wewayo*, which was approximately 10 miles to the north of the Project near the City of Reedley (Kroeber 1925). Primary Yokuts villages were typically located along lakeshores and major stream courses, with scattered secondary or temporary camps and settlements located near gathering areas in the foothills. Yokuts were organized into local tribes, with one or more linked villages and smaller settlements within a territory (Kroeber 1925).

Each local tribe was a land-owning group that was organized around a central village and shared common territory and ancestry. Most local tribe populations ranged from 150 to 500 people (Kroeber 1925). These local tribes were often led by a chief, who was often advised by a variety of assistants including the winatum, who served as a messenger and assistant chief (Gayton 1930). Early studies by Kroeber (1925), Gifford and Schenck (1926), and Gayton (1930) concluded that social and political authority within local tribes was derived from male lineage and patriarchy. However, more recent reexaminations (Dick-Bissonnette 1998) argue that this assumption of patriarchal organization was based on male bias by early 20th century researchers, and instead Yokuts sociopolitical authority was matriarchal in nature and centered around matrilineal use-rights and women's work groups.

Prior to Euro-American contact, there was abundance of natural resources within the greater Tulare Lake area. Due to these resources, Yokuts maintained some of the largest populations in North America west of the continental divide (Cook 1955a).

2.4 HISTORIC SETTING

2.4.1 California History

European contact in modern-day California first occurred in 1542 with the arrival of a Spanish expedition lead by Juan Rodríguez Cabrillo into San Diego Bay (Engstrand 1997). Expeditions along the California coast continued throughout the sixteenth century and primarily focused on finding favorable harbors for further expansion and trade across the Pacific. However, rocky shorelines, unfavorable currents, and wind conditions made traveling north from New Spain to the upper California coast a difficult and time-consuming journey (Eifler 2017). The topography of California, with high mountains, large deserts, and few natural harbors lead to European expansion into California only starting in the 1760s. As British and Russian expansion through fur trading encroached on California from the north, Spain established a system of presidios, pueblos, and missions along the California coast to defend its claim, starting with Mission San Diego de Alcalá in 1769 (Engstrand 1997).

2.4.2 Central California History

The San Joaquin Valley did not experience contact with Europeans until the late 1700s (Starr 2007). Life at the California missions was hard and brutal for Native Americans, with many dying of disease, poor conditions, and many fleeing to areas not under direct Spanish control (Jackson and Castillo 1995). The earliest exploration of the San Joaquin Valley by Europeans was likely by the Spaniards when in the fall of 1772 a group known as the Catalonian Volunteers entered the valley through Tejon Pass in search of deserters from the Southern California Missions (Zack 2017). However, the group only made it as far north as Buena Vista Lake in modern day Kern County before turning around due to the extensive swamps. Additional excursions to the valley were for exploration such as those led by Lieutenant Bariel Moraga in 1806, but also to find sites for suitable mission sites and to track down Native Americans fleeing the coastal missions (Cook 1958).

Subsequent expeditions were also sent to pursue outlaws from the coast who would often flee to the valley for safety. One of the subsequent explorations was an expedition in 1814 to 1815 with Sargent Juan Ortega and Father Juan Cabot, who left the Mission San Miguel with a company of approximately 30 Spanish soldiers and explored the San Joaquin Valley (Smith 2004). This expedition passed through the Kaweah Delta and modern-day Visalia and made a recommendation to establish a mission near modern-day Visalia. However, with European contact also came European disease. Malaria and other new diseases were brought by Europeans, and in 1833 an epidemic of unknown origin traveled throughout the Central Valley. Some estimates place the Native American mortality of the epidemic as high as 75 percent (Cook 1955b). Combined with the rapid expansion of Americans into California in 1848 during the Gold Rush, Native American populations within the valley never fully recovered (Eifler 2017).

Initial settlement within the valley by Europeans in the 1830s was largely either by trappers like Jedediah Smith or horse thieves like Pegleg Smith (Clough and Secrest 1984). In fact, horse and other livestock theft was so rampant that ranching operations on the Rancho Laguna de Tache

by the Kings River and Rancho del San Joaquin Rancho along the San Joaquin River could not be properly established (Cook 1962). With the end of the Mexican American War and the beginning of the gold rush in 1848, the San Joaquin Valley became more populated with ranchers and prospectors. Most prospectors traveled by sea to San Francisco and used rivers ranging from the Sacramento River to the San Joaquin River to access the California interior (Eifler 2017). Most areas south of the San Joaquin River were less settled simply because those rivers did not connect to the San Francisco Bay area except in wet flood years. By 1850, California became a state and Tulare County was established in 1853.

3
METHODS

3.1 RECORDS SEARCH

Taylored Archaeology requested a cultural resource records search from the SSJVIC of the CHRIS at California State University in Bakersfield, California on August 4, 2025. The purpose of this request was to identify and review prior cultural resource studies and previously recorded cultural resources on or near the Project boundary. The records search included prior cultural resources investigation reports conducted, previously recorded resources within the Project boundary and the 0.5-mile radius around the Project boundary (Appendix B). Also included in research were cultural resource records (DPR forms) as well as the Historic Properties Directory of the Office of Historic Preservation list, General Land Office Maps, Archaeological Determinations of Eligibility list, and the California Inventory of Historic Resources list.

3.2 ARCHIVAL RESEARCH

Archival research was conducted to investigate the historical background for any potential historic structures, buildings and historical deposits that may exist and land use within the Project boundary. Historical maps, historical aerial photographs, historical US Geological Survey (USGS) topographic maps, Google Earth aerial photographs, Google Street View photos, Map Aerial Locator Tool (MALT) at the Henry Madden Library, California State University, Fresno, books, articles and other records were used to better understand the prehistory and history of the Project area. The results of this research are presented in Chapter 4.

3.3 NATIVE AMERICAN OUTREACH

Taylored Archaeology requested a Sacred Lands File (SLF) search from the NAHC on August 4, 2025. The SLF search was requested to identify whether there are sensitive or sacred tribal cultural resources in the vicinity of the Project boundary that could be affected by the proposed Project. The NAHC also included a list of contacts of local Native American representatives who may have knowledge or interest in sharing information of resources of sacred significance present in or near the Project boundary. Every individual listed was sent a nongovernmental outreach letter and a map via email notifying them of the Project and asking if they have further information or concerns of the Project area. Follow-up communication was performed via email and phone calls, as appropriate. The SLF results are in Chapter 4.

3.4 ARCHAEOLOGICAL PEDESTRIAN SURVEY

On August 23, 2025, Archaeologist Consuelo Sauls conducted an archaeological pedestrian survey of the entire Project boundary. Ms. Sauls surveyed within the Project boundary using parallel transects spaced 10 meters apart and generally oriented east to west throughout the entire 82.7-acre of the Project boundary to identify any archaeological deposits that may be present on the ground surface. Ground disturbances, such as burrows, and exposed areas, were

visually inspected. A plan map of the Project boundary was used to see land usage, structures, and map out transects. Field survey observations were documented on field notes and collected locational data on a Gaia Global Positioning System application. Photographs documenting the Project site using an iPhone 11 Pro digital camera.

4
RESULTS

4.1 RECORDS SEARCH

The SSJVIC provided the CHRIS records search results in a letter dated September 18, 2025 (Appendix B). According to the CHRIS records results, there are no prior cultural resources studies conducted within the Project boundary. However, there were five cultural resources studies previously conducted within a 0.5-mile radius (Table 4-1). In addition, the CHRIS search also reported that there are no previously recorded cultural resources within the Project boundary nor any previously recorded cultural resources within a 0.5-mile radius.

Table 4-1
Previous Cultural Resources Studies within 0.5-miles of the Project boundary

Report Number	Author(s)	Date	Report Title	Study
TU-00041	William Self	1995	Class I Overview, Santa Fe Pacific Pipeline Partners, L.P., Proposed Concord to Colton Pipeline Project	Archaeological Literature Review
TU-00103	Brian Wickstrom and Emily Anderson	1997	Cultural Resource Survey for the Selma to Bakersfield Fiberoptic Line, Southern San Joaquin Valley, California	Archaeological Field Survey
TU-01438	Catherine Lewis Pruett	2010	A Cultural Resources Assessment for the Groundwater Recharge and Banking Project, Northeast of Traver, Tulare County, California	Archaeological Field Survey
TU-01699	Beatrice Cox	2014	Cultural Resources Constraints Report for the Kingsburg 1113 to 1114 Reconductor Project, Tulare and Kings Counties, California	Architectural Field Survey
TU-01809	Kristina C. Roper	2017	Cultural Resources Assessment, London Community Service District Water Storage Tank and distribution System, London, Tulare County, California	Archaeological Field Survey

4.2 ARCHIVAL RESEARCH

The Project site and the surrounding area were mostly agricultural use. Historical topographic map coverage of the Project site dates to 1927. A review of the 1927 USGS topographic map depicts the site with the Kennedy Schoolhouse Ditch running north to south in the middle of the Project site, and the project being bordered to the north by a "Dodge Avenue" in similar configuration to present day Avenue 384. The Project is also depicted northwest of the community of London. The 1949 USGS topographic map shows the Project site and surrounding area similar to the 1927 topographic map. A 1969 photorevised map shows the area adjacent to the east of the Project site as a "Gravel Pit" where the London Pond currently resides. Two additional unnamed ditches are depicted on the Project site in addition to the original Kennedy Schoolhouse Ditch. Finally, a building is shown along Avenue 384 immediately to the northwest of the Project site. Topographic maps between 2012 to 2018 show no changes to the Project site or surrounding area, while the 2021 topographic map shows the London Pond as an unnamed body of water east of the Project site.

Historic aerial photograph coverage of the Project site dates to 1956. A review of historic aerial photographs shows the Project site utilized for row crops from at least 1956 to 1969. Historic aerial photographs from 1956 to 1967 show the Kennedy Schoolhouse Ditch in a similar configuration as depicted on topographic maps. In the 1969 photograph the ditch is no longer visible, potentially due to being turned into a pipeline and undergrounded sometime between 1967 and 1969 (NETROnline 2025). The area adjacent to the Project site to the east appears similar to depictions of a gravel quarry in 1969. Additionally, an unnamed ditch is seen crossing the Project site in the middle from west to east, before turning south along the eastern boundary of the site in the same alignment as the unnamed ditch in the 1969 photorevised topographic map (NETROnline 2025). By the next available photograph in 1984, the Project site appears as an orchard, and the former gravel site appears as the London Pond does in present day. The unnamed ditch no longer crosses to the Project site from west to east and appears to have been realigned to the north towards Avenue 384 along the eastern portion of the Project site. No changes in the Project site appear between 1984 and present day with the exception of a few portions of the site alternating between orchard and row crops (NETROnline 2025, Google 2025).

4.3 NATIVE AMERICAN OUTREACH

The NAHC responded on August 4, 2025, via email with a letter regarding Taylored Archaeology's request. The SLF search did not identify the presence of tribal cultural resources in the proposed Project boundary. The NAHC supplied a list of potentially interested Native American representatives to contact for further information or concerns of cultural resources in the Project site and the surrounding area (Appendix C).

The following Native American organizations/individuals were contacted from the list provided by NAHC below:

1. Chairperson Delia Dominguez of Kitanemuk and Yowlumne Tejon Indians
2. Cultural Specialist II Samantha McCarty of the Santa Rosa Rancheria Tachi Yokut Tribe

3. Cultural Specialist I Nichole Escalon of the Santa Rosa Rancheria Tachi Yokut Tribe
4. Tribal Historic Preservation Officer Shana Powers of the Santa Rosa Rancheria Tachi Yokut Tribe
5. Chairperson Michelle Heredia-Cordova of Table Mountain Rancheria
6. Cultural Resource Director Bob Pennell of Table Mountain Rancheria
7. Environmental Department Director Kerri Vera of the Tule River Tribe
8. Chairperson Neil Peyron of the Tule River Indian Tribe
9. Chairperson Kenneth Woodrow of the Wuksachi Indian Tribe/Eshom Valley Band

According to prior communication with the Santa Rosa Rancheria, Tribal Historic Preservation Officer (THPO) Shana Powers is no longer with the Santa Rosa Rancheria Tachi Yokut Tribe and Nichole Escalon of the Santa Rosa Rancheria Tachi Tribe is now THPO (McCarty 2024).

As part of this archaeological investigation, nongovernmental outreach letters and location maps were sent to each individual listed above on August 26, 2025. The letter was followed up via email on September 8, 2025. Tule River Tribe Environmental Director Kerri Vera responded acknowledging receipt of the outreach letter and stated she would respond later that week. As of the date of this report, no further responses were received. The NAHC letter of SLF results, contact log, and copies of the Native American outreach documentation are included in Appendix C.

4.4 ARCHAEOLOGICAL SURVEY RESULTS

The Project site consisted of primarily an orchard (walnuts and peaches) and agricultural field (Figures 4-1 and 4-2). The natural topography of the area has been altered by historical and modern agricultural practices and much of the land on the Project site has been graded, plowed, planted and/or harvested, which has caused additional disturbance to the soil. Overall, ground visibility within the Project boundary was generally good throughout the orchard portion ranging from 90 to 100 percent (Figures 4-3 and 4-4). The cutout at the London Pond was covered in high thick weeds and annual grass. A small dirt road that ran along the fence line from north to south. The ground visibility was poor in areas with vegetation and obscured by water in the London Pond, ranging from 0 to 5 percent (Figure 4-5 and 4-6). No evidence was observed on the ground surface of the Kennedy Schoolhouse Ditch depicted on historic topographic maps as discussed in Section 4.2. The unnamed ditch from the 1984 aerial photograph alongside the eastern boundary of the Project site was observed in the same alignment (Figure 4-5).

Soils observed on the Project site consisted of a light brown sandy loam consistent with Hanford sandy loam soil series as reported by the Natural Resources Conservation Service Web Soil Survey to be within the Project site (NRCS 2025). The topography in the Project site was relatively flat.

No prehistoric cultural resources were encountered within the Project site during the survey. While past agricultural and development activities may have potentially destroyed or obscured ground surface evidence of archaeological resources within the Project site, intact archaeological resources may potentially exist below the ground surface.

Taylored Archaeology's intensive pedestrian survey of the Project site covered a total of 87.2 acres that were not obstructed by trees, shrubs or grass (Figure 4-7).



Figure 4-1 Orchard in northern portion of Project site, facing east.



Figure 4-2 Overgrown field in central portion of Project site, facing south.



Figure 4-3 Orchard in southern portion of Project site, facing west.



Figure 4-4 Irrigation pumping station in central portion of Project site, facing north.



Figure 4-5 Unnamed ditch along eastern boundary of Project site, facing north.



Figure 4-6 Portion of Project site within London Pond, facing east.

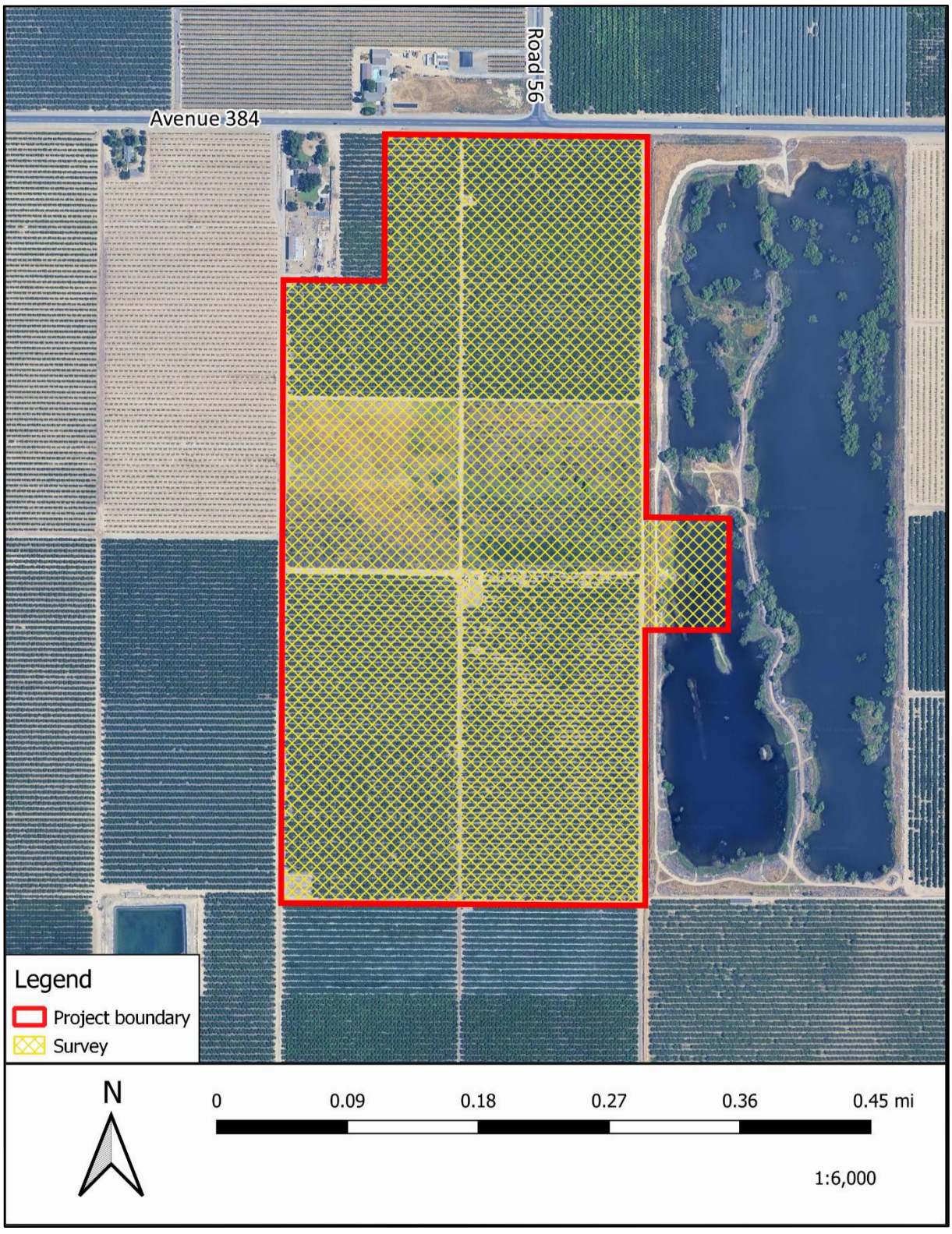

Figure 4-7 Survey coverage of the Project site.

5
SUMMARY AND RECOMMENDATION

Taylored Archaeology performed a Phase I Cultural Resources Assessment for the Alta Irrigation District London West Pond Basin Project. The SSJVIC revealed the CHRIS records shows no cultural resources previously recorded within the Project area nor with a 0.5-mile radius. The CHRIS records also showed no prior cultural studies within the Project boundary. However, five cultural studies were previously conducted within a 0.5-mile radius of the Project site.

The NAHC's Sacred Lands File results search of the Project area were negative. Outreach was conducted to local Native American representatives. As of the date of this report, only one response was received. Environmental Director Kerri Vera of the Tule River Tribe responded via email acknowledging receiving the letter and saying she would respond later. No additional comments were received.

The archaeological pedestrian survey resulted in negative findings with no prehistoric resources within the Project boundary. A single unnamed ditch was encountered along the eastern boundary of the Project site. Based on archival research, this ditch appears to have been realigned circa early 1980s. No further cultural resource investigation of this ditch is warranted. The absence of cultural material on the ground surface does not, however, preclude the possibility of Project construction unearthing buried archaeological deposits.

Based on the results of this investigation, Taylored Archaeology recommends the following:

- In the event that previously unidentified archaeological remains are encountered during development or ground-moving activities in the Project boundary, all work should be halted until a qualified archaeologist can identify the discovery and assess its significance.

- If human remains are uncovered during construction, the Tulare County Coroner is to be notified to investigate the remains and arrange proper treatment and disposition. If the remains are identified on the basis of archaeological context, age, cultural associations, or biological traits to be those of a Native American, California Health and Safety Code 7050.5 and PRC 5097.98 require that the coroner notify the NAHC within 24 hours of discovery. The NAHC will then identify the Most Likely Descendent who will be afforded an opportunity to make recommendations regarding the treatment and disposition of the remains.

6
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APPENDIX A

Personnel Qualifications

Consuelo Sauls, M.A., RPA 41591505
Archaeologist
csaulsarchaeo@gmail.com
559.797.1572

Areas of Expertise

- Cultural Resource Management
- CEQA and Federal regulations
- Prehistoric Archaeology
- Laboratory Management
- Technical Writing
- Phase I Assessments

Years of Experience

- 17

Education

- M.A., Archaeology, University of Durham, 2014
- B.A., Anthropology, California State University, Fresno, 2009

Registrations/Certifications

- Registered Professional Archaeologist 41591505

Professional Affiliations

- Coalition for Diversity in California Archaeology
- Society for American Archaeology
- Society for California Archaeology
- Society of Black Archaeologists

Professional Experience

2019 –Present Principal Investigator, Taylored Archaeology, Fresno, California

2018 – 2019 Staff Archaeologist, Applied EarthWorks, Inc., Fresno, California

2016 – 2018 Principal Investigator, Soar Environmental Consulting, Inc., Fresno, California

2015 Archivist/Database Technician, Development and Conservation Management, Inc., Laguna Beach, California

2013 Laboratory Research Assistant, Durham University Archaeology Department and Archaeology Museum, Durham, England, UK

2011 – 2012 Laboratory Technician, University of Pennsylvania Museum of Archaeology and Anthropology, Philadelphia, Pennsylvania

2008 – 2009 Laboratory Technician, California State University, Fresno

2008 Field School, California State University, Fresno

Technical Qualifications

Ms. Sauls meets the Secretary of the Interior's Professional Qualification Standards as an archaeologist. She has conducted pedestrian surveys, supervised Extended Phase I survey, authored technical reports, and completed the Section 106 process with the State Historic Preservation Officer and Tribal Historic Preservation Officer. Her experience includes data recovery excavation at Western Mono sites and processing recovered artifacts in the laboratory as well as conducting archival research about prehistory and ethnography of Central California. Ms. Sauls has authored and contributed to technical and letter reports in compliance with of the National Historical Preservation Act (NHPA) Section 106 and the California Environmental Quality Act (CEQA). She also has supported NHPA tribal consultation and responded to Assembly Bill 52 tribal comments. Ms. Sauls also has an extensive background supervising laboratory processing, cataloging, and conservation of prehistoric and historical archaeological collections. In addition, she worked with the Rock Art Heritage Group in the management, preservation, and presentation of rock art in museums throughout England, including a thorough analysis of the British Museum's rock art collections. At Durham University Archaeology Museum, Ms. Sauls processed the excavated skeletal remains of 30 individuals from the seventeenth century.

APPENDIX B

Records Search Results

APPENDIX C

Native American Outreach

NATIVE AMERICAN HERITAGE COMMISSION

CHAIRPERSON
Reginald Pagaling
Chumash

VICE-CHAIRPERSON
Buffy McQuillen
Yokayo Pomo, Yuki, Nomlaki

SECRETARY
Sara Dutschke
Miwok

PARLIAMENTARIAN
Wayne Nelson
Luiseño

COMMISSIONER
Isaac Bojorquez
Ohlone-Costanoan

COMMISSIONER
Stanley Rodriguez
Kumeyaay

COMMISSIONER
Reid Milanovich
Cahuilla

COMMISSIONER
Bennae Calac
Pauma-Yuima Band of Luiseño Indians

COMMISSIONER
Vacant

ACTING EXECUTIVE SECRETARY
MICHELLE CARR

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

August 4, 2025

Consuelo Sauls
Taylored Archaeology

Via Email to: csaulsarchaeo@gmail.com

Re: Alta Irrigation District London West Pond Recharge Project, Tulare County

To Whom It May Concern:

As requested, a search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed based on information submitted for the above referenced project. The results were negative. Be aware that tribes do not always record their sacred sites in the SLF, nor are they required to do so. As such, an SLF search is not a substitute for consultation with all tribes that are traditionally and culturally affiliated with a project's geographic area.

Attached is a list of Native American tribes that are traditionally and culturally affiliated with the project's geographic area. Please contact all of the listed tribes as they may have information about sacred sites within the project area that is not listed with the NAHC.

If within two weeks of notification, a response has not been received, the Commission requests that you follow up with a telephone call or email to ensure that the project information was received.

If you receive notification of a change of address or phone number from a tribe, please inform the NAHC so that we can assure that our lists contain current information.

In addition to engaging in tribal consultation, you should consult the appropriate regional California Historical Research Information System (CHRIS) information center to determine whether it has information regarding the presence of recorded archaeological sites within the project area.

If you have any questions or need additional information, please contact me at my email address: melina.carlos@nahc.ca.gov

Sincerely,

Melina Carlos

Melina Carlos
Cultural Resources Analyst

Attachment

Native American Heritage Commission
Native American Contact List
Tulare County
8/4/2025

County	Tribe Name	Fed (F) Non-Fed (N)	Contact Person	Contact Address	Phone #	Fax #	Email Address	Cultural Affiliation	Counties	Last Updated
Tulare	Kitanemuk & Yowlumne Tejon Indians	N	Delia Dominguez, Chairperson	115 Radio Street Bakersfield, CA, 93305	(626) 339-6785		2deedominguez@gmail.com	Kitanemuk Southern Valley Yokut	Fresno,Kern,Kings,Los Angeles,Madera,Monterey,San Benito,San Luis Obispo,Tulare	
	Santa Rosa Rancheria Tachi Yokut Tribe	F	Samantha McCarty, Cultural Specialist II	P.O. Box 8 Lemoore, CA, 93245	(559) 633-3440		smccarty@tachi-yokut-nsn.gov	Southern Valley Yokut	Fresno,Kern,Kings,Merced,Monterey,San Benito,San Luis Obispo,Tulare	10/3/2023
	Santa Rosa Rancheria Tachi Yokut Tribe	F	Nichole Escalon, Cultural Specialist I	P.O. Box 8 Lemoore, CA, 93245	(559) 924-1278		nescalon@tachi-yokut-nsn.gov	Southern Valley Yokut	Fresno,Kern,Kings,Merced,Monterey,San Benito,San Luis Obispo,Tulare	10/3/2023
	Santa Rosa Rancheria Tachi Yokut Tribe	F	Shana Powers, THPO	P.O. Box 8 Lemoore, CA, 93245	(559) 423-3900			Southern Valley Yokut	Fresno,Kern,Kings,Merced,Monterey,San Benito,San Luis Obispo,Tulare	10/3/2023
	Table Mountain Rancheria	F	Michelle Heredia-Cordova, Chairperson	P.O. Box 410 Friant, CA, 93626	(559) 822-2587	(559) 822-2693	mhcordova@tmr.org	Yokut	Fresno,Kern,Kings,Madera,Monterey,San Benito,San Luis Obispo,Tulare	12/21/2023
	Table Mountain Rancheria	F	Bob Pennell, Cultural Resource Director	P.O. Box 410 Friant, CA, 93626	(559) 325-0351	(559) 325-0394	rpennell@tmr.org	Yokut	Fresno,Kern,Kings,Madera,Monterey,San Benito,San Luis Obispo,Tulare	
	Tule River Indian Tribe	F	Kerri Vera, Environmental Department	P. O. Box 589 Porterville, CA, 93258	(559) 783-8892	(559) 783-8932	kerri.vera@tuleriv ertribe-nsn.gov	Yokut	Alameda,Amador,Calaveras,Contra Costa,Fresno,Inyo,Kern,Kings,Madera,Mariposa,Merced,Monterey,Sacramento,San	7/22/2016
	Tule River Indian Tribe	F	Neil Peyron, Chairperson	P.O. Box 589 Porterville, CA, 93258	(559) 781-4271	(559) 781-4610	neil.peyron@tuleri vertribe-nsn.gov	Yokut	Alameda,Amador,Calaveras,Contra Costa,Fresno,Inyo,Kern,Kings,Madera,Mariposa,Merced,Monterey,Sacramento,San	
	Wuksachi Indian Tribe/Eshom Valley Band	N	Kenneth Woodrow, Chairperson	1179 Rock Haven Ct. Salinas, CA, 93906	(831) 443-9702		kwood8934@aol.com	Foothill Yokut Mono	Alameda,Calaveras,Contra Costa,Fresno,Inyo,Kings,Madera,Marin,Mariposa,Merced,Mono,Monterey,San Benito,San	6/19/2023

Native American Heritage Commission
Native American Contact List
Tulare County
8/4/2025

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

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed Alta Irrigation District London West Pond Recharge Project, Tulare County.

Record: PROJ-2025-004254
Report Type: List of Tribes
Counties: Tulare
NAHC Group: All

Native American Outreach Log

Alta Irrigation District London West Recharge Basin Project, Tulare County, California

Organization	Name	Position	Address	Phone Number	Email Address	Letter	E-Mail	Summary of Contact
Native American Heritage Commission	Melina Carlos	Culutral Resources Analyst	1550 Harbor Boulevard Suite 100 West Sacramento, California 95691	(916) 373-3710	nahc@nahc.ca.gov		8/4/2025	In a letter dated August 4, 2025, the NAHC stated that the results of the SLF results were negative and suggested to contact the local Native American representatives on the list provided.
Kitanemuk & Yowlumne Tejon Indians	Delia Dominguez	Chairperson	115 Radio Street Bakersfield, CA 93305	(626) 339-6785	2deedominguez@gmail.com	8/26/2025	9/8/2025	No response.
Santa Rosa Rancheria Tachi Yokut Tribe	Samantha McCarty	Cultural Specialist II	P.O. Box 8 Lemoore, CA 93245	(559) 633-3440	smccarty@tachi-yokut-nsn.gov	8/26/2025	9/8/2025	No response.
Santa Rosa Rancheria Tachi Yokut Tribe	Nichole Escalon	THPO	P.O. Box 8 Lemoore, CA 93245	(559) 423-3900	nescalone@tachi-yokut-nsn.gov	8/26/2025	9/8/2025	No response.
Santa Rosa Rancheria Tachi Yokut Tribe	Shana Powers	Former THPO	P.O. Box 8 Lemoore, CA 93245	(559) 423-3900	spowers@tachi-yokut-nsn.gov	N/A	N/A	According to prior 2024 communication with the Santa Rosa Rancheria, Tribal Historic Preservation Officer (THPO) Shana Powers is no longer with the Santa Rosa Rancheria Tachi Yokut Tribe and Nichole Escalon of the Santa Rosa Rancheria Tachi Tribe is now THPO.
Table Mountain Rancheria	Michelle Heredia-Cordova	Chairperson	P.O. Box 410 Friant, CA 93626	(559) 822-2587	mhcordova@tmr.org	8/26/2025	9/8/2025	No response.
Table Mountain Rancheria	Bob Pennell	Cultural Resource Direc	P.O. Box 410 Friant, CA, 93626	(559) 325-0351	rpennell@tmr.org	8/26/2025	9/8/2025	No response.
Tule River Indian Tribe	Kerri Vera	Environmental Department Director	P.O. Box 589 Porterville, CA 93258	(559) 783-8892	kerri.vera@tulerivertribe-nsn.gov	8/26/2025	9/8/2025	Kerri Vera responded acknowledging receipt of the outreach letter and stated she would respond later that week.
Tule River Indian Tribe	Neil Peyron	Member	P.O. Box 589 Porterville, CA 93258	(559) 781-4271	neil.peyron@tulrivertribe-nsn.gov	8/26/2025	9/8/2025	No response.
Tule River Indian Tribe	Shine Nieto	Chairperson	P.O. Box 589 Porterville, CA 93258	(559) 781-4271	shine.nieto@tulerivertribe-nsn.gov	8/26/2025	9/8/2025	No response.
Wuksachi Indian Tribe/Eshom Valley Band	Kenneth Woodrow	Chairperson	1179 Rock Haven Ct. Salinas, CA 93906	(831) 443-9702	kwood8934@aol.com	8/26/2025	9/8/2025	No response.

Taylored Archaeology

EXAMPLE

August 26, 2025

Shine Nieto, Chairperson
Kerri Vera, Environmental Department Director
Tule River Indian Tribe
P.O. Box 589
Porterville, CA 93258

RE: Alta Irrigation District London West Pond Recharge Project, London, Tulare County, California

Dear Shine Nieto and Kerri Vera,

Taylored Archaeology is providing cultural resources services to Provost & Pritchard Consulting Group for the proposed Alta Irrigation District London West Pond Recharge Project (project) in the community of London, Tulare County, California.

The proposed project involves developing a 4-cell recharge basin on approximately 78 acres adjacent to an existing recharge basin. The proposed basin would connect to an existing canal, Kennedy Schoolhouse Ditch, for delivery running north to south in the middle of the project site. This project is subject to the California Environmental Quality Act (CEQA). The site is northwest of the community of London, on the south side of Avenue 384 within an agricultural area. The project site is in Section 2 of Township 17 South, Range 23 East, Mount Diablo Base Line and Meridian of the Traver, California 7.5-minute USGS quadrangle (please see attached maps).

A search of the Native American Heritage Commission's (NAHC) Sacred Lands File did not indicate the presence of tribal or cultural resources in the immediate project area. Taylored Archaeology also requested a records search of the project area from the California Historic Resources Information System (CHRIS), Southern San Joaquin Valley Information Center (SSJVIC) located at the California State University, Bakersfield. The records search results did not identify any previously recorded archaeological resources within the project area nor within the 0.5-mile surrounding area. One prior cultural survey overlaps the project area, and four prior cultural surveys were completed within the surrounding half-mile radius. An intensive pedestrian survey of the project site was completed to identify and record cultural resources present at the ground surface level; no archaeological resources were encountered.

The NAHC provided your name and address as someone who may have interest in sharing information regarding sacred sites, tribal cultural resources, or other resources of importance in the project area. Please note this research inquiry/outreach letter is research for a cultural resources investigation and is not government-to-government consultation under Assembly Bill 52 or Section 106. Taylored Archaeology understands and takes measures to protect the confidentiality of archaeological site locations, cemeteries, or sacred places, as required by law. Taylored Archaeology will not disclose locational information in any document available to the general public.

6083 N Figarden Dr., Ste. 616, Fresno, CA 93722
559.797.1572 / csaulsarchaeo@gmail.com

Taylored Archaeology

If you have information that you would like to share, please feel free to contact me by email at csaulsarchaeo@gmail.com, or send a letter to my attention at 6083 N. Figarden Dr., Ste. 616, Fresno, CA 93722. Any response by September 9, 2025, would be greatly appreciated.

Sincerely,

Consuelo Y. Sauls, M.A., RPA # 41591505
Archaeologist

Gmail **Consuelo Sauls <csaulsarchaeo@gmail.com>**

Native American Outreach- Alta Irrigation District London West Pond Recharge Basin Project, Tulare County

3 messages

Consuelo Sauls <csaulsarchaeo@gmail.com> Tue, Aug 26, 2025 at 8:00 AM
To: Shine Nieto <shine.nieto@tulerivertribe-nsn.gov>, Kerri Vera <kerri.vera@tulerivertribe-nsn.gov>

Dear Shine Nieto and Kerri Vera,

Please find attached a letter and maps addressed to the Tule River Indian Tribe for Native American outreach regarding the Alta Irrigation District London West Pond Recharge Basin Project in Tulare County.

The NAHC provided your name and address as someone who may have interest in sharing information regarding sacred sites, tribal cultural resources, or other resources of importance in the project area. Taylored Archaeology is conducting this outreach for research as part of the cultural resources investigation. Your response is greatly appreciated.

Respectively,

Consuelo Sauls

--
Consuelo Sauls, M.A., RPA 41591505
Archaeologist
Taylored Archaeology
6083 N. Figarden Dr., Ste. 616
Fresno, CA 93722
csaulsarchaeo@gmail.com
(559) 797-1572

3 attachments



AID London West Aerial.jpg
451K

AID London West Pond Recharge Basin - Topo Map.pdf
1631K

Shine Nieto Outreach Letter- AID London West Pond Project.pdf
140K

Consuelo Sauls <csaulsarchaeo@gmail.com> Mon, Sep 8, 2025 at 9:00 AM
To: Shine Nieto <shine.nieto@tulerivertribe-nsn.gov>, Kerri Vera <kerri.vera@tulerivertribe-nsn.gov>

Good morning Shine Nieto and Kerri Vera,

I am following up on a letter I sent to you by email on August 26, 2025. I am conducting a cultural resources assessment for the Alta Irrigation District London West Pond Recharge Basin Project in Tipton, Tulare County, California.

I want to confirm my letter was received and to offer you the opportunity to share any information regarding the project area. If you have any questions, please contact me at csaulsarchaeo@gmail.com. Thank you for your time.

Respectively,
Consuelo Sauls
[Quoted text hidden]

Kerri Vera <Kerri.Vera@tulerivertribe-nsn.gov> Mon, Sep 8, 2025 at 9:04 AM
To: Consuelo Sauls <csaulsarchaeo@gmail.com>, Shine Nieto <Shine.Nieto@tulerivertribe-nsn.gov>

Good Morning, I have received the letter and will respond this week.
Thank you,

Kerri Vera - Director
Department of Environmental Protection
Tule River Tribe
POB 589, Porterville CA 93258
ph: 559/781-4271 ext: 5041
email(1): tuleriverenv@yahoo.com
email(2): kerri.vera@tulerivertribe-nsn.gov

From: Consuelo Sauls <csaulsarchaeo@gmail.com>
Sent: Monday, September 8, 2025 9:00 AM
To: Shine Nieto <Shine.Nieto@tulerivertribe-nsn.gov>; Kerri Vera <Kerri.Vera@tulerivertribe-nsn.gov>
Subject: Re: Native American Outreach- Alta Irrigation District London West Pond Recharge Basin Project, Tulare County

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders.

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