DEPARTMENT OF RESOURCE MANAGEMENT

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Planning Services Division

NOTICE IS HEREBY GIVEN that the County of Solano, as Lead Agency has completed a Draft Initial Study/Mitigated Negative Declaration (Draft IS/MND) for the Realized Dreams Minor Subdivision Application MS-24-02 (proposed project) in accordance with the California Environmental Quality Act (CEQA). The Draft IS/MND discloses potential environmental impacts associated with the Proposed Project and recommends Mitigation Measures to reduce any identified impacts to a less than significant level. The County will release the Draft IS/MND for a 20-day Public Review and comment period from **June 2, 2025 to June 21, 2025.** The Mitigation Measures discussed in the Draft IS/MND will be imposed as conditions of approval for the Proposed Project. Below are additional details regarding the proposed project, Draft IS/MND, public Review and Comment Period. For additional information, please contact Matt Walsh, Principal Planner with the County of Solano at (707) 784-6765 or mwalsh@solanocounty.gov

Proposed Project: Realized Dreams Minor Subdivision MS-24-02

Project Location: The project site encompasses approximately 426 acres located at 8330 Tremont Road, within unincorporated Solano County. It is located southwesterly of the City of Davis. The Yolo County line is located 2,720 feet to the east, including Yolo County's Grassland Park.

Project Description: The applicant requests a Minor Subdivision of four (4) existing parcels totaling 426± acres, into ten (10) agricultural lots, over 41± acres each. The project will convert more than 342 acres of current cattle pasture to active row crops. The subdivision is part of a proposed family compound for five residences, and the ten parcels are proposed to be farmed together. The existing Williamson Act Contract will be amended to reflect the new parcel boundaries.

Public Review: The 20-day public review and comment period for the Draft IS/MND will take from **June 2, 2025 to June 21, 2025.** The Draft IS/MND will be available for public review at the Solano County Department of Resource Management, 675 Texas Street, Suite 5500, Fairfield, California, and on the County of Solano's website (https://www.solanocounty.com/depts/rm/documents/eir/default.asp).

Comments: Please direct written comments on the proposed project and the Draft IS/MND to Matt Walsh, at Solano County Department Resource Management, 675 Texas Street, Fairfield, CA 94533 or emailed to mwalsh@solanocounty.gov.

FILED

JUN 02 2025

Bill Emlen, Clerk of the Board of Supervisors of the County of Solano, State of California
Deputy Emily Shepherd

Document Posted From
6/2/25 to _____

Deputy Clerk of the Board

INITIAL STUDY AND
MITIGATED NEGATIVE DECLARATION

REALIZED DREAM RANCH

File no. MS-24-02 (Minor Subdivision)

Prepared By

County of Solano
Planning Services Division
Resource Management Department
675 Texas Street, Suite 5500
Fairfield, CA 94533

May 2025

DEPARTMENT OF RESOURCE MANAGEMENT PLANNING SERVICE DIVISION
PART II OF INITIAL STUDY OF ENVIRONMENTAL IMPACTS

Introduction

The following analysis is provided by the Solano County Department of Resource Management as a review of and supplement to the applicants' completed "Part I of Initial Study". These two documents, Part I and II, comprise the Initial Study prepared in accordance with the State CEQA Guidelines, Section 15063.

Project Title:	Realized Dreams Ranch Subdivision
Application Number	MS-24-02
Assessor Parcel Numbers	APN: 110-190-09, 110-190-10, 111-070-20, 111-070-21
Project Sponsor's Name and Address	Grant Guerrieri 44130 Country Club Drive El Macero, CA 95618

General Information

This document discusses the proposed project, the environmental setting for the proposed project, and the impacts on the environment from the proposed project and any measures incorporated which will minimize, avoid and/or provide mitigation measures for the impacts of the proposed project on the environment.

- ❑ Please review this Initial Study. You may order additional copies of this document from the Planning Services Division, Resource Management Department, County of Solano County at 675 Texas Street Suite 5500, Fairfield, CA, 94533.

- ❑ We welcome your comments. If you have any comments regarding the proposed project, please send your written comments to this Department by the deadline listed below.
- ❑ Submit comments via postal mail to:

Planning Services Division
Resource Management Department
Attn: Mathew Walsh, Principal Planner
675 Texas Street, Suite 5500
Fairfield, CA 94533

- ❑ SUBMIT COMMENTS VIA EMAIL TO: MWALSH@SOLANOCOUNTY.GOV
- ❑ SUBMIT COMMENTS BY THE DEADLINE OF: **JUNE 21, 2025**

NEXT STEPS

After comments are received from the public and any reviewing agencies, the Department may recommend that the environmental review is adequate and that the Mitigated Negative Declaration be adopted or that the environmental review is not adequate and that further environmental review is required.

ENVIRONMENTAL DETERMINATION

Based on this initial study:

☐ I find 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 the project proponent has agreed to revise the project to avoid any significant effect. **A MITIGATED NEGATIVE DECLARATION** will be prepared.

☐ I find the proposed project could have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT (EIR) is required.

☐ I find the proposed project could have a significant effect on the environment, but at least one effect has been (1) adequately analyzed in a previous document pursuant to applicable legal standards, and (2) addressed by mitigation measures based on the previous analysis as described in the attached initial study.
An EIR is required that analyzes only the effects that were not adequately addressed in a previous document.

☐ I find that although the proposed project could have a significant effect on the environment, no further environmental analysis is required because all potentially significant effects have been (1) adequately analyzed in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (2) avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are included in the project, and further analysis is not required.

5/30/25
Date

Matthew Walsh
Mathew Walsh
Principal Planner

INCORPORATION OF MITIGATION MEASURES INTO THE PROPOSED PROJECT

By signature of this document, the project proponent amends the project description to include the mitigation measures as set forth in Section 2.

4/19/25
Date

Grant Guerrieri
Project Applicant

Organization of this Report

This document was prepared to meet CEQA requirements for the analysis of the project. Chapter 1, *Introduction*, provides an introduction and describes the purpose of the project and the organization of the report. Chapter 2, *Proposed Project*, describes the proposed project. Chapter 3, *Evaluation of Environmental Impacts,* describes the environmental setting and the environmental impacts associated with the project. The following resource areas are included based on Appendix G (Environmental Checklist Form) of the State CEQA Guidelines:

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

INTRODUCTION:

The Solano County Department of Resource Management provides the following analysis as a review of and supplement to the applicants' completed "Part I of Initial Study". These two documents, Part I and II, comprise the Initial Study prepared in accordance with the State CEQA Guidelines, Section 15063.

Per the California Environmental Quality Act (CEQA) (California Public Resources Code §21000 et seq.) and the State CEQA Guidelines (California Code of Regulations, Title 14, §15000 et seq.), this Draft Initial Study (IS) has been prepared as documentation for a Mitigated Negative Declaration (MND) for the proposed subdivision of an existing four (4) parcels totaling 426± acres, into ten (10) agricultural lots, over 41± acres each (see table 1). The subdivision proposes dedicating five feet along Tremont Road, to ensure the ultimate half-width of 35 feet for the Public Right-of-Way and a 60-foot Private Access and Utility Easement for the access of all ten (10) parcels. If the subdivision is approved, it will allow for

the construction of five (5) new single-family homes to support commercial agricultural uses, in two phases. It should be noted that an additional five homes could be built once the subdivision is approved (one home on each parcel per the zoning code), but the applicant is only proposing five homes.

This Draft IS/MND includes a description of the Project; the location of the Project site; an evaluation of the potential environmental impacts of Project implementation; and a written statement that an Environmental Impact Report (EIR) is not required because the project will not have a significant adverse impact on the environment.

Pursuant to Section 15367 of the State CEQA Guidelines, the County of Solano is the Lead Agency for the Project. As the Lead Agency for this private project, the County of Solano has the principal responsibility for approving this project and its accompanying environmental documentation. In addition to addressing the potential environmental impacts that would result from the Project, this Draft IS/MND serves as the primary environmental document for future activities associated with the Project, including discretionary approvals requested or required for Project implementation.

SECTION 1.0: ENVIRONMENTAL SETTING AND PROJECT DESCRIPTION

1.1 Project Location

The project site encompasses approximately 426 acres located at 8330 Tremont Road, within unincorporated Solano County. It is located southwesterly of the City of Davis. The Yolo County line is located 2,720 feet to the east, including Yolo County's Grassland Park.

1.2 ENVIRONMENTAL SETTING:

The project site currently consists of farmland and livestock grazing areas. Along Tremont Road, approximately 71 acres are farmed as row crops. The remaining 349 acres are being used as grassland for cattle grazing.

There are three groundwater wells used to irrigate the site.

A 14-acre agricultural stock pond is located within the project area. The pond has been used as a temporary storage basin for irrigation water.

The existing site drains into two Dixon Resource Conservation District (DRCD) drainage ditches. As part of the project a drainage ditch will be realigned. Approximately 2,000 feet of Lateral E will be rerouted to allow construction of the five residences. The ditch will be moved to the west, along the east edge of the existing irrigation pond. The previous ditch had culverts located on the north and south end. These culverts will be removed.

Currently, the site is used for cattle pastures, with dirt roads, a stock pond (14.5 acres), vegetated and unvegetated irrigation ditches, and canals. It is composed primarily of non-native perennial grassland, ranging from 25 feet above sea level to the east, sloping up to 33.5 feet above sea level to the west, and adjacent to active agricultural fields to the west and

north with the Tremont Cemetery. The surrounding Land Uses and Zoning are detailed in the table below (1.3.2).

Surrounding General Plan, Zoning, and Land Uses

Property	General Plan	Zoning	Land Use
North	Exclusive Agricultural	A-40	Farmland/Agricultural
South	Exclusive Agricultural	A-40	Farmland/Agricultural
East	Exclusive Agricultural	A-40	Farmland/Agricultural
West	Exclusive Agricultural	A-40	Farmland/Agricultural

1.2 PROJECT DESCRIPTION:

Under CEQA Guidelines Section 15125, the Project Description is required to identify the existing baseline physical conditions. For this project, the baseline conditions include all existing development and the current parcel configuration. The applicant requests a Minor Subdivision of existing four (4) parcels totaling 426± acres, into ten (10) agricultural lots, over 41± acres each (See table 1).

The project will convert more than 342 acres of current cattle pasture to active row corps. The subdivision is part of a proposed family compound for five residences, and the ten parcels are proposed to be farmed together.

Owner/Family Living Quarters
No existing residential uses are on the site. The applicant proposes to develop five owner/farmer residences on the five northerly parcels. There are no plans to build anything on the remaining five parcels. The residences will be clustered to maximize the agricultural potential of the site.

One new well for each residence would be installed for potable use for a total of up to five new wells. Each residence will also have an associated septic tank and leach field.

Agricultural uses will continue to be the primary use on all of the parcels.

The project includes grading, new driveways, and an encroachment permit for proposed roadway improvements, drainage systems, and filling and relocating irrigation ditches and canals. The project site is located within a 100-year floodplain so the proposed five residential lots would be built up to elevate finished floor elevations above the floodplain. Thus, some import of fill may be necessary, although the existing stock pond used for previous cattle grazing is no longer needed. This stock pond was created above ground with berms. The stock pond may be removed, and the berms may be used to provide fill.

In order to accommodate the housing configuration, a portion of an existing manmade agricultural irrigation ditch would be re-aligned, and an existing culvert would be removed. A total of approximately 1,950 linear feet of the existing irrigation ditch would be filled and a corresponding 3,183 linear feet of new irrigation ditch would be installed.

The applicant proposes a phased soil improvement program to transition the land from cattle to lands suitable for high value row crops. This includes strategies like organic matter incorporation, gypsum applicants, and advanced drainage systems to enhance soil fertility and productivity.

Access

The subdivision will dedicate five (5) feet of right-of-way along Tremont Road, to ensure the ultimate half-width of 35 feet for the Public Right-of-Way and a 60-foot internal Private Access and Utility Easement for the access of all ten (10) parcels.
Access to the project site would be provided by a proposed paved access driveway off Tremont Road. The access driveway would be shaped into a cul-de-sac format to provide vehicle access to the propped driveways for each residence.

TABLE 1:

PROPOSED PARCELS

Parcel 1	**42.07± acres**	**Parcel 6**	**46.92± acres**
Parcel 2	**42.05± acres**	**Parcel 7**	**46.94± acres**
Parcel 3	**42.18± acres**	**Parcel 8**	**41.80± acres**
Parcel 4	**42.07± acres**	**Parcel 9**	**41.11± acres**
Parcel 5	**42.06± acres**	**Parcel 10**	**41.81± acres**

Upon approval, the subdivision will allow for the future construction of ten (10) new single-family homes and ongoing commercial agricultural uses by creating ten parcels. It should be noted that the applicant is only proposing five homes at this time. The site is zoned Exclusive Agriculture A-40 with minimum parcel sizes of 40-acres. All proposed parcels will range from 41 to 46-acres in size, consistent with the minimum zoning requirements.

The project includes new landscaping. Development of each of the residential use lots would require a domestic well and septic tank with accompanying leach fields. While not proposed, an additional 5 homes could be constructed on the other five remaining agricultural parcels

Impacts may include impacts resulting from construction of access improvements, and residential and accessory structures on the newly created lots, as well as grading and drainage improvements.

To achieve the necessary grading for roadways, building pads, and associated infrastructure, soil materials will be sourced through a combination of methods as determined during project implementation. These methods may include, but are not limited to, on-site reallocation of existing soil, potential import of fill material, and utilization of available earthen features within the property boundaries. All earthwork activities will be conducted in accordance with

applicable regulations and best management practices to ensure site stability and proper drainage.

Williamson Act Contract

At present, the entire project site is under land conservation contract (Williamson Act Contract). Specifically, Williamson Act Contracts 14 and 15 cover the proposed subdivision properties, as well as multiple other non-contiguous properties under different ownership. As part of this project, Williamson Act Contracts 14 and 15 will be rescinded and replaced with three new Williamson Act Contracts: (1) a standalone Williamson Act Contract for the new subdivision parcels; (2) a Williamson Act Contract covering those other parcels previously under Contract 14; and (3) a Williamson Act Contract covering those other parcels previously under Contract 15. The resulting contracts will neither add nor remove any land from under contract, nor will it change the terms of any contract.

1.2.1 FINDINGS OF POTENTIALLY SIGNIFICANT IMPACT

Based upon the Initial Study, Part I as well as other information reviewed by the Department of Resource Management, the project does not have the potential to significantly impact any environmental factors.

1.3 CONSISTENCY WITH EXISTING GENERAL PLAN, ZONING, AND OTHER APPLICABLE LAND USE CONTROLS:

The project does not conflict with land use plans, the general plan designation, or the area's zoning.

1.3.1 ADDITIONAL DATA:

NRCS Soil Classification:	Prime Farmland consisting of Capay silty clay loam, Pescadero silty clay loam, Rincon clay loam, and Yolo silty clay loam.
Agricultural Preserve Status/ Williamson Contract No.:	Yes; Active Contract
Non-renewal Filed (date):	N/A
Airport Land Use Referral Area:	No
Alquist Priolo Special Study Zone:	No
Primary or Secondary Management Area of the Suisun Marsh:	No
Primary or Secondary Zone identified in the Delta Protection Act of 1992:	No
Other:	FEMA-Flood Zone A

1.3.2 Permits and Approvals Required from Other Agencies (Responsible, Trustee, and Agencies with Jurisdiction):

Solano County would use this Initial Study and Mitigated Negative Declaration to evaluate the potential environmental impacts of the proposed project. Anticipated approvals and actions may include but are not limited to the following:

- Preparation and Approval of an Initial Study / Mitigated Negative Declaration - Solano County will act as the lead agency as defined by the California Environmental Quality Act (CEQA) and will have the authority to determine if the IS/MND is adequate under CEQA.
- Approval of a Minor Subdivision Application No. MS 24-02 - Solano County will consider the proposed Realized Dream Ranch project (Subdivision Map Act Section 66426 (d) under a Minor Subdivision Application. Minor Subdivisions are discretionary actions. Because the Project includes updating the Williamson Act contracts, the Project will be subject to approval by the Board of Supervisors.
- Building Permits - Solano County Buildings & Safety Division will require a building permit for each of the proposed single-family residences. A soil report completed by a licensed geotechnical engineer must be submitted with the building permit applications.
- Well Construction Permits - The Solano County Division of Environmental Health (DEH) will review site plans and issue permits for the proposed domestic wells.
- On-Site Septic Systems – The Solano County Division of Environmental Health (DEH)will review site plans and issue permits for the proposed on-site waste disposal systems.
- Encroachment Permit – Solano County Department of Public Works will require encroachment permits for any work conducted on County roads and/or right-of-way.
- Storm Drainage – Plans and improvements for the proposed storm drainage basin shall be reviewed by the Solano County Department of Public Works to ensure compliance with the County's MS4 Permit.
- Extension of utilities, including electric and gas services.

1.3.4 Agencies that May Have Jurisdiction over the Project

- Yolo Solano Air Pollution District
- State Water Board
- CDFW
- Army Corp
- Dixon Reclamation and Conservation District (RCD)
- Dixon Fire Protection District

Figure 1. Project Location Map

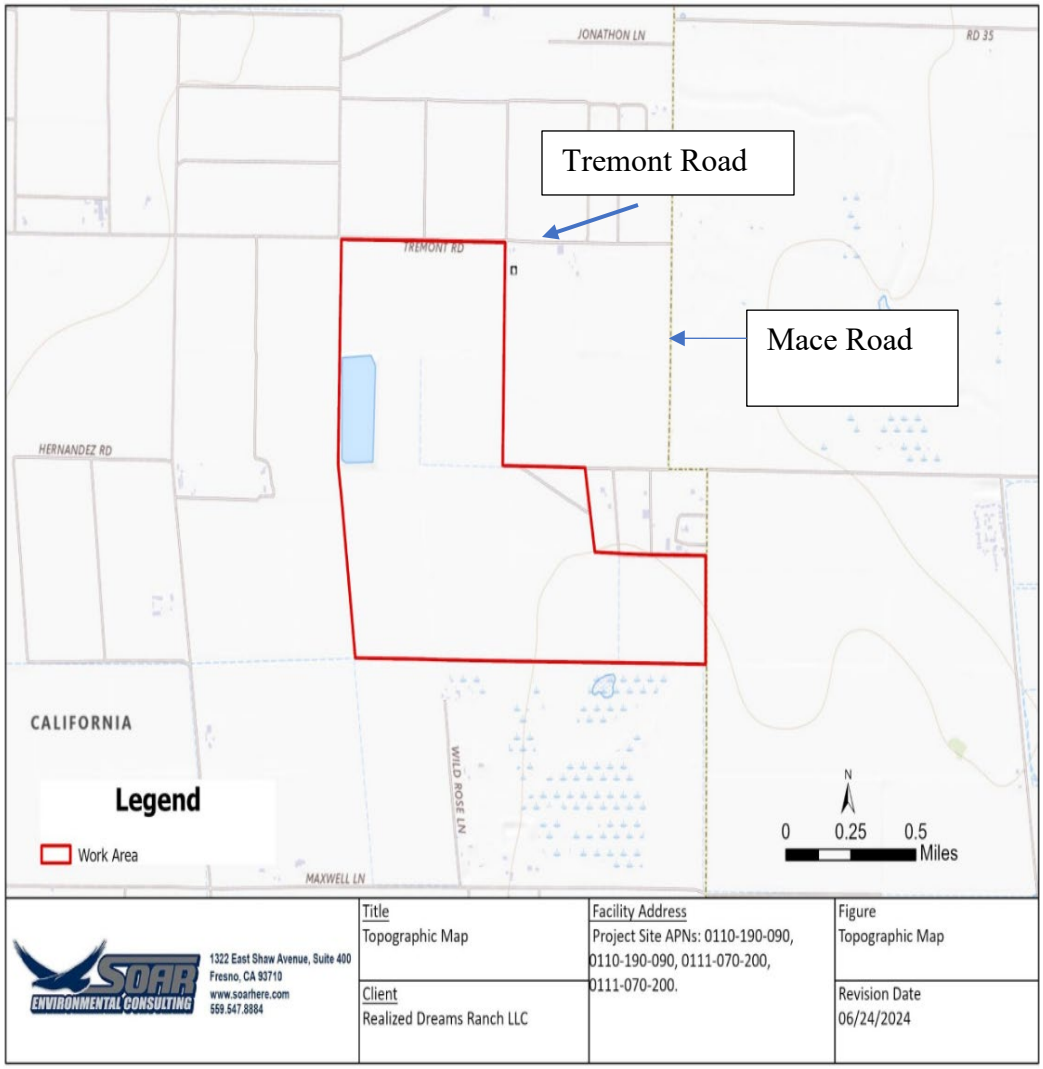


Figure 2. Project Soils Map

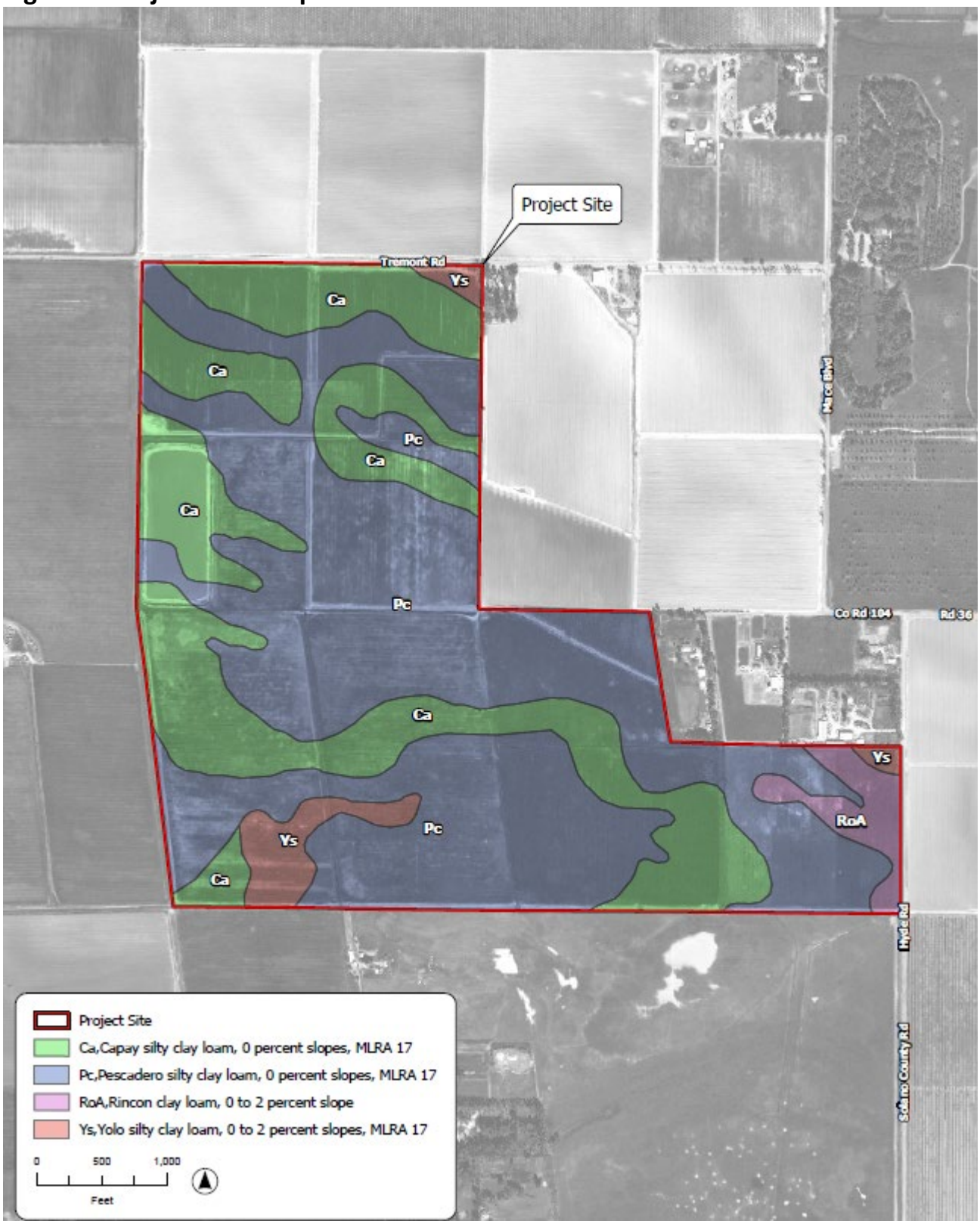


Figure 3. Proposed Tentative Map

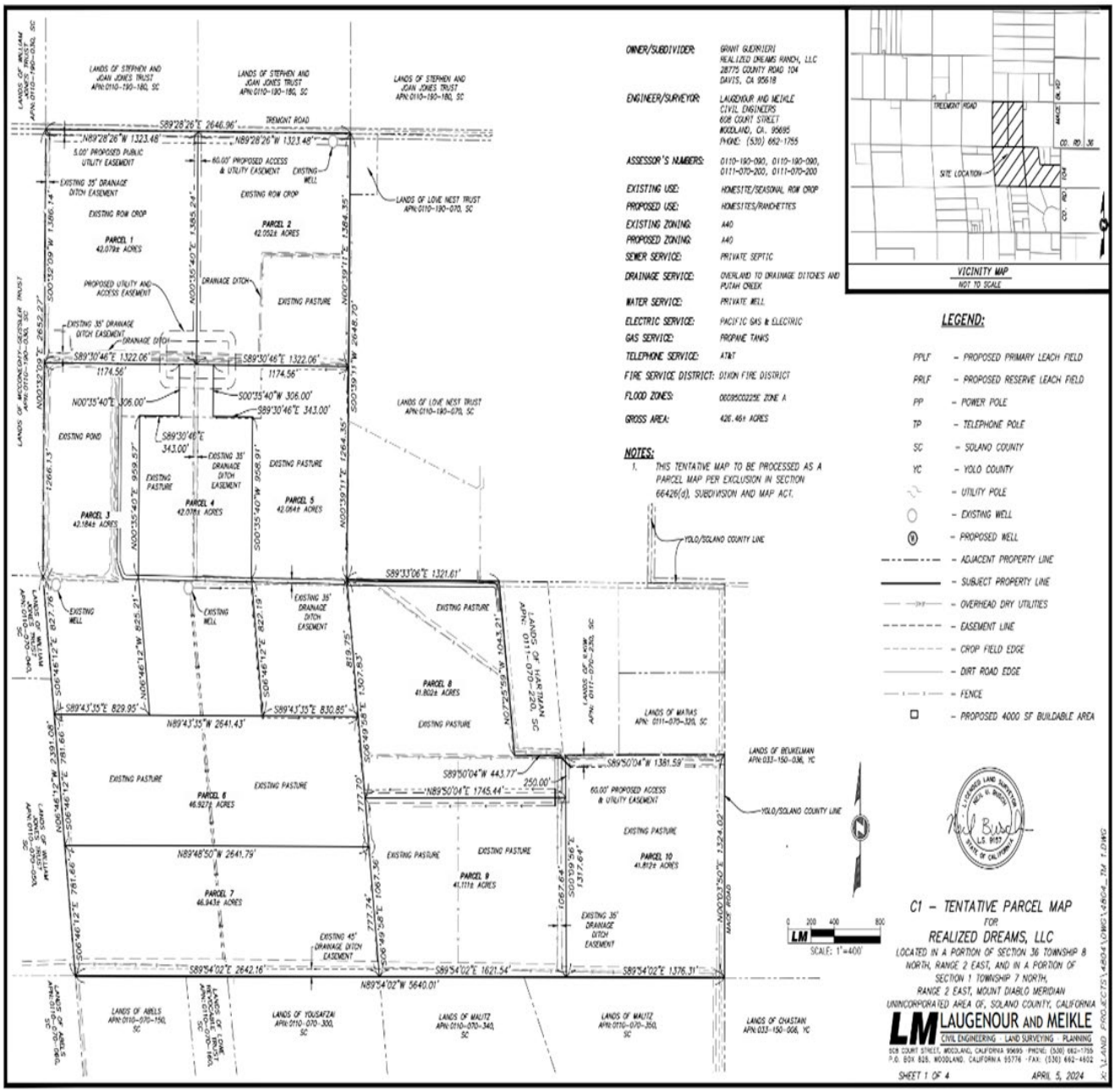
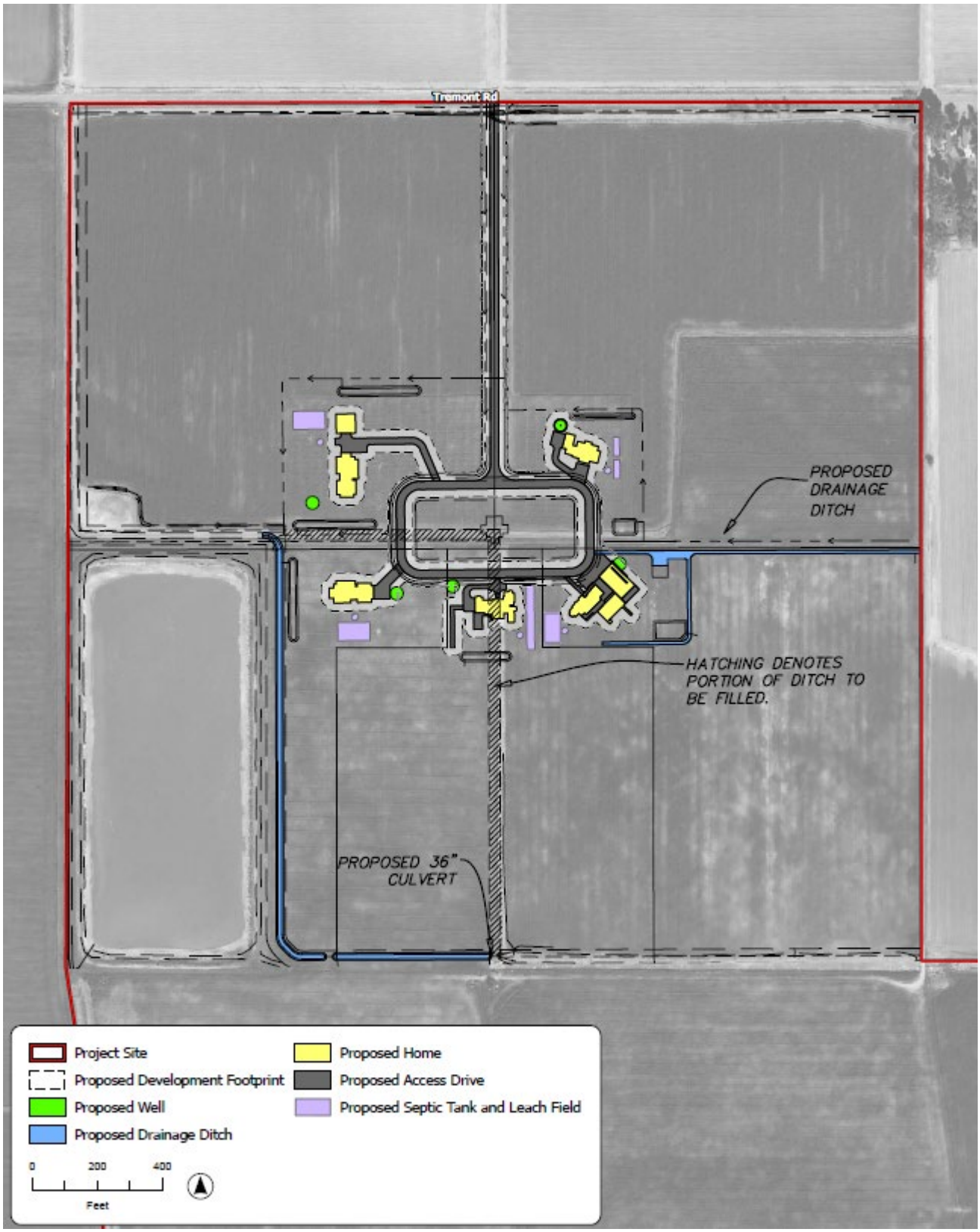


Figure 5 Proposed Location of Residences



SECTION 2.0: ENVIRONMENTAL CHECKLIST

Purpose and Legal Basis for Initial Study (IS)

As a public disclosure document, this provides local decision-makers and the public with information regarding the environmental impacts associated with the proposed project. According to Section 15063 of the *CEQA Guidelines*, the purpose of the IS is to:

1. Provide the Lead Agency with information to use as the basis for deciding whether to prepare an Environmental Impact Report (EIR), or a Negative Declaration (ND);

2. Enable an applicant or Lead Agency to modify a project, mitigating adverse impacts before an EIR is prepared, thereby enabling the project to qualify for a Negative Declaration.

3. Assist in the preparation of an EIR, if one is required, by:

    a. Focusing the EIR on the effect determined to be significant.
    b. Identifying the effects determined not to be significant.
    c. Explaining the reasons for determining that potentially significant effects would not be significant; and,
    d. Identifying whether a program EIR, tiering, or other appropriate process can be used for analysis of the project's effects.

4. Facilitate environmental assessment early in the design of a project.
5. Provide documentation of the factual basis for the finding in a Negative Declaration that the project will not have a significant effect on the environment.
6. Eliminate unnecessary EIRs;
7. Determine whether a previously prepared EIR could be used with the project.

This IS evaluates the potential for the proposed project to result in environmental impacts and evaluates the significance of those impacts. The information in this IS will be used by Solano County to determine if a Mitigated Negative Declaration or an EIR is the appropriate level of CEQA documentation for the proposed project. This IS will also serve as a basis for soliciting comments and input from members of the public and public agencies.

Consistent with the conclusion and findings of this Initial Study Checklist, an EIR will not be prepared for the Project. At a minimum, this IS will evaluate the Project's potential environmental impacts under the topical areas identified above. Additional issues or concerns that may be raised pursuant to the Initial Study's Notice of Preparation (NOP) process and/or scoping meeting(s) conducted for the Project will also be evaluated and addressed in the Staff Report that will be prepared for this project

AFFECTED ENVIRONMENT, ENVIRONMENTAL CONSEQUENCES AND AVOIDANCE, MINIMIZATION AND/OR PROTECTION MEASURES

This chapter discusses the potential for adverse impacts on the environment. Where the potential for adverse impacts exists, the report discusses the affected environment, the level

of potential impact on the affected environment and methods to avoid, minimize, or mitigate potential impacts to the affected environment.

Findings of SIGNIFICANT IMPACT

Based on the Initial Study, Part I, and other information reviewed by the Department of Resource Management, the project does not have significant impacts on any environmental resources.

Findings of LESS THAN SIGNIFICANT IMPACT Due to Mitigation Measures Incorporated into the Project

Based on the Initial Study, Part I as well as other information reviewed by the Department of Resource Management, the following environmental resources were considered and the potential for significant impacts was reduced to less than significant due to mitigation measures incorporated into the project. A detailed discussion of the potential adverse effects on environmental resources is provided below:

- ❑ Biological Resources
- ❑ Hydrology and Water Quality
- ❑ Cultural Resources and Tribal Cultural Resources
- ❑ Mandatory Findings of Significance

Findings of LESS THAN SIGNIFICANT IMPACT

Based on the Initial Study, Part I, and the review of the proposed project by the Department of Resource Management, the following environmental resources were considered, and the potential for impact is considered less than significant. A detailed discussion of the potential adverse effects on environmental resources is provided below:

- ❑ Aesthetics
- ❑ Air Quality
- ❑ Greenhouse Gas
- ❑ Energy
- ❑ Hazards and Hazardous Materials
- ❑ Noise
- ❑ Transportation

Findings of NO IMPACT

Based on the Initial Study, Part I, and the review of the proposed project by the Department of Resource Management, the following environmental resources were considered but no potential for adverse impacts to these resources were identified. A discussion of the no-impact finding on environmental resources is provided below:

- ❑ Land Use
- ❑ Wildfire
- ❑ Agriculture

- ❑ Public Services
- ❑ Recreation

ENVIRONMENTAL CHECKLIST

2.1 AESTHETICS

Would the project		Significant Impact	Less Than Significant Impact with Mitigation	Less Than Significant Impact	No Impact
a.	Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b.	Substantially damage scenic resources, including, but not limited to, trees, rock out-croppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c.	In nonurbanized areas, substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐
d.	Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

Existing Setting: A "scenic vista" is defined as a *singular vantage point that offers high-quality, harmonious, or visually interesting views of a valued landscape for the benefit of the public*. Scenic vistas are typically found along major highways or other public roads but may also occur in other areas accessible to the public.

"Scenic resources" include objects, features, or patterns within the landscape that are visually interesting or pleasing. Scenic resources can include trees, rock outcroppings, historic buildings, or other features. California Streets and Highways Code (SHC) Sections 260-284 establish the State Scenic Highway program for "*the protection and enhancement of California's natural scenic beauty*". No National Scenic Byways are in Solano County as designated by the U.S. Secretary of Transportation. The Solano County General Plan designates Interstate 80 as a scenic corridor, but the project site is not visible from I-80.

Impacts Discussion

2.1 a. **Less than Significant Impact:** The site is in Solano County on Tremont Road, which is not designated as a scenic corridor, according to the Solano General Plan. As noted in the Project Description section above, the project would not involve any direct impact to a scenic corridor. Indirect impacts related to the future construction of the proposed structures would be less than significant because the site does not meet the criteria of a scenic vista. The site is surrounded by residential and agricultural uses that are not unique to the area.

Construction of new residences shall be subject to Solano County Building reviews, consistent with existing development in the area. As such no scenic vistas will be affected by the project, nor will the project degrade the project location's visual characteristics.

2.1 b. **No Impact**: The project area is not in or does it include any portions of a State Scenic Highway identified by the California Department of Transportation or the General Plan. There are no identified scenic resources or historic buildings in the project area.

Mitigation Measures: None Required

2.1 c. **Less than Significant Impact:** As noted in the Project Description section above, the project would not involve any direct impacts to the visual character of the site or the surroundings. The site is surrounded by residential and agricultural uses that are not unique to the area. Future construction of residential structures would be limited in height and area by the applicable zoning ordinance regulations. These regulations would limit impacts between nearby public streets (Tremont Road, Mace Blvd., etc.).

Mitigation Measures: None Required

2.1 d. **Less than Significant Impact:** No direct impacts would occur as a result of adding a new source of light or glare. The Solano County Article IV, 28.90 Standards (*Site Development and Other Standards, Lights*) states that all lighting shall be designed to minimize conflicts with surrounding properties.

The site's existing visual character is characterized by agricultural uses with residences and related site improvements. Future development would be subject to zoning regulations, which include limits on building height, setbacks, grading, and new developments. In addition, the Solano County planning review process, which includes substantial conformance with agricultural uses would be used to ensure visual compatibility within the project vicinity. The construction of the future homes would be similar to existing homes in the vicinity and therefore would not adversely affect day or nighttime views in the area.

Mitigation Measures: None Required

2.2 AGRICULTURE AND FORESTRY RESOURCES

Checklist Items: Would the project		Significant Impact	Less Than Significant Impact with Mitigation	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)?	☐	☐	☐	☒
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?	☐	☐	☐	☒

Existing Setting: Agriculture has historically been an important industry in Solano County and a central part of the county's identity. Agricultural lands account for more land than any other land use in the County. Agriculture also contributes to regional economic health and prosperity, defines much of the County's visual character, supports wildlife habitats and migration corridors, provides open space and recreational amenities for residents and visitors, and separates urban land uses defining the county's cities.

Solano County includes land that is classified as Prime Farmland, Farmland of Statewide Importance, and Unique Farmland by the California Department of Conservation (Solano County 2008:4.8-1). The project site is designated as Prime Farmland according to the California Department of Conservation's Farmland Mapping and Monitoring Program. Lands to the north and east include areas of Prime Farmland. The project site has a General Plan Land Use designation of Agriculture and is zoned Exclusive Agriculture (A-40) Forty-acre minimum, which permits agricultural and agriculturally related residences as an allowable use.

The project site is under Williamson Act Contract. The two Williamson Act Contracts covering the project site will be rescinded and replaced to align with the new legal parcel boundaries, however all land previously under contract will remain under contract. Agricultural uses will continue with the subdivision.

Impacts Discussion: The California Department of Conservation manages the Farmland Mapping and Monitoring Program (FMMP) which produces maps and statistical data used for analyzing impacts on California's agricultural resources. The FMMP mapping survey covers roughly 98% of privately owned land in the state. Each map is updated at approximately two-year intervals. Agricultural land is rated according to soil quality and irrigation status; the best quality land is called "Prime Farmland". Other critical designations include "Unique Farmland" and "Farmland of Statewide Importance."

The Williamson Act (officially the California Land Conservation Act of 1965) is a California law that provides relief of property tax to owners of farmland and open-space land in exchange for an agreement that the land will not be developed or otherwise converted to another use. The Williamson Act intends to preserve a maximum amount of a limited supply of prime agricultural land to discourage premature and unnecessary conversion of prime agricultural land to urban uses.

The Solano Zoning Ordinance also establishes use types that are allowable by right and conditionally in each zoning district. A zoning conflict may occur if a use is proposed which is not allowable in the corresponding zoning district. Solano County has adopted Policies and Procedures for Agricultural Preserves and Williamson Act Contracts. Among the policies and procedures are regulations concerning compatible and incompatible uses of lands under a Williamson Act contract.

2.2 a. **Less Than Significant Impact:** The project site has been used for cattle grazing for many years and row crops and is in an area fully developed with agricultural uses. The project site and all surroundings are identified and mapped by the FMMP as “Prime Farmland.” The subdivision project proposes to maintain the land in agricultural use and is currently assigned Solano County Zoning designation (A-40). Therefore, there is no potential to convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use. The project would not involve any adverse impact.

2.2 b. **Less Than Significant Impact**: The property is on agriculturally zoned land, Exclusive Agricultural (A-40) consistent with the surrounding neighborhoods. The land uses proposed under the project are consistent with the A-40 zoning. The project site will remain under Williamson Act contract and subject to Solano County Uniform Rules and Procedures Governing Agricultural Preserves and Land Conservation Contracts (As Revised May 22, 2012). As part of this action the Williamson Act contracts are being rescinded and replaced to be consistent with the new subdivision boundaries, but this action will have no substantive impact on the acreage under contract or the terms and conditions of the contracts. Agricultural uses will continue to be the primary uses of the properties.

Mitigation Measures: None Required

2.2 c. **No Impact:** Existing vegetation on the property does not meet the definition of timberland and is not zoned as Timberland Production. Therefore, indirect impacts would not occur.

Mitigation Measures: None Required

2.2 d. **No Impact:** Existing vegetation on the property does not meet the definition of forest land. Therefore, indirect impacts would not occur.

Mitigation Measures: None Required

2.2 e. **No Impact:** Direct Impact would not occur, and there will be no changes to the existing agricultural use. No other environmental changes would occur that would convert farmland

or forest lands to non-agricultural or non-forest use not already addressed in the preceding sections.

Mitigation Measures: None Required

2.3 AIR QUALITY

Checklist Items: Would the project		Significant Impact	Less Than Significant Impact with Mitigation	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?	☐	☐	☒	☐

Existing Setting: The project site is in Solano County in the Sacramento Valley Air Basin (SVAB) The County of Solano, including the project site, is within the boundaries of the Yolo-Solano Air Quality Management District (YSAQMD). The District has jurisdiction over all of Yolo County and the northeast portion of Solano County, including Vacaville, Dixon and Rio Vista. The District includes approximately 1,500 square miles and a population of approximately 354,000 people. Air Districts in California develop regulations based on the measures identified in the Clean Air Act and its Clean Air plan as well as state regulations. In Solano County, these are known as the district's "Rules and Regulations." These regulations establish the procedure for new point source emissions to obtain an air quality permit, air quality standards for new construction, and others.

Impacts Discussion: Operations and maintenance activities would be similar to pre-project conditions. Accordingly, there would be negligible change in operational emissions relative to existing conditions. In addition, engine exhaust emissions are expected to diminish over time as zero-emission vehicles become more prevalent, due in part to state regulations and mandates.

2.3 a. Less than significant Impact: YSAQMD's (2007) CEQA Handbook states that "General Plans of cities and counties must show consistency with [YSAQMD's] Air Quality Attainment Plan (AQAP) and State Implementation Plan (SIP) strategies in order to claim a less than significant impact on air quality." Projects that propose development that is consistent with the growth anticipated by the City's and County's general plans would

therefore be consistent with YSAQMD's Air Quality Attainment Plans (i.e., the 2023 Ozone Plan and PM2.5 Plan. The proposed subdivision is consistent with the General Plan and zoning and will continue agricultural uses on the site.

The project is expected to comply with existing regulatory requirements of YSAQMD, which requires specific measures to be implemented during all construction operations. As proposed, the project does not conflict with YSAQMD Rules and Regulations because it would be bound by the existing regulatory rules, including consultation with YSAQMD and any required permits. No project features are proposed that would conflict with District Rules and Regulations. The growth-inducing effects of the proposed project were analyzed when the Exclusive Agricultural land use classification was assigned to the site. Future Development of the ten residences is expected to comply with YSAQMD regulations.

Mitigation Measures: None Required

2.3 b. **Less than Significant Impact:** Emissions from the project are associated with the combustion of fuels such as diesel and gasoline. Emissions will temporarily increase due to vehicle trips to and from the project site during construction of the homes and associated accessory structures and utilities. The improved access to the new parcels will not add any additional lanes of traffic and will therefore not increase vehicle miles traveled. Tremont Road is not a part of a plan that could be considered cumulatively significant. The nearby properties will not be affected by the limited pollutants. Construction of this project would not generate ROG, NO_X, or PM10 emissions in excess of the numeric analysis thresholds. In addition, construction contractors would implement fugitive dust BMPs including watering exposed surfaces, unpaved construction roads, and limiting vehicle speeds on unpaved roads. Accordingly, construction-related emissions related to the restoration portion of the proposed project would have a less-than-significant impact.

Mitigation Measures: None Required

2.3 c Less Than Significant Impact: No sensitive receptors are immediately adjacent to the site. The nearest school is located 3.5± miles north of the site (Marguerite Montgomery Elementary School). The nearest clinic is located 4± miles north of the parcel. Other sensitive receptors include nearby residences, also located on agricultural lands. No direct impacts would occur. The size, scale, location, and nature of potential future development of accessory structures would be minimal. Therefore, the potential indirect impacts of future construction on sensitive receptors is less than significant.

Mitigation Measures: None Required

2.3 d. **Less than Significant Impact**: The California Air Resources Board's Air Quality and Land Use Handbook includes a list of land uses that commonly result in odor complaints. This includes sewage treatment plants, landfills, autobody shops, and livestock operations. The project does not include land uses on this list and is not expected to result in significant odors. Though development is not expected to result in significant odors, YSAQMD can determine that a source of odors is considered a public nuisance due to received complaints.

YSAQMD then has the authority to require the source to implement mitigation measures to correct the nuisance conditions. This regulatory structure ensures that unanticipated odor sources that may arise from the project are handled appropriately. The project site is not in a mapped area which may contain naturally occurring asbestos (NOA).

Mitigation Measures: None Required

2.4 BIOLOGICAL RESOURCES

A Biological Resource Assessment was conducted by Acorns Environmental in April 2025. The report provides information about the biological resources within the project site, the regulatory environment applicable to resources, potential project related impacts and mitigation measures.

Regulatory Background

The project site is located within the plan area of the draft Solano Multispecies Habitat Conservation Plan (SMHCP), within an area of voluntary participation. The SMCP is currently in administrative draft form and a final plan has not yet been adopted. The purpose of the plan will be to provide a programmatic analysis of development impacts within the plan area and to provide a streamline permitting process for actions proposed within the plan area. As the final SMHCP has not been issued, permitting cannot yet be completed through this process. However, it can be referred to as a basis for locally sensitive biological resources and likely acceptable impact avoidance and minimization measures, as it was developed and coordinated with resources agencies such as the U.S. Fish and Wildlife Service and California Department of Fish and Wildlife.

The following information sources were reviewed in support of the biological study:

- USGS topographic quadrangles of the project site and vicinity
- Current and historical aerial photography of the project site and vicinity
- The California Natural Diversity Database (CNDDB) query of known species occurrences within the
- Davis, Dixon, Merritt, and Saxon USGS Quads (CDFW, 2025)
- A query of the California Native Plant Society's (CNPS) database *Inventory of Rare and Endangered Plants of California* of known species occurrences within the Davis, Dixon, Merritt, and Saxon
- USFWS National Wetlands Inventory (NWI) mapper (**Figure 5**)
- USFWS information for Planning and Consultation species list (**Attachment A**)
- The USFWS and National Marine Fisheries Service (NMFS) Critical Habitat mappers
- National Marine Fisheries (NMFS EFH) mapper
- Natural Resources Conservation Service (NRCS) soil report for the project site

Field Surveys

A preliminary biological resources survey was completed by Soar Environmental Consulting in August of 2024. Subsequently, senior biologist Dr. Geo Graening with Acorn Environmental conducted a biological resources survey and aquatic resources delineation of the project site on April 22, 2025.

Data was collected on wildlife and plant species present, as well as on habitat types and potentially jurisdictional aquatic resources. A variable-intensity pedestrian survey was performed that covered the project site with additional focus on the proposed development area. Fauna and flora observed were recorded in a field notebook and identified to the lowest possible taxon. Survey efforts emphasized the search for State and federally listed special-status species identified in the queries contained in **Attachment A**. Habitat types on the project site were mapped on aerial photographs and via a handheld GPS receiver. Information on habitat conditions and the suitability of habitats to support special-status species was also recorded. The aquatic resources delineation was conducted in accordance with the manuals relevant to the region, including the following:

- 1987 Corps of Engineers Wetland Delineation Manual
- 2008 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0)
- 2008 A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States.
- 2010 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0). U.S. Army Engineer Research and Development Center Environmental Laboratory, Vicksburg, MS. 153 pp.

2.4 Biological Impacts

Checklist Items: Would the project		Significant Impact	Less Than Significant Impact with Mitigation	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 Game 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 Game or U.S. Fish and Wildlife Service?	☐	☐	☐	☒

c.	Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☒	☐	☐
d.	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☒	☐
e.	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f.	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

Existing Setting:

Habitats

Terrestrial habitats observed within the project site are limited to agriculture. Approximately 395.8 acres of the site are in agricultural use. Based on historical aerial imagery, the project site has been in consistent agricultural production for years, with clear evidence of row crop production. At the time of the April 2025 survey, the majority of the site was planted with hay species for livestock feed. The northern portion of the site was sown with alfalfa and the balance were in production of forage hay grasses, primarily perennial ryegrass (*Lolium perenne*) and hare barley (*Hordeum murinum*). Evidence of flood irrigation was observed. Areas not actively cultivated are limited to dedicated infrastructure for ongoing maintenance of agricultural activities on the project site such as internal dirt roadways. These areas are generally devoid of vegetation and are regularly managed. Where vegetation is present, it is generally sparse and limited to hardy, weedy species that are subject to ongoing removal.

An aquatic resources delineation of the project was conducted on April 22, 2025, in accordance with the US Army Corps of Engineers (ASACE) standards. The survey considered features listed on the National Wetlands Inventory (NWI) which were not identified as actually occurring on the project site, with the exception of the freshwater pond, which is an above ground man-made agricultural water storage basin. In addition, the project site contains man-made agricultural irrigation ditches.

A portion of the agricultural irrigation ditches are under the jurisdiction of the Solano Irrigation District. The ditches are earthen trapezoidal ditches that vary in depth from six to eight feet and vary in with from six to 15-feet (at the bottom). These ditches are subject to dredging

and vegetation maintenance, which may include a combination of herbicide application, scraping and trimming.

Where vegetation is allowed to grow, it varies by level of inundation and soil saturation. In stagnant areas, broadleaf cattail (*Typha latifolia*) and floating plants (e.g. duckweed) dominate, while in faster flowing canals, there are no rooted plants. The wetted slopes contain smartweed (*Persicaria* sp.) and hydrophytic grasses, such as barnyard grass (*Echinochloa crus-galli*), and dallis grass (*Paspalum dilatatum*). On the top of the canals, curly dock (*Rumex crispus*) and upland grasses dominate, such as rabbitsfoot grass (*Polypogon monspeliensis*), wild oat (*Avena* spp.), and bromes and chesses (*Hordeum, Bromus* spp.).

Agricultural: Smaller Irrigation Ditches
Encircling each field are smaller earthen ditches that are used to convey water between fields and to flood-irrigate fields. These ditches are 1 to 3 feet deep and 1 to 5 feet in width (at the bottom). These ditches are created by plowing and are typically devoid of vegetation. Where present, vegetation consists of upland grasses and weedy forbs.

Agricultural Water Storage Basin
A 14-acre agricultural water storage basin was created in uplands and contains berms (or dikes) up to 12 feet high above grade to impound water. The outside berms are covered in upland pasture grasses while the inside is fringed with smartweed and curly dock. This feature is also subject to regular vegetation maintenance and is used for both irrigation and stock watering.

Critical Habitat

The project site is not within critical habitat that is designated or proposed by the USFWS or NMFS. Critical habitat is designated approximately 0.8 miles east of the project site for the following species: Solano grass (*Tuctoria mucronate*), Colusa grass (*Neostapfia colusana*), vernal pool tadpole shrimp (*Lepidurus packardi*), and delta smelt (*Hypomesus transpacificus*). The project site is also within an area known for Chinook salmon; however, no suitable habitat to support Chinook salmon is within the project site

Wildlife Movement
Active bird nests were not observed and the likelihood of active nests on the project site is low due to a lack of trees or structures, ongoing human disturbance, and ongoing vegetation management. Suitable nesting habitat may occur within the vegetation and tree canopy of the neighboring cemetery, portions of which overhang the project site. However, this area is approximately 1,000 feet from the proposed development, and tree removal would not occur as part of the proposed project. The project site may be utilized by wildlife species that commonly forage in agricultural fields. Unique wildlife features such as nursery sites and rookeries were not observed. Wildlife movement corridors are absent from the project site as the project site consists primarily of agricultural use and is surrounded by agricultural development and roadways.

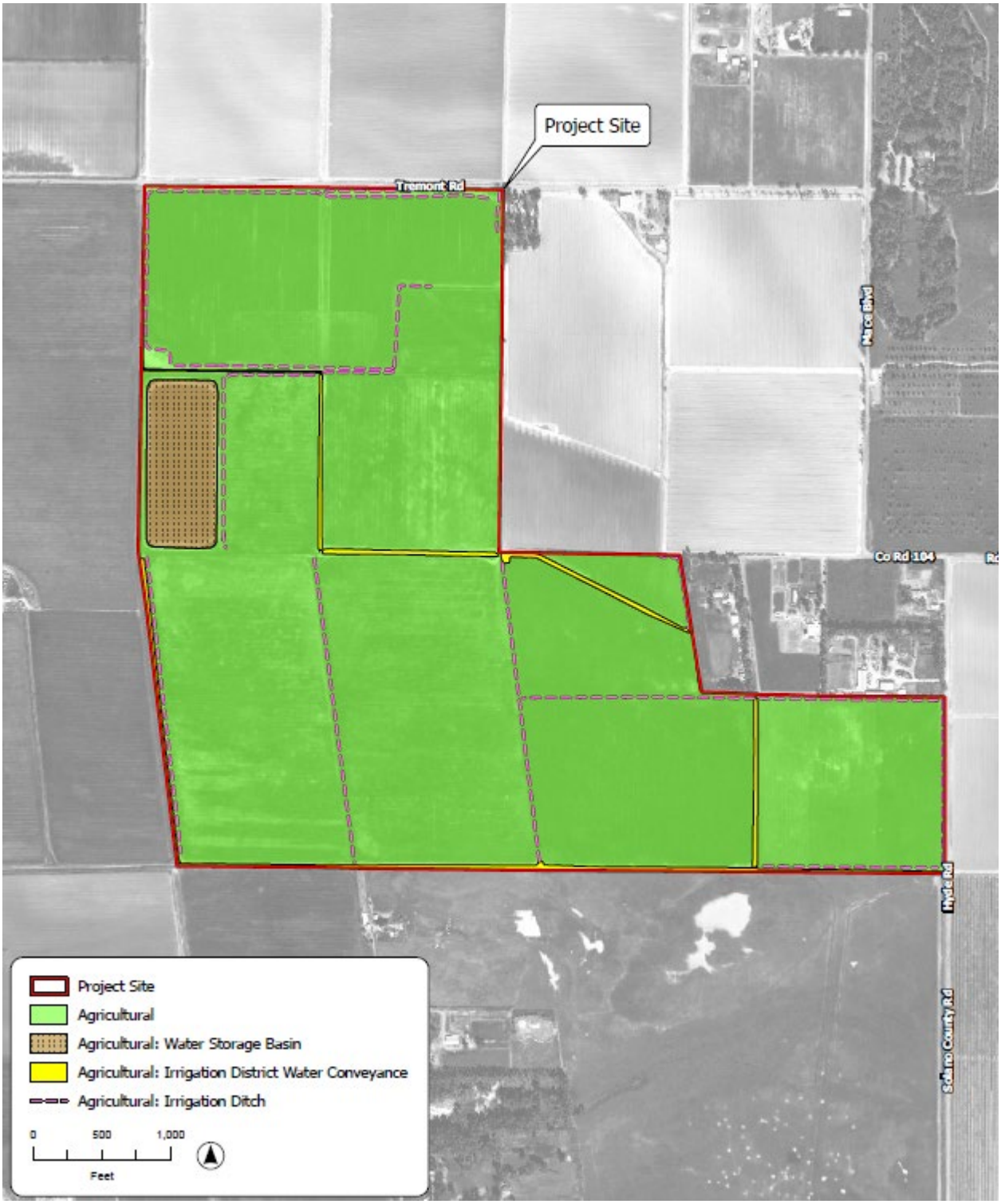
Special Status Species

The following special-status species have the potential to occur within the proposed development area:

- Swainson's hawk: This species has been observed foraging on the project site. The nearest nesting habitat is within scattered oak trees, part of the adjacent cemetery's landscaping over 1,000 feet from the proposed development.
- Northern harrier: This species has been observed to be foraging on the project site. The nearest nesting habitat is within scattered oak trees, part of the adjacent cemetery's landscaping over 1,000 feet from the proposed development.
- Giant Garter Snake: may occur within the irrigation ditches, including the irrigation district conveyance system
- Northwestern pond turtle: may occur within the water storage basin located outside of but immediately adjacent to the proposed development area. It may also disperse through agricultural irrigation ditches. Nesting, aestivation, and terrestrial dispersal habitat are absent.

Burrowing Owls are not expected to utilize the site. Burrowing owls utilize flat open habitats characterized by well-drained, level to gently sloped areas with sparse vegetation, short grass, and bare soil such as prairies, grasslands, desert, and sagebrush steppe environments. Burrowing owls largely rely on small mammal burrows (predominately ground squirrels) or burrow-like analogs for nest sites. Burrows large enough to accommodate burrowing owls were not observed on the project site during the surveys. Additionally, the project site is within a floodplain, lacks bare ground, contains tall grass, and is regularly disturbed. Therefore, the project site does not contain suitable habitat to support burrowing owls.

Figure 6 Irrigation Ditches



Impacts Discussion:

2.4 a. Impacts to Special Status Species:

The following special-status species have the potential to occur within the project site:

- Swainson's hawk: This species has been observed foraging on the project site. The nearest nesting habitat is within scattered oak trees, part of the adjacent cemetery's landscaping over 1,000 feet from the proposed development.
- Northern harrier: This species has been observed to be foraging on the project site. The nearest nesting habitat is within scattered oak trees, part of the adjacent cemetery's landscaping over 1,000 feet from the proposed development.
- Giant Garter Snake: may occur within the irrigation ditches, including the irrigation district conveyance system. Breeding habitat absent.
- Northwestern pond turtle: may occur within the water storage basin located outside of but adjacent to the proposed development area. May also disperse through the agricultural irrigation ditches. Nesting, aestivation, and terrestrial dispersal habitat are absent.

Giant Garter Snake
Giant garter snake has the potential to disperse through the project site via the agricultural irrigation ditches. As breeding habitat is absent, impacts to breeding individuals would not occur. Additionally, operational activities within the agricultural irrigation ditches would be unchanged from current conditions and thus there would be no operational impacts to this species. Further, while a portion of these ditches would be impacted, the proposed project would re-route these features and would not result in a loss of habitat. Therefore, impacts would be limited to impacts to individual giant garter snakes that may be present during construction activities within the irrigation ditches. In order to prevent impacts to individual giant garter snakes, recommended measures include a preconstruction survey for this species and temporary exclusion from construction areas to prevent this species from migrating into a work area. Further, measures include a worker environmental awareness training program to ensure construction personnel are aware of the sensitive biological resources on the project site and what to do in the event an individual giant garter snake is observed. With inclusion of these measures, impacts to giant garter snake would be **less than significant with mitigation.**

Northwestern Pond Turtle
Northwestern pond turtle has the potential to disperse through the project site via the agricultural irrigation ditches on the project site and may also occur within the water storage basin. Suitable upland habitat (including dispersal) is absent; therefore, impacts to nesting or aestivating turtles would not occur. The water storage basin is outside of the development area and would not be impacted. As noted under giant garter snake, habitat loss would not occur given that filled agricultural irrigation ditches would be replaced by proposed re-routing of the ditches. In order to prevent impacts to individual northwestern pond turtles, recommended include a preconstruction survey for this species and temporary exclusion from construction areas to prevent this species from migrating into a work area. Further, measures include a worker environmental awareness training program to ensure construction

personnel are aware of the sensitive biological resources on the project site and what to do in the event an individual northwestern pond turtle is observed. With inclusion of these measures, impacts to northwestern pond turtle would be **less than significant with mitigation.**

Migratory, Nesting, and Special-Status Birds and Raptors
Numerous bird species, including special-status Swainson's hawk and northern harrier, have the potential to occur on or in the vicinity of the project site. Trees will not be removed as part of the proposed project; thus, there would be no loss of nesting habitat for tree-nesting species such as Swainson's hawk and northern harrier. Additionally, the vast majority of potential foraging habitat on the project site would be avoided. However, suitable nesting habitat for tree-nesting species such as Swainson's hawk and northern harrier is located off-site over 1,000 feet from the proposed development area, and ground nesting birds have a low potential to nest on the project site. As the project site and vicinity are already subject to ongoing human disturbance through traffic and agricultural activities, the small scale and temporary nature of construction is not expected to severely increase sensory disturbance from baseline conditions.

Although nesting birds would generally be habituated to human disturbance, avoidance and minimization measures, including a pre-construction nesting bird survey, are included to ensure impacts are avoided and would be **less than significant with mitigation**.

2.4 b. Impacts to Sensitive Habitat. Terrestrial habitat on the project site is limited to agriculture, which is not considered a sensitive habitat. Although aquatic habitats are generally considered sensitive, aquatic features on the project site are all manmade and are either devoid of vegetation or vegetated with sparse and managed plants. These features are used for irrigation and stock watering and are not considered sensitive. As there are no sensitive habitats on the project site, there would be **No Impact.**

Mitigation: None Required

2.4 c. Impacts to Aquatic Resources

The proposed project would result in impacts to 1,950 linear feet of agricultural irrigation ditches. An aquatic resources delineation was prepared for the project site. These features are manmade, dug from uplands, and lack relatively permanent flow. The definition of irrigation ditches that do not meet the criteria of "Waters of the U.S." is provided in 40 CFR §120.2(b)(3) which states "ditches (including roadside ditches) excavated wholly in and draining only dry land and that do not carry a relatively permanent flow of water." Thus, the aquatic resources delineation concluded that the agricultural irrigation ditches do not meet the definition of a water of the U.S. Further, as described in **Section 2**, certain waters of the state, including agricultural irrigation ditches, are exempt from permitting. The agricultural irrigation ditches on the project site consist of manmade features that were created within uplands and drain to uplands for use as crop irrigation. Based on this, the agricultural irrigation ditches would likely be considered waters of the State that are exempt from Waste Discharge Requirement permitting per the *State Policy for Water Quality Control: State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to*

Waters of the State exemptions within Section IV.D(2c). Although permitting for impacts to the agricultural irrigation ditches is not expected to be necessary, the results of the aquatic resources delineation are expected to be sent to USACE and the State for concurrence.

Further, construction activities have the potential to indirectly impact off-site aquatic resources through release of impaired stormwater runoff that may occur due to exposure of bare soils or accidental release of chemicals such as equipment fuel. Recommended mitigation measures (found below in Section2.10 Hydrology) Mitigation Measure: **MM HYD-1:** includes the preparation of a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP is a requirement of the Construction General Permit for construction activities disturbing one or more acres**. Less than Significant Impact with Mitigation.**

2.4 d. Impacts to Wildlife Movement Corridors or Nursery Sites.

There are no wildlife movement corridors or nursery sites present within the project site. Therefore, there would be **No Impact** on wildlife movement, corridors, or nursery sites.

Mitigation: None Required.

2.4 e. Conflict with Policies, Ordinances, Habitat Conservation Plans or Natural Community Conservation Plan.

Implementation of the proposed project would not require the removal of trees or other actions that would conflict with local policies or ordinances regarding biological resources. It is noted that the project site falls within the draft SMHCP plan area. However, this plan is a draft that has not yet been finalized, and the project site falls within an area that is currently designated as voluntary for participation. Thus, consistency with this plan, even once finalized, would be optional. Recommended measures contained herein were nonetheless prepared to be consistent with the draft SMHCP in order to align with measures that were developed for the region in coordination between applicable resource agencies, such as USFWS and CDFW. There would be **No Impact**.

Mitigation: None Required.

The following Mitigation Measures are required for potential impacts identified above.

Mitigation Measures:

MM BIO-1: Worker Environmental Awareness Training.

- All construction and equipment operators working on the project will complete a worker environmental awareness program training regarding Swainson's hawk, northern harrier, giant garter snake, and northwestern pond turtle.
- A qualified biological monitor will be present to monitor for the presence of giant garter snake and northwestern pond turtle during fill of agricultural irrigation ditches.

- If a giant garter snake or northwestern pond turtle is observed, the biological monitor will have the authorization to stop work in order to allow the individual to vacate the work area on its own. Work shall not resume until the biological monitor has determined the individual has vacated the work area and continued construction would no longer pose a risk to the individual.

MM BIO-2 Protection of Northwestern Pond Turtle

- A preconstruction northwestern pond turtle survey shall occur within 14 days prior to
- construction on or within 500 feet of the agricultural irrigation ditches or agricultural water storage basin. If this species is not observed, exclusionary fencing shall be immediately installed to prevent northwestern pond turtles from entering areas of impact on or within 500 feet of the agricultural irrigation ditches or agricultural water storage basin. If northwestern pond turtle is observed, installation of the exclusionary fencing shall be postponed until after the individual has left of its own accord.
- Following the survey, a report presenting the results of the survey shall be submitted to the County of Solano and applicable regulatory agencies, if necessary.
- The exclusionary fencing shall remain in place until after initial vegetation removal is completed for the excluded area. The integrity of the fence shall be inspected at least once every 14 days. Should the fence be damaged, a qualified biologist shall inspect the fencing either virtually or in person. If compromised, the preconstruction survey shall be repeated as described above.
- The fencing shall be constructed out of plastic weed cloth or construction fabric, shall be keyed into the ground, and shall be supported by stakes and wire mesh, as needed. Fencing shall also be opaque, a minimum three feet in height, and installed with a smooth material such that it cannot be climbed.

MM BIO-3 Protection of Swainson's Hawk, and Nesting birds, Including Northern Harrier During Construction

- Should construction commence between March 1 and August 31, a biologist shall conduct a preconstruction survey to identify active Swainson's hawk nests. Surveys shall be conducted within 15 days of the anticipated start of construction and shall be designed and of sufficient intensity to document nesting within 0.25-miles of planned work activities. If a lapse in project-related construction work of 15 days or longer occurs, additional pre-construction surveys shall be required before project work may be reinitiated.
- Construction work (including grading, earthmoving, and operation of construction equipment) shall not occur within a 0.25-mile buffer zone around an active Swainson's hawk nest except when a qualified biologist has confirmed that nesting activity is complete (e.g., young have fledged/are capable of flight/ and have left the nest, or the adults have abandoned the nest for a minimum of 7 days and there is no evidence of re-nesting activity). The size of nest site buffer zones may be reduced only if all of the following conditions are met:
    - A site-specific analysis prepared by a qualified biologist indicates that the nesting pair under consideration is not likely to be adversely affected by construction activities (e.g., the nest is located in an area where the hawks are

habituated to human activity and noise levels comparable to anticipated construction work).

- Monitoring by a qualified biologist is conducted during all construction activities for a minimum of 10 consecutive days following the initiation of construction, and the nesting pair does not exhibit adverse reactions to construction activities (e.g., changes in behavioral patterns, reactions to construction noise).
- Monitoring is continued at least once a week through the nesting cycle at that nest. This longer-term monitoring may be reduced to a minimum of 2 hours in the morning and 2 hours in the afternoon during construction activities; however, additional and more frequent monitoring may be required if any adverse reactions are suspected.
- If adverse effects are identified, construction activities shall cease immediately, and construction shall not be resumed until the qualified biologist has determined that construction may continue under modified restrictions or that nesting activity is complete.
- If construction activities commence during the general nesting season (February 15 to September 1), a preconstruction nesting bird survey shall be conducted by a qualified biologist on and within 100 feet of proposed construction within 14 days of initiating ground disturbance. If active nests are identified, the qualified biologist shall determine a suitable avoidance buffer based on the needs of the species observed.
- Avoidance measures may include the establishment of a buffer zone using construction fencing or similar, or the postponement of construction until after the nesting season, or until after a qualified biologist has determined the nest is no longer active. Avoidance buffers may vary in size depending on habitat characteristics, project-related activities, and disturbance levels.
- Should work activity cease for 14 days or more during the nesting season, surveys shall be repeated prior to recommencing construction within the general nesting season to ensure birds and have not established nests during inactivity.

2.5 CULTURAL RESOURCES

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

Existing Setting: CEQA Guidelines Section 15064.5 establishes procedures for addressing determinations of historical resources on archaeological sites and subsequent treatment of the resource(s) in accordance with PRC Section 21083.2. CEQA Guidelines Section 15064.5 establishes procedures for the treatment of Native American human remains in environmental documents. PRC Section 21082 establishes standards for the accidental discovery of historical or unique archaeological resources during construction.

The California Office of Historic Preservation (OHP) houses the Built Environment Resource Directory (BERD). BERD files provide information regarding non-archaeological resources in OHP's inventory. Each resource listed in BERD is assigned a status code, which indicates whether resources have been evaluated as eligible under certain criteria. This tool provides information to assist in identifying potentially historic resources throughout the County.

A cultural resources survey and assessment were completed for the proposed project site, meeting Section 15064.5 of the CEQA Guidelines. A detailed description of archival research and field survey methods can be found in the Cultural Resource Survey completed by Soar Environmental Consulting dated August 2024. Per the California Historical Resources Listing, there are no existing cultural resources discovered on the project site. However, should historical or archaeological resources be found, the project would then be subject to the conditions detailed in the Solano County Planning Commission Resolution on the discovery of cultural resources.

Impacts Discussion:

2.5 a. **No Impact**: The applicant submitted an Archaeological Survey Report by Soar Environmental Consulting dated August 2024. The Survey did not find evidence of any historical or cultural resources of significance at the project site. No structures are on the site. It is unlikely that future development will impact Historical resources. However, should historical or archaeological resources be found, the project would then be subject to the conditions detailed in the Solano County Planning Commission Resolution on the discovery of cultural resources.

Mitigation Measures: None Required

2.5 b. **Less Than Significant Impact with Mitigation:** The applicant submitted an Archaeological Survey Report by Soar Environmental Consulting dated August 2024. The Survey did not find evidence of any historical or cultural resources of significance at the project site. The site has been extensively disturbed by agricultural practices for some time. It is unlikely that future development will impact Archeological resources. However, should historical or archaeological resources be found, mitigation has been added (Mitigation Measures Cul-1 and Cul-2) to include sensitivity training for construction personnel and inadvertent discovery of cultural resources.

2.5 c. **Less Than Significant with Mitigation:** No known human remains have been previously discovered on the project site. Therefore, no impact is expected. However, if human remains or unrecorded resources could be exposed, Section 7050.5 of the California Health and Safety Code will be implemented. Section 7050.5 requires that all construction

and excavation be stopped until the county coroner can determine whether the remains are those of a Native American. If the remains are determined to be Native American, the coroner must contact the California Native American Heritage Commission (Mitigation Cul-2, Archaeology Discovery Protocol).

Mitigation Measures:

MM CUL-1 Archaeological Alert Sheet and Crew Training.

The project applicant, or designee, shall implement an Archaeological Alert Sheet and Crew Training Program to mitigate the impacts to archaeological resources. The Archaeological Alert Sheet and Crew Training should be prepared and performed prior to any ground-disturbing work at all locations within the project site. This Alert Sheet shall be distributed to all project personnel, including construction – crew and their supervisory personnel, the Project Design Team and the future contractor(s). The Alert Sheet shall contain information regarding potential archaeological resources and the actions to take in the case of inadvertent discovery of cultural resources, including contact protocol and avoidance and minimization measures.

MM CUL-2 Archaeological Discovery Protocol.

Should an archaeological deposit be encountered during project subsurface construction activities, all ground-disturbing activities within 50 feet shall be redirected and a qualified archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for Archeology contacted to assess the situation, determine if the deposit qualifies as a historical resource, consult with agencies as appropriate, and make recommendations for the treatment of the discovery. If the deposit is found to be significant (i.e., eligible for listing in the California Register of Historical Resources), the project applicant shall be responsible for funding and implementing appropriate mitigation measures. Mitigation measures may include recordation of the archaeological deposit, data recovery and analysis, and public outreach regarding the scientific and cultural importance of the discovery. Upon completion of the selected mitigations, a report documenting methods and findings shall be prepared and submitted to the Counties' Community Development Director for review and approval, and the final report shall be submitted to the Northwest Information Center at Sonoma State University. Significant archaeological materials shall be submitted to an appropriate curation facility and used for public interpretive displays, as appropriate and in coordination with a local Native American tribal representative.

2.6 ENERGY

Checklist Items: Would the project		Significant Impact	Less Than Significant Impact with Mitigation	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?	☐	☐	☒	☐

Environmental Setting: The proposed site currently uses little energy for the agricultural and grazing uses. Energy resources required for the Project would include electricity and petroleum fuels. These energy resources would be required for ongoing agricultural uses, and for construction of the proposed homes, and for importing soil if needed. Operation of the five homes would also require electricity and gas.

Impacts Discussion:

2.6a: While the Project would consume energy resources during construction and operation, the consumption of such resources would not result in a wasteful, inefficient, or unnecessary consumption of energy resources. The Project would be required to meet the state building code energy requirements and would not result in wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation. Therefore, the Project would result in **Less Than Significant Impact**.

Mitigation Measures: None Required

2.6b: The Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. Vehicle use associated with the Project would rely on fuels that are subject to the state's Low Carbon Fuel Standard (LCFS), which addresses the carbon intensity of fuels used in the State and is also recognized as a key greenhouse gas reduction measure in CARB's 2017 Scoping Plan (CARB, 2017). Project vehicles would be subject to both CARB's stringent engine emission standards and the LCFS. CARB's 2017 Scoping Plan also calls for significant expansion of composting and other greenhouse gas reducing solid waste infrastructure, which the Project would support. Therefore, the Project would result in **Less than Significant Impact**

Mitigation: None Required.

2.7 Geology, Soils, and Paleontological Resources

Checklist Items: Would the project:		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:				
	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.	☐	☐	☐	☒
	Strong seismic ground shaking?	☐	☐	☐	☒
	Seismic-related ground failure, including liquefaction?	☐	☐	☐	☒
	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 an onsite or offsite 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 wastewater disposal systems in areas where sewers are not available for the disposal of wastewater?	☐	☐	☒	☐

f.	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒	☐

Environmental Setting

Flat broad valleys, marshes, sloughs, bays, islands, and low-lying hills associated with the Sacramento River Alluvial Fan dominate the south and east parts of Solano County, which includes the project area. Geologic structural subunits within the project area include Quaternary surficial deposits. The Holocene alluvium and Montezuma formation are the specific geologic complexes underlying the project area. The Late Holocene alluvial deposits overlie older Pleistocene alluvium and/or the upper Tertiary bedrock formations. This alluvium consists of sand, silt, and gravel deposited in fan, valley fill, terrace, or basin environments. This unit is typically in smooth, flat valley bottoms, in medium-sized drainages, and other areas where terrain allows a thin veneer of this alluvium to deposit, generally in shallowly sloping or flat environments.

Seismic shaking (or ground shaking) is a general term referring to all aspects of motion of the Earth's surface resulting from an earthquake and is normally the major cause of damage in seismic events. Solano County is an area of relatively high seismicity and is subject to earthquake shaking in the future. Earthquake-triggered landslides are a potential major problem that can be induced by only moderate ground shaking. Ground failure in the form of liquefaction, lurching, and settlement could also result from shaking. Flood damage from earthquake-induced dam failure, canal and levee damage, and tsunamis and seiches are also threats. Depending upon the magnitude, proximity to epicenter, and subsurface conditions (bedrock stability and the type and thickness of underlying soils) present at a given point beneath the earth's surface, ground shaking damage would vary from slight to intensive.

Liquefaction is the temporary transformation of loose, saturated granular sediments from a solid state to a liquefied state as a result of seismic ground shaking. Under certain conditions, loosely consolidated soils may tend to amplify shaking and increase structural damage. Water-saturated soils compound the problem because of their susceptibility to liquefaction and corresponding loss of shear strength. Liquefaction potential in Solano County has increased over the years because of a rising water table in many parts of the county. Where these water conditions are combined with loose, fine-grained sands (i.e., prime agricultural soils), liquefaction potential is high. According to Figure HS-9 in the Solano County General Plan, the project site has areas of Moderate to High liquefaction potential (Solano County General Plan, Public Health and Safety Chapter (Updated 2024) page HS-30).

The site is characterized by clay soils. Expansion and contraction of volume can occur when expansive soils undergo alternating cycles of wetting (swelling) and drying (shrinking). During these cycles, the volume of the soil changes markedly. As a consequence of such volume changes, structural damage to buildings and infrastructure may occur if the potentially expansive soils were not considered in building design and during construction.

Impacts Discussion:

2.7 a. The nearest known fault to the project site is the Midland Fault Zone south of the project site (see Solano County General Plan, page HS-29) which extends north-south through most of the western side of the county. The Seismic Shaking Potential map, Figure HS-5 of the General Plan, depicts the project outside of the Highest Potential Earthquake Damage Area. The project is not located within an Alquist-Priolo fault zone per the Alquist-Priolo Earthquake Fault Zoning Map. There are no known faults that lie within Solano County that would affect the project site, and no impacts related to the rupture of a known earthquake fault are expected.

The project site is not in an area designated as an Alquist-Priolo Earthquake Fault Zone (Solano County General Plan, Figure HS-8)).

The project area is not located in an earthquake-induced landslide zone. Additionally, most of the project area is generally flat land, and no rainfall-induced landslides or existing landslides are mapped. **No impact** would occur.

Page HS-36 of the General Plan indicates the project area is in a high to moderate area for shrink swell potential. In compliance with Section 1803 of the California Building Code, the applicant submitted a Geotechnical and Soils report prepared by a licensed engineer, Raney Geotechnical, Inc., on October 29, 2024. The engineer report addresses all soil liquefaction when development occurs.

Mitigation: None Required

2.7 b **Less than Significant Impact.** The project site has been previously cleared and graded for farming and agricultural uses. Implementing the subdivision project would not result in temporary soil erosion or the loss of topsoil. The subdivision project does not propose any construction.

Considering the above factors and by submitting an engineered soil report pursuant to the California Building Code, therefore any potential soil impacts or unstable soils would be less than significant when development occurs, and no mitigation would be necessary.

Mitigation: None Required

2.7 c. **Less than Significant Impact.** The project area's soil contains a large amount of clay. The surface and near-surface generally consist of stiff to hard clay with varying clay, silt, sand contents, and interbedded layers of clayey sand within several of the test pits performed at the site. In compliance with the California Building Code, a soil report was prepared by a licensed soil engineer, Raney Geotechnical, Inc., to support future construction. The report shall address any topsoil limitations.

Considering the above factors and by submitting a soil report pursuant to the California Building Code, when development occurs, potential impacts from landslides, lateral spreading, subsidence, or unstable soils would be less than significant, and no mitigation would be necessary.

Mitigation: None Required

2.7 d **Less than Significant Impact.** Expansive soils are soils that expand when water is added and shrink when they dry out. The soil in the project area consists of stiff to hard clay with varying clay, slit, sand contents, and interbedded layers of clayey sand, which have some building limitations.

According to the soil-engineered report, near-surface clay soils can exert significant expansion pressure on building foundations, interior floor slabs, and exterior flatwork. The report presents specific recommendations to reduce the effect of expansive soils when construction occurs, including post-tensioned (PT) foundations, deepened foundations, pre-saturation of the slab subgrade, and reinforcement of floor slabs are presented in the report. Best Management Practices (BMPs) will be used throughout all future construction activities.

Considering the above factors and the submitted engineered soil report pursuant to the California Building Code, therefore potential impacts from soil expansions when development occurs are less than significant, and no mitigation would be necessary.

Mitigation: None Required

2.7 e **Less than Significant Impact.** The subdivision would allow five new residential structures. Any future septic systems shall be reviewed by the Solano County Department of Public Health, Division of Environmental Health, which will determine the appropriate design standards in accordance with all applicable regulations.

The soil in the project area is characterized as stiff hard clay with varying clay, slit, sand contents, and interbedded layers of clayey sand. Therefore, the impacts of any future septic tanks are anticipated to be less than significant.

Mitigation: None Required

2.7 f **No Impact.** The project site has already been disturbed by agricultural operations, and there are no known paleontological resources, sites, or unique geologic features on the site. No impact is anticipated.

Mitigation: None Required

2.8 GREENHOUSE GAS EMISSIONS

Checklist Items: Would the project		Significant Impact	Less Than Significant Impact with Mitigation	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?	☐	☐	☒	☐

Environmental Setting: Title 14 CCR Section 15064.4 establishes specific guidelines for determining the significance of impacts from greenhouse gas emissions. Lead agencies may choose to quantify greenhouse gas emissions resulting from a project or rely on a qualitative analysis or performance-based standards.

Solano County and Yolo-Solano Air Quality Management District (YSAQMD) have adopted a Climate Action Plan (June 7, 2011), consistent with CEQA thresholds of significance for criteria air pollutants and GHGs and issued updated CEQA guidelines to assist lead agencies in evaluating air quality impacts to determine if a project's emissions would be cumulatively considerable. According to YSAQMD, these CEQA thresholds of significance are the same as those adopted by the Bay Area Air Quality Management District (BAAQMD) with noted exceptions.

The California Emissions Estimator Model (CalEEMod) is a tool that can be used to quantify ozone precursors, criteria pollutants, and greenhouse gas emissions from construction and operation of development in California. The model is published by the California Air Pollution Control Officers Association.

In California transportation is the largest sector of GHG emissions, many reduction strategies and applicable transportation and land use plans focus on reducing vehicle miles traveled (VMT) and making transportation more efficient to reduce GHG emissions. The proposed subdivision project shall comply with Solano County's adopted climate action plan and generate under the threshold of significance for Vehicle Miles Traveled (VMT); therefore, impacts to GHG emissions as they relate to transportation impacts would be less than significant.

Impacts Discussion:

2.8 a **Less than Significant Impact:** No direct impacts would occur. Indirect impacts due to the future development of residential structures are speculative. Cumulative impacts due to the incremental construction of structures were addressed when the General Plan classification was applied to the site and analyzed as part of the 2008 General Plan Final EIR.

Mitigation: None Required

2.8 b**. Less than Significant Impact:** No direct impact would occur. As proposed, the subdivision project would not conflict with any plan, goals, or policies of the Solano County General Plan, intended to reduce, or indirectly reduce Green House Gas (GHG) emissions. The project site would create greenhouse gas emissions from the generation of electricity for future residential development and vehicle trips. Solid waste would make up a small amount of the total generation of greenhouse gas emissions. The proposed project is expected to comply with Solano County's adopted climate action plan and generate under the threshold of significance for Vehicle Miles Traveled (VMT).

Mitigation: None Required

2.9 HAZARDS AND HAZARDOUS MATERIALS

Checklist Items: Would the project		Significant Impact	Less Than Significant Impact with Mitigation	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 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?	☐	☐	☐	☒

Environmental Setting: California Health and Safety Code (HSC) Section 25501 defines "hazardous materials" as a material that, *"because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment."* The use, storage, and transport of hazardous materials are regulated by the California Department of Toxic Substances Control (DTSC) as provided by Title 22 California Code of Regulations Section 66001, et seq. Unless specifically exempted, it is unlawful for any person to transport hazardous waste unless the person holds a valid registration issued by DTSC.

Construction activities often involve the use of oils, fuels, solvents, gasoline, lubricants, and paint. These and other materials may be classified as hazardous materials. Commercial or residential operations may also involve hazardous materials, particularly cleaning supplies, batteries, and electronics. Agricultural operations and landscaping may include hazardous materials such as fertilizer and pesticides.

The California Environmental Protection Agency (CalEPA) maintains several data resources that provide information regarding the facilities or sites identified as meeting the "Cortese List" requirements, including:

- List of Hazardous Waste and Substances sites from DTSC EnviroStor database.
- List of Leaking Underground Storage Tank Sites from the State Water Board's GeoTracker database.
- List of Solid Waste Disposal Sites identified by the Water Board with waste constituents above hazardous waste levels outside the waste management unit (from CalEPA's website).
- List of "active" CDO and CAO from the State Water Board.
- List of Hazardous Waste Facilities subject to corrective action pursuant to CA HSC §25187.5 as identified by DTSC (from CalEPA's website).

The California Department of Forestry and Fire Protection (CALFIRE) has established Fire Safe Regulations for certain projects in the State Responsibility Area. CALFIRE designates areas of the County into fire severity zones, which informs recommendations for land use agencies and planning. Several fire agencies serve the Local Responsibility Areas in Solano County and have established fire safety regulations for development.

The California Department of Forestry and Fire Protection divides the County into fire severity zones. These maps are used to develop recommendations for local land use agencies and for general planning purposes.

Impacts Discussion:

2.9 a-b. **Less than Significant impact:** The proposed project is an agricultural development that does not involve the routine transport, use, or disposal of hazardous waste. Nominal amounts of hazardous material like fuels and other construction materials are routinely used during construction processes. The transport and use of these materials would be temporary and at concentrations that do not pose a significant health risk. Household products and construction tools are expected to meet applicable local, state, and federal requirements for hazardous materials. The construction of the subdivision improvements would not be a source of hazardous emissions. Any future residential construction must comply with California Occupational Safety and Health Administration (OSHA) regulations.

Mitigation: None Required

2.9 c. **No Impact:** The project is not within one quarter of an existing or proposed school.

Mitigation: None Required

2.9 d. **No Impact:** The project site is not included in any of the lists compiled pursuant to Government Code Section 65962.5.

Mitigation: None Required

2.9 e. **No Impact:** The site is not within an airport land use plan influence area, not within two miles of a public airport and not near a private landing strip. The nearest airport is Davis University Airport, over five (5) miles northeast of the project site. No hazardous materials should be released through transport in this proposal. The project shall not impair the implementation of the adopted emergency evacuation plan.

Mitigation: None Required

f. **No Impact:** Direct impacts would not occur. Indirect future development is unlikely to impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan because the project has direct access to a publicly maintained road. Setback requirements and existing easements would prevent the construction of a structure that would impair the ability to move through the lot in the event of an emergency.

Mitigation: None Required

g. **No Impact**: The project site is bordered by agricultural uses. Irrigated agricultural land is less susceptible to wildland fires than grazing lands. Orchards, field crops and developed parcels have minimal fire risk due to plants' moisture content. No hazardous materials would

be transported or emitted for the project. The project does not contain existing hazardous materials and is not in the airport land use plan. The site is not near any public schools and does not interfere with Solano County adopted Operational Emergency Response Plan. Future developments will be subject to review by the Solano County Fire Department. The subdivision would not expose people or structures to significant risks associated with wildland fire, and no impact shall result from the proposed project.

Mitigation: None Required

2.10 HYDROLOGY AND WATER QUALITY

Checklist Items: Would the project		Significant Impact	Less Than Significant Impact With Mitigation	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 the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	☐	☐	☒	☐
1)	result in a substantial erosion or siltation on- or off-site;	☐	☐	☒	☐
2)	substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	☐	☐	☒	☐
3)	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	☐	☐	☒	☐
4)	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?	☐	☐	☒	☐

Environmental Setting: Regulatory agencies include the State Water Resources Control Board (SWRCB) and the Regional Quality Control Board (NCRWQCB). The State Water Resources Control Board is responsible for implementing water quality standards in California. Water Code Section 13050(d) states: "*Waste includes sewage and any other waste substances, liquid, solid, gaseous, or radioactive, associated with human habitation, or of human or animal origin, or from any producing, manufacturing, or processing operation, including waste placed within containers of whatever nature before, and for purposes of, disposal."* Typical activities and uses that affect water quality include, but are not limited to, discharge of process wastewater from factories, confined animal facilities, construction sites, sewage treatment facilities, and material handling areas that drain into storm drains. Certain activities may require a Construction General Permit from SWRCB.

Water Code Section 1005.1 defines groundwater as water beneath the ground's surface, whether or not flowing through known and definite channels. Both surface water and groundwater define a watershed, moving from higher to lower elevations. In Solano County, groundwater is the main source for municipal and individual domestic water systems.

The project site is in the greater Sacramento Valley Groundwater Basin, specifically the Solano Subbasin (California Department of Water Resources 2004). The subbasin is considered a medium priority basin. Five Groundwater Sustainability Agencies in the Solano Subbasin developed a single Groundwater Sustainability Plan to manage groundwater in the Subbasin (Luhdorff & Scalmanini Consulting Engineers 2021). Groundwater recharge is primarily from rivers and streams draining the Sierra Nevada and the Coast Ranges, and infiltration of precipitation and surface water applied for irrigation (Bennett et al. 2011). Groundwater conditions in the Solano Subbasin are generally stable. Short-term groundwater level fluctuations from spring to fall with rising levels occur in response to groundwater recharge during the winter and lowering levels in the fall result from increased seasonal groundwater demands during the summer. Longer-term trends in groundwater levels are associated with changing hydrologic conditions (i.e., wet and dry periods). Groundwater in the Solano Subbasin is considered to be of generally good quality, and useable for both domestic and agricultural purposes (California Department of Water Resources 2004**Error! Bookmark not defined.**). In the study area, one or more trace elements were detected at high and medium concentrations of the primary aquifers in about 30 percent and 24 percent, respectively. Arsenic and boron were the two trace elements that were most frequently detected at concentrations greater than benchmarks (Bennett et al. 2011).

The National Flood Hazard Layer maintained by the Federal Emergency Management Agency (FEMA) can be used to review project impacts from flooding. The Department of Water Resources Division of Safety of Dams (DSOD) reviews and approves inundation maps prepared by licensed civil engineers and submitted by dam owners for hazardous dams and appurtenant structures. These maps are based on a hypothetical failure of a dam or appurtenant structure. DSOD maintains a web map that displays this information.

Impacts Discussion:

2.10 a. **Less Than Significant Impact with Mitigation:** The proposed project is not expected to violate any water quality standards or waste discharge requirements or substantially degrade water quality. The majority of the project site has been previously graded and leveled; however, the proposed project would disturb more than one acre through the construction of improvements to serve the project. Consequently, the applicant would be required to obtain a General Construction Activity Storm Water Permit from the SWRCB for stormwater discharges associated with construction activities, which would require the implementation of a SWPPP. The SWPPP must contain BMPs to reduce soil erosion and protect against stormwater runoff.

Because the project is proposing more than 5,000 square feet of new impervious surface, the applicant must also comply with the County's MS4 Storm Water Permit by implementing site design, source control, runoff reduction, and stormwater treatment. This is enforced by the Solano County Department of Public Works, Roads Division.

Conformance with the State's General Construction Permit, the County Stormwater Ordinance, and **MM HYD-1** would ensure the project would not violate any water quality standards or waste discharge requirements and would not otherwise substantially degrade surface water or groundwater quality. Therefore, impacts would **be less than significant with mitigation** incorporated.

2.10 b-e. **Less than Significant Impact:** The applicant proposes to subdivide four (4) existing parcels of cattle grazing and row corps, totaling 426 ± acres, into ten (10) agricultural lots, over 41 ± acres each (see table 1) for high-value row crops, and five (5) residences for the commercial farming use of the property. If the subdivision is approved, it would allow for the construction of five new single-family homes to support agricultural uses. Future developments shall comply with any water quality standards or wastewater discharge and be subject to review by the Solano County Environmental Health Services Division for approval.

Water usage for the proposed subdivision project will not substantially increase from construction of the five homes.

The proposed access easement and improvements would increase the impermeable surface area on-site of the new impervious surface. This amount of impermeable surface area would not substantially interfere with groundwater recharge. The project will not result in substantial erosion or siltation on or offsite. The contractor must have a SWPPP and WPCP plan in place before construction. A proper BMP shall be implemented for future construction to protect water quality and prevent any discharges to nearby drainages. The Solano County building inspectors will be on-site to ensure compliance.

The project sites are in FEMA flood zone A. Per Solano County Building Services Division, all future development in the flood zone shall meet the following requirements: Top of finished floor elevation of the structures must be located 3 feet above the highest adjacent grade; a preconstruction elevation certificate to establish the minimum finished floor elevation; A post-construction elevation certificate will also be required for verification before final inspection. (Solano County Code, Chapter 12.2, Article V, Section 12.2-50).

The Project site is inland and not at risk of tsunami inundation. Seiches are large waves generated in enclosed bodies of water in response to ground shaking. Flooding from a seismically induced seiche is unlikely in the area. The subdivision is not located at the base of a hill and the surrounding area is developed for agricultural use. The Project site would not be subject to inundation by mudflow.

Mitigation: None Required

The following mitigation measures are required for Impact 2.10 a.

Mitigation Measures:

MM HYD-1: Storm Water Pollution Prevention Plan (SWPPP) is required in California for development projects that disturb one acre or more of land. This requirement is part of the Construction General Permit (CGP). Prior to the issuance of a grading permit, the applicant shall submit an Erosion and Sediment Control Plan or SWPPP prepared by a registered professional engineer or Qualified SWPPP Developer (QSD) as an integral part of the grading plan. The plan shall be reviewed and approved by the County prior to issuing a grading permit. The plan shall include all erosion control measures and BMPs to be used during project construction and operation, including runoff control, sediment control, and pollution control measures for the entire site to prevent the discharge of sediment and contaminants into the drainage system. Post-construction measures include maintenance of the bioretention areas and vegetative landscaping. The plan shall include the following measures, as applicable:

1. Throughout the construction process, ground disturbance shall be minimized, and existing vegetation shall be retained to the extent possible to reduce soil erosion. All construction and grading activities, including short-term needs (equipment staging areas, storage areas, and field office locations) shall minimize the amount of land area disturbed. Whenever possible, existing disturbed areas shall be used for such purposes.

2. All drainage ways, wetland areas, and stream areas shall be protected from silt and sediment in storm runoff using appropriate BMPs, such as silt fences, diversion berms, and check dams. Fill slopes shall be stabilized and covered when appropriate. All exposed surface areas shall be mulched and reseeded. All cut and fill slopes shall be protected with hay mulch and/or erosion control blankets, as appropriate.

3. During construction, all erosion control measures shall be installed according to the approved plans prior to the onset of the rainy season but no later than October 15. Construction erosion control measures shall remain in place until the end of the rainy season but may not be removed before April 15. The County shall be responsible for notifying construction contractors about erosion control requirements.

4. The following Best Management Practices are recommended for inclusion in the SWPPP:

- Grading activities shall be limited to the immediate area required for construction.
- Temporary erosion control measures (such as silt fences, fiber rolls, staked straw bales, temporary re-vegetation, rock bag dams, erosion control blankets, and sediment traps) shall be employed as needed for disturbed areas. Plastic monofilament or similar materials that could entangle wildlife shall not be used.
- Construction activities shall be scheduled to minimize land disturbance during peak runoff periods to the extent feasible.
- Disturbed areas shall be paved, re-vegetated, and/or stabilized following construction activities.
- A spill prevention and countermeasure plan shall be developed that identifies proper storage, collection, and disposal measures for potential pollutants used on-site.
- Petroleum products shall be stored, handled, used, and disposed of properly in accordance with provisions of the CWA (33 USC §§ 1251 to 1387).
- Construction materials shall be stored, covered, and isolated to prevent runoff loss and contamination of surface and groundwater.
- Fuel and vehicle maintenance areas shall be limited to the impact area. Sanitary facilities shall be provided for construction workers.

To minimize dust generation during construction, soil will be wet with water prior to ground disturbance as needed.

- Generated waste shall be properly disposed of.

2.11 LAND USE AND PLANNING

Checklist Items: Would the project		Significant Impact	Less Than Significant Impact With Mitigation	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?	☐	☐	☐	☒

Environmental Setting: All lands within the unincorporated portions of Solano County are regulated by the General Plan and zoning ordinance. Discretionary projects are referred to several agencies with jurisdiction over aspects of the project as well as other interested parties. The project site has been in agricultural use in the past and is surrounded by agricultural lands.

Impacts Discussion:

2.11 a. **No Impact:** No direct impact would occur. Potential future development must occur on one of the resulting lots, which would not divide an established community if carried out under standard zoning regulations such as setbacks and height limits.

Mitigation: None Required

2.11 b. **No Impact:** The General Plan, Division of Land Regulations, and Zoning Ordinance contain policies and regulations aimed at avoiding or mitigating environmental impacts. The Project is consistent with applicable regulations as described elsewhere in this document. The project includes a designation of Agriculture in the General Plan and the Zoning is Agriculture A-40. The primary use of the sites will remain in agriculture. Constructing one single family home per 40-acre parcel is an allowed use by right. The project is consistent with the General Plan and Zoning Ordinance.

Mitigation: None Required

2.12 MINERAL RESOURCES

Checklist Items: Would the project		Significant Impact	Less Than Significant Impact With Mitigation	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?	☐	☐	☐	☒

Environmental Setting: The Surface Mining and Reclamation Act (SMARA) of 1975 provides a comprehensive surface mining and reclamation policy to ensure that adverse environmental impacts are minimized, and mined lands are reclaimed to a usable condition. SMARA also encourages the production, conservation, and protection of the state's mineral resources. SMARA requires the State Mining and Geology Board to adopt policies for the reclamation of mined lands and the conservation of mineral resources. SMARA also directs the State Geologist to identify and map non-fuel mineral resources of the state to show where

economically significant mineral deposits occur and where they are likely to occur based on the best available scientific data.

Impacts Discussion:

2.12 a-b. **No Impact**: No direct impacts occur. The site does not contain any known mineral resources of value.

Mitigation: None Required

2.13 NOISE

Checklist Items: Would the project		Significant Impact	Less Than Significant Impact with Mitigation	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?	☐	☐	☐	☒

Environmental Setting: Acceptable levels of noise vary depending on the land use. In any one location, the noise level will vary over time, from the lowest background or ambient noise level to temporary increases caused by traffic or other sources. State and federal standards have been established as guidelines for determining the compatibility of a particular use with its noise environment. Solano County relies principally on standards in its Public Health and Safety Chapter of the General Plan, its Zoning Ordinance, and other County ordinances to evaluate noise-related impacts of development. Land uses considered noise-sensitive are those in which noise can adversely affect what people are doing on the land. Churches, schools, and certain kinds of outdoor recreation are also usually considered noise sensitive.

Impacts Discussion:

2.13 a. **Less than Significant Impact**: The standards in Table HS-3 within the Public Health and Safety Chapter of the Solano County General Plan indicate a community noise exposure of less than 75 dBA to be normally acceptable for agricultural uses and less than 60 dBA for residential land uses. The nearest sensitive receptor in the agricultural zones is at an existing residence over 200 feet east of the project site. Therefore, short-term construction activities would periodically increase ambient, ground borne vibration, or ground borne noise levels at the project site and vicinity but would subside once construction is completed. Compliance with Solano County's noise standard would ensure there is no effect on the community, and other adverse impacts on the health, safety, and welfare of the vicinity.

Mitigation: None Required

b**. Less than Significant Impact**: No direct impacts would occur. Construction of structures is not expected to create substantial noise beyond the standards outlined in the General Plan. Some temporary noise impacts may occur, but existing regulations limiting allowable noise would restrict construction noise. Operation is not expected to be a significant new source of noise and will be compatible with adjacent ongoing agricultural operation.

Mitigation: None Required

c. **No Impact:** The project is not near a private airstrip, public airport, or within an airport influence area.

Mitigation: None Required

2.14 POPULATION AND HOUSING

Checklist Items: Would the project		Significant Impact	Less Than Significant Impact with Mitigation	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?	☐	☐	☐	☒

Existing Setting: The most recent census for Solano County was in 2020, with an estimated population of 453,491. The County has undergone cycles of population boom followed by

periods of slower growth. For example, the County population increased about 28 percent between 1950 and 1960 but barely grew from 2010 to 2020. Population growth slowed further from 2020 to 2023, increasing only 9.7 percent.

Impacts Discussion:

2.14 a. **Less than Significant Impact:** The proposed project is proposing to subdivide four parcels into ten parcels and proposes the construction of five (5) future residential units. It should be noted that while not proposed at this time, an additional five (units) would be allowed on the additional five agricultural lots. This could result in buildout of ten homes. This would be consistent with the allowable General Plan and zoning district and would not induce substantial population growth in the area. The project site is zoned Exclusive Agriculture (A-40) and will remain A-40 for use in the Solano County Zoning Ordinance.

No existing public infrastructure or new infrastructure with the capacity to serve areas beyond the project site would be affected, constructed, or removed.

Mitigation: None Required

2.14 b. **No Impact:** The project proposes to create five single-family homes. This would not displace existing housing, nor would the Project displace any existing people. An additional five homes could be built on the remaining five parcels created by the subdivision (allowed by right under the zoning district) but are not proposed by the project.

Mitigation: None Required

2.15 PUBLIC SERVICES

Checklist Items: Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the 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:		Significant Impact	Less Than Significant Impact with Mitigation	Less Than Significant Impact	No Impact
1)	Fire Protection?	☐	☐	☐	☒
2)	Police Protection?	☐	☐	☐	☒
3)	Schools?	☐	☐	☒	☐
4)	Parks?	☐	☐	☐	☒
5)	Other Public Facilities?	☐	☐	☐	☒

Environmental Setting: The Solano County Office of Emergency Services (OES) is the primary local coordination agency for emergencies and disasters affecting residents, public infrastructure, and government operations in the Solano County Operational Area. Fire

protection services are provided by the California Department of Forestry and Fire Protection (CALFIRE) or one of several local fire districts. Police protection is provided by the County Sheriff, California Highway Patrol, or city police. Several school districts and parks are located throughout the County. Other public facilities include roads, libraries, water and sewage treatment plants, airports, and animal control facilities. Projects may have an impact if they cumulatively contribute to significantly increased demand for public services such that new facilities would be required.

Impacts Discussion:

2.15 1. **No Impact:** Implementation of the proposed project would result in the future construction of five (5) single-family residences. An additional five homes could be built on the remaining five parcels created by the subdivision (allowed by right under the zoning district) but are not proposed by the project at this time. The Dixon Fire Protection District imposes requirements for new buildings constructed for the project site, including plan checks, address identification, access requirements, and fire flow requirements. Compliance set forth by the Fire District would be required as conditions of approval and would reduce fire risk and hazard to levels found acceptable by the Dixon Fire Protection District. There would be no increase or change in the demand for fire services that would require the provision of new or physically altered fire facilities.

Mitigation: None Required

2.15 2. **No Impact:** The site would be served by the Sheriff's department and the nearest police station is the Davis Police Department over 4± miles to the north. Implementation of the proposed project would result in the future construction of five (5) single-family residences An additional five homes could be built on the remaining five parcels created by the subdivision (allowed by right under the zoning district),but are not proposed by the project.

The potential addition of up to ten (10) residential structures would induce minimal population growth that was previously addressed when the Exclusive Agricultural (A-40) land use classification and zoning district were applied to the site in the General Plan Update Final EIR. Therefore, the project is not expected to require the provision of new police facilities.

Mitigation: None Required

2.15 3. **No Impact:** The site is within the Davis Unified School District. The potential addition of up to five (5) residential structures and an additional five homes could be built on the remaining five parcels created by the subdivision (allowed by right under the zoning district), but are not proposed by the project at this time. would induce minimal population growth that was previously addressed when the Exclusive Agricultural (A-40) land use classification and zoning district were applied to the site in the General Plan Update Final EIR. Therefore, the project is not expected to require the provision of new school facilities.

Mitigation: None Required

2.15 4. **No Impact:** The addition of up to five (5) residential structures (and potential for another five structures allowed under the zoning district) would induce minimal population growth that was previously addressed when the Exclusive Agricultural (A-40) land use classification and zoning district were applied to the site in the General Plan Update Final EIR. Therefore, the project is not expected to require the provision of new park facilities.

Mitigation: None Required

2.15 5. **No Impact:** The addition of five (5) residential structures (and potential for another five structures allowed under the zoning district) would induce minimal population growth that was previously addressed when the Exclusive Agricultural (A-40) land use classification and zoning district were applied to the site in the General Plan Update Final EIR. Therefore, the project is not expected to require the provision of new public facilities.

Mitigation: None Required

2.16 RECREATION

Checklist Items: Would the project		Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
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?	☐	☐	☒	☐
b.	Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	☐	☐	☒	☐

Environmental Setting: The County of Solano manages a variety of public recreation areas. Grasslands Regional Park which is located approximately a quarter mile east of the project site, is located within Yolo County. Additionally, Solano County is host to a variety of state parks, reserves, and other state-protected areas used for recreation.

Impacts Discussion:

2.16 a. Less Than Significant Impact: The addition of five residences and potential addition of up to five (5) additional residential structures allowed by the zoning district would induce

minimal population growth and need for recreation facilities that was previously addressed when the Exclusive Agricultural (A-40) land use classification and zoning district were applied to the site in the General Plan Update Final EIR. Therefore, the project is not expected to require the provision of new park facilities.

Mitigation: None Required

2.16 b. Less Than Significant Impact: No recreational facilities are proposed as part of the Project. The Project would not require the construction or expansion of recreational facilities because while it would add incremental demand, the demand would not require the provision of new park facilities.

Mitigation: None Required

2.17 TRANSPORTATION

Checklist Items: Would the project		Significant Impact	Less Than Significant Impact with Mitigation	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 Vehicle Miles Traveled (VMT) § 15064.3, subdivision (b) Criteria for Analyzing Transportation Impacts?	☐	☐	☒	☐
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?	☐	☐	☐	☒

Environmental Setting: CEQA Guidelines Section 15064.3 recommends *"specific considerations for evaluating a project's transportation impacts. Generally, vehicle miles traveled is the most appropriate measure of transportation impacts. For the purposes of this section, "vehicle miles traveled" refers to the amount and distance of automobile travel attributable to a project. Other relevant considerations may include the effects of the project on transit and non-motorized travel."* This section details appropriate methods for determining the significance of transportation impacts.

According to the 2018 Office of Planning and Research (OPR) Technical Advisory on Evaluating Transportation Impacts in CEQA, *"many local agencies have developed screening thresholds to indicate when detailed analysis is needed. Absent substantial evidence indicating that a project would generate a potentially significant level of VMT, or inconsistency with a Sustainable Communities Strategy (SCS) or general plan, projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less-than-significant transportation impact."*

Impacts Discussion:

2.17 a. **Less Than Significant Impact:** The proposed subdivision would not conflict with any plan, ordinance, or policy regarding transportation as no major physical aspects of the subject parcel are intended to change. The project shall secure and abide by the conditions of an encroachment permit with the Department of Transportation for any work within the Public Right-of-Way.

Mitigation: None Required

2.17 b. **Less Than Significant Impact:** The project does not conflict or would not be inconsistent with CEQA Guidelines § 15064.3 subdivision (b). The vehicle miles traveled (VMT) will not increase, as the project will not add lanes that would create additional road capacity and the construction of five homes and an additional five homes that could be built on the remaining five parcels created by the subdivision (allowed by right under the zoning district),but are not proposed by the project at this time would not result in significant increase in traffic. The vehicle trips generated during the road's construction would be temporary and short-term.

Mitigation: None Required

2.17 c**. No Impact:** The improvements must conform to Solano County Road and Development Standards. The project proposed no hazards to any designed features, no sharp curves, dangerous intersections, or incompatible uses. No changes to the existing access for farm equipment.

Mitigation: None Required

2.17 d. **No Impact:** No direct impacts would occur. The construction of driveway approach improvements would benefit emergency access by establishing a consistent surface between the County Road and the private lot, thereby reducing potential impacts to emergency vehicles accessing the lot, or damage to the County Road from emergency vehicles accessing the lot.

Mitigation: None Required

2.18 TRIBAL CULTURAL RESOURCES

Checklist Items: Would the project		Significant Impact	Less Than Significant Impact with Mitigation	Less Than Significant Impact	No Impact
a.	Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code § 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:	☐	☒	☐	☐
1)	Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	☐	☐	☐	☒
2)	A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code § 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☐	☐	☒

Environmental Setting: Assembly Bill (AB) 52, a law signed by then-Governor Jerry Brown in 2014, amended CEQA to require tribal cultural resources to be considered as potentially significant cultural resources under the CEQA environmental review processes. The procedures under AB 52 offer tribes an opportunity to take an active role in the CEQA process in order to protect tribal cultural resources. Pursuant to AB 52, if a Native American identifies tribal cultural resources within a project site, the Native American shall contact the local Lead Agency.

As described in Section 2.5, Cultural Resources, the Native American Heritage Commission (NAHC) was contacted via email in December 2024. This letter included a map depicting the project area and surrounding vicinity and requested an SLF search, along with a list of contact information for Native American community representatives who might have an interest in, or concerns with, the proposed Project. The NAHC responded, noting that no previously documented culturally significant properties were known to be present within or near the project area.

Impacts Discussion: On April 16, 2023, Yocha Dehe representative Eric Hernandez met with County and Consultant staff to discuss the project. Mr. Hernandez indicated he did not have concerns about the project and requested that the two mitigation measures found in the Cultural Resources section of this MND be included (Mitigation Measure Cul-1 and Cul-2).

a. **Less Than Significant Impact with Mitigation:** The project site has been historically disturbed by agricultural practices. No tribal or historical resources have been identified on the project site. State law (Section 7050.5 of the California Health and Safety Code) dictates that any human remains found during construction activities shall be reported to the proper official(s).

Mitigation Measures: See MM Cul-1 and MM Cul-2 above.

2.19 UTILITIES AND SERVICE SYSTEMS

Checklist Items: Would the project		Significant Impact	Less Than Significant Impact with Mitigation	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?	☐	☐	☐	☒

Environmental Setting: This section addresses the potential for increased demand on utilities and service systems that serve or are otherwise impacted by the Project. As described above, the project will rely on irrigation water, wells and septic systems to support the agricultural and rural residential uses.

Impacts Discussion:

2.19 a. **Less than Significant Impact:** The project would result in individual domestic wells for each of the five proposed residential lots. Per Solano County, the entire project area, all five existing parcels and resulting five additional lots, reside within "D" water abundant zone according to US Geological Service Mapping, "1972 Water Bearing Rocks in the San Francisco Bay Region". The area has sufficient water quantity and yield for residential use. Ministerial construction permits and plans would be reviewed and issued by the Solano County Division of Environmental Health.

The proposed stormwater drainage would be constructed in compliance with the County's MS4 permit and reviewed and approved by the Division of Public Works. Also, each of the ten proposed residential lots in the project would be served by an individual Onsite Wastewater Treatment Systems (OWTS) on each lot. Soils vary by project location, and some soils are not optimal for successful operation of an OWTS because the site contains only limited soils. The proposed systems shall be reviewed by the Solano County Division of Environmental Health (EH).

All on-site sewage disposal systems to be constructed shall conform to Solano County EH minimum design standards for on-site sewage disposal systems to ensure that each of the proposed OWTS would operate to avoid adverse effects on water quality.

Mitigation: None Required

2.19 b. **Less than Significant Impact:** The proposed subdivision proposes the construction of five residences (and an additional five residences could be constructed on the remaining five parcels) which would require potable water supplied by new wells permitted and constructed to Solano County Division of Environmental Health standards and is not anticipated to exceed groundwater demand

Mitigation: None Required

2.19 c. **No Impact:** The project site is not currently served by a wastewater treatment provider, nor is it planned to be served by a wastewater treatment provider in the future. The site would be served by septic systems permitted through Solano County Environmental Health. No impact on a wastewater treatment provider would result from project implementation.

Mitigation: None Required

2.19 d. and e **No Impact:** The proposed subdivision would generate a minimal amount of solid waste for the five residential lots (and potential additional five residences allowed under

the zoning district). Development of the site shall be consistent with the General Plan and would need to comply with federal, state, and local statutes and regulations related to solid waste.

Mitigation: None Required

2.20 WILDFIRE

Checklist Items: Would the project		Significant Impact	Less Than Significant Impact With Mitigation	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 uncontrolled spread of a wildfire?	☐	☐	☐	☒
c.	Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☐	☒
d.	Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	☒

Environmental Setting: As noted on the County's website, the County Emergency Operations Plan (EOP), which complies with local ordinances, state law, and stated and federal emergency planning guidance, serves as the primary guide for coordinating and responding to all emergencies and disasters within the County. The purpose of the County EOP is to "facilitate multi-agency and multi-jurisdictional coordination during emergency operations, particularly between Solano County, local and tribal governments, special districts as well as state and Federal agencies".

Per the Solano County General Plan, the project is not located within a Cal Fire Hazards Severity Zones or State Responsibilities Areas map. The project is not located in the California Board of Forestry and Fire Protection's (CAL FIRE) State Responsibility Area.

Impacts Discussion:

2.20 a. **No Impact:** Development of the subdivision and residential structures is unlikely to impair an emergency response plan or an emergency evacuation plan because they would not block Tremont Road and Mace Blvd, which serves as an evacuation route.

Mitigation: None Required

2.20 b. **No Impact:** The project location area does not contain steep slopes or high vegetation, and although construction of the project will alter the existing site topography, it will not increase susceptibility to wildfire hazards in the area.

Mitigation: None Required

2.20 c. **No Impact:** Development would be required to comply with applicable building codes and fire district requirements, which would minimize wildfire risk and impacts to the environment.

Mitigation: None Required

2.20 d. **No Impact**: Development would be required to comply with applicable building codes and fire district requirements. The project would not expose people or structures to significant risk.

Mitigation: None Required

2.21 MANDATORY FINDINGS OF SIGNIFICANCE

Checklist Items: Would the project		Significant Impact	Less Than Significant Impact with Mitigation	Less Than Significant Impact	No Impact
a.	Does the project have the potential to (1) substantially degrade the quality of the environment, (2) substantially reduce the habitat of a fish or wildlife species, (3) cause a fish or wildlife population to drop below self-sustaining levels, (4) threaten to eliminate a plant or animal community, (5) substantially reduce the number or restrict the range of a rare or endangered plant or animal, or (6) eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b.	Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection	☐	☒	☐	☐

	with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)				
c.	Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

Discussion: Certain mandatory findings of significance must be made to comply with CEQA Guidelines §15065. The proposed project has been analyzed and determined that it would not:

- Substantially degrade environmental quality;
- Substantially reduce fish or wildlife habitat;
- Cause a fish or wildlife population to fall below self-sustaining levels;
- Threaten to eliminate a plant or animal community;
- Reduce the numbers or range of a rare, threatened, or endangered species;
- Eliminate important examples of the major periods of California history or pre-history;
- Achieve short-term goals to the disadvantage of long-term goals;
- Have environmental effects that will directly or indirectly cause substantial adverse effects on human beings; or
- Have possible environmental effects that are individually limited but cumulatively considerable when viewed in connection with past, current, and reasonably anticipated future projects.

a. Less than Significant Impact with Mitigation Incorporated. The project site contains habitats that were identified as potentially suitable for special-status wildlife species. Impacts on special-status plant and wildlife species would be less than significant with the implementation of MM BIO-1 through MM BIO-3 and MM HYD-1. Therefore, the project would have a less than significant impact on biological resources

b. Less than Significant Impact with Mitigation Incorporated: When project impacts are considered along or in combination with other impacts, the project-related impacts may be significant. Construction and operation of the project would contribute to cumulative impacts related to agricultural resources, biological resources, hydrology, and water quality. Mitigation measures have been incorporated into the project to reduce project-related impacts to a less than significant level. Based on the implementation of Mitigation Measures MM BIO-1 through MM BIO-3, and MM HYD-1, the cumulative effects of the proposed project would be less than significant

c. **Less than Significant Impact:** As discussed in Aesthetics, Air Quality, Geology and Soils, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Hydrology and Water Quality, Land Use, and Planning, Noise, Population and Housing, Public Services, Recreation, Transportation, Utilities and Service Systems, and Wildfire of this document, compliance with local, state, and federal regulations would pre-empt the potential for significant adverse effects on humans. Therefore, the proposed project would not result in a Mandatory Finding of Significance related to environmental effects that could cause substantial adverse effects on humans.

FINDINGS: The proposed project would have a **Less than Significant Impact with Mitigation Incorporated** on Mandatory Findings of Significance. Mitigation measures have been outlined above.

3.0 Agency Coordination and Public Involvement

3.1 Consultation and Coordination with Public Agencies

The Initial Study is being circulated for public comment. In addition, it will be sent to the Department of Conservation and the Solano County Agriculture Commissioner and other local agencies for review and comment.

3.2 Public Participation Methods

The Initial Study is available at the Solano County Department of Resource Management and online at the Department's Planning Services Division website at:

http://www.solanocounty.com/depts/rm/documents/eir/default.asp

Interested parties may contact the planner assigned to this project at the contact points provided below:

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4.0 List of Preparers

This Initial Study was prepared by the Solano County Department of Resource Management. The following staff and consultants contributed to the preparation of this Initial Study:

Solano County Department of Resource Management

5.0 RESOURCES USED AS REFERENCE

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U.S. Fish & Wildlife Service – National Wetlands Inventory

6.0 Appendices

Aquatic Resources Delineation, Realized Drams Ranch Subdivision Project, April 2025, Acorn Environmental.

Biological Resources Assessment, Realized Dreams Ranch Subdivision Project, April 2025, Acorn Environmental.

AQUATIC RESOURCES DELINEATION

Realized Dreams Ranch Subdivision Project

Solano County, CA | April 2025

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Attachment D: List of Plants Observed
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Executive Summary

Acorn Environmental conducted a delineation of potential waters of the United States and waters of the State on the 426-acre Realized Dreams Ranch property located in unincorporated Solano County, California (Study Area). The delineation was conducted on April 22, 2025 and delineation methods were conducted in accordance with the 1987 Corps of Engineers Wetlands Delineation Manual as amended by the 2010 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0). Aquatic features were identified and mapped within the Study Area using GPS technology and were subjected to the 3-parameter test, the Kennedy and Scalia tests, and State of California agency criteria. Aquatic resources within the Study Area do not appear to meet the definition of a water of the U.S. and therefore are likely not subject to USACE jurisdiction.

The following aquatic resources within the Study Area were determined to be potentially subject to State jurisdiction:

> **Agricultural Irrigation Ditches:** The agricultural irrigation ditches in the Study Area are likely considered waters of the State. However, these ditches are likely exempt from permitting requirements per the *State Policy for Water Quality Control: State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State* (SWRCB, 2021)

Riparian zones were not observed within the Study Area. The remaining portions of the Study Area contain upland features. This delineation is subject to verification by the USACE and State agencies. Information contained herein is preliminary until the appropriate agency provides a written determination of the boundaries of its jurisdiction and verifies the delineation map.

Section 1 | Introduction

1.1 PURPOSE AND SCOPE OF REPORT

Acorn Environmental conducted a formal delineation of aquatic resources within an approximately 426-acre property (Study Area) in unincorporated Solano County, California. This report presents the results of the survey conducted in accordance with the USACE Wetlands Delineation Manual to determine which portions of the Study Area may qualify as potentially jurisdictional aquatic resources. USACE is ultimately responsible for determining the limits of their jurisdiction. This report also identifies those portions of the Study Area that may qualify as potentially jurisdictional waters of the State of California. The Regional Water Quality Control Board is ultimately responsible for determining the limits of their jurisdiction. The completed USACE Minimum Standards Checklist is included as **Attachment A**.

1.2 PROPOSED LOCATION AND DESCRIPTION

Figure 1 and **Figure 2** show the location of the Study Area, and **Figure 3** presents an aerial photograph of the Study Area and the immediate vicinity. The Study Area totals approximately 426 acres and is comprised of four parcels, Assessor's Parcel Numbers (APNs) 0110190100, 01101900090, 0111070200, and 0111070210. The Study Area is within Section 35, Township 8 North, Range 2 East of the Mount Diablo Baseline and Meridian, within the "Saxon" United States Geological Survey (USGS) 7.5-minute quadrangle (quad). Access to the Study Area is provided off Tremont Road, approximately four miles south of Interstate 80 and the City of Davis.

1.3 DIRECTIONS TO THE STUDY AREA

From the City of Davis, take U.S. Highway 80 east towards Sacramento. Take the Mace Boulevard exit located within the eastern extent of the City's limits. Travel south on Mace Boulevard for approximately 2.6 miles. Turn right (west) onto Tremont Road. The Study Area will be on the left (southern side) immediately following the Tremont Cemetery. A signed property access form is included as **Attachment B**.

1.4 CONTACT INFORMATION

1.4.1 Applicant

Realized Dreams Ranch, LLC
Grant Guerrieri
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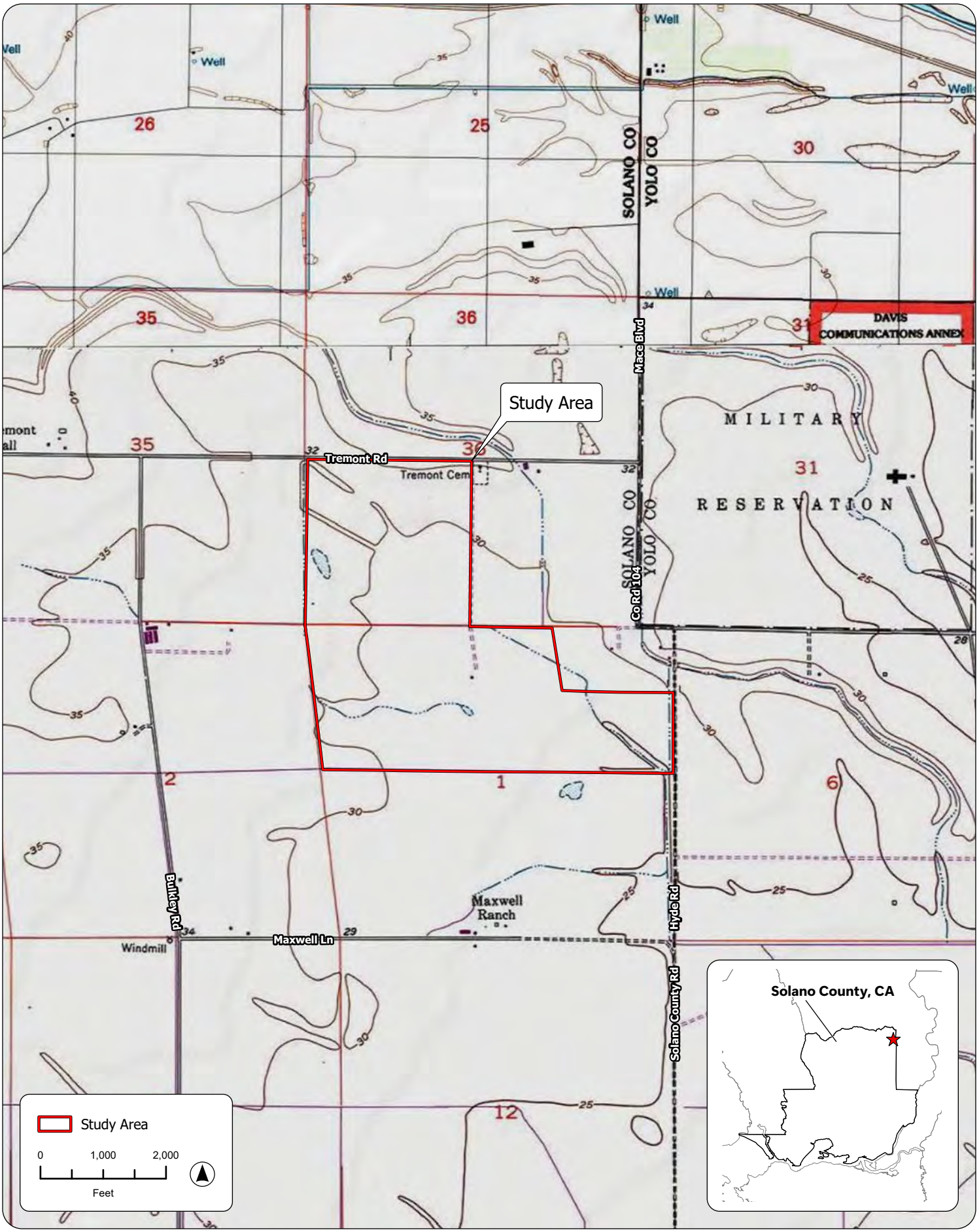
Email: gguerrieri@clarkpacific.com
28775 County Road 104, Davis, CA 95618

SOURCE: ESRI, 2025; Acorn Environmental, 4/23/2025

Figure 1
Regional Location



SOURCE: "Saxon, CA" USGS 7.5 Minute Topographic Quadrangle, T7N R2E & T8N R2E, Sections 1 & 36, Mt. Diablo Baseline & Meridian; Sonoma County GIS, 2025; ESRI, 2025; Acorn Environmental, 4/23/2025

Figure 2
Site and Vicinity

SOURCE: ESRI, 2025; Sonoma County GIS, 2025; Google Earth Aerial Photograph, 3/24/2025; Acorn Environmental, 4/23/2025

Figure 3
Aerial Overview

1.4.1 Agent / Environmental Consultant

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1.5 REGULATORY SETTING

1.5.1 Federal Regulations

At the federal level, the Federal Water Pollution Control Act, more commonly referred to as the Clean Water Act (CWA) (33 United States Code [USC] 1344), is the primary law regulating wetlands and surface waters. In Section 404 of the CWA, waters of the U.S. are defined as: all waters used in interstate or foreign commerce; all interstate waters including interstate wetlands; all other waters such as intrastate lakes, rivers, streams (including intermittent and ephemeral streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes or natural ponds, where the use, degradation, or destruction of which could affect interstate commerce; impoundments of these waters; tributaries of these waters; or wetlands adjacent to these waters (33 CFR Part 328). With non-tidal waters, in the absence of adjacent wetlands, the extent of federal jurisdiction is defined by the ordinary high water mark - the line on the shore established by the fluctuations of water, and indicated by a clear, natural line impressed on the bank, shelving, changes in soil character, destruction of terrestrial vegetation, or the presence of litter and debris. Wetlands are defined as: "…*those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions*," (Federal Register 1980, 1982).

Any person, firm, or agency planning to alter of work in navigable waterbodies, including the discharge of dredged or fill material, must first obtain authorization from the United States Army Corps of Engineers (USACE). Section 10 of the Rivers and Harbors Act of 1899 (33 USC 403) prohibits the obstruction or alteration of navigable waters of the US without a permit from USACE. Section 301 of the Federal Water Pollution Control Act, as amended ("Clean Water Act") prohibits the discharge of pollutants, including dredged or fill material, into waters of the U.S. without a Section 404 permit from USACE (33 USC 1344). Pertinent sections include:

- Section 401: Under CWA Section 401, every applicant for a federal permit or license for any activity which may result in a discharge to a water body must obtain certification that the proposed activity will comply with State water quality standards. The applicable Regional Water Quality Control Board must certify that a USACE Section 404 Permit action meets state water quality objectives by issuing a Water Quality Certification. California Department of Fish and Wildlife provides comments on USACE permit actions under the Fish and Wildlife Coordination Act.
- Section 402: Under CWA Section 402, any construction project that disturbs at least one acre of land requires enrollment in the State's construction general permitting program under the National Pollutant Discharge Elimination System and implementation of a storm water pollution prevention plan.

The United States Environmental Protection Agency (USEPA) and USACE (2008) issued joint guidance regarding Clean Water Act jurisdiction following the decision in the consolidated cases of Rapanos v. United States and Carabell v. United States. USACE and USEPA will assert jurisdiction over traditional navigable waters, and non-navigable tributaries that have relatively permanent flow, and adjacent wetlands. The agencies will decide jurisdiction on a case-by-case basis for non-navigable tributaries that do not have relatively permanent flow, and adjacent wetlands, based upon significant nexus criteria (Kennedy Test, Scalia Test). The agencies generally will not assert jurisdiction over ditches, swales or other erosional features, or isolated wetlands.

Effective September 8, 2023, the USEPA and the USACE have issued a new final rule in the Code of Federal Regulations to conform the definition of 'waters of the United States' to the 2023 Supreme Court's May 25, 2023, decision in Sackett vs. EPA. Under the new final rule, tributaries and wetlands must have a continuous surface connection to navigable waterways to be considered jurisdictional under the Clean Water Act. Only those relatively permanent, standing, or continuously flowing bodies of water meet the current definition. In certain states where litigation regarding this definition is ongoing, the pre-2015 definition of waters of the U.S. is in effect. California is not one of these states and currently operates under the definition as promulgated under the new final rule.

1.5.2 State Regulations

Waters of the State are regulated primarily under the California Water Code and the California Code of Regulations Title 23: Water and Title 27: Environmental Protection. All water features in California, on public and private lands, in both natural and artificial channels, including isolated wetland features and impermanent drainages that are not claimed as waters of the US, are considered waters of the State. Waters of the State are protected under the Porter-Cologne Water Quality Control Act and are regulated by the State Water Resources Control Board (SWRCB) and its 9 Regional Water Quality Control Boards. Additional statewide regulations that protect wetlands and riparian areas are the Wetlands Conservation Policy (Executive Order W-59-93), also known as the State's "No Net Loss" Policy for Wetlands, and the Policy for Implementation and Enforcement of the Nonpoint Source Pollution Control Program (State Water Board Resolution No. 2004-0030). All parties proposing to discharge materials that could affect waters of the State must file a report of waste discharge with the appropriate regional board. The regional board will then respond to the report by issuing waste discharge requirements (WDRs) in a public hearing, or by waiving WDRs (with or without conditions) for that proposed discharge. Both of the terms "discharge of waste" and "waters of the State" are broadly defined in the Porter-Cologne Act, such that discharges of waste include fill, any material resulting from human activity (including construction), or any other "discharge" that may directly or indirectly impact waters of the State.

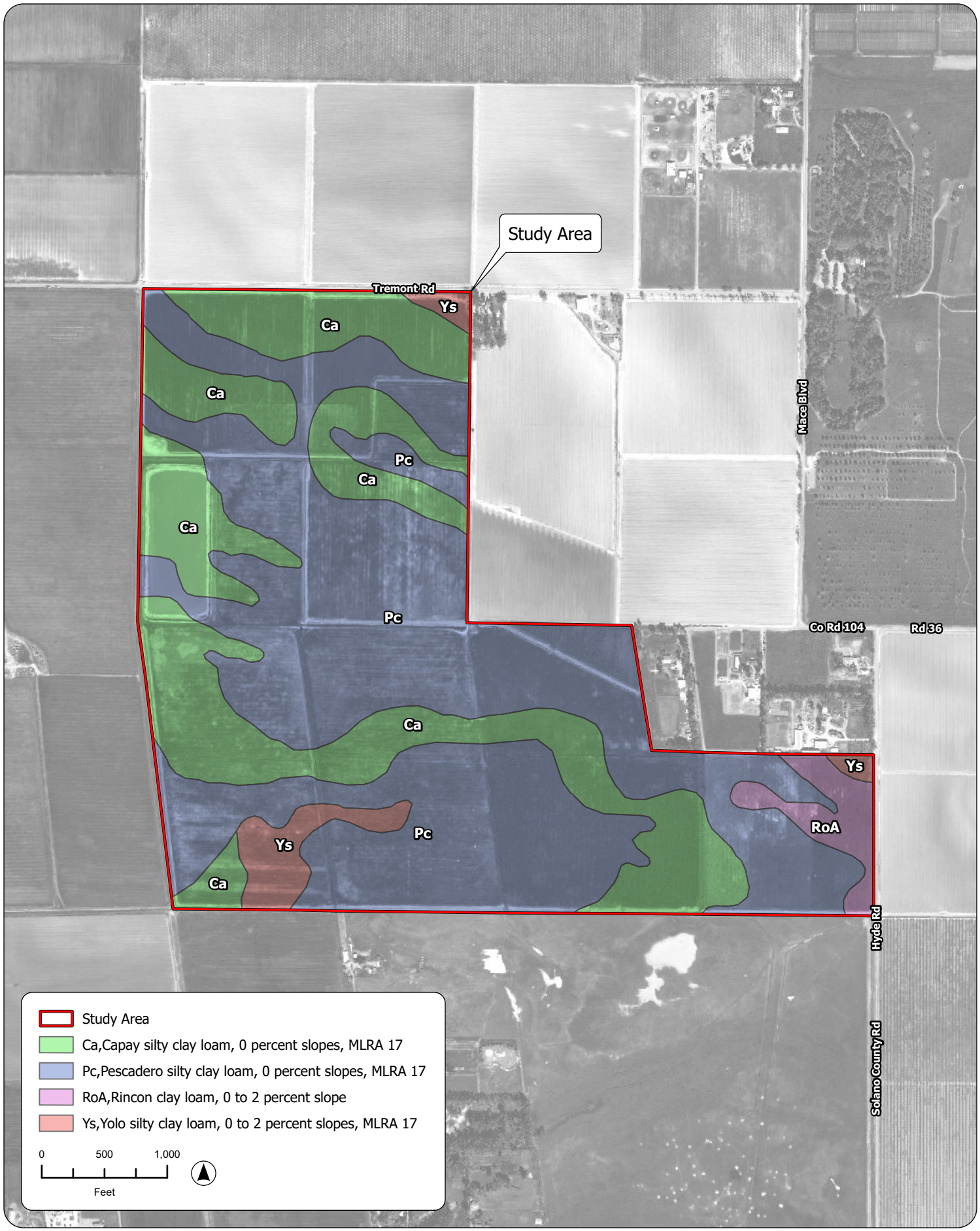
California Fish and Game Code (§1600-1607, 5650F) protects fishery resources by regulating "*...any activity that may substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake*." The California Department of Fish and Wildlife (CDFW) requires notification prior to project commencement, and issuance of a Lake or Streambed Alteration Agreement, if a proposed project will result in the alteration or degradation of waters of the State. The limit of CDFW jurisdiction is currently interpreted to be the "stream zone", defined as "that portion of the stream channel that restricts lateral movement of water" and delineated at "*the top of the bank or the outer edge of any riparian vegetation, whichever is more landward*". CDFW reviews the proposed actions and, if necessary, submits to the applicant a proposal for measures to protect affected fish and wildlife resources. The final proposal that is mutually agreed upon by CDFW and the applicant is the Streambed Alteration Agreement.

Section 2 | Environmental Setting

The Study Area is located within the California Floristic Province (Baldwin et al., 2012) within a region that experiences a Mediterranean-type climate, characterized by distinct seasons of hot, dry summers and wet, moderately cold winters (Sunset Western Garden Collection, 2025). Average monthly temperatures peak in July at 93 degrees Fahrenheit and reach a low in the month of December and January with an average temperature of 54 degrees Fahrenheit (U.S. Climate Data, 2025). Precipitation falls exclusively as rain, with January seeing the most precipitation at an average of 3.92 inches across the month.

Topography on the Study Area is relatively flat with elevations ranging from 40 to 55 feet above mean sea level. Land use on the Study Area is agricultural and consists of livestock forage production (hay) and livestock grazing. Land uses surrounding the Study Area are similarly agricultural in nature with rural residences. The Tremont Cemetery borders the northeastern border of the Study Area.

Soils on the Study Area include Capay silty clay loam (Ca), 0% slopes; Pescadero silty clay loam (Pc), 0% slopes, (62%); Rincon silty clay loam (RoA), 0 to 2% slopes; and Yolo silty clay loam, 0 to 2% slopes (**Figure 4**). The Study Area is primarily composed of Pescadero silty clay loam, which occurs through the middle of the Study Area, and Capay silty clay loam, which occurs along the western edge of the Study Area. Rincon silty clay loam occurs only in the southeastern corner while Yolo silty clay loam occurs in small portions of the northwest corner and southwestern corner.



SOURCE: NRCS Soils, 2025; ESRI, 2025; Sonoma County GIS, 2025; Google Earth Aerial Photograph, 3/24/2025; Acorn Environmental, 4/23/2025

Figure 4
Soil Types

Section 3 | Methods

The delineation was conducted in accordance with the manuals relevant to the region, including the following:

- 1987 Corps of Engineers Wetland Delineation Manual
- 2008 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0)
- 2008 A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States.
- 2010 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0). U.S. Army Engineer Research and Development Center Environmental Laboratory, Vicksburg, MS. 153 pp.

3.1 PRELIMINARY DATA GATHERING AND RESEARCH

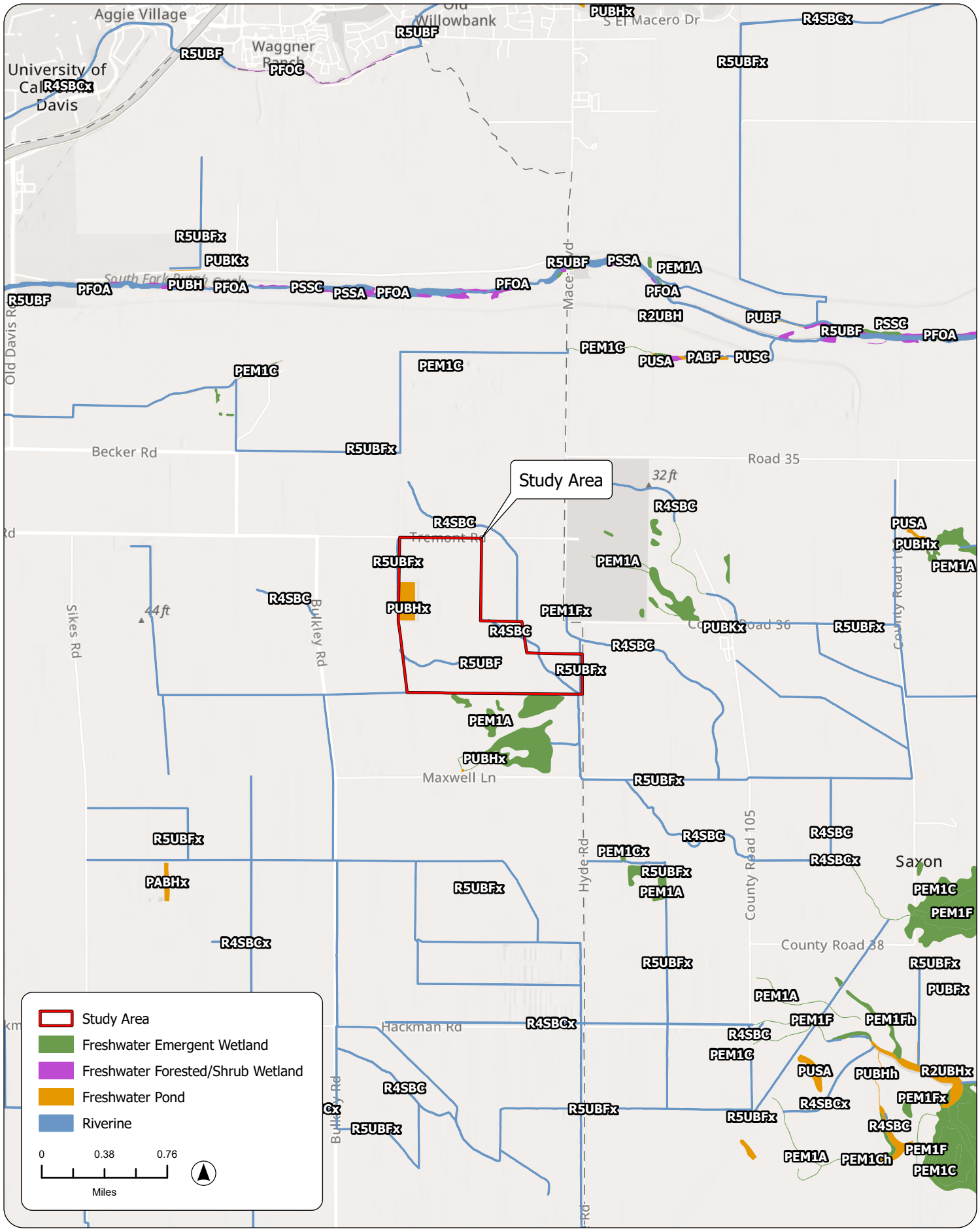
Prior to conducting the survey, the following information sources were reviewed:

- USGS 7.5-degree minute topographic quadrangle maps and aerial photography;
- United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) soil survey maps (**Figure 4**);
- Federal Emergency Management Agency (FEMA) Flood Insurance Rate (Flood Hazard Boundary) Maps (FEMA, 2025);
- USFWS National Wetland Inventory Maps (**Figure 5**); and
- Previously prepared environmental reports for the Study Area.

3.2 DELINEATION PROCEDURES

The purpose of the field determination was to: 1) identify water features that are subject to federal jurisdiction within the Study Area; and 2) if present, determine the boundary of each water feature. The entire Study Area was assessed in such a manner as to view all areas to the degree necessary to determine the vegetation community types and the presence or absence of jurisdictional water features. Wetland field determination procedures followed the USACE Wetlands Delineation Manual technical guidelines for a Level 2 Routine Field Determination (Environmental Laboratory, 1987). Additionally, the appropriate USACE regional supplement was also consulted.

The diagnostic environmental characteristics of hydrophytic vegetation, hydric soils, and wetland hydrology (i.e., 3-parameter approach) were used as the standard for determining if specific areas qualified as wetlands (Environmental Laboratory, 1987). A subject area was determined to be a wetland if all 3 requisite characteristics were present; as a general rule, evidence of a minimum of one positive indicator for each parameter must be found in order to make a positive wetland determination. These parameters are discussed below.



SOURCE: U.S. Fish and Wildlife Service, 2024; ESRI, 2025; Acorn Environmental, 4/23/2025

Figure 5
National Wetland Inventory

3.2.1 Hydrophytic Vegetation

Hydrophytic vegetation is defined as "...*the sum total of macrophytic plant life that occurs in areas where the frequency and duration of inundation or soil saturation produce permanently or periodically saturated soils sufficient in duration to exert a controlling influence on the plant species present*," (Environmental Laboratory, 1987).

Hydrophytic vegetation indicators included: prevalence of vegetation; majority of dominant plant species are obligate or facultative wetland plants (hydrophytes); morphological or physiological adaptations to saturated soil conditions; and species listed on the National List of Plant Species that Occur in Wetlands (USACE, 2025). This National List divides plant species into categories based upon their frequency of occurrence in wetlands. These categories are: OBL = obligate wetland plants that occur almost always in wetlands under natural conditions (estimated probability greater than 99%); FACW = facultative wetland plants that usually occur in wetlands, but occasionally occur in non-wetlands (estimated probability 67 – 99%); FAC = facultative wetland plants that are equally likely to occur in wetlands or non-wetlands (estimated probability 34 – 66 %); FACU – facultative upland plants that usually occur in non-wetlands, but occasionally are found in wetlands (estimated probability 1 – 33 %); UPL = obligate upland plants that almost always occur in non-wetlands (estimated probability greater than 99%); NI and UNK = insufficient information to determine status; NL = not listed; NA = no agreement by Regional Panel on status; NO = species does not occur in specified region; * (asterisk) indicates tentative assignment; + (positive) or – (negative) sign indicates higher or lower frequency in its category, respectively. During field investigations, the percentage of hydrophytic plant coverage was determined based on the ratio of wetland indicator species coverage present to the total plant coverage present. Generally, more than 50 percent of the dominant plant species cover must be FAC, FACW, or OBL to meet the hydrophytic vegetation criterion.

3.2.2 Hydric Soils

Hydric soils are defined as soils that are "...formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part." (Environmental Laboratory, 1987). A minimum of one week of inundation or 14 consecutive days of saturation during the growing season is a typical requirement. The criteria for establishing the presence of hydric soils vary among different soil types and drainage classes. Hydric soil indicators include evidence of reducing or redoximorphic conditions (including sulfidic odor, organic streaking), gleyed, mottled, or low-chroma soils, iron and manganese concretions, and low dissolved oxygen concentration (aquic moisture regime); organic soils (histosols); or mineral soils saturated and rich in organics (histic epipedon) (NRCS, 2006). Richardson and Vepraskas (2001) present a thorough discussion of wetland soil science. In the absence of visible field indicators, hydric soil conditions may be determined according to two criteria: 1) all dominant plant species have an indicator status of OBL and/or FACW (at least one dominant plant species must be OBL); and 2) areas below the level of ordinary high water are frequently flooded for long duration or very long duration during the growing season and possess and aquic (reducing) moisture regime. Soils are also classified as hydric on non-hydric by NRCS (2006).

3.2.3 Hydrology

Wetland hydrology "...*encompasses all hydrologic characteristics of areas that are periodically inundated or have soils saturated to the surface at some time during the growing season*" (Environmental Laboratory, 1987). Many factors influence site-specific hydrology, including the precipitation, stratigraphy, topography, soil permeability, and plant cover of the site. In general, inundation or saturation must occur for at least 5 percent of the growing season to qualify as wetland hydrology.

The degree of inundation or saturation at the subject site can vary widely from year to year depending on rainfall patterns within the watershed. Primary wetland hydrology indicators include visual observations of inundation or soil saturation, water marks and water-stained leaves, sediment deposits, drift lines, and drainage patterns in wetlands.

3.2.4 Data Collection Procedures

Sampling locations were established within potential wetland areas and within adjacent uplands, where present, to determine the boundary of wetlands. At each sampling point, the location was georeferenced using a GPS receiver and marked on an aerial photograph; a numbered pin flag or lathe was placed, where necessary, to assist other surveyors. Information on vegetation, soils, and hydrology was recorded on a USACE Routine Wetland Determination Data Form.

Dominant and subdominant plant species in each vegetative stratum (e.g., tree, shrub, forb) that occurred within approximately 5 to 10 feet of the sampling point were identified and recorded, and their wetland indicator status determined. All visible flora observed were recorded in a field notebook and identified to the lowest possible taxon; a hand lens was used where necessary. When a specimen could not be identified *in situ*, a photograph or voucher specimen (depending upon scientific permit requirements) was taken and identified later in the laboratory using a dissecting scope where necessary. Taxonomic determinations and nomenclature followed Baldwin et al. (2012) and University of California at Berkeley (2025).

Where necessary, a soil pit was dug with a spade to expose at least 16 inches of soil profile, and the sample evaluated for hydric soil indicators. Munsell Soil Color Charts (2000 edition, Gretagmacbeth, Inc.) were used to determine soil matrix and mottle color (hue, value, and chroma), and soil type and particle size was also noted. NRCS (2002, 2006) Soil Taxonomy handbook was referenced for soil classification where necessary. Based on the results of the 3-parameter test, the extent of each potential wetland was mapped in the field using a GPS receiver capable of submeter accuracy and/or demarcated on aerial photographs for later “heads-up” digitization. Wetlands and other aquatic habitats were classified using the USFWS “Classification System for Wetland and Deepwater Habitats”, or “Cowardin class” (Cowardin et al., 1979; USFWS 2014). A determination was made whether normal environmental conditions exist; atypical conditions followed a modified procedure described in the USACE Manual (Environmental Laboratory, 1987). Geographic analyses, including acreage calculations, were performed using geographical information system software (ArcGIS 10, ESRI, Inc.).

For identification of water features other than wetlands that are subject to federal or State jurisdiction, 2 principal field characteristics were evaluated: 1) the presence of a channel; and 2) the presence of an ordinary high water mark. The ordinary high water mark is defined in 33 CFR Part 329.11 as the line on the shore established by the fluctuations of water, and indicated by a clear, natural line impressed on the bank, shelving, changes in soil character, destruction of terrestrial vegetation, or the presence of litter and debris. Other characteristics were noted, where possible: description of hydrologic feature type, length, approximate discharge volume, gradient, range between low and high water mark, width of riparian vegetation, etc. For determination of whether these water bodies constituted waters of the US, USACE regulations (33 CRF 328) were consulted.

Section 4 | Results

4.1 FIELD SURVEY

Dr. G.O. Graening conducted the field assessment on April 22, 2025. Complete coverage, variable-intensity pedestrian surveys were performed of the Study Area, modified to account for differences in terrain, vegetation density, and visibility. Sampling points were established at key locations and analyzed for the presence or absence of wetland (or for channels, ordinary high water mark) indicators; these points are documented in the data sheets in **Attachment C**. The results of the analyses of Study Area vegetation, soils, and hydrology are presented in the following sections, followed by the recommended jurisdictional determination.

4.2 TERRESTRIAL VEGETATION COMMUNITIES

Terrestrial habitats observed within the Study Area are limited to agriculture. Based on historical aerial imagery, the Study Area has been in consistent agricultural production for years, with clear evidence of row crop production. At the time of the April 2025 survey, the majority of the Study Area was planted in commercial hay species. The northern portion of the Study Area was sown with alfalfa, and the balance of agricultural areas were in production of forage hay grasses, primarily perennial ryegrass (*Lolium perenne*) and hare barley (*Hordeum murinum*). Evidence of flood irrigation was observed. Areas not actively cultivated are limited to dedicated infrastructure for ongoing maintenance of agricultural activities on the Study Area such as internal dirt roadways. These areas are generally devoid of vegetation and are regularly managed. Where vegetation is present, it is generally sparse and limited to hardy, weedy species that are subject to ongoing removal. A total of 395.8 acres within the Study Area is in agricultural use. Classification and description of terrestrial plant communities follows the methodology accepted by CDFW (2019), which is based on Sawyer and Keeler-Wolf's (1995) Manual of California Vegetation. Habitats are shown on **Figure 6**. **Attachment D** contains a list of plant species observed within the Study Area, and site photographs are provided in **Attachment E**.

4.3 SOIL TYPES

The NRCS mapped soil units occurring within the Study Area are listed and described in **Table 1** below and are shown in **Figure 4**. None of the NRCS mapped soil units within the Study Area were found to be designated "hydric" by NRCS. NRCS provides this disclaimer: "Lists of hydric soils along with soil survey maps are good off-site ancillary tools to assist in wetland determinations, but they are not a substitute for observations made during on-site investigations."

4.4 HYDROLOGY

Topography on and around the Study Area is relatively flat. Surface waters are largely comprised of networks of manmade ditches used for agricultural irrigation and flood control. The Study Area is within the Tremont Cemetery (180201630601) watershed (USEPA, 2025). According to the FEMA Flood Hazard Boundary Map of the region, the Study Area is wholly within the 100-year floodplains (Flood Zone A; FEMA, 2025).

SOURCE: ESRI, 2025; Sonoma County GIS, 2025; Google Earth Aerial Photograph, 3/24/2025; Acorn Environmental, 4/23/2025

Figure 6
Habitat Types

Table 1: Soils within the Study Area

Soil Type	Soil Characteristics	Hydric Soil?
Capay silty clay loam, 0 percent slopes, MLRA 17	▪ Prime Farmland if irrigated ▪ Moderately well drained ▪ High runoff class ▪ 80+ inches to groundwater	No
Pescadero silty clay loam, 0 percent slopes, MLRA 17	▪ Not Prime Farmland ▪ Somewhat poorly drained ▪ Very high runoff class ▪ 4-85 inches to groundwater	No
Rincon clay loam, 0 to 2 percent slope	▪ Prime Farmland if Irrigated ▪ Well drained ▪ Medium runoff class ▪ 80+ inches to groundwater	No
Yolo silty clay loam, 0 to 2 percent slopes, MLRA 17	▪ Prime Farmland if Irrigated ▪ Well drained ▪ Low runoff class ▪ 80+ inches to groundwater	No

Source: NRCS, 2025

4.5 NATIONAL WETLANDS INVENTORY / PREVIOUS DELINEATIONS

The USFWS National Wetland Inventory (NWI) digital map of the Study Area is included as **Figure 5** and was reviewed prior to the delineation field efforts and visited in the field to verify presence and accuracy of mapping. NWI features within the Study Area are described as “Riverine” habitat, with the exception of a feature classified as a freshwater pond (palustrine). NWI reports the location of these features as being interpreted using 1:65,000 scale, color infrared imagery from 1985. This database was not used to conclude that a wetland was present or absent in the Study Area but was used as an information source.

A preliminary review of aquatic resources on the Study Area was performed by Soar Environmental Consulting on August 6-7, 2024 (Soar Environmental Consulting, 2024). The draft results of this review were erroneously sent to USACE prior to a complete quality control review of the data and report body. This report was reviewed during the preparation of this Aquatic Resources Delineation with the understanding that errors are present within the draft Aquatic Resources Delineation that was prepared by Soar Environmental Consulting.

Section 5 | Delineation Results and Jurisdictional Recommendations

5.1 DELINEATED WATER RESOURCES

Hydrologic features were identified and mapped within the Study Area. This map has not been verified by USACE or SWRCB and thus represents an unofficial demarcation of the potential limits of jurisdiction. Various survey points were established for the delineation and data sheets completed.

5.1.1 Agricultural Irrigation Ditches

The definition of irrigation ditches that do not meet the criteria of "Waters of the U.S." is provided in 40 CFR §120.2(b)(3) which states "ditches (including roadside ditches) excavated wholly in and draining only dry land and that do not carry a relatively permanent flow of water." The agricultural irrigation ditches in the Study Area were dug from uplands and drain uplands (withdrawal for irrigation). These features do not carry a permanent flow. Therefore, these features do not meet the criteria for waters of the U.S.

5.1.2 Agricultural Water Storage Basin

The definition of an artificial lake is provided in 40 CFR §120.2(b)(5) which states "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" are also not "Waters of the United States". The agricultural water storage basin is a manmade feature that was created in uplands by placement of berms. The agricultural water storage basin was established pursuant to a water right that allowed the landowner to divert water from the County Irrigation District's ditches for the purposes of agricultural irrigation and stock watering. This feature was established in uplands and drains to uplands (withdrawal for irrigation). This feature is isolated and not connected to other surface waters. Manmade isolated features that do not have a hydrological connection to other surface waters do not meet the definition of a water of the U.S.

5.2 WATER RESOURCES POTENTIALLY SUBJECT TO USACE JURISDICTION

Identified hydrologic features were subjected to the 3-parameter test and guidance of current court decisions. Based upon these criteria, the following water features within the Study Area were determined to be potentially subject to USACE jurisdiction (**Figure 7**). As described in Section 5.1, the aquatic resources identified in the Study Area do not meet the definition of waters of the U.S. Therefore, there are no features considered potentially subject to USACE jurisdiction.

Aquatic Resources Classification			Aquatic Resource Size		
Aquatic Resource Name	**Cowardin**	**Location (Lat/Long)**	**(sq. ft.)**	**(acre)**	**(linear feet)**
Channels					
none	---	---	0	0.00	0
		Total Channels	**0**	**0.00**	**0**
Wetlands					
none	---	---	0	0.00	
		Total Wetlands	**0**	**0.00**	

Delineator: Dr. G.O. Graening, 4/23/2025

SOURCE: ESRI, 2025; Sonoma County GIS, 2025; Google Earth Aerial Photograph, 3/24/2025; Acorn Environmental, 4/24/2025

Figure 7
Aquatic Resources Delineation

5.2.1 Upland Features Not Expected to be Subject to Federal Regulation

Upland features such as agricultural production areas are not expected to be subject to federal regulation.

5.3 WATER RESOURCES POTENTIALLY SUBJECT TO STATE JURISDICTION

Identified hydrologic features were compared against the definition of waters of the State as currently enforced by SWRCB. The following presents a discussion on the jurisdictional status of identified aquatic resources and the need for permitting prior to impacts.

5.3.1 Agricultural Irrigation Ditches

Waters of the State are currently defined to include any surface water or groundwater, including saline waters and man-made features, within the boundaries of the State. The agricultural irrigation ditches in the Study Area, including the Solano Irrigation District water conveyance ditches, consist of manmade features that were created within uplands and drain to uplands for use as crop irrigation. Therefore, the agricultural irrigation ditches within the Study Area would be considered waters of the State. However, the State Policy for Water Quality Control: State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State provides exemptions for certain ditches. Exemptions within Section IV.D(2c) applicable to the agricultural irrigation ditches include:

1. Agricultural ditches with ephemeral flow that are not a relocated water of the state or excavated in a water of the state.
2. Agricultural ditches with intermittent flow that are not a relocated water of the state or excavated in a water of the state, or that do not drain wetlands other than any wetlands described in sections (iv) or (v).
3. Agricultural ditches that do not flow, either directly or through another water, into another water of the state.

Based on this, the agricultural irrigation ditches, including the Solano Irrigation District water conveyance ditches, would likely be considered waters of the State that are exempt from Waste Discharge Requirement permitting.

5.3.2 Agricultural Water Storage Basin

The agricultural water storage basin is a manmade feature created in uplands by installation of a berm above grade to retain water. This feature was initially constructed as part of a water right that allowed for use of tail water from the Solano Irrigation District's ditches and has since been used for agricultural irrigation and stock watering, primarily of sheep and cattle. The State Policy for Water Quality Control: State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State generally considers artificial wetlands to be waters of the state but does provide an exemption in Section II 3(d)v. when the use is for agricultural irrigation and stock watering. Therefore, the agricultural water storage basin does not meet the definition of a water of the state. Further, permitting exceptions listed in Section IV.D(2c) include an exemption for "artificial, constructed lakes and ponds created in dry land such as farm and stock watering ponds, irrigation ponds, and settling basins." Thus, even though the agricultural water storage basin does not meet the definition of a water of the state, it also exempt from permitting requirements.

5.3.3 Riparian Stream Zones Regulated by CDFW

Riparian habitat was not observed within the Study Area.

5.3.4 Upland Features Not Expected to be Subject to State Regulation

Upland features such as agricultural production areas are not expected to be subject to State regulation.

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Section 7 | Qualifications of Surveyors/Authors

G.O. Graening, Ph.D., M.S.E.

G. O. Graening holds a Doctorate in Biological Sciences and a Master of Science in Biological Engineering, and is a certified arborist (International Society of Arboriculture). Dr. Graening has 30 years of experience in environmental assessment and research, including the performance of numerous wetland delineations and aquatic restoration projects. Dr. Graening also served as an adjunct professor of biology at California State University Sacramento for 10 years and was an active researcher in the area of conservation biology and groundwater ecology.

Kelli Raymond, B.S.

Ms. Raymond holds a B.S. in Animal Biology with a focus on Wildlife Ecology. She has approximately 10 years of experience collecting field data and preparing environmental assessments. Ms. Raymond has worked in several states across the U.S. performing biological resources surveys, including plant surveys, wetland delineations, and wildlife utilization monitoring. She also has experience live handling numerous wildlife species, including fish, migratory birds, and big game. Ms. Raymond is experienced in the preparation of Biological Assessments and Section 7 consultation with both the USFWS and NMFS under the federal Endangered Species Act.

Attachment A

USACE Minimum Standards Checklist

MINIMUM STANDARDS FOR ACCEPTANCE OF AQUATIC RESOURCES DELINEATION REPORTS

U.S. ARMY CORPS OF ENGINEERS **BUILDING STRONG®**

January 2016

The U.S Army Corps of Engineers, through its Regulatory Program, regulates certain activities in waters of the United States. Waters of the U.S. are defined under 33 CFR Part 328. In order for the Corps to determine the amount and extent of waters of the United States at a site, aquatic resources must first be delineated in accordance with established regulatory standards, guidance and protocol, such as the 1987 Corps of Engineers Wetlands Delineation Manual and appropriate regional supplements. Before making any permit decision, the Corps is responsible for conducting or verifying the delineation and determining which of the aquatic resources have the potential to fall under federal jurisdiction.

Due to limited staffing and resources, the Corps' Sacramento District recommends permit applicants employ the services of individuals experienced in delineating aquatic resources. Permit applicants are further encouraged early in the project planning stages to submit the delineation, along with a request for a preliminary or approved jurisdictional determination, and engage in a pre-application consultation with their local District office. Early consultation may help identify potential concerns and result in a quicker permit decision.

The District has established minimum standards for delineation reports to insure consistency and accuracy in the delineation of aquatic resources, which will minimize potential delays. The standards are based on years of experience conducting and verifying delineations, as well as the best practices of environmental consultants. Delineations submitted for verification must follow the standards, unless determined to not be practical on a case-by-case basis. Situations where adherence to the standards may not be practical include activities with small permanent or temporary impacts to aquatic resources (under 0.10 acre), applicants with limited financial resources, and emergencies. The District will notify the requestor for delineation submittals that do not contain sufficient information to accurately identify the limits of waters of the U.S.

Aquatic resources delineation reports submitted to the District must include the following:

☒ A cover letter requesting a jurisdictional determination. The letter must specify whether a preliminary or approved jurisdiction determination is requested.

☒ A signed statement from the property owner(s) allowing Corps personnel to enter the property and to collect samples during normal business hours. If the property is land-locked, the owner or proponent must obtain permission from the adjacent property owner(s) to provide access for Corps personnel.

☒ A statement that the delineation has been conducted in accordance with the 1987 Corps of Engineers Wetlands Delineation Manual and appropriate regional supplement(s). The regional supplement(s) used must be identified. For ordinary high water mark (OHWM) delineations, a statement indentifying the use of the OHWM field guide must be included.

☒ Directions to the survey area.

☒ Contact information for the applicant(s), property owner(s), and agent(s).

☒ A narrative describing all aquatic resources at the site and an explanation for the mapped boundaries, especially for resources containing complex transition zones. If the site contains resources that meet one or two wetland criteria or do not exhibit a clear OHWM, describe the rationale for not delineating these features. Examples include erosional features, upland swales, and other upland areas that appear “wet” on satellite or aerial imagery.

☒ The total acreage of the survey area.

☒ Date(s) field work was completed.

☒ A table listing all aquatic resources. The table will include the name of each aquatic resource, its Cowardin type, acreage, and location (latitude/longitude). For linear features, the table must show both acreage and linear feet.

☒ A description of existing field conditions. The field condition description may include current land use, flood/drought conditions, irrigation practices, modifications to the site, and any characteristics considered atypical.

☒ A discussion of the hydrology at the site, including all known surface or subsurface sources, drainage gradients, surface water connections to the nearest traditional navigable waterway or interstate water, and any potential influence for manmade water sources, such as irrigation. The discussion should also identify the nearest “blue-line” waterway or other feature found on the most recent USGS map.

☐ If remote sensing was used in the delineation, provide an explanation of how it was used and include the name, date and source of the tools used and copies of applicable maps/photographs.

☒ A discussion of plant communities and habitat types present at the site and a list of the scientific name, common name, and wetland indicator status of all plants.

☒ Soil descriptions, soil map(s), and a discussion of hydric soils or soils with hydric inclusions at the site.

☐ Any observed or documented interstate or foreign commerce associated with aquatic resources found on the site, specifically recreation or other use by interstate or foreign travelers, sale of fish or shellfish in interstate or foreign commerce, and use by industries operating in interstate or foreign commerce.

☒ A site location map on a 7.5-minute USGS quadrangle. The map must provide the name of the USGS quadrangle, Section, Township, Range, the UTM or latitude and longitude.

☒ A completed copy of the *Aquatic Resources Excel* spreadsheet must be submitted. The current version of the spreadsheet can be found at the following website: *www.spk.usace.army.mil/Missions/Regulatory/Jurisdiction/WetlandDelineations.aspx*

☒ A map of all delineated aquatic resources ("Aquatic Resouces Delineation Map") in accordance with the *Final Map and Drawing Standards for the South Pacific Division Regulatory Program* (Mapping Standards) and showing the following:

> ☒ All aquatic resources delineated must be clearly shown on the map. Because only the Corps determines the regulatory status of each aquatic resource, the map must not include any labeling about jurisdiction. If the requestor believes one or more aquatic resources are not jurisdictional, the rationale should be included in the delineation report and the resource(s) should be identified on the map.
> ☐ At least one set of paired data points, documented in data forms, for each aquatic resource or complex. The paired data points must be located close to the delineated boundary. Additional data points may be necessary, and should be shown on the map, depending on various factors including the size and shape of the aquatic resource, changes in vegetation communities, and slope.
> ☒ A reference block that identifies the site or project name, individual(s) who conducted the delineation, date of the map, and date(s) of any revisions.

☒ Completed data forms including all essential information to make a decision.

☒ A description of the methods used to survey the aquatic resource boundaries. For most delineations, the Sacramento District requires GPS equipment for the collection of data. At a minimum the GPS equipment must have the capability of sub-meter (<=1 meter) level accuracy. If other methods are used, the report must contain a rationale for this deviation.

☒ Digital data for the site, aquatic resource boundaries, and data point locations must be provided in a geographic information system (GIS) format, with ESRI Shape-files being the preferred format. Each GIS data file must be accompanied by a metadata file containing the appropriate geographic coordinate system, projection, and datum. If GIS data is unavailable or otherwise cannot be produced and the Corps determines a site visit is necessary, the aquatic resource boundaries must be physically marked with numbered flags or stakes before the Sacramento District can complete a delineation verification.

Often, additional information can expedite the verification of a delineation. Particularly helpful data includes site specific topographic maps, National Wetland Inventory (NWI), Light Detection and Ranging (LIDAR), satellite, aerial and ground photographs, floodplain maps, and related reports.

The Corps' Sacramento District developed a suggested format for aquatic resources delineation reports, which is attached to this document. This format is not required but rather is intended to assist requestors with the preparation of a delineation report in accordance with these minimum standards.

More information regarding aquatic resource delineations, including reference materials, the *Aquatic Resources Excel* spreadsheet, and the suggested format for the aquatic resources delineation report can be found on our website at: *www.spk.usace.army.mil/Missions/Regulatory/Jurisdiction/WetlandDelineations.aspx*.

Attachment B

Property Access Form

U.S. ARMY CORPS OF ENGINEERS

REQUEST FOR CORPS JURISDICTIONAL DETERMINATION

*__Authorities__: Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Marine Protection, Research, and Sanctuaries Act, Section 103, 33 USC 1413; Regulatory Program of the U.S. Army Corps of Engineers; Final Rule for 33 CFR Parts 320-332. __Principal Purpose__: The information that you provide will be used in evaluating your request to determine whether there are any aquatic resources within the project area subject to federal jurisdiction under the regulatory authorities referenced above. __Routine Uses__: This information may be shared with the Department of Justice and other federal, state, and local government agencies, and the public, and may be made available as part of a public notice as required by federal law. Your name and property location where federal jurisdiction is to be determined will be included in the approved jurisdictional determination (AJD), which will be made available to the public on the District's website and on the Headquarters USACE website. __Disclosure__: Submission of requested information is voluntary; however, if information is not provided, the request for an AJD cannot be evaluated nor can an AJD be issued.

CORPS USE ONLY:
DATE RECEIVED:

PROJECT NO.:

1. PROPERTY LOCATION:

Street Address: 8330 Tremont Road

City/Township/Parish: Dixon

County: Solano State: California

Acreage of Parcel/Review Area for JD: 426

Section: 35 Township: 8N Range: 2E

Latitude: 38.494596 Longitude: -121.705238

(For linear projects, please include the center point of the proposed alignment.)

2.REQUESTOR CONTACT INFORMATION:

Typed or Printed Name: Kt Alonzo

Company Name: Acorn Environmental

Street Address: 5170 Golden Foothill Parkway

City: El Dorado State: CA ZIP: 95762

Phone Number: (530) 863-6191

E-mail: kalonzo@acorn-env.com

3. MAP: Please attach a survey/plat map and vicinity map identifying location and review area for the JD.

4. REASON FOR REQUEST (check as many as applicable):

- ☐ I intend to construct/develop a project or perform activities on this parcel which would be designed to avoid all aquatic resources.
- ☒ I intend to construct/develop a project or perform activities on this parcel which would be designed to avoid all jurisdictional aquatic resources under Corps authority.
- ☐ I intend to construct/develop a project or perform activities on this parcel which may require authorization from the Corps, and the JD would be used to avoid and minimize impacts to jurisdictional aquatic resources and as an initial step in a future permitting process.
- ☐ I intend to construct/develop a project or perform activities on this parcel which may require authorization from the Corps; this request is accompanied by my permit application and the JD is to be used in the permitting process.
- ☐ I intend to construct/develop a project or perform activities in a navigable water of the U.S. which is included on the district Section 10 list and/or is subject to the ebb and flow of the tide.
- ☐ A Corps JD is required in order to obtain my local/state authorization.
- ☐ I intend to contest jurisdiction over a particular aquatic resource and request the Corps confirm that jurisdiction does/does not exist over the aquatic resource on the parcel.
- ☐ I believe that the site may be comprised entirely of dry land.
- ☐ Other:

5. TYPE OF DETERMINATION BEING REQUESTED:

- ☒ I am requesting an approved JD.
- ☐ I am requesting a preliminary JD.
- ☐ I am requesting a “no permit required” letter as I believe my proposed activity is not regulated.
- ☐ I am unclear as to which JD I would like to request and require additional information to inform my decision.

6. OWNERSHIP DETAILS:

- ☐ I currently own this property.
- ☐ I plan to purchase this property.
- ☒ I am an agent/consultant acting on behalf of the requestor.
- ☐ Other (please explain:)

By signing below, you are indicating that you have the authority, or are acting as the duly authorized agent of a person or entity with such authority, to and do hereby grant Corps personnel right of entry to legally access the site if needed to perform the JD. Your signature shall be an affirmation that you possess the requisite property rights to request a JD on the subject property.

Signature: Kaitlan Alonzo Digitally signed by Kaitlan Alonzo Date: 2025.04.24 16:23:37 -07'00' Date:

Attachment C

Data Sheets

SID Canal

Project: Realized Dreams Ranch subdivision **Date:** 4/22/25 **Time:**
Project Number: 2514 **Town:** **State:**
Stream: n/a SID canal **Photo begin file#** **Photo end file#**
Investigator(s): Dr. Geo Graening

Y ☐ / N ☒ Do normal circumstances exist on the site?

Y ☒ / N ☐ Is the site significantly disturbed?

Location Details: SID canal near pond

Projection: **Datum:**
Coordinates: 38.49138, -121.7116

Notes: entire site has been graded; regular disturbance from active agriculture and weed control

Brief site description:
SID canal near ag reservoir; irregularly flowing; also used for flood control

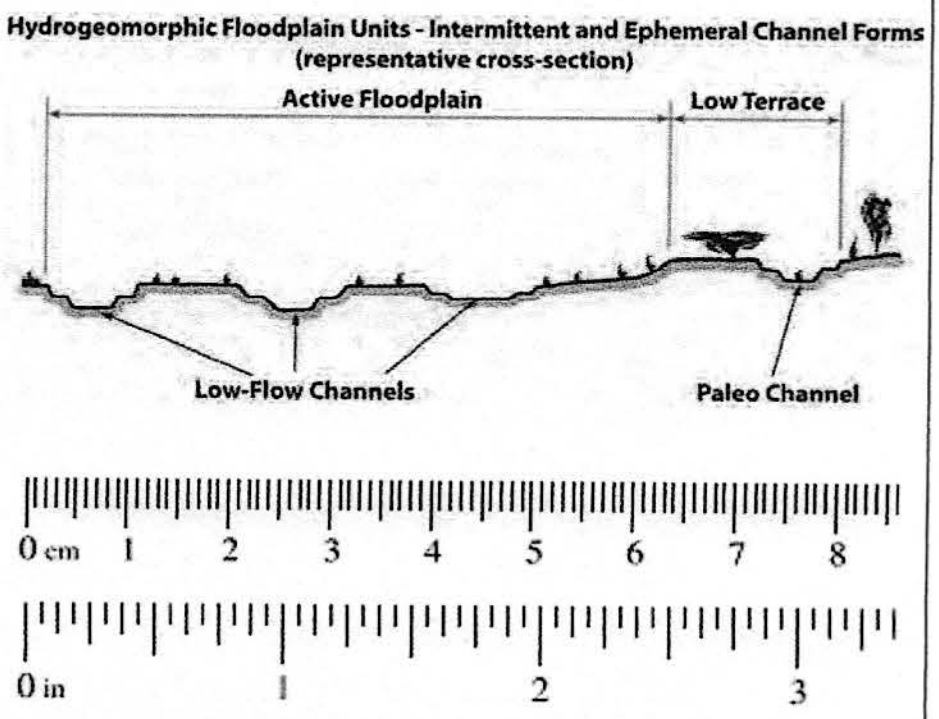
Checklist of resources (if available):

- ☒ Aerial photography
  Dates:
- ☒ Topographic maps
  Scale:
- ☐ Geologic maps
- ☐ Vegetation maps
- ☒ Soils maps
- ☐ Rainfall/precipitation maps
- ☒ Existing delineation(s) for site
- ☒ Global positioning system (GPS)
- ☐ Other studies

- ☐ Stream gage data n/a
  Gage number:
  Period of record:
- ☐ Clinometer / level
- ☐ History of recent effective discharges
- ☐ Results of flood frequency analysis
- ☐ Most recent shift-adjusted rating
- ☐ Gage heights for 2-, 5-, 10-, and 25-year events and the most recent event exceeding a 5-year event

The dominant Wentworth size class that imparts a characteristic texture to each zone of a channel cross-section is recorded in the average sediment texture field under the characteristics section for the zone of interest.

Millimeters (mm)	Inches (in)	Wentworth size class	
10.08	256	Boulder	
2.56	64	Cobble	Gravel
0.157	4	Pebble	
0.079	2.00	Granule	
0.039	1.00	Very coarse sand	
0.020	0.50	Coarse sand	
0.0098	0.25	Medium sand	Sand
0.005	0.125	Fine sand	
0.0025	0.0625	Very fine sand	
0.0012	0.031	Coarse silt	
0.00061	0.0156	Medium silt	
0.00031	0.0078	Fine silt	Silt
0.00015	0.0039	Very fine silt	
		Clay	Mud



☑ **Walk the channel and floodplain within the study area to get an impression of the vegetation and geomorphology present at the site. Record any potential anthropogenic influences on the channel system in "Notes" above.**

☐ **Locate the low-flow channel (lowest part of the channel). Record observations.**

Characteristics of the low-flow channel:

Average sediment texture: fine silt

Total veg cover: 10 % Tree: 0 % Shrub: 0 % Herb: 10 %

Community successional stage:

- ☒ NA
- ☐ Early (herbaceous & seedlings)
- ☐ Mid (herbaceous, shrubs, saplings)
- ☐ Late (herbaceous, shrubs, mature trees)

Dominant species present: Persicaria, Lemna, Typha

Other:
- ☐ canal is 6 to 8 feet deep and 8 feet wide
- ☐
- ☐
- ☐

☒ **Walk away from the low-flow channel along cross-section. Record characteristics of the low-flow/active floodplain boundary.**

Characteristics used to delineate the low-flow/active floodplain boundary:

- ☐ Change in total veg cover ☐ Tree ☐ Shrub ☐ Herb
- ☐ Change in overall vegetation maturity
- ☐ Change in dominant species present
- ☒ Other
  - ☒ Presence of bed and bank
  - ☒ Drift and/or debris
  - ☐ Other: _____
  - ☐ Other: _____

☐ **Continue walking the channel cross-section. Record observations below.** n/a

Characteristics of the low-flow channel:

Average sediment texture: _____

Total veg cover: _____ % Tree: _____ % Shrub: _____ % Herb: _____ %

Community successional stage:

- ☐ NA
- ☐ Early (herbaceous & seedlings)
- ☐ Mid (herbaceous, shrubs, saplings)
- ☐ Late (herbaceous, shrubs, mature trees)

Dominant species present: _____

Other:
- ☐
- ☐ 1 channel only
- ☐
- ☐

☑ **Continue walking the channel cross-section. Record indicators of the active floodplain/low terrace boundary.**

Characteristics used to delineate the active floodplain/ low terrace boundary:

- ☐ Change in average sediment texture
- ☐ Change in total veg cover ☐ Tree ☐ Shrub ☐ Herb
- ☐ Change in overall vegetation maturity
- ☐ Change in dominant species present
- ☒ Other
  - ☑ Presence of bed and bank
  - ☐ Drift and/or debris
  - ☐ Other: _____
  - ☐ Other: _____

☒ **Walk the active floodplain/low terrace boundary both upstream and downstream of the cross-section to verify that the indicators used to identify the transition are consistently associated the transition in both directions.**

Consistency of indicators used to delineate the active floodplain/low terrace boundary:

- Y ☐ N ☐ Change in average sediment texture
- Y ☐ N ☐ Change in total veg cover ☐ Tree ☐ Shrub ☐ Herb
- Y ☐ N ☐ Change in overall vegetation maturity
- Y ☐ N ☐ Change in dominant species present
- Y ☒ N ☒ Other:
  - Y ☒ N ☐ Presence of bed and bank
  - Y ☐ N ☐ Drift and/or debris
  - Y ☐ N ☐ Other: _____
  - Y ☐ N ☐ Other: _____

☐ **If the characteristics used to delineate the active floodplain/low terrace boundary were NOT consistently associated with the transition in both the upstream and downstream directions, repeat all steps above.**

☒ **Continue walking the channel cross-section. Record characteristics of the low terrace.**

Characteristics of the low terrace:

Average sediment texture: _____

Total veg cover: 100 % Tree: ____ % Shrub: ____ % Herb: 100 %

Community successional stage:

- ☐ NA
- ☒ Early (herbaceous & seedlings)
- ☐ Mid (herbaceous, shrubs, saplings)
- ☐ Late (herbaceous, shrubs, mature trees)

Dominant species present: upland grasses (Avena, Bromus, Hordeum)

Other:
- ☐ _____
- ☐ _____
- ☐ _____
- ☐ _____

☒ **If characteristics used to delineate the active floodplain/low terrace boundary were deemed reliable, acquire boundary.**

Active floodplain/low terrace boundary acquired via:

- ☐ Mapping on aerial photograph
- ☒ Digitized on computer
- ☒ GPS
- ☐ Other: _____

Agricultural Ditch

Project: Realized Dreams Ranch Subdivision
Project Number: 2514
Stream: n/a Ditch
Investigator(s): Dr. Geo Gmeiner

Date: 4/22/25
Time:
Town:
State:
Photo begin file#
Photo end file#

Y ☐ / N ☑ Do normal circumstances exist on the site?

Y ☑ / N ☐ Is the site significantly disturbed?

Location Details:

Projection: **Datum:**
Coordinates: 38.4848, -121.7092

Notes: entire site has been graded; irrigation ditches recently plowed & active agriculture

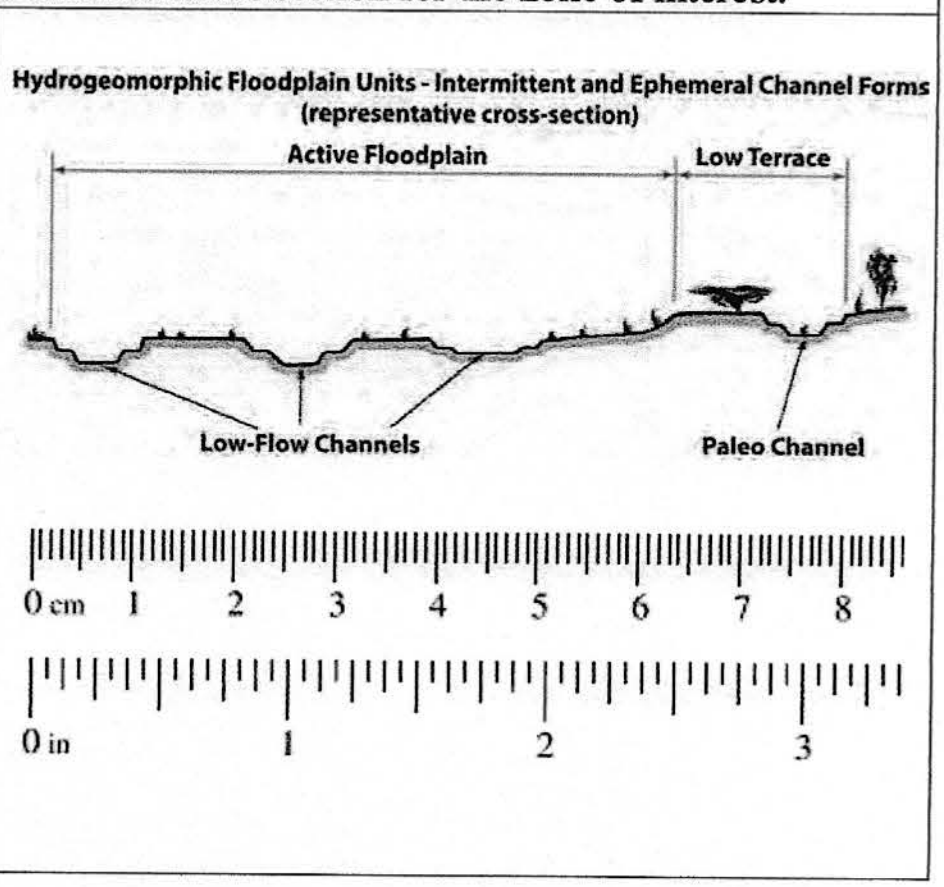
Brief site description:
typical agricultural ditch, created in uplans by plowing

Checklist of resources (if available):

- ☑ Aerial photography
  Dates:
- ☑ Topographic maps
  Scale:
- ☐ Geologic maps
- ☐ Vegetation maps
- ☑ Soils maps
- ☐ Rainfall/precipitation maps
- ☑ Existing delineation(s) for site
- ☑ Global positioning system (GPS)
- ☐ Other studies
- ☐ Stream gage data n/a
  Gage number:
  Period of record:
- ☐ Clinometer / level
- ☐ History of recent effective discharges
- ☐ Results of flood frequency analysis
- ☐ Most recent shift-adjusted rating
- ☐ Gage heights for 2-, 5-, 10-, and 25-year events and the most recent event exceeding a 5-year event

The dominant Wentworth size class that imparts a characteristic texture to each zone of a channel cross-section is recorded in the average sediment texture field under the characteristics section for the zone of interest.

Millimeters (mm)	Inches (in)	Wentworth size class	
10.08	256	Boulder	
2.56	64	Cobble	Gravel
0.157	4	Pebble	
0.079	2.00	Granule	
0.039	1.00	Very coarse sand	
0.020	0.50	Coarse sand	
1/2 0.0098	0.25	Medium sand	Sand
1/4 0.005	0.125	Fine sand	
1/8 0.0025	0.0625	Very fine sand	
1/16 0.0012	0.031	Coarse silt	
1/32 0.00061	0.0156	Medium silt	
1/64 0.00031	0.0078	Fine silt	Silt
1/128 0.00015	0.0039	Very fine silt	
		Clay	Mud



☑ **Walk the channel and floodplain within the study area to get an impression of the vegetation and geomorphology present at the site. Record any potential anthropogenic influences on the channel system in "Notes" above.**

☐ **Locate the low-flow channel (lowest part of the channel). Record observations.**

Characteristics of the low-flow channel:

Average sediment texture: Coarse Sand

Total veg cover: Ø % Tree: Ø % Shrub: Ø % Herb: Ø %

Community successional stage:

☐ NA
☐ Early (herbaceous & seedlings)
☐ Mid (herbaceous, shrubs, saplings)
☐ Late (herbaceous, shrubs, mature trees)

Dominant species present: none, as it was recently plowed

Other:
☐
☐
☐
☐

☒ **Walk away from the low-flow channel along cross-section. Record characteristics of the low-flow/active floodplain boundary.**

Characteristics used to delineate the low-flow/active floodplain boundary:

☐ Change in total veg cover ☐ Tree ☐ Shrub ☐ Herb
☐ Change in overall vegetation maturity
☐ Change in dominant species present
☒ Other ☒ Presence of bed and bank
☐ Drift and/or debris
☐ Other:
☐ Other:

☐ **Continue walking the channel cross-section. Record observations below.**

Characteristics of the low-flow channel:

Average sediment texture:

Total veg cover: % Tree: % Shrub: % Herb: %

Community successional stage:

☐ NA
☐ Early (herbaceous & seedlings)
☐ Mid (herbaceous, shrubs, saplings)
☐ Late (herbaceous, shrubs, mature trees)

Dominant species present:

Other:
☐ no additional channels
☐
☐
☐

☑ **Continue walking the channel cross-section. Record indicators of the active floodplain/low terrace boundary.**

Characteristics used to delineate the active floodplain/ low terrace boundary:

- ☐ Change in average sediment texture
- ☐ Change in total veg cover ☐ Tree ☐ Shrub ☐ Herb
- ☐ Change in overall vegetation maturity
- ☐ Change in dominant species present
- ☑ Other ☒ Presence of bed and bank
  - ☐ Drift and/or debris
  - ☐ Other: _____
  - ☐ Other: _____

☐ **Walk the active floodplain/low terrace boundary both upstream and downstream of the cross-section to verify that the indicators used to identify the transition are consistently associated the transition in both directions.**

Consistency of indicators used to delineate the active floodplain/low terrace boundary:

- Y ☐ N ☐ Change in average sediment texture
- Y ☐ N ☐ Change in total veg cover ☐ Tree ☐ Shrub ☐ Herb
- Y ☐ N ☐ Change in overall vegetation maturity
- Y ☐ N ☐ Change in dominant species present
- Y ☐ N ☐ Other:
  - Y ☒ N ☐ Presence of bed and bank
  - Y ☐ N ☐ Drift and/or debris
  - Y ☐ N ☐ Other: _____
  - Y ☐ N ☐ Other: _____

☐ **If the characteristics used to delineate the active floodplain/low terrace boundary were NOT consistently associated with the transition in both the upstream and downstream directions, repeat all steps above.**

☑ **Continue walking the channel cross-section. Record characteristics of the low terrace.**

Characteristics of the low terrace:

Average sediment texture: _____

Total veg cover: 100 % Tree: ____ % Shrub: ____ % Herb: 100 %

Community successional stage:

- ☐ NA
- ☑ Early (herbaceous & seedlings)
- ☐ Mid (herbaceous, shrubs, saplings)
- ☐ Late (herbaceous, shrubs, mature trees)

Dominant species present: alfalfa

Other:
- ☐ planted on alfalfa
- ☐
- ☐
- ☐

☒ **If characteristics used to delineate the active floodplain/low terrace boundary were deemed reliable, acquire boundary.**

Active floodplain/low terrace boundary acquired via:

- ☐ Mapping on aerial photograph
- ☑ Digitized on computer
- ☑ GPS
- ☐ Other: _____

Attachment D

List of Plants Observed

Plants observed by Soar Environmental Consulting (August 2024)
and Acorn Environmental (April 2025)

Scientific Name	Common Name
Quercus lobata	valley oak
Robinia pseudoacacia	black locust
Juglans californica	California walnut
Avena barbata	wild oat
Bromus hordeaceus	soft chess
Cynodon dactylon	Bermuda grass
Festuca perennis (Lolium perenne)	Italian ryegrass
Festuca pratensis	meadow fescue
Hordeum marinum	wall barley
Echinochloa crus-galli	barnyard grass
Polypogon monspeliensis	Rabbitsfoot grass
Lepidium appelianum	white top mustard
Echinodorus berteroi	Burhead
Amaranthus albus	white amaranth
Rubus armeniacus	Himalaya berry
Portulaca oleracea	purslane
Rumex crispus	curly dock
Lactuca serriola	prickly lettuce
Medicago ploymorpha	bur clover
Leymus condensatus	ryegrass
Typha latifolia	broadleaf cattail
Carduus pycnocephalus	Italian thistle
Convolvulus arvensis	bindweed
Cirsium vulgare	bull thistle
Centaurea solstitialis	yellow starthistle
Paspalum dilatatum	Dallis grass
Croton setigerus	doveweed
Cynara cardunculus	Artichoke thistle
Erigeron bonariensis	flax-leaf fleabane
Epilobium brachycarpum	willowherb
Lotus corniculatus	birdsfoot trefoil
Malva bullata	cheeseweed
Malva nicaensis	bull mallow
Malvella leprosa	Alkali mallow
Polygonum aviculare	knotweed
Plantago lanceolata	European plantain
Trifolium fragiferum	strawberry clover
Spergularia rubra	spurrey
Typha domingoensis	Cattail
Silybum marianum	milk thistle
Centromadia pungens	Common tar plant
Medicago sativa	alfalfa

Attachment E

Site Photographs

Representative photo of an agricultural irrigation ditch with unpaved farm road and berm of water storage basin on the right and flooded field agriculture on the left (alfalfa)

Agricultural water storage basin on the Study Area used for irrigation and stockwatering

Agricultural irrigation ditch that is part of the Solano Irrigation District's conveyance system

Site access off Tremont Road showing road ditch and feedcrop (alfalfa)

Site access off Tremont Road showing agricultural irrigation ditch and associated siphons and dams used to flood-irrigate the alfalfa

Berm of agricultural storage basin (on right) and hay crop (on left), with pipe culvert and irrigation ditch (center)

Concrete pipe culvert/lock and irrigation ditch (center), with hay crops on both sides.

Irrigation ditch parallel to Tremont Road that is filled by groundwater pumped from a well.

One of the Solano Irrigation District's canals in the center of the Study Area.

Site access off Tremont Road showing Solano Irrigation District's canal, with a sidewall that was recently scraped to remove vegetation.

BIOLOGICAL RESOURCES ASSESSMENT

Realized Dreams Ranch Subdivision Project

Solano County, CA | April 2025

Prepared For:

Realized Dreams Ranch, LLC
8330 Tremont Road
Dixon, CA 95620

Prepared By:

Acorn Environmental
5170 Golden Foothill Parkway
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Section 1 | Introduction

1.1 PURPOSE OF ASSESSMENT

This Biological Resources Assessment (BRA) has been prepared for the Realized Dreams Ranch Subdivision Project (proposed project) located on an approximately 426-acre property within unincorporated Solano County, California (project site). This BRA provides information about the biological resources within the project site, the regulatory environment applicable to such resources, potential project-related impacts on these resources, and recommendations to reduce the significance of these impacts.

1.2 PROJECT LOCATION AND DESCRIPTION

1.2.1 Project Location

The project site is located at 8330 Tremont Road within unincorporated Solano County, California. The project site totals approximately 426 acres and is comprised of four parcels, Assessor's Parcel Numbers (APNs) 0110190100, 01101900090, 0111070200, and 0111070210 within Section 35, Township 8 North, Range 2 East of the Mount Diablo Baseline and Meridian, within the "Saxon" United States Geological Survey (USGS) 7.5-minute quadrangle. Access to the project site is provided off Tremont Road, approximately four miles south of Interstate 80 and the City of Davis. Land use on the project site is currently agricultural. **Figure 1** and **Figure 2** show the location of the project site and **Figure 3** presents an aerial photograph of the project site and the immediate vicinity.

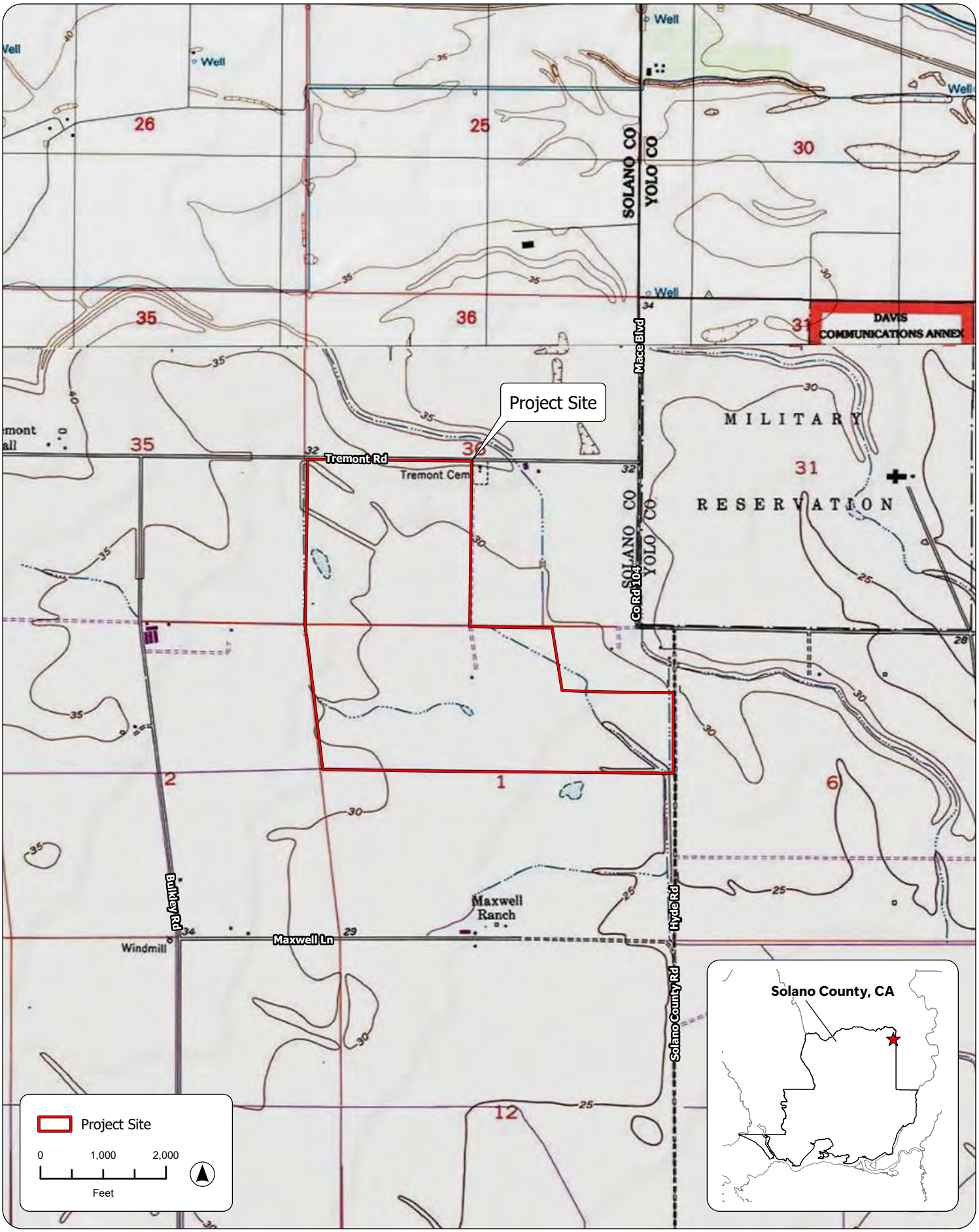
1.2.2 Proposed Project

A site plan is provided as **Figure 4**. The proposed project involves the subdivision of the project site into 10 parcels for the development of five detached single-family homes. Access to the project site would be provided by a proposed paved access driveway off Tremont Road. The access driveway would be shaped in a cul-de-sac format to provide vehicular access to the proposed driveways for each residence. One new well per residence would be installed for potable use for a total of up to five new wells. Each residence would also have an associated septic tank and leach field. Agriculture would continue on the balance of the project site. Ongoing agricultural use is consistent with the existing use of the project site and is not considered part of the proposed project.

The project site is within a 100-year floodplain and the proposed residential lots would be built up to elevate finish floor elevations above the floodplain. Thus, some import of fill may be necessary. Additionally, to accommodate the housing configuration, a portion of an existing manmade agricultural irrigation ditch would be re-aligned and an existing culvert would be removed (**Figure 4**). A total of approximately 1,950 linear feet of the existing irrigation ditch would be filled, and a corresponding 3,183 linear feet of new irrigation ditch would be dug.

SOURCE: ESRI, 2025; Acorn Environmental, 4/22/2025

Figure 1
Regional Location

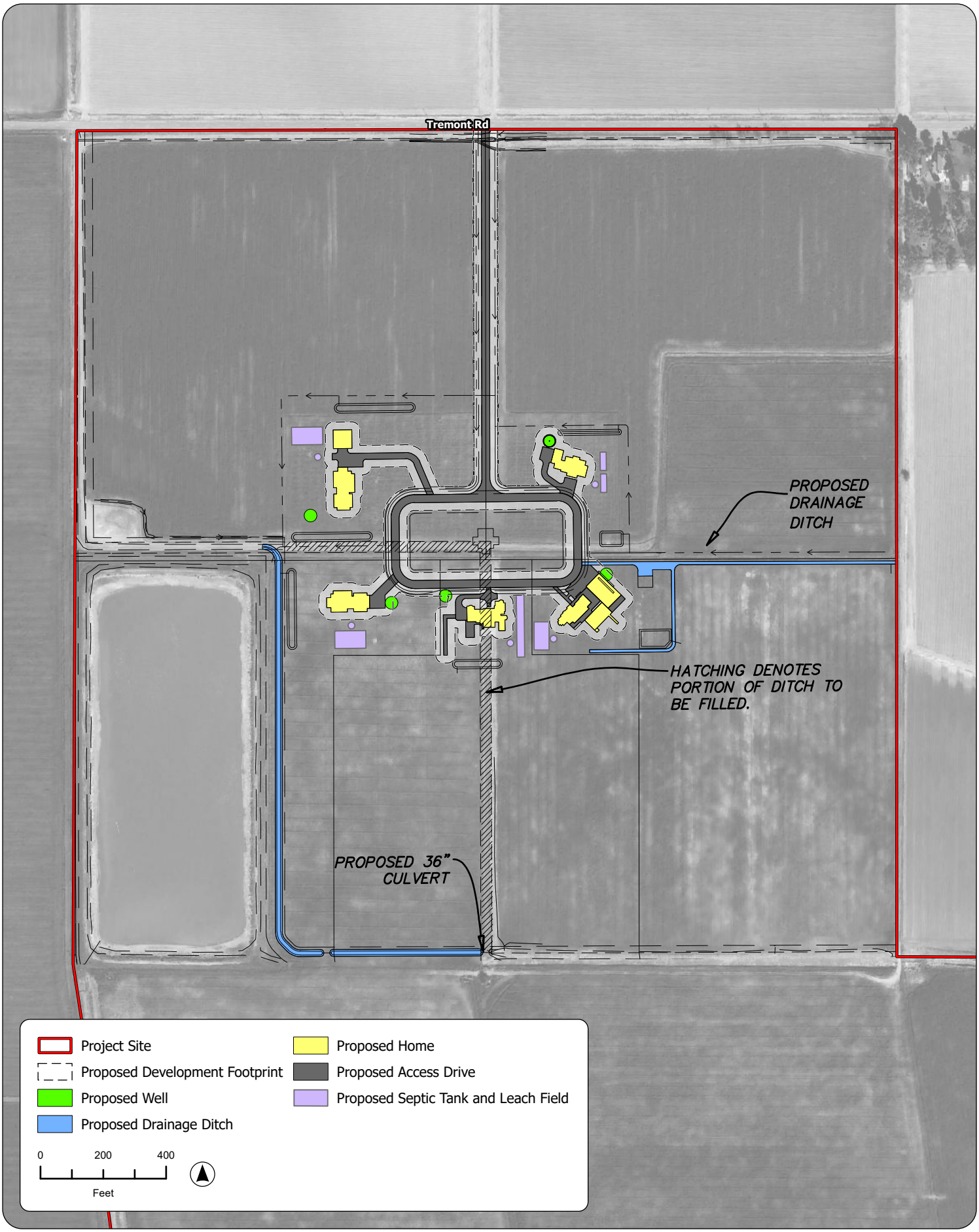


SOURCE: "Saxon, CA" USGS 7.5 Minute Topographic Quadrangle, T7N R2E & T8N R2E, Sections 1 & 36, Mt. Diablo Baseline & Meridian; Sonoma County GIS, 2025; ESRI, 2025; Acorn Environmental, 4/22/2025

Figure 2
Site and Vicinity

SOURCE: ESRI, 2025; Sonoma County GIS, 2025; Google Earth Aerial Photograph, 3/24/2025; Acorn Environmental, 4/23/2025

Figure 3
Aerial Overview



SOURCE: Laugenour and Meikle, 11/14/2024; ESRI, 2025; Google Earth Aerial Photograph, 3/24/2025; Sonoma County GIS, 2025; Acorn Environmental, 4/24/2025

Figure 4
Site Plan

Section 2 | Regulatory Setting

2.1.1 Federal

Federal Endangered Species Act

The Federal Endangered Species Act (FESA) protects species that are at risk of extinction and provides for the conservation of the ecosystems on which they depend. The U.S. Fish and Wildlife Service (USFWS) and the National Oceanic and Atmosphere Administration, Fisheries Service (NOAA Fisheries) share responsibility for implementing FESA. Generally, USFWS manages terrestrial and freshwater species, while NOAA Fisheries is responsible for marine and anadromous species. Threatened and endangered species on the federal list (50 CFR Sections 17.11 and 17.12) are protected from take.

Magnuson-Stevens Act and Sustainable Fisheries Act

The Magnuson–Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) is the primary law that governs marine fisheries management in U.S. federal waters. The Sustainable Fisheries Act of 1996 (Public Law 104-297) amended the Magnuson-Stevens Act to establish new requirements for fishery management councils to identify and describe Essential Fish Habitat (EFH) and to protect, conserve, and enhance EFH for the benefit of fisheries. EFH is defined as those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity. An adverse effect includes direct or indirect physical, chemical, or biological alternations to waters or substrate, species and their habitat, quality and/or quantity of EFH, or other ecosystem components. A 2002 update to EFH regulations allowed fishery management councils to designate Habitat Areas of Particular Concern, specific areas within EFH that have extremely important ecological functions and/or are especially vulnerable to degradation.

Migratory Bird Treaty Act (MBTA)

Migratory birds are protected under the MBTA of 1918 (16 USC 703-711). The MBTA makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed under 50 CFR 10, including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 CFR 21). The direct injury or death of a migratory bird that causes nest abandonment, nestling abandonment, or forced fledging would be considered take under federal law.

Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act was enacted in 1940 to protect bald eagles and was later amended to include golden eagles (16 USC Subsection 668-668). This act prohibits take, possession, and commerce of bald and golden eagles and associated parts, feathers, nests, or eggs with limited exceptions. The definition of take is the same as the definition under the FESA. The USFWS established five recovery programs in the mid-1970s based on geographical distribution of the species, with California located in the Pacific Recovery Region. Habitat conservation efforts in the Pacific Recovery Region, including laws and management practices at federal, state, and community levels, have helped facilitate bald eagle population increases. In 1995, the USFWS reclassified the bald eagle from endangered to threatened under FESA in the contiguous 48 states, excluding Michigan, Minnesota, Wisconsin, Oregon, and Washington where it had already been listed as threatened. In 2007, the bald eagle was federally delisted under FESA. However, the provisions of this act remain in place for protection of bald and golden eagles.

Clean Water Act (Sections 404 and 401)

Any project that involves discharge of dredged or fill material into jurisdictional Waters of the U.S. must first obtain authorization from the U.S. Army Corps of Engineers (USACE) under Section 404 of the Clean Water Act (CWA). Projects requiring a 404 permit under the CWA also require a Section 401 certification from the Regional Water Quality Control Board (RWQCB) in California. These two agencies also administer the National Pollutant Discharge Elimination System (NPDES) general permits for construction activities disturbing one acre or more. Effective September 8, 2023, the USEPA and the USACE have issued a new final rule in the Code of Federal Regulations to conform the definition of 'waters of the United States' to the 2023 Supreme Court's May 25, 2023 decision in Sackett vs. EPA. Under the new final rule, tributaries and wetlands must have a continuous surface connection to navigable waterways to be considered jurisdictional under the CWA. Only those relatively permanent, standing, or continuously flowing bodies of water meet the current definition. In certain states where litigation regarding this definition is ongoing, the pre-2015 definition of waters of the U.S. is in effect. California is not one of these states and currently operates under the definition as promulgated under the new final rule.

Porter-Cologne Water Quality Control Act

Waters of the State in California are currently defined to include any surface water or groundwater, including saline waters and man-made features, within the boundaries of the state. In general, features that do not meet the definition of a water of the U.S. but that do meet the definition of a water of the State are subject to permitting requirements as dictated by the Porter-Cologne Water Quality Control Act. Impacts to waters of the State, under the Porter-Cologne Water Quality Control Act, would generally require acquisition of a Waste Discharge Requirement permit. However, the *State Policy for Water Quality Control: State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State* provides exemptions for certain ditches. Exemptions within Section IV.D(2c) include:

1. Agricultural ditches with ephemeral flow that are not a relocated water of the state or excavated in a water of the state.
2. Agricultural ditches with intermittent flow that are not a relocated water of the state or excavated in a water of the state, or that do not drain wetlands other than any wetlands described in sections (iv) or (v).
3. Agricultural ditches that do not flow, either directly or through another water, into another water of the state.

2.1.2 State

California Endangered Species Act

The California Endangered Species Act (CESA) declares that certain plant or animal species will be given protection by the State because they are of ecological, educational, historical, recreational, aesthetic, economic, and/or scientific value to the people of the State. The CESA established that it is State policy to conserve, protect, restore, and enhance State-listed species and their habitats. Under State law, plant and animal species may be formally listed by the California Fish and Game Commission, and those species that are listed are protected from take under CESA. CESA authorizes take that is ancillary to an otherwise lawful activity provided that an incidental take permit is acquired prior to the activity.

California Fish and Game Code

The California Fish and Game Code defines "take" (Section 86) and prohibits take of a species listed under the CESA (California Fish and Game Code Section 2080), or otherwise of a special status (California Fish and Game Code Section 3511, 4700, and 5050). Section 2081(b) and (c) of the CESA allows CDFW to issue an incidental take permit for a State-listed species if specific criteria outlined in Title 14 CCR Section 783.4(a), (b) and CDFW Code Section 2081(b) are met. The CDFW Code Section 3503 also states that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird except as otherwise provided by the code. Section 3503.5 states that it is unlawful to take, possess, or destroy any birds in the taxonomic order Falconiformes or Strigiformes (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird. Section 3513 states that it is unlawful to take or possess any migratory nongame bird as designated in the MBTA or any part of such migratory nongame bird except as provided by rules and regulations adopted by the U.S. Secretary of the Interior under provisions of the MBTA. CDFW cannot provide take authorization under the CESA for impacts to migratory birds.

Native Plant Protection Act of 1977

The Native Plant Protection Act of 1977 and implementing regulations in Section 1900 et seq. of the California Fish and Game Code designate special-status plant species and provide specific protection measures for identified populations. The CDFW administers the Native Plant Protection Act.

2.1.3 Local

Solano County General Plan

Chapter 4 of the Solano County General Plan contains the County's goals and policies related to environmental resources, including biological resources. The following are the primary goals as outline by this chapter:

- Protecting or improving water quality;
- Preserving wetlands, including jurisdictional wetlands and saltwater and freshwater marshes consistent with federal and state requirements;
- Protecting and developing in watersheds and aquifer recharge areas;
- Conserving riparian vegetation protecting special status species and their habitats;
- Protecting wildlife movement corridors;
- Conserving oak woodlands;
- Promoting energy conservation and renewable energy; and
- Implementing water conservation programs.

Also of note is Chapter 3 of the General Plan, which guides agricultural use and preservation planning throughout the County.

Draft Solano Multispecies Habitat Conservation Plan

The project site is located within the plan area of the draft Solano Multispecies Habitat Conservation Plan (SMHCP), within an area of voluntary participation. The SMHCP is currently in administrative draft form and a final plan has not yet been adopted. The purpose of the plan is to provide a programmatic analysis of development impacts within the plan area and to provide a streamlined permitting process for actions proposed within the plan area. As the final SMHCP has not been issued, permitting cannot yet be completed through this process.

However, it can be referred to as a basis for locally sensitive biological resources and likely acceptable impact avoidance and minimization measures for the region as the current draft was developed in coordination with the resource agencies, such as USFWS and CDFW.

Section 3 | Environmental Setting

The project site is located within the California Floristic Province (Baldwin et al., 2012) within a region that experiences a Mediterranean-type climate, characterized by distinct seasons of hot, dry summers and wet, moderately cold winters (Sunset Western Garden Collection, 2025). Average monthly temperatures peak in July at 93 degrees Fahrenheit and reach a low in the month of December and January with an average temperature of 54 degrees Fahrenheit (U.S. Climate Data, 2025). Precipitation falls exclusively as rain, with January seeing the most precipitation at an average of 3.92 inches across the month.

Topography on the project site is relatively flat with elevations ranging from 40 to 55 feet above mean sea level. Land use on the project site is agricultural and consists of livestock forage production (hay) and livestock grazing. Land uses surrounding the project site are similarly agricultural in nature with rural residences. The Tremont Cemetery borders the northeastern border of the project site.

Soils on the project site include Capay silty clay loam (Ca), 0% slopes; Pescadero silty clay loam (Pc), 0% slopes, (62%); Rincon silty clay loam (RoA), 0 to 2% slopes; and Yolo silty clay loam, 0 to 2% slopes (NRCS, 2025). The project site is primarily composed of Pescadero silty clay loam, which occurs through the middle of the project site, and Capay silty clay loam, which occurs along the western edge. Rincon silty clay loam occurs only in the southeastern corner while Yolo silty clay loam occurs in small portions of the northwest corner and southwestern corner.

Section 4 | Methods

4.1 PRELIMINARY DATA GATHERING AND RESEARCH

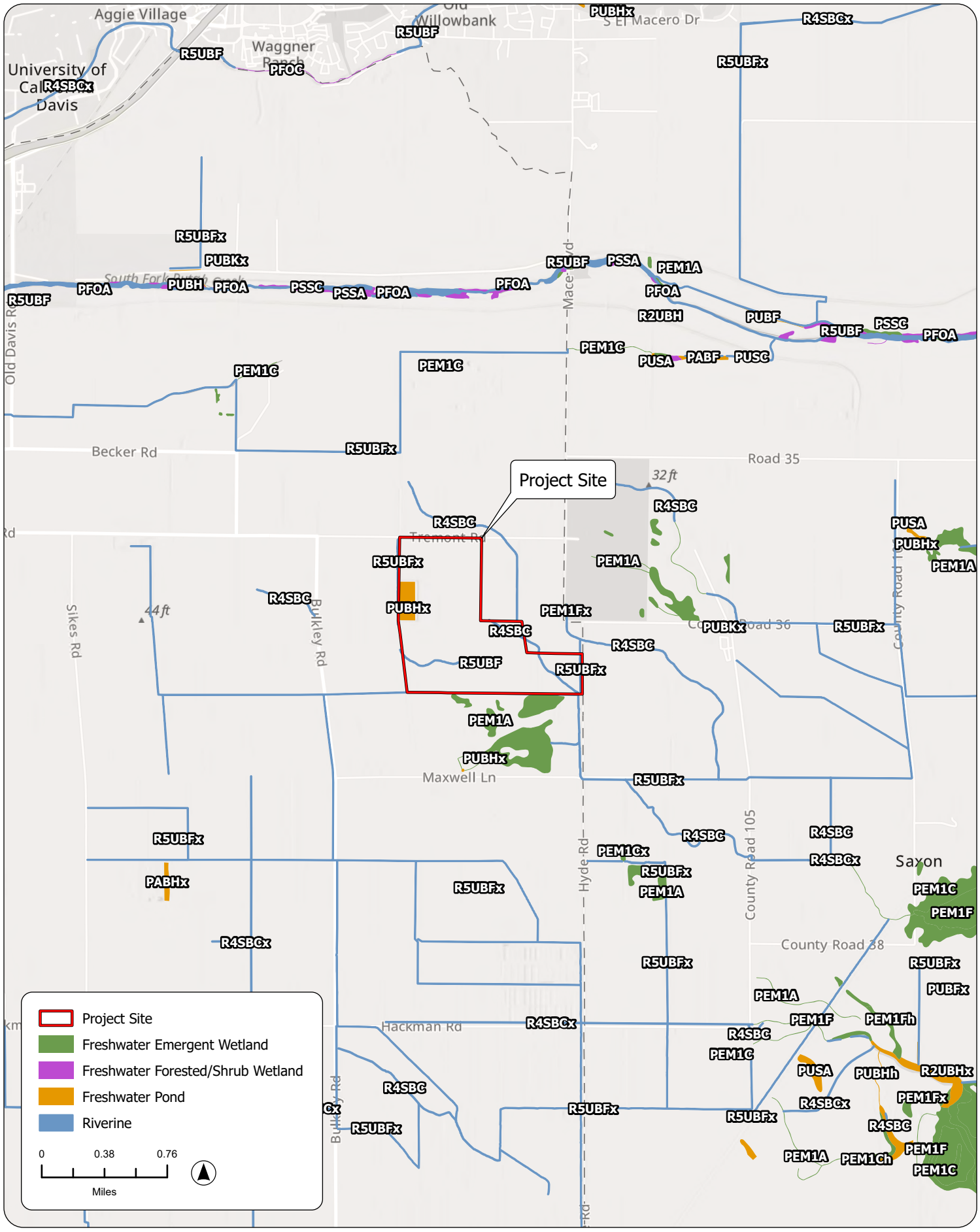
The following information sources were reviewed in support of this BRA:

- USGS topographic quadrangles of the project site and vicinity
- Current and historical aerial photography of the project site and vicinity
- The California Natural Diversity Database (CNDDB) query of known species occurrences within the Davis, Dixon, Merritt, and Saxon USGS Quads (CDFW, 2025)
- A query of the California Native Plant Society's (CNPS) database *Inventory of Rare and Endangered Plants of California* of known species occurrences within the Davis, Dixon, Merritt, and Saxon USGS Quads (**Attachment A**)
- USFWS National Wetlands Inventory (NWI) mapper (**Figure 5**)
- USFWS information for Planning and Consultation species list (**Attachment A**)
- The USFWS and National Marine Fisheries Service (NMFS) Critical Habitat mappers (**Attachment A**)
- NMFS EFH mapper (**Attachment A**)
- Natural Resources Conservation Service (NRCS) soil report for the project site (**Attachment B**; **Figure 6**)

4.2 FIELD SURVEYS

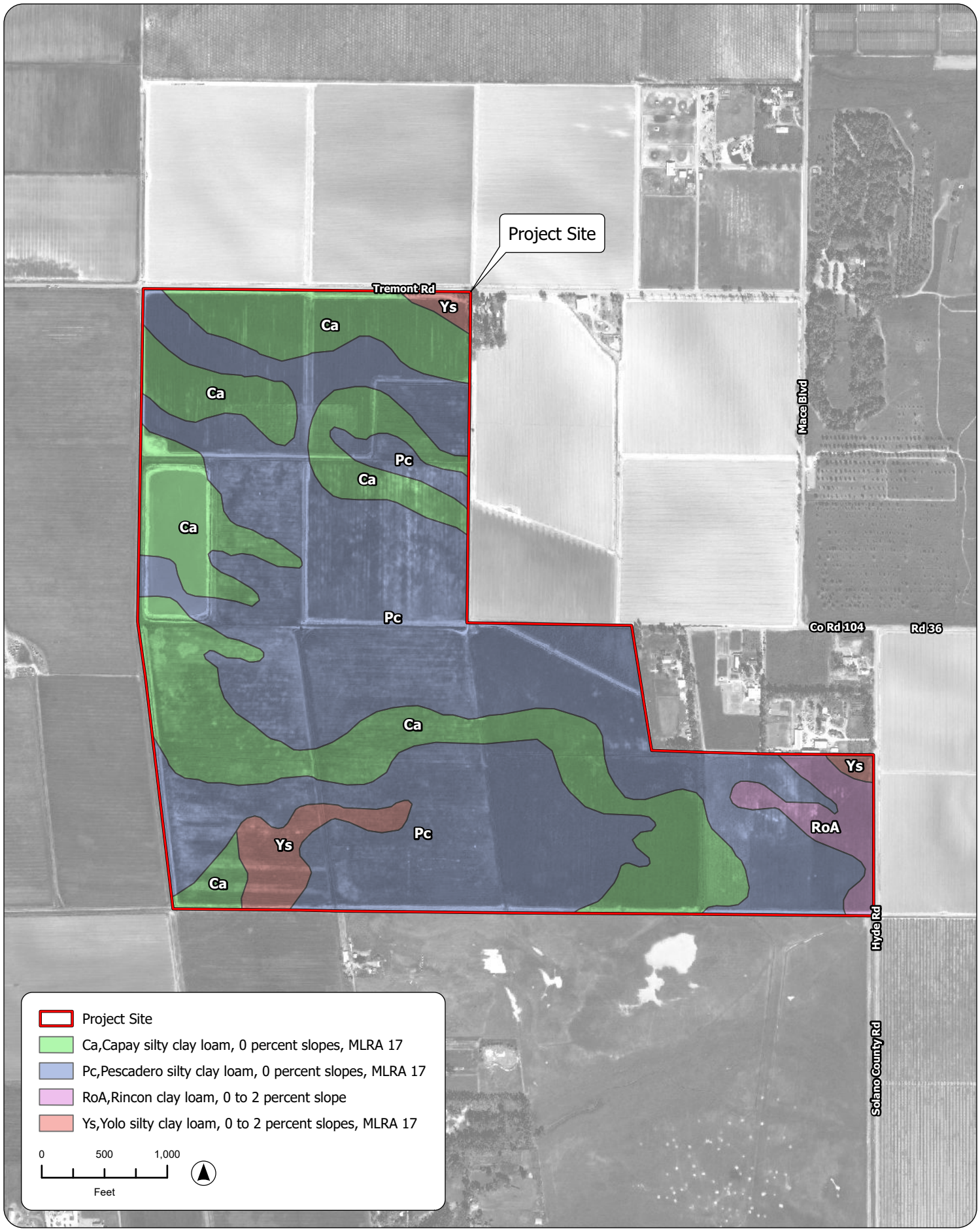
A preliminary biological resources survey was completed by Soar Environmental Consulting in August of 2024 (Soar Environmental Consulting, 2024). Subsequently, senior biologist Dr. Geo Graening with Acorn Environmental conducted an biological resources survey and aquatic resources delineation of the project site on April 22, 2025. Data was collected on wildlife and plant species present, as well as on habitat types and potentially jurisdictional aquatic resources. A variable-intensity pedestrian survey was performed that covered the project site with additional focus on the proposed development area. Fauna and flora observed were recorded in a field notebook and identified to the lowest possible taxon. Survey efforts emphasized the search for State and federally listed special-status species identified in the queries contained in **Attachment A**. Habitat types on the project site were mapped on aerial photographs and via a handheld GPS receiver. Information on habitat conditions and the suitability of habitats to support special-status species was also recorded. The aquatic resources delineation was conducted in accordance with the manuals relevant to the region, including the following:

- 1987 Corps of Engineers Wetland Delineation Manual
- 2008 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0)
- 2008 A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States.
- 2010 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0). U.S. Army Engineer Research and Development Center Environmental Laboratory, Vicksburg, MS. 153 pp.



SOURCE: U.S. Fish and Wildlife Service, 2024; ESRI, 2025; Acorn Environmental, 4/22/2025

Figure 5
National Wetland Inventory



SOURCE: NRCS Soils, 2025; ESRI, 2025; Sonoma County GIS, 2025; Google Earth Aerial Photograph, 3/24/2025; Acorn Environmental, 4/23/2025

Figure 6
Soil Types

4.3 MAPPING AND OTHER ANALYSES

Locations of species' occurrences and habitat boundaries within the project site were mapped using hand-held GPS receivers, and color aerial photographs were interpreted and the data was digitized to produce habitat maps. The boundaries of potentially jurisdictional aquatic resources within the project site were identified and measured in the field and similarly digitized to calculate acreages and to produce aquatic resources delineation maps. Geographic analyses were performed using geographical information system software (ArcGIS Pro, ESRI, Inc.). Vegetation communities were classified by Vegetation Series using the CNPS Vegetation Classification system (CNPS, 2025a and b). Aquatic habitats were classified using USFWS National Wetlands Inventory Classification System for Wetland and Deepwater Habitats, or "Cowardin class" (Cowardin et al., 1979). The aquatic resources delineation identified features based upon the three requisite wetland parameters (hydrophytic vegetation, hydric soils, hydrologic regime) defined in the USACE Wetlands Delineation Manual (Environmental Laboratory, 1987). Corresponding data points were selected and data sheets generated. Species' habitat requirements and life histories were identified using the following sources: Baldwin et al. (2012); Calflora (2025); CDFW (2024); and University of California at Berkeley (2024).

Section 5 | Results

5.1 INVENTORY OF FLORA AND FAUNA

Plant and animal species identified on the project site during the biological resources survey conducted on April 22, 2025 are listed in **Attachment C**.

5.2 TERRESTRIAL HABITATS

Terrestrial habitats observed within the project site are limited to agriculture. Representative site photographs are included as **Attachment D** and a figure illustrating habitat types is provided as **Figure 7**. Approximately 395.8 acres within the project site are in agricultural use. Based on historical aerial imagery, the project site has been in consistent agricultural production for years, with clear evidence of row crop production. At the time of the April 2025 survey, the majority of the project site was planted with hay species for livestock feed. The northern portion of the project site was sown with alfalfa and the balance of agricultural areas were in production with forage hay grasses, primarily perennial ryegrass (*Lolium perenne*) and hare barley (*Hordeum murinum*). Evidence of flood irrigation was observed. Areas not actively cultivated are limited to dedicated infrastructure for ongoing maintenance of agricultural activities on the project site such as internal dirt roadways. These areas are generally devoid of vegetation and are regularly managed. Where vegetation is present, it is generally sparse and limited to hardy, weedy species that are subject to ongoing removal.

5.3 AQUATIC HABITATS

An aquatic resources delineation of the project site was conducted on April 22, 2025 in accordance with USACE standards (Acorn Environmental, 2025). The survey considered features listed on the NWI (**Figure 5**), which were not identified as actually occurring on the project site, with the exception of the freshwater pond, which is the man-made agricultural water storage basin (**Figure 7**). The project site contains the following aquatic resources: man-made agricultural irrigation ditches and one man-made agricultural water storage basin. These habitats are described below and are shown on **Figure 7**.

Several agricultural irrigation ditches were observed within the project site. A portion of these agricultural irrigation ditches are under the jurisdiction of the Solano Irrigation District. These features are shown on **Figure 7** as Agricultural: Irrigation District Water Conveyance, and other agricultural irrigation ditches that are not part of the Solano Irrigation District network are shown on **Figure 7** as Agricultural: Irrigation Ditch. Within this BRA, these features are collectively referred to as agricultural irrigation ditches. The differences between these features are described below to provide context.

5.3.1 Agricultural: Irrigation District Water Conveyance

The irrigation district features are a series of man-made ditches that are maintained by the Solano Irrigation District. These are earthen trapezoidal ditches that vary in depth from 6 to 8 feet and vary in width from 6 to 15 feet (at the bottom). The ditches are subject to dredging and vegetation maintenance, which may include a combination of herbicide application, scraping, and trimming.

SOURCE: ESRI, 2025; Sonoma County GIS, 2025; Google Earth Aerial Photograph, 3/24/2025; Acorn Environmental, 4/23/2025

Figure 7
Habitat Types

Where vegetation is allowed to grow, it varies by level of inundation and soil saturation. In stagnant areas, broadleaf cattail (*Typha latifolia*) and floating plants (e.g. duckweed) dominate, while in faster flowing canals, there are no rooted plants. The wetted slopes contain smartweed (*Persicaria* sp.) and hydrophytic grasses, such as barnyard grass (*Echinochloa crus-galli*), and dallis grass (*Paspalum dilatatum*). On the top of the canals, curly dock (*Rumex crispus*) and upland grasses dominate, such as rabbitsfoot grass (*Polypogon monspeliensis*), wild oat (*Avena* spp.), and bromes and chesses (*Hordeum, Bromus* spp.).

5.3.2 Agricultural: Irrigation Ditch

Encircling each field are smaller earthen ditches that are used to convey water between fields and to flood-irrigate fields. These ditches are 1 to 3 feet deep and 1 to 5 feet in width (at the bottom). These ditches are created by plowing and are typically devoid of vegetation. Where present, vegetation consists of upland grasses and weedy forbs.

5.3.3 Agricultural Water Storage Basin

A 14-acre agricultural water storage basin was created in uplands and contains berms (or dikes) up to 12 feet high above grade to impound water. The outside berms are covered in upland pasture grasses while the inside is fringed with smartweed and curly dock. This feature is also subject to regular vegetation maintenance and is used for both irrigation and stock watering.

5.4 CRITICAL HABITAT AND ESSENTIAL FISH HABITAT

The project site is not within critical habitat that is designated or proposed by the USFWS or NMFS (**Attachment A**). Critical habitat is designated approximately 0.8 miles east of the project site for the following species: Solano grass (*Tuctoria mucronate*), Colusa grass (*Neostapfia colusana*), vernal pool tadpole shrimp (*Lepidurus packardi*), and delta smelt (*Hypomesus transpacificus*). The project site is also entirely within EFH for Chinook salmon (**Attachment A**); however, suitable habitat to support Chinook salmon does not actually occur.

5.5 WILDLIFE USE AND MOVEMENT

Active bird nests were not observed and the likelihood of active nests on the project site is low due to a lack of trees or structures, ongoing human disturbance, and ongoing vegetation management. Suitable nesting habitat may occur within the vegetation and tree canopy of the neighboring cemetery, portions of which overhang the project site. However, this area is approximately 1,000 feet from proposed development, and tree removal would not occur as part of the proposed project. The project site may be utilized by wildlife species that commonly forage in agricultural fields. Unique wildlife features such as nursery sites and rookeries were not observed. Wildlife movement corridors are absent from the project site as the project site consists primarily of agricultural use and is surrounded by agricultural development and roadways.

5.6 SPECIAL-STATUS SPECIES

For the purposes of this assessment, “special-status” is defined to be species that are:

- Listed as endangered, threatened, proposed, or candidate for listing under FESA;
- Listed as endangered, threatened, rare, or proposed for listing, under CESA;
- Designated as endangered or rare, pursuant to California Fish and Game Code (§1901);

- Designated as fully protected, pursuant to California Fish and Game Code (§3511, §4700, or §5050);
- Designated as a species of special concern by CDFW;
- Plants considered to be rare, threatened or endangered in California by CNPS; this consists of species on Lists 1A, 1B, and 2 of the CNPS Ranking System; or
- Plants listed as rare under the California Native Plant Protection Act.

5.6.1 Potential for Special-Status Species to Occur on the Project Site

No special-status species were detected during the survey conducted on April 22, 2025. A list of special-status species that may occur in the vicinity of the project site was compiled from CNDDB and CNPS queries, and a species list from USFWS (**Attachment A**). A species table is included as **Attachment E** and provides the species name, status, and habitat requirements of these special-status species. **Attachment E** also provides an analysis of the potential for each species to occur within the proposed development area, which is defined to include those areas that would be impacted by implementation of the proposed project. The potential for each special status species to occur on the project site was evaluated in **Attachment E** according to the following criteria:

- **No Potential.** Habitat on and adjacent to the site is clearly unsuitable for the species requirements (foraging, breeding, cover, substrate, elevation, hydrology, plant community, site history, disturbance regime), or is outside of the known range of the species.
- **Low Potential.** Few of the habitat components meeting the species requirements are present, and/or the majority of habitat on and adjacent to the site is unsuitable or of very poor quality. The species is not likely to be found on the site.
- **Moderate Potential.** Some of the habitat components meeting the species requirements are present, and/or only some of the habitat on or adjacent to the site is unsuitable. The species has a moderate probability of being found on the site.
- **High Potential.** All of the habitat components meeting the species requirements are present and/or most of the habitat on or adjacent to the site is highly suitable. The species has a high probability of being found on the site.

As detailed in **Attachment E**, the following special-status species have the potential to occur within the proposed development area:

- Swainson's hawk: This species has been observed foraging on the project site. The nearest nesting habitat is within scattered oak trees part of the adjacent cemetery's landscaping over 1,000 feet from the proposed development.
- Northern harrier: This species has been observed foraging on the project site. The nearest nesting habitat is within scattered oak trees part of the adjacent cemetery's landscaping over 1,000 feet from the proposed development.
- Giant garter snake: may occur within the irrigation ditches, including the irrigation district conveyance system
- Northwestern pond turtle: may occur within the water storage basin located outside of but immediately adjacent to the proposed development area. It may also disperse through the agricultural irrigation ditches. Nesting, aestivation, and terrestrial dispersal habitat are absent.

Section 6 | Impact Analyses and Recommended Avoidance and Minimization Measures

As defined by CEQA, the Project would be considered to have a significant adverse impact on biological resources if it would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a special-status species in local or regional plans, policies, or regulations, or by USFWS or CDFW
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by USFWS or CDFW
- 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
- 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 county or municipal policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved governmental habitat conservation plan.

6.1 IMPACTS TO SPECIAL-STATUS SPECIES

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

As discussed in **Section 5.6**, the following special-status species have the potential to occur within the project site:

- Swainson's hawk: This species has been observed foraging on the project site. The nearest nesting habitat is within scattered oak trees part of the adjacent cemetery's landscaping over 1,000 feet from the proposed development.
- Northern harrier: This species has been observed foraging on the project site. The nearest nesting habitat is within scattered oak trees part of the adjacent cemetery's landscaping over 1,000 feet from the proposed development.
- Giant garter snake: may occur within the irrigation ditches, including the irrigation district conveyance system. Breeding habitat absent.
- Northwestern pond turtle: may occur within the water storage basin located outside of but adjacent to the proposed development area. May also disperse through the agricultural irrigation ditches. Nesting, aestivation, and terrestrial dispersal habitat are absent.

Potential impacts to these species resulting from implementation of the proposed project are discussed below. Swainson's hawk and northern harrier are discussed below concurrently with migratory and nesting birds.

Giant Garter Snake

Giant garter snake has the potential to disperse through the project site via the agricultural irrigation ditches. As breeding habitat is absent, impacts to breeding individuals would not occur. Additionally, operational activities within the agricultural irrigation ditches would be unchanged from current conditions and thus there would be no operational impacts to this species. Further, while a portion of these ditches would be impacted, the proposed project would re-route these features as shown in **Figure 4** and would not result in a loss of habitat. Therefore, impacts would be limited to impacts to individual giant garter snakes that may be present during construction activities within the irrigation ditches. In order to prevent impacts to individual giant garter snakes, recommended measures in **Section 6.1.2** include a preconstruction survey for this species and temporary exclusion from construction areas to prevent this species from migrating into a work area. Further, measures in **Section 6.1.2** include a worker environmental awareness training program to ensure construction personnel are aware of the sensitive biological resources on the project site and what to do in the event an individual giant garter snake is observed. With inclusion of these measures, impacts to giant garter snake would be less than significant.

Northwestern Pond Turtle

Northwestern pond turtle has the potential to disperse through the project site via the agricultural irrigation ditches on the project site and may also occur within the water storage basin. Suitable upland habitat (including dispersal) is absent; therefore, impacts to nesting or aestivating turtles would not occur. The water storage basin is outside of the development area and would not be impacted. As noted under giant garter snake, habitat loss would not occur given that filled agricultural irrigation ditches would be replaced by proposed re-routing of the ditches (**Figure 4**). In order to prevent impacts to individual northwestern pond turtle, recommended measures in **Section 6.1.2** include a preconstruction survey for this species and temporary exclusion from construction areas to prevent this species from migrating into a work area. Further, measures in **Section 6.1.2** include a worker environmental awareness training program to ensure construction personnel are aware of the sensitive biological resources on the project site and what to do in the event an individual northwestern pond turtle is observed. With inclusion of these measures, impacts to northwestern pond turtle would be less than significant.

Migratory, Nesting, and Special-Status Birds and Raptors

Numerous bird species, including special-status Swainson's hawk and northern harrier, have the potential to occur on or in the vicinity of the project site. Trees will not be removed as part of the proposed project; thus, there would be no loss of nesting habitat for tree-nesting species such as Swainson's hawk and northern harrier. Additionally, the vast majority of potential foraging habitat on the project site would be avoided. However, suitable nesting habitat for tree-nesting species such as Swainson's hawk and northern harrier is located off-site over 1,000 feet from the proposed development area, and ground nesting birds have a low potential to nest on the project site. As the project site and vicinity are already subject to ongoing human disturbance through traffic and agricultural activities, the small scale and temporary nature of construction is not expected to severely increase sensory disturbance from baseline conditions. Although nesting birds would generally be habituated to human disturbance, avoidance and minimization measures, including a pre-construction nesting bird survey, are included in **Section 6.1.2** to ensure impacts are avoided.

These measures would ensure that active nests are identified prior to construction and that the appropriate buffer would be provided. With inclusion of these measures, impacts to nesting and special-status birds and raptors would be less than significant.

Critical Habitat and Essential Fish Habitat

The project site is not within proposed or designated critical habitat and would have no impact on critical habitat. The project site is wholly within EFH for Chinook salmon. Although the project site is within EFH, there is no suitable habitat for this species within the project site. This EFH was designated at a larger scale, such as a watershed scale, and includes large areas of non-suitable habitat such as the City of Davis. According to the NMFS "Assessment of Impacts of Fishery Management Actions on Essential Fish Habitat" a determination of no adverse impact is acceptable when and action in the context of the fishery as a whole will not have an adverse impact on EFH (NMFS, 2024). The project site does not provide habitat for Chinook salmon and therefore would not affect the fishery as a whole as no functional fish habitat would be lost. Therefore, this would be a less-than-significant impact.

6.1.2 Recommended Measures

Worker Environmental Awareness Training

- All construction and equipment operators working on the project will complete a worker environmental awareness program training regarding Swainson's hawk, northern harrier, giant garter snake, and northwestern pond turtle.
- A qualified biological monitor will be present to monitor for the presence of giant garter snake and northwestern pond turtle during fill of agricultural irrigation ditches.
- If a giant garter snake or northwestern pond turtle is observed, the biological monitor will have the authorization to stop work in order to allow the individual to vacate the work area on its own. Work shall not resume until the biological monitor has determined the individual has vacated the work area and continued construction would no longer pose a risk to the individual.

Protection of Northwestern Pond Turtle

- A preconstruction northwestern pond turtle survey shall occur within 14 days prior to construction on or within 500 feet of the agricultural irrigation ditches or agricultural water storage basin. If this species is not observed, exclusionary fencing shall be immediately installed to prevent northwestern pond turtles from entering areas of impact on or within 500 feet of the agricultural irrigation ditches or agricultural water storage basin. If northwestern pond turtle is observed, installation of the exclusionary fencing shall be postponed until after the individual has left of its own accord.
- Following the survey, a report presenting the results of the survey shall be submitted to the County of Solano and applicable regulatory agencies, if necessary.
- The exclusionary fencing shall remain in place until after initial vegetation removal is completed for the excluded area. The integrity of the fence shall be inspected at least once every 14 days. Should the fence be damaged, a qualified biologist shall inspect the fencing either virtually or in person. If compromised, the preconstruction survey shall be repeated as described above.
- The fencing shall be constructed out of plastic weed cloth or construction fabric, shall be keyed into the ground, and shall be supported by stakes and wire mesh, as needed. Fencing shall also be opaque, a minimum three feet in height, and installed with a smooth material such that it cannot be climbed.

Protection of Giant Garter Snake

- The project site is within the USFWS Yolo Basin Recovery Unit for giant garter snake. A preconstruction survey conducted by a qualified wildlife biologist familiar with the species shall be conducted seven or fewer days prior to construction on or within 500 feet of the agricultural irrigation ditches. The exclusionary fencing identified above for northwestern pond turtle shall also be designed to exclude giant garter snake and shall be installed and maintained as described above following confirmation that this species is absent from the work area.
- Following the survey, a report presenting the results of the survey shall be submitted to the County of Solano and to applicable regulatory agencies, if necessary.

Protection of Swainson's Hawk

- Should construction commence between March 1 and August 31, a biologist shall conduct a pre-construction survey to identify active Swainson's hawk nests. Surveys shall be conducted within 15 days of the anticipated start of construction and shall be designed and of sufficient intensity to document nesting within 0.25-miles of planned work activities. If a lapse in project-related construction work of 15 days or longer occurs, additional pre-construction surveys shall be required before project work may be reinitiated.
- Construction work (including grading, earthmoving, and operation of construction equipment) shall not occur within a 0.25-mile buffer zone around an active Swainson's hawk nest except when a qualified biologist has confirmed that nesting activity is complete (e.g., young have fledged/are capable of flight/ and have left the nest, or the adults have abandoned the nest for a minimum of 7 days and there is no evidence of re-nesting activity). The size of nest site buffer zones may be reduced only if all of the following conditions are met:
    - A site-specific analysis prepared by a qualified biologist indicates that the nesting pair under consideration is not likely to be adversely affected by construction activities (e.g., the nest is located in an area where the hawks are habituated to human activity and noise levels comparable to anticipated construction work).
    - Monitoring by a qualified biologist is conducted during all construction activities for a minimum of 10 consecutive days following the initiation of construction, and the nesting pair does not exhibit adverse reactions to construction activities (e.g., changes in behavioral patterns, reactions to construction noise).
    - Monitoring is continued at least once a week through the nesting cycle at that nest. This longer-term monitoring may be reduced to a minimum of 2 hours in the morning and 2 hours in the afternoon during construction activities; however, additional and more frequent monitoring may be required if any adverse reactions are suspected.
    - If adverse effects are identified, construction activities shall cease immediately and construction shall not be resumed until the qualified biologist has determined that construction may continue under modified restrictions or that nesting activity is complete.

Protection of Nesting Birds, Including Northern Harrier, During Construction

- If construction activities commence during the general nesting season (February 15 to September 1), a preconstruction nesting bird survey shall be conducted by a qualified biologist on and within 100 feet of proposed construction within 14 days of initiating ground disturbance. If active nests are identified, the qualified biologist shall determine a suitable avoidance buffer based on the needs of the species observed.

- Avoidance measures may include the establishment of a buffer zone using construction fencing or similar, or the postponement of construction until after the nesting season, or until after a qualified biologist has determined the nest is no longer active. Avoidance buffers may vary in size depending on habitat characteristics, project-related activities, and disturbance levels.
- Should work activity cease for 14 days or more during the nesting season, surveys shall be repeated prior to recommencing construction within the general nesting season to ensure birds and have not established nests during inactivity.

6.2 IMPACTS TO SENSITIVE HABITATS

Will 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 California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Terrestrial habitat on the project site is limited to agriculture, which is not considered a sensitive habitat. Although aquatic habitats are generally considered sensitive, aquatic features on the project site are all manmade and are either devoid of vegetation or vegetated with sparse and managed plants. These features are used for irrigation and stock watering and are not considered sensitive. Impacts to aquatic resources are further assessed in **Section 6.3**. As there are no sensitive habitats on the project site, there would be no impact.

6.2.1 Recommended Measures

No avoidance or minimization measures are required.

6.3 IMPACTS TO AQUATIC RESOURCES

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

The proposed project would result in impacts to 1,950 linear feet of agricultural irrigation ditches. An aquatic resources delineation was prepared for the project site. These features are manmade, dug from uplands, and lack relatively permanent flow. The definition of irrigation ditches that do not meet the criteria of "Waters of the U.S." is provided in 40 CFR §120.2(b)(3) which states "ditches (including roadside ditches) excavated wholly in and draining only dry land and that do not carry a relatively permanent flow of water." Thus, the aquatic resources delineation concluded that the agricultural irrigation ditches do not meet the definition of a water of the U.S. Further, as described in **Section 2**, certain waters of the state, including agricultural irrigation ditches, are exempt from permitting. The agricultural irrigation ditches on the project site consist of manmade features that were created within uplands and drain to uplands for use as crop irrigation. Based on this, the agricultural irrigation ditches would likely be considered waters of the State that are exempt from Waste Discharge Requirement permitting per the *State Policy for Water Quality Control: State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State* exemptions within Section IV.D(2c). Although permitting for impacts to the agricultural irrigation ditches is not expected to be necessary, the results of the aquatic resources delineation are expected to be sent to USACE and the State for concurrence.

Further, construction activities have the potential to indirectly impact off-site aquatic resources through release of impaired stormwater runoff that may occur due to exposure of bare soils or accidental release of chemicals such as equipment fuel. Recommended measures in **Section 6.3.1** include the preparation of a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP is a requirement of the Construction General Permit for construction activities disturbing one or more acres. BMPs recommended for inclusion in the SWPPP are outlined in **Section 6.3.1** and would prevent significant indirect impacts to off-site surface waters. This would be a less-than-significant impact with implementation of measures in **Section 6.3.1**.

6.3.1 Recommended Measures

Water Resource Protection

A Storm Water Pollution Prevention Plan (SWPPP) is required in California for development projects that disturb one acre or more of land. This requirement is part of the Construction General Permit (CGP). The following Best Management Practices are recommended for inclusion in the SWPPP:

- Grading activities shall be limited to the immediate area required for construction.
- Temporary erosion control measures (such as silt fences, fiber rolls, staked straw bales, temporary re-vegetation, rock bag dams, erosion control blankets, and sediment traps) shall be employed as needed for disturbed areas. Plastic monofilament or similar materials that could entangle wildlife shall not be used.
- Construction activities shall be scheduled to minimize land disturbance during peak runoff periods to the extent feasible.
- Disturbed areas shall be paved, re-vegetated, and/or stabilized following construction activities.
- A spill prevention and countermeasure plan shall be developed that identifies proper storage, collection, and disposal measures for potential pollutants used on-site.
- Petroleum products shall be stored, handled, used, and disposed of properly in accordance with provisions of the CWA (33 USC §§ 1251 to 1387).
- Construction materials shall be stored, covered, and isolated to prevent runoff loss and contamination of surface and groundwater.
- Fuel and vehicle maintenance areas shall be limited to the impact area.
- Sanitary facilities shall be provided for construction workers.
- To minimize dust generation during construction, soil will be wet with water prior to ground disturbance as needed.
- Generated waste shall be properly disposed of.

6.4 IMPACTS TO WILDLIFE MOVEMENT, CORRIDORS, OR NURSERY SITES

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

There are no wildlife movement corridors or nursery sites present within the project site. Therefore, there would be no impact on wildlife movement, corridors, or nursery sites.

6.4.1 Recommended Measures

No avoidance or minimization measures are required.

6.5 CONFLICT WITH POLICIES, ORDINANCES, HABITAT CONSERVATION PLANS, OR NATURAL COMMUNITY CONSERVATION PLAN

Will the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? Will the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

Implementation of the proposed project would not require the removal of trees or other actions that would conflict with local policies or ordinances regarding biological resources. It is noted that the project site falls within the draft SMHCP plan area. However, this plan is a draft that has not yet been finalized, and the project site falls within an area that is currently designated as voluntary for participation. Thus, consistency with this plan, even once finalized, would be optional. Recommended measures contained herein were nonetheless prepared to be consistent with the draft SMHCP in order to align with measures that were developed for the region in coordination between applicable resource agencies, such as USFWS and CDFW. There would be no impact.

6.5.1 Recommended Measures

No avoidance or minimization measures are required.

Section 7 | References

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Section 8 | Qualifications of Surveyors and Authors

8.1.1 G.O. Graening, Ph.D., M.S.E.

G. O. Graening holds a Doctorate in Biological Sciences and a Master of Science in Biological Engineering and is a certified arborist (International Society of Arboriculture). Dr. Graening has over 30 years of experience in environmental assessment and research, including the performance of numerous biological assessments, wetland delineations, and habitat restoration projects. Dr. Graening also served as an adjunct professor of biology at California State University Sacramento for 10 years and was an active researcher in the area of conservation biology and groundwater ecology.

8.1.2 Kelli Raymond, B.S.

Ms. Raymond holds a B.S. in Animal Biology with a focus on Wildlife Ecology. She has approximately 10 years of experience collecting field data and preparing environmental assessments. Ms. Raymond has worked in several states across the U.S. performing biological resources surveys, including plant surveys, wetland delineations, and wildlife utilization monitoring. She also has experience live handling numerous wildlife species, including fish, migratory birds, and big game. Ms. Raymond is experienced in the preparation of Biological Assessments and Section 7 consultation with both the USFWS and NMFS under the federal Endangered Species Act.

Attachment A

Biological Resources Desktop Review

Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Davis (3812156) OR Dixon (3812147) OR Merritt (3812157) OR Saxon (3812146))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Acipenser medirostris pop. 1 green sturgeon - southern DPS	AFCAA01031	Threatened	None	G2T1	S1	SSC
Actinemys marmorata northwestern pond turtle	ARAAD02031	Proposed Threatened	None	G2	SNR	SSC
Agelaius tricolor tricolored blackbird	ABPBXB0020	None	Threatened	G1G2	S2	SSC
Ambystoma californiense pop. 1 California tiger salamander - central California DPS	AAAAA01181	Threatened	Threatened	G2G3T3	S3	WL
Ammodramus savannarum grasshopper sparrow	ABPBXA0020	None	None	G5	S3	SSC
Antrozous pallidus pallid bat	AMACC10010	None	None	G4	S3	SSC
Astragalus tener var. ferrisiae Ferris' milk-vetch	PDFAB0F8R3	None	None	G2T1	S1	1B.1
Astragalus tener var. tener alkali milk-vetch	PDFAB0F8R1	None	None	G2T1	S1	1B.2
Athene cunicularia burrowing owl	ABNSB10010	None	Candidate Endangered	G4	S2	SSC
Atriplex cordulata var. cordulata heartscale	PDCHE040B0	None	None	G3T2	S2	1B.2
Atriplex depressa brittlescale	PDCHE042L0	None	None	G2	S2	1B.2
Bombus crotchii Crotch's bumble bee	IIHYM24480	None	Candidate Endangered	G2	S2	
Bombus occidentalis western bumble bee	IIHYM24252	None	Candidate Endangered	G3	S1	
Bombus pensylvanicus American bumble bee	IIHYM24260	None	None	G3G4	S2	
Branchinecta conservatio Conservancy fairy shrimp	ICBRA03010	Endangered	None	G2	S2	
Branchinecta lynchi vernal pool fairy shrimp	ICBRA03030	Threatened	None	G3	S3	
Branchinecta mesovallensis midvalley fairy shrimp	ICBRA03150	None	None	G2	S2S3	
Buteo swainsoni Swainson's hawk	ABNKC19070	None	Threatened	G5	S4	
Centromadia parryi ssp. parryi pappose tarplant	PDAST4R0P2	None	None	G3T2	S2	1B.2

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Charadrius nivosus nivosus western snowy plover	ABNNB03031	Threatened	None	G3T3	S3	SSC
Cicindela hirticollis abrupta Sacramento Valley tiger beetle	IICOL02106	None	None	G5TH	SH	
Circus hudsonius northern harrier	ABNKC11011	None	None	G5	S3	SSC
Coccyzus americanus occidentalis western yellow-billed cuckoo	ABNRB02022	Threatened	Endangered	G5T2T3	S1	
Desmocerus californicus dimorphus valley elderberry longhorn beetle	IICOL48011	Threatened	None	G3T3	S3	
Elanus leucurus white-tailed kite	ABNKC06010	None	None	G5	S3S4	FP
Eryngium jepsonii Jepson's coyote-thistle	PDAPI0Z130	None	None	G2	S2	1B.2
Extriplex joaquinana San Joaquin spearscale	PDCHE041F3	None	None	G2	S2	1B.2
Fritillaria pluriflora adobe-lily	PMLIL0V0F0	None	None	G2G3	S2S3	1B.2
Lasionycteris noctivagans silver-haired bat	AMACC02010	None	None	G3G4	S3S4	
Lasiurus cinereus hoary bat	AMACC05032	None	None	G3G4	S4	
Lepidium latipes var. heckardii Heckard's pepper-grass	PDBRA1M0K1	None	None	G4T1	S1	1B.2
Lepidurus packardi vernal pool tadpole shrimp	ICBRA10010	Endangered	None	G3	S3	
Lilaeopsis masonii Mason's lilaeopsis	PDAPI19030	None	Rare	G2	S2	1B.1
Linderiella occidentalis California linderiella	ICBRA06010	None	None	G2G3	S2S3	
Myrmosula pacifica Antioch multilid wasp	IIHYM15010	None	None	GH	SH	
Navarretia leucocephala ssp. bakeri Baker's navarretia	PDPLM0C0E1	None	None	G4T2	S2	1B.1
Neostapfia colusana Colusa grass	PMPOA4C010	Threatened	Endangered	G1	S1	1B.1
Oncorhynchus mykiss irideus pop. 11 steelhead - Central Valley DPS	AFCHA0209K	Threatened	None	G5T2Q	S2	SSC
Plagiobothrys hystriculus bearded popcornflower	PDBOR0V0H0	None	None	G2	S2	1B.1
Puccinellia simplex California alkali grass	PMPOA53110	None	None	G2	S2	1B.2

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Sidalcea keckii Keck's checkerbloom	PDMAL110D0	Endangered	None	G2	S2	1B.1
Spea hammondii western spadefoot	AAABF02020	Proposed Threatened	None	G2G3	S3S4	SSC
Taxidea taxus American badger	AMAJF04010	None	None	G5	S3	SSC
Thamnophis gigas giant gartersnake	ARADB36150	Threatened	Threatened	G2	S2	
Trifolium hydrophilum saline clover	PDFAB400R5	None	None	G2	S2	1B.2
Tuctoria mucronata Crampton's tuctoria or Solano grass	PMPOA6N020	Endangered	Endangered	G1	S1	1B.1

Record Count: 46

Search Results

21 matches found. Click on scientific name for details

Search Criteria: , Quad is one of [**3812146:3812156:3812147:3812157**]

▲ SCIENTIFIC NAME	COMMON NAME	BLOOMING PERIOD	FED LIST	STATE LIST	STATE RANK	CA RARE PLANT RANK	GENERAL HABITATS	MICROHABITATS	LOWEST ELEVATION (FT)	HIGHEST ELEVATION (FT)
Astragalus tener var. *ferrisiae*	Ferris' milk-vetch	Apr-May	None	None	S1	1B.1	Meadows and seeps (vernally mesic), Valley and foothill grassland (subalkaline flats)		5	245
Astragalus tener var. *tener*	alkali milk-vetch	Mar-Jun	None	None	S1	1B.2	Playas, Valley and foothill grassland (adobe clay), Vernal pools	Alkaline	5	195
Atriplex cordulata var. *cordulata*	heartscale	Apr-Oct	None	None	S2	1B.2	Chenopod scrub, Meadows and seeps, Valley and foothill grassland (sandy)	Alkaline (sometimes)	0	1835
Atriplex depressa	brittlescale	Apr-Oct	None	None	S2	1B.2	Chenopod scrub, Meadows and seeps, Playas, Valley and foothill grassland, Vernal pools	Alkaline, Clay	5	1050

Centromadia parryi ssp. *parryi*	pappose tarplant	May-Nov	None	None	S2	1B.2	Chaparral, Coastal prairie, Marshes and swamps (coastal salt), Meadows and seeps, Valley and foothill grassland (vernally mesic)	Alkaline (often)	0	1380
Centromadia parryi ssp. *rudis*	Parry's rough tarplant	May-Oct	None	None	S3	4.2	Valley and foothill grassland, Vernal pools	Alkaline, Roadsides (sometimes), Seeps, Vernally Mesic	0	330
Eryngium jepsonii	Jepson's coyote-thistle	Apr-Aug	None	None	S2	1B.2	Valley and foothill grassland, Vernal pools	Clay	10	985
Extriplex joaquinana	San Joaquin spearscale	Apr-Oct	None	None	S2	1B.2	Chenopod scrub, Meadows and seeps, Playas, Valley and foothill grassland	Alkaline	5	2740
Fritillaria agrestis	stinkbells	Mar-Jun	None	None	S3	4.2	Chaparral, Cismontane woodland, Pinyon and juniper woodland, Valley and foothill grassland	Clay, Serpentine (sometimes)	35	5100
Fritillaria pluriflora	adobe-lily	Feb-Apr	None	None	S2S3	1B.2	Chaparral, Cismontane woodland, Valley and foothill grassland	Adobe (often)	195	2315
Hesperevax caulescens	hogwallow starfish	Mar-Jun	None	None	S3	4.2	Valley and foothill grassland (mesic clay), Vernal pools (shallow)	Alkaline (sometimes)	0	1655

Lepidium latipes var. *heckardii*	Heckard's pepper-grass	Mar-May	None	None	S1	1B.2	Valley and foothill grassland (alkaline flats)		5	655
Lilaeopsis masonii	Mason's lilaeopsis	Apr-Nov	None	CR	S2	1B.1	Marshes and swamps (brackish, freshwater), Riparian scrub		0	35
Myosurus minimus ssp. *apus*	little mousetail	Mar-Jun	None	None	S2	3.1	Valley and foothill grassland, Vernal pools (alkaline)		65	2100
Navarretia leucocephala ssp. *bakeri*	Baker's navarretia	Apr-Jul	None	None	S2	1B.1	Cismontane woodland, Lower montane coniferous forest, Meadows and seeps, Valley and foothill grassland, Vernal pools	Mesic	15	5710
Neostapfia colusana	Colusa grass	May-Aug	FT	CE	S1	1B.1	Vernal pools (adobe clay)		15	655
Plagiobothrys hystriculus	bearded popcornflower	Apr-May	None	None	S2	1B.1	Valley and foothill grassland (mesic), Vernal pools (margins)		0	900
Puccinellia simplex	California alkali grass	Mar-May	None	None	S2	1B.2	Chenopod scrub, Meadows and seeps, Valley and foothill grassland, Vernal pools	Alkaline, Flats, Lake Margins, Vernally Mesic	5	3050
Sidalcea keckii	Keck's checkerbloom	Apr-May(Jun)	FE	None	S2	1B.1	Cismontane woodland, Valley and foothill grassland	Clay, Serpentine	245	2135

Trifolium hydrophilum	saline clover	Apr-Jun	None	None	S2	1B.2	Marshes and swamps, Valley and foothill grassland (mesic, alkaline), Vernal pools	0	985
Tuctoria mucronata	Crampton's tuctoria or Solano grass	Apr-Aug	FE	CE	S1	1B.1	Valley and foothill grassland (mesic), Vernal pools	15	35

Showing 1 to 21 of 21 entries

Go to top

Suggested Citation:

California Native Plant Society, Rare Plant Program. 2025. Rare Plant Inventory (online edition, v9.5.1). Website https://www.rareplants.cnps.org [accessed 18 April 2025].

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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: 04/18/2025 19:48:02 UTC
Project Code: 2025-0085483
Project Name: Realized Dreams

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, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts, see https://www.fws.gov/program/migratory-bird-permit/what-we-do.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures, see https://www.fws.gov/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: 2025-0085483
Project Name: Realized Dreams
Project Type: Residential Construction
Project Description: Housing
Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@38.49148795,-121.70952430072225,14z

Counties: Solano and Yolo counties, California

ENDANGERED SPECIES ACT SPECIES

There is a total of 11 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.

---

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.

REPTILES

NAME	STATUS
Giant Garter Snake *Thamnophis gigas* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4482	Threatened
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* 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
Valley Elderberry Longhorn Beetle *Desmocerus californicus dimorphus* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/7850	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
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

FLOWERING PLANTS

NAME	STATUS
Colusa Grass *Neostapfia colusana*	Threatened
There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5690	
Solano Grass *Tuctoria mucronata*	Endangered
There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8302	

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: Kelli Raymond
Address: 5170 Golden Foothill Parkway
City: El Dorado Hills
State: CA
Zip: 95762
Email kraymond@acorn-env.com
Phone: 9162358224

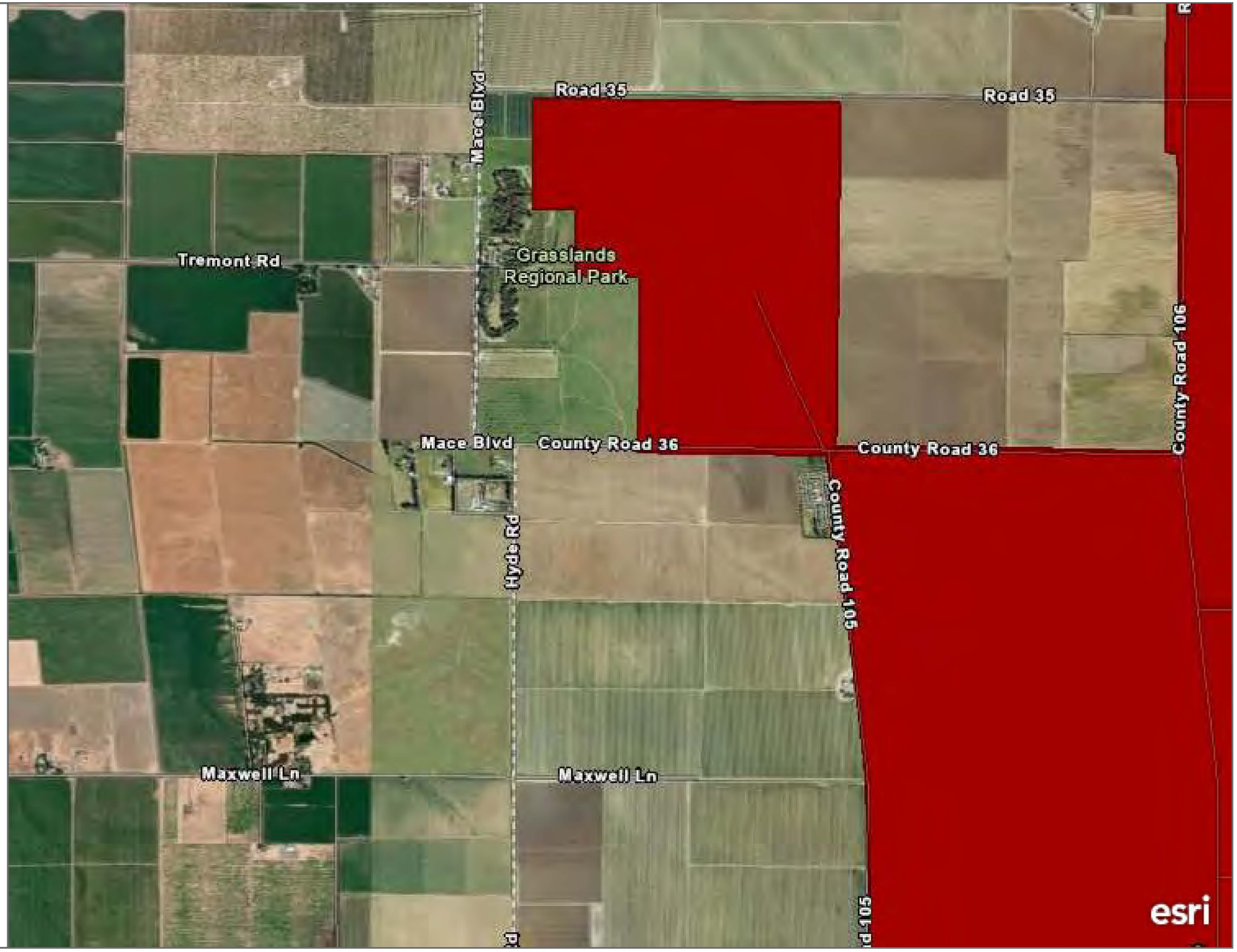
Critical Habitat for Threatened & Endangered Species [USFWS]

Final Polygon Features

Final Linear Features

Proposed Polygon Features

Proposed Linear Features



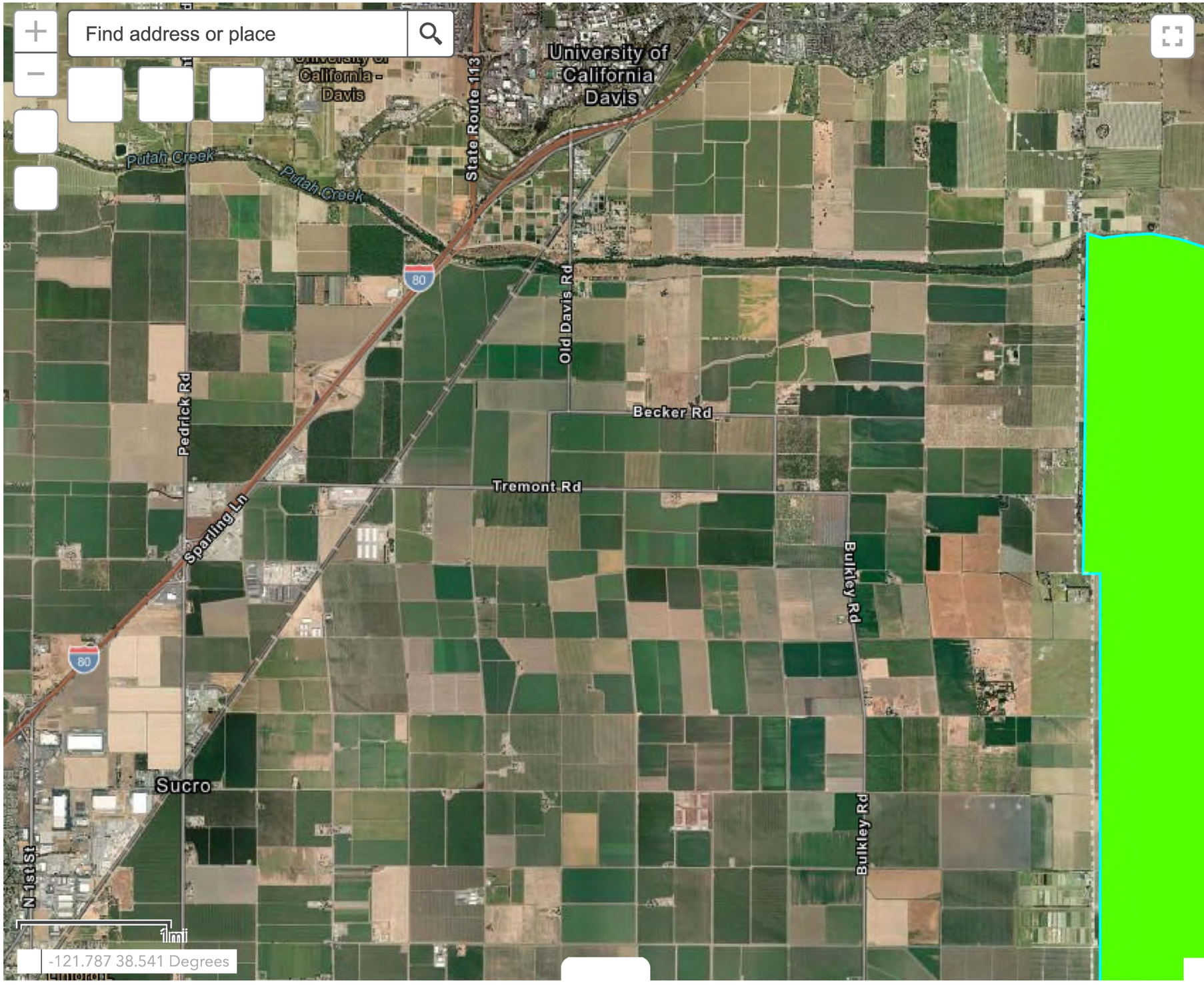
A specific geographic area(s) that contains features essential for the conservation of a threatened or endangered species and that may require special management and protection.

Welcome

This mapper includes all available spatial data for critical habitat designated and proposed by NOAA Fisheries. Links to download the geodatabase for data displayed in this mapper and to regional NMFS ESA Mappers can be found below:

- Download Geodatabase
- Alaska Regional ESA Mapper
- Greater Atlantic ESA Mapper
- West Coast Protected Resources Mapper

This version of the National NMFS ESA Critical Habitat Mapper may not yet include spatial data for recently proposed or designated critical habitat. Additionally, spatial data are not yet available for the designated critical habitat of the Southern Oregon/Northern California Coast coho salmon and the Snake River spring/summer-run chinook salmon. NMFS will add these



EFH Mapper Report

EFH Data Notice

Essential Fish Habitat (EFH) is defined by textual descriptions contained in the fishery management plans developed by the regional fishery management councils. In most cases mapping data can not fully represent the complexity of the habitats that make up EFH. This report should be used for general interest queries only and should not be interpreted as a definitive evaluation of EFH at this location. A location-specific evaluation of EFH for any official purposes must be performed by a regional expert. Please refer to the following links for the appropriate regional resources.

West Coast Regional Office

Query Results

Degrees, Minutes, Seconds: Latitude = 38° 29' 26" N, Longitude = 122° 17' 31" W
Decimal Degrees: Latitude = 38.490, Longitude = -121.708

The query location intersects with spatial data representing EFH and/or HAPCs for the following species/management units.

EFH

No additional Essential Fish Habitats (EFH) were identified at the report location.

Pacific Salmon EFH

Link	HUC Name	Species/Management Unit	Lifestage(s) Found at Location	Management Council	FMP
	Lower Sacramento	Chinook Salmon	All	Pacific	Pacific Coast Salmon Plan

Atlantic Salmon

No Atlantic Salmon were identified at the report location.

HAPCs

No Habitat Areas of Particular Concern (HAPC) were identified at the report location.

EFH Areas Protected from Fishing

No EFH Areas Protected from Fishing (EFHA) were identified at the report location.

Spatial data does not currently exist for all the managed species in this area. The following is a list of species or management units for which there is no spatial data.
****For links to all EFH text descriptions see the complete data inventory: open data inventory -->**

Pacific Coastal Pelagic Species,
Jack Mackerel,
Pacific (Chub) Mackerel,
Pacific Sardine,
Northern Anchovy - Central Subpopulation,
Northern Anchovy - Northern Subpopulation,
Pacific Highly Migratory Species,
Bigeye Thresher Shark - North Pacific,
Bluefin Tuna - Pacific,
Dolphinfish (Dorado or Mahimahi) - Pacific,
Pelagic Thresher Shark - North Pacific,
Swordfish - North Pacific

Attachment B

NRCS Soil Report

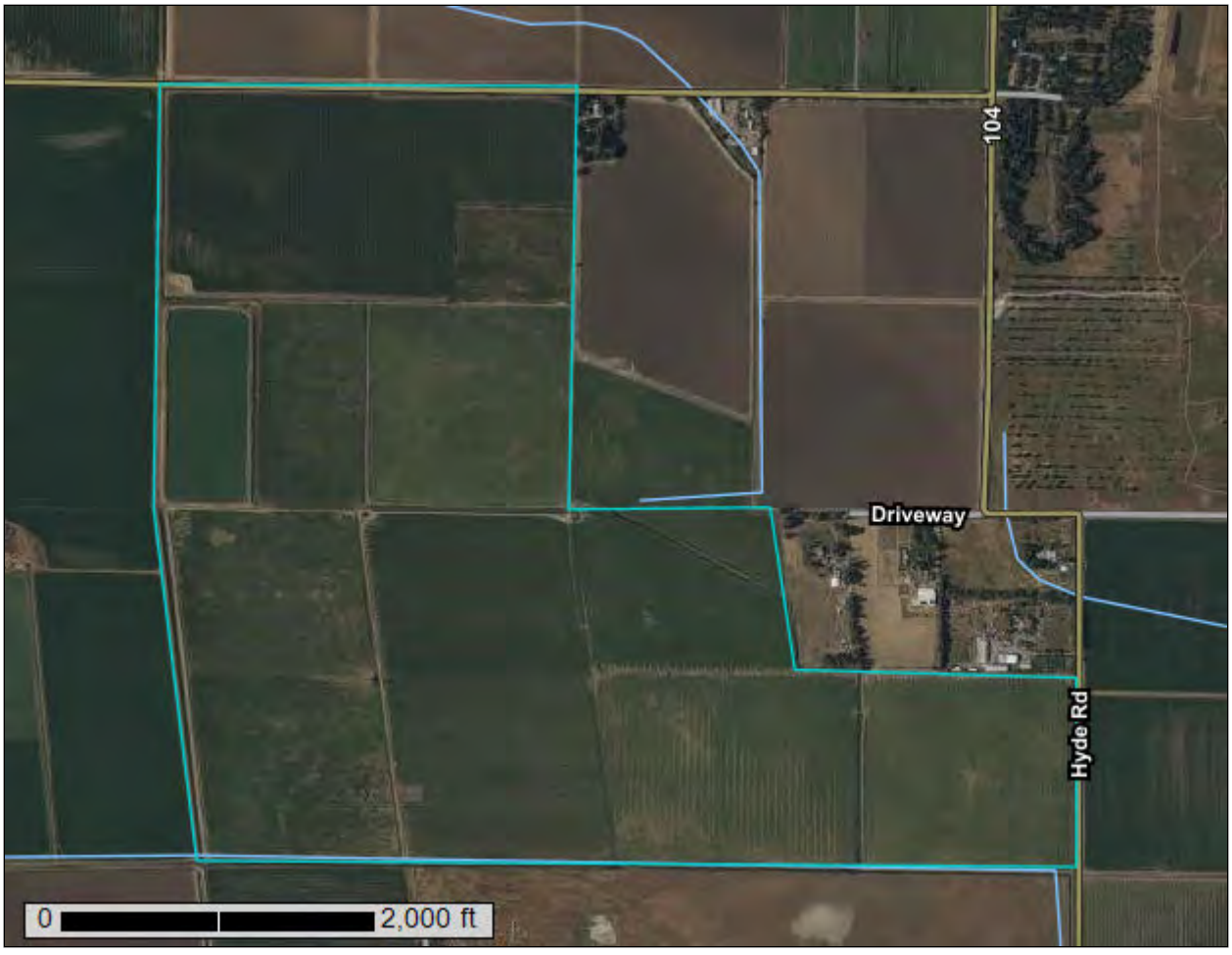
United States Department of Agriculture

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 Solano County, California



April 21, 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.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

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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.

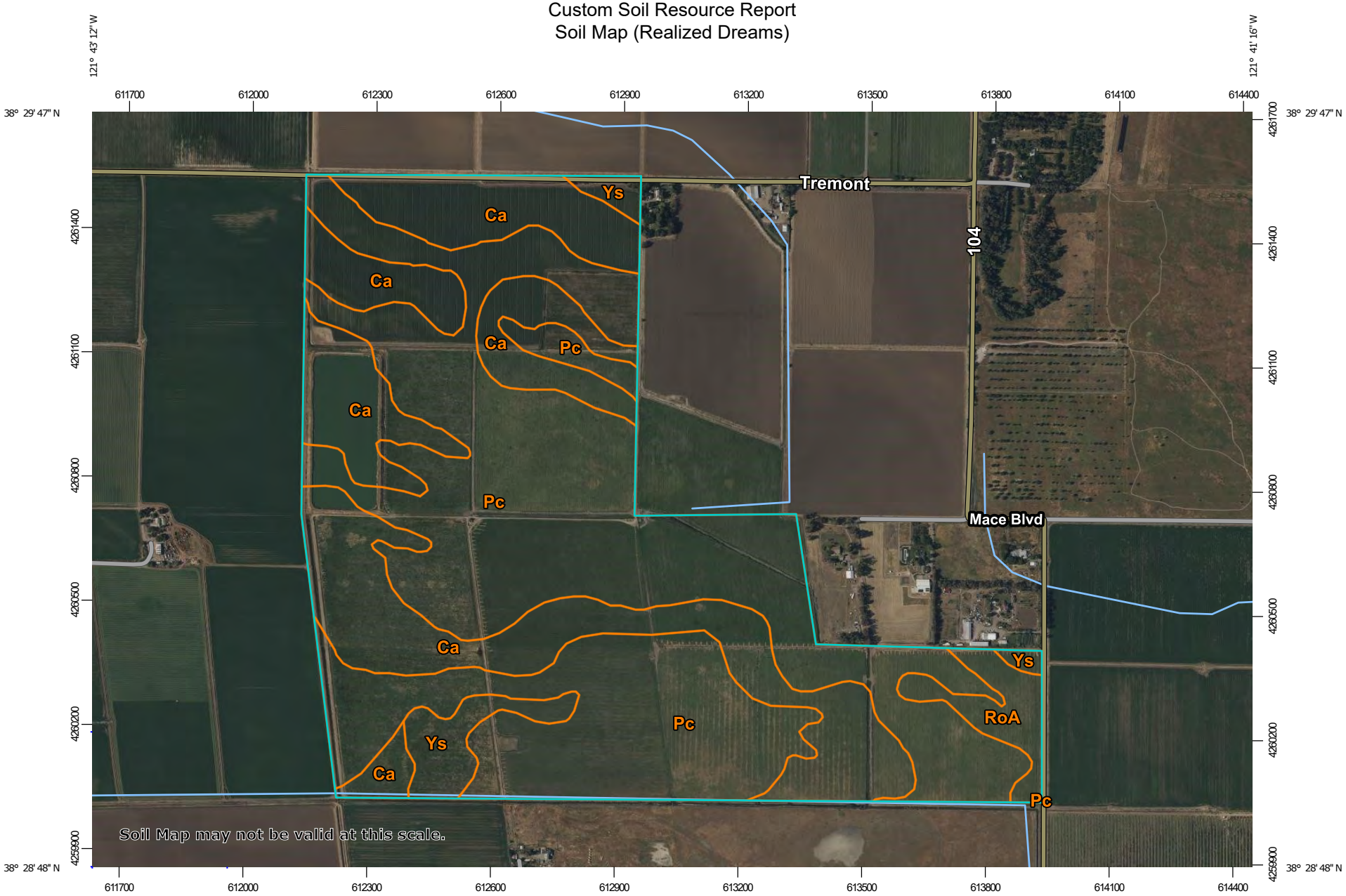
Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree 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.



Map Scale: 1:12,900 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 150 300 600 900

Feet
0 500 1000 2000 3000

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 10N 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: Solano County, California
Survey Area Data: Version 19, Sep 8, 2024

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

Date(s) aerial images were photographed: Apr 23, 2022—Apr 24, 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 (Realized Dreams)

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Ca	Capay silty clay loam, 0 percent slopes, MLRA 17	141.3	33.7%
Pc	Pescadero silty clay loam, 0 percent slopes, MLRA 17	250.4	59.8%
RoA	Rincon clay loam, 0 to 2 percent slope	11.9	2.8%
Ys	Yolo silty clay loam, 0 to 2 percent slopes, MLRA 17	15.3	3.6%
Totals for Area of Interest		**418.9**	**100.0%**

Map Unit Descriptions (Realized Dreams)

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.

Solano County, California

Ca—Capay silty clay loam, 0 percent slopes, MLRA 17

Map Unit Setting

National map unit symbol: 2xcc2
Elevation: 20 to 110 feet
Mean annual precipitation: 20 to 25 inches
Mean annual air temperature: 61 to 62 degrees F
Frost-free period: 315 to 325 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

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

Description of Capay

Setting

Landform: Alluvial fans
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread, rise
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from igneous, metamorphic and sedimentary rock

Typical profile

Ap - 0 to 5 inches: silty clay loam
Bwk1 - 5 to 21 inches: silty clay loam
Bwk2 - 21 to 32 inches: silty clay loam
Bwk3 - 32 to 40 inches: silty clay loam
Bwk4 - 40 to 50 inches: silty clay loam
Bwk5 - 50 to 62 inches: silty clay loam
Bwk6 - 62 to 81 inches: silty clay loam
2Bwk7 - 81 to 88 inches: sandy clay loam
2Bk - 88 to 102 inches: fine sandy loam

Properties and qualities

Slope: 0 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 50 to 102 inches
Frequency of flooding: Rare
Frequency of ponding: Occasional
Calcium carbonate, maximum content: 1 percent
Gypsum, maximum content: 1 percent
Maximum salinity: Nonsaline to very slightly saline (0.5 to 3.0 mmhos/cm)
Sodium adsorption ratio, maximum: 15.0
Available water supply, 0 to 60 inches: High (about 10.1 inches)

Interpretive groups

Land capability classification (irrigated): 2s
Land capability classification (nonirrigated): 4s
Hydrologic Soil Group: C
Ecological site: R017XY904CA - Subirrigated Deep Alluvial Fans
Hydric soil rating: No

Minor Components

Rincon

Percent of map unit: 5 percent
Landform: Alluvial fans
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread, rise
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Brentwood

Percent of map unit: 5 percent
Landform: Alluvial fans
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread, rise
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Yolo

Percent of map unit: 5 percent
Landform: Alluvial fans
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread, rise
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Pc—Pescadero silty clay loam, 0 percent slopes, MLRA 17

Map Unit Setting

National map unit symbol: 2xcbg
Elevation: 0 to 50 feet
Mean annual precipitation: 19 to 23 inches
Mean annual air temperature: 61 to 61 degrees F
Frost-free period: 318 to 326 days
Farmland classification: Not prime farmland

Map Unit Composition

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

Description of Pescadero

Setting

Landform: Basin floors on fan remnants, basin floors
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from igneous, metamorphic and sedimentary rock

Typical profile

An - 0 to 4 inches: silty clay loam
Btn - 4 to 14 inches: silty clay loam
Btknss1 - 14 to 22 inches: silty clay
Btknss2 - 22 to 34 inches: silty clay loam
Btkn - 34 to 47 inches: clay loam
Bwkn1 - 47 to 58 inches: clay loam
Bwkn2 - 58 to 69 inches: clay loam
B'tkn - 69 to 85 inches: clay loam

Properties and qualities

Slope: 0 percent
Depth to restrictive feature: 4 inches to natric
Drainage class: Somewhat poorly drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.01 in/hr)
Depth to water table: About 4 to 85 inches
Frequency of flooding: Rare
Frequency of ponding: Frequent
Calcium carbonate, maximum content: 20 percent
Maximum salinity: Slightly saline to strongly saline (5.0 to 16.0 mmhos/cm)
Sodium adsorption ratio, maximum: 95.0
Available water supply, 0 to 60 inches: Very low (about 0.9 inches)

Interpretive groups

Land capability classification (irrigated): 3w
Land capability classification (nonirrigated): 4w
Hydrologic Soil Group: D
Ecological site: R017XY901CA - Clayey Basin Group
Hydric soil rating: No

Minor Components

Solano

Percent of map unit: 8 percent
Landform: Fan remnants
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Willows

Percent of map unit: 7 percent

Landform: Basin floors
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: Yes

RoA—Rincon clay loam, 0 to 2 percent slope

Map Unit Setting

National map unit symbol: h9m5
Elevation: 20 to 200 feet
Mean annual precipitation: 20 to 25 inches
Mean annual air temperature: 59 to 61 degrees F
Frost-free period: 240 to 260 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

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

Description of Rincon

Setting

Landform: Stream terraces, fan remnants
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from sedimentary rock

Typical profile

H1 - 0 to 22 inches: clay loam
H2 - 22 to 44 inches: clay loam
H3 - 44 to 60 inches: clay loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 9.4 inches)

Interpretive groups

Land capability classification (irrigated): 2s
Land capability classification (nonirrigated): 4s
Hydrologic Soil Group: C
Ecological site: R014XG918CA - Loamy Fan
Hydric soil rating: No

Minor Components

Brentwood

Percent of map unit: 10 percent
Landform: Alluvial fans
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Capay

Percent of map unit: 5 percent
Landform: Basin floors
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Ys—Yolo silty clay loam, 0 to 2 percent slopes, MLRA 17

Map Unit Setting

National map unit symbol: 2w8b1
Elevation: 10 to 420 feet
Mean annual precipitation: 16 to 28 inches
Mean annual air temperature: 61 to 63 degrees F
Frost-free period: 240 to 270 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

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

Description of Yolo

Setting

Landform: Alluvial fans
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear

Parent material: Alluvium derived from igneous, metamorphic and sedimentary rock

Typical profile

Ap - 0 to 9 inches: silty clay loam
A1 - 9 to 18 inches: silty clay loam
A2 - 18 to 28 inches: silty clay loam
Bw1 - 28 to 36 inches: clay loam
Bw2 - 36 to 44 inches: loam
Bw3 - 44 to 60 inches: loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.60 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: Rare
Frequency of ponding: None
Calcium carbonate, maximum content: 1 percent
Maximum salinity: Nonsaline (0.3 to 0.5 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 11.1 inches)

Interpretive groups

Land capability classification (irrigated): 1
Land capability classification (nonirrigated): 4c
Hydrologic Soil Group: B
Ecological site: R014XG918CA - Loamy Fan
Hydric soil rating: No

Minor Components

Sycamore

Percent of map unit: 5 percent
Landform: Alluvial fans
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Reiff

Percent of map unit: 5 percent
Landform: Alluvial fans
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Brentwood

Percent of map unit: 5 percent
Landform: Alluvial fans
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread

Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

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Attachment C

Species Observed

Species observed by Soar Environmental Consulting (August 2024)
and Acorn Environmental (April 2025)

Scientific Name	Common Name
Plants	
Quercus lobata	valley oak
Robinia pseudoacacia	black locust
Juglans californica	California walnut
Avena barbata	wild oat
Bromus hordeaceus	soft chess
Cynodon dactylon	Bermuda grass
Festuca perennis (Lolium perenne)	Italian ryegrass
Festuca pratensis	meadow fescue
Hordeum marinum	wall barley
Echinochloa crus-galli	barnyard grass
Polypogon monspeliensis	Rabbitsfoot grass
Lepidium appelianum	white top mustard
Echinodorus berteroi	Burhead
Amaranthus albus	white amaranth
Rubus armeniacus	Himalaya berry
Portulaca oleracea	purslane
Rumex crispus	curly dock
Lactuca serriola	prickly lettuce
Medicago ploymorpha	bur clover
Leymus condensatus	ryegrass
Typha latifolia	broadleaf cattail
Carduus pycnocephalus	Italian thistle
Convolvulus arvensis	bindweed
Cirsium vulgare	bull thistle
Centaurea solstitialis	yellow starthistle
Paspalum dilatatum	Dallis grass
Croton setigerus	doveweed
Cynara cardunculus	Artichoke thistle
Erigeron bonariensis	flax-leaf fleabane
Epilobium brachycarpum	willowherb
Lotus corniculatus	birdsfoot trefoil
Malva bullata	cheeseweed
Malva nicaensis	bull mallow
Malvella leprosa	Alkali mallow
Polygonum aviculare	knotweed
Plantago lanceolata	European plantain
Trifolium fragiferum	strawberry clover
Spergularia rubra	spurrey

Typha domingoensis	Cattail
Silybum marianum	milk thistle
Centromadia pungens	Common tar plant
Medicago sativa	alfalfa
Animals	
Recurvirostra americana	American avocet
Tyrannus verticalis	Western kingbird
Buteo swainsoni	Swainson's hawk
Anas platyrhynchos	mallard
Buteo jamaicensis	red tailed hawk
Ardea herodias	great blue heron
Ardea alba	great egret
Bubulcus ibis	cattle egret
Aechmophorus occidentalis	western grebe
Aeshna multicolor	Blue-eyed darner dragonfly
Rhionaeschna californica	California darner dragonfly
Enallagma cyathigerum	American bluet damselfly
Pseudoacris regilla	Pacific tree frog
Circus hudsonius	Northern harrier
Cathartes aurea	Turkey vulture
Riparia riparia	Bank swallow
Calypte anna	Anna's hummingbird
Sayornis nigricans	Black Phoebe
Lontra canadensis	North American river otter
Agelaius phoeniceus	Red-wing blackbird
Hirundo rustica	Barn swallow
Sturnella neglecta	Western meadowlark
Charadrius vociferus	Killdeer
Streptopelia decaocto	Eurasian collared dove
Mimus polyglottos	Northern mockingbird
Pacifastacus leniusculus	Signal crayfish
Microtus californicus	California vole

Attachment D

Site Photographs

Representative photo of an agricultural irrigation ditch with unpaved farm road and berm of water storage basin on the right and flooded field agriculture on the left (alfalfa)

Agricultural water storage basin on the project site used for irrigation and stockwatering

Agricultural irrigation ditch that is part of the Solano Irrigation District's conveyance system

Site access off Tremont Road showing road ditch and feedcrop (alfalfa)

Site access off Tremont Road showing agricultural irrigation ditch and associated siphons and dams used to flood-irrigate the alfalfa

Berm of agricultural storage basin (on right) and hay crop (on left), with pipe culvert and irrigation ditch (center)

Concrete pipe culvert/lock and irrigation ditch (center), with hay crops on both sides.

Irrigation ditch parallel to Tremont Road that is filled by groundwater pumped from a well.

One of the Solano Irrigation District's canals in the center of the project site.

Site access off Tremont Road showing Solano Irrigation District's canal, with a sidewall that was recently scraped to remove vegetation.

Attachment E

Species Table

Special-status Species with the Potential to Occur in the Vicinity of the Project Site

Scientific Name	Common Name	Status*	General Habitat**	Microhabitat**	Potential to Occur on Project Site
Mammals					
Antrozous pallidus	Pallid bat	CSSC	Deserts, grasslands, shrublands, woodlands & forests. Most common in open, dry habitats with rocky areas for roosting.	Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	No potential to occur.
Lasionycteris noctivagans	Silver-haired bat	CSSC	Primarily a coastal & montane forest dweller feeding over streams, ponds & open brushy areas.	Roosts in hollow trees, beneath exfoliating bark, abandoned woodpecker holes & rarely under rocks. Needs drinking water.	No potential to occur.
Lasiurus cinereus	Hoary bat	CSSC	Trees and snags	--	No potential to occur.
Taxidea taxus	American badger	CSSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils.	Needs sufficient food, friable soils & open, uncultivated ground. Preys on burrowing rodents. Digs burrows.	No potential to occur.
Amphibians and Reptiles					
Ambystoma californiense pop. 1	California tiger salamander - central California DPS	FT, CT	Require both aquatic and upland habitats throughout their life cycle, using vernal pools and other seasonal wetlands for breeding and underground burrows for shelter.	--	No potential to occur.
Emys marmorata	northwestern pond turtle	FPT	A thoroughly aquatic turtle of ponds, marshes, rivers, streams & irrigation ditches, usually with aquatic vegetation	Need basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying	**Moderate potential to occur within the water storage basin and irrigation ditches.**
Spea hammondii	Western spadefoot	FPT	Occurs primarily in grassland habitats but can be found in valley-foothill hardwood woodlands.	Vernal pools are essential for breeding and egg-laying.	No potential to occur.
Thamnophis gigas	Giant garter snake	FT, CT	Prefers freshwater marsh and low gradient streams. Has adapted to drainage canals & irrigation ditches.	This is the most aquatic of the garter snakes in California.	**Moderate potential to occur. May use the irrigation ditches for dispersal. Breeding habitat absent**.
Birds					
Agelaius tricolor	Tricolored blackbird	CT	Highly colonial species, most numerous in central valley & vicinity. Largely endemic to California.	Requires open water, protected nesting substrate, & foraging area with insect prey within a few km of the colony.	No potential to occur.
Ammodramus savannarum	Grasshopper sparrow	CSSC	Dense grasslands on rolling hills, lowland plains, in valleys & on hillsides on lower mountain slopes.	Favors native grasslands with a mix of grasses, forbs & scattered shrubs. Loosely colonial when nesting.	No potential to occur.
Athene cunicularia	Burrowing owl	CSSC	Open, dry annual or perennial grasslands, deserts & scrublands characterized by low-growing vegetation.	Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	No potential to occur.
Buteo swainsoni	Swainson's hawk	CT	Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, & agricultural or ranch lands	Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.	**Has been observed foraging on the project site but nesting habitat is not present.**
Charadrius nivosus nivosus	Western snowy plover	FT	Sandy beaches, salt pond levees & shores of large alkali lakes.	Needs sandy, gravelly or friable soils for nesting.	No potential to occur.
Circus hudsonius	Northern harrier	CSSC	Prairies, open areas, and marshes	--	**Has been observed foraging on the project site but nesting habitat is not present.**
Coccyzus americanus occidentalis	Western yellow-billed cuckoo	FT, CE	Riparian forest nester, along the broad, lower flood-bottoms of larger river systems.	Nests in riparian jungles of willow, often mixed with cottonwoods, w/ lower story of blackberry, nettles, or wild grape.	No potential to occur.
Elanus leucurus	White-tailed kite	CSSC	Rolling foothills and valley margins with scattered oaks & river bottomlands or marshes next to deciduous woodland.	Open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching.	No potential to occur.
Invertebrates					
Bombus pensylvanicus	American bumble bee	CSSC	Grasslands.	--	No potential to occur.
Bombus crotchii	Crotch's bumble bee	CP	Grasslands.	--	No potential to occur.
Bombus occidentalis	Western bumble bee	CP	Grasslands.	--	No potential to occur.
Branchinecta conservatio	Conservancy fairy shrimp	FE	Endemic to the grasslands of the northern two-thirds of the central valley; found in large, turbid pools.	Inhabit astatic pools located in swales formed by old, braided alluvium; filled by winter/spring rains, last until June.	No potential to occur.
Branchinecta lynchi	Vernal pool fairy shrimp	FT	Endemic to the grasslands of the central valley, central coast mtns, and south coast mtns, in astatic rain-filled pools.	Inhabit small, clear-water sandstone-depression pools and grassed swale, earth slump, or basalt-flow depression pools.	No potential to occur.

Branchinecta mesovallensis	Midvalley fairy shrimp	CSSC	Vernal pools in the central valley.	--	No potential to occur.
Cicindela hirticollis abrupta	Sacramento Valley tiger beetle	CSSC	Sandy floodplain habitat in the Sacramento valley. No beetles located during intensive 2001-2004 surveys.	Requires fine to medium sand, terraced floodplains or low sandy water edge flats.	No potential to occur.
Danaus plexippus	Monarch Butterfly	FPT	Requires milkweed as larval host plant, requires variety of flowering plants throughout the growing season.	--	No potential to occur.
Desmocerus californicus dimorphus	Valley elderberry longhorn beetle	FT	Occurs only in the central valley of California, in association with blue elderberry (*sambucus mexicana*).	Prefers to lay eggs in elderberries 2-8 inches in diameter; some preference shown for "stressed" elderberries.	No potential to occur.
Fishes					
Acipenser medirostris pop. 1	Green sturgeon - southern DPS	FT	Permanent waters.	--	No potential to occur.
Oncorhynchus mykiss irideus pop. 11	Steelhead - Central Valley DPS	FT	Populations in the Sacramento and San Joaquin rivers and their tributaries.	--	No potential to occur.
Plants					
Astragalus tener var. Ferrisiae	Ferris' milk-vetch	CNPS 1B.1	Meadows, valley and foothill grassland.	Subalkaline flats on overflow land in the central valley; usually seen in dry, adobe soil. 5-75m.	No potential to occur.
Astragalus tener var. Tener	Alkali milk-vetch	CNPS 1B.2	Alkali playa, valley and foothill grassland, vernal pools.	Low ground, alkali flats, and flooded lands; in annual grassland or in playas or vernal pools. 1-170m.	No potential to occur.
Atriplex cordulata var. Cordulata	Heartscale	CNPS 1B.2	Chenopod scrub, valley and foothill grassland, meadows.	Alkaline flats and scalds in the central valley, sandy soils. 1-150(600)m.	No potential to occur.
Atriplex depressa	Brittlescale	CNPS 1B.2	Chenopod scrub, meadows, playas, valley and foothill grassland, vernal pools.	Usually in alkali scalds or alkaline clay in meadows or annual grassland; rarely associated w/riparian, marshes, or vernal pools. 1-320m.	No potential to occur.
Centromadia parryi ssp. Parryi	Pappose tarplant	CNPS 1B.2	Coastal prairie, meadows and seeps, coastal salt marsh, valley and foothill grassland.	Vernally mesic, often alkaline sites. 2-420m.	No potential to occur.
Eryngium jepsonii	Jepson's coyote-thistle	CNPS 1B.2	Wetlands.	--	No potential to occur.
Extriplex joaquinana	San Joaquin spearscale	CNPS 1B.2	Chenopod scrub, alkali meadow, valley and foothill grassland.	In seasonal alkali wetlands or alkali sink scrub with distichlis spicata, frankenia, etc. 1-250m.	No potential to occur.
Fritillaria pluriflora	Adobe-lily	CNPS 1B.2	Chaparral, cismontane woodland, foothill grassland.	Usually on clay soils; sometimes serpentine. 55-820m.	No potential to occur.
Lepidium latipes var. Heckardii	Heckard's pepper-grass	CNPS 1B.2	Valley and foothill grassland.	Grassland, and sometimes vernal pool edges. Alkaline soils. 2-200 m.	No potential to occur.
Lilaeopsis masonii	Mason's lilaeopsis	CNPS 1B.1	Freshwater and brackish marshes, riparian scrub.	Tidal zones, in muddy or silty soil formed through river deposition or river bank erosion. 0-10m.	No potential to occur.
Navarretia leucocephala ssp. Bakeri	Baker's navarretia	CNPS 1B.1	Cismontane woodland, meadows and seeps, vernal pools, valley and foothill grassland, lower montane coniferous forest.	Vernal pools and swales; adobe or alkaline soils. 5-950m.	No potential to occur.
Neostapfia colusana	Colusa grass	FT, CE	Vernal pools.	Usually in large, or deep vernal pool bottoms; adobe soils. 5-200 m.	No potential to occur.
Plagiobothrys hystriculus	Bearded popcorn flower	CNPS 1B.1	Vernal pools, valley and foothill grassland.	Wet sites. 10-50m.	No potential to occur.
Puccinellia simplex	California alkali grass	CNPS 1B.2	Alkaline soils.		No potential to occur.
Sidalcea keckii	Keck's checkerbloom	FE	Cismontane woodland, valley and foothill grassland	Grassy slopes in blue oak woodland. 75-650 m.	No potential to occur.
Trifolium hydrophilum	Saline clover	CNPS 1B.2	Marshes and swamps, valley and foothill grassland, vernal pools.	Mesic, alkaline sites. 0-300m.	No potential to occur.
Tuctoria mucronata	Crampton's tuctoria or Solano grass	FE, CE	Vernal pools, valley and foothill grassland.	Clay bottoms of drying vernal pools and lakes in valley grassland. 5-10 m.	No potential to occur.

Sources: IPaC, CNDDB, and CNPS

Definitions of Status Codes

FE = Federally listed as endangered FT = Federally listed as threatened FC = Candidate for federal listing FPT = Federally proposed for listed as threatened
CE = California State listed as endangered CT = California State listed as threatened CSSC = California species of special concern
California Rare Plant Rank (CRPR) List 1A = Plants presumed extinct in California List 1B = Plants designated rare, threatened or endangered in California and elsewhere List 2A = Plants presumed extirpated in California but common elsewhere
List 2B = Plants rare threatened or endangered in California, but more common elsewhere List 3 (Review List) = Plants about which more information is needed .
CRPR Threat Ranks: 0.1 = seriously threatened in California .2 = moderately threatened in California .3 = not very threatened in California .