

# Creekview Ranch Project

SCH# 2021070362

## Final Environmental Impact Report

Prepared for  
Placer County



March 2023

Prepared by



1501 SPORTS DRIVE, SUITE A, SACRAMENTO, CA 95834



# **Creekview Ranch Project Final Environmental Impact Report**

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SCH# 2021070362

## **Lead Agency**

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Community Development Resource Agency  
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## **Appendix**

Updated Biological Resources Assessment





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# **1. Introduction and List of Commenters**

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# 1. INTRODUCTION AND LIST OF COMMENTERS

## 1.1 INTRODUCTION

This Final Environmental Impact Report (EIR) contains agency and public comments received during the public review period of the Creekview Ranch Project (proposed project) Draft EIR. This document has been prepared by Placer County, as Lead Agency, in accordance with the California Environmental Quality Act (CEQA) and the CEQA Guidelines, Section 15132. The Introduction and List of Commenters chapter of the Final EIR discusses the background of the Draft EIR and purpose of the Final EIR, identifies the comment letters received on the Draft EIR, and provides an overview of the Final EIR's organization.

## 1.2 BACKGROUND

The Draft EIR identifies the proposed project's potential environmental impacts and the mitigation measures that would be required to be implemented. The following environmental analysis chapters are contained in the Draft EIR:

- Aesthetics;
- Agricultural Resources;
- Air Quality and Greenhouse Gas Emissions;
- Biological Resources;
- Cultural Resources;
- Energy;
- Geology and Soils;
- Hazards and Hazardous Materials;
- Hydrology and Water Quality;
- Land Use and Planning/Population and Housing;
- Noise;
- Public Services and Utilities;
- Transportation;
- Tribal Cultural Resources;
- Wildfire;
- Effects Not Found to be Significant;
- Statutorily Required Sections; and
- Alternatives Analysis.

In accordance with CEQA, the Draft EIR was sent to the State Clearinghouse (SCH#: 2021070362) for distribution to State agencies on December 19, 2022 for a 45-day public review period. In addition, the Draft EIR and a Notice of Availability (NOA) for the Draft EIR were published on the Placer County Community Development Resource Agency website. Printed copies of the Draft EIR were made available for review at the Roseville Public Library (225 Taylor Street, Roseville), the Rocklin Public Library (4890 Granite Drive, Rocklin), the Placer County Community Development Resource Agency (3091 County Center Drive, Auburn), and the County Clerk's



Office (2954 Richardson Drive, Auburn). A public meeting was held before the Planning Commission on January 12, 2023 to solicit public comments regarding the Draft EIR.

**1.3 PURPOSE OF THE FINAL EIR**

Under CEQA Guidelines Section 15132, the Final EIR shall consist of:

- 1. The Draft EIR or a revision of the Draft.
- 2. Comments and recommendations received on the Draft EIR.
- 3. A list of persons, organizations, and public agencies commenting on the Draft EIR.
- 4. The responses to significant environmental points raised in the review process.
- 5. Any other information added by the Lead Agency.

As required by CEQA Guidelines, Section 15090(a)(1)-(3), a Lead Agency must make the following three determinations in certifying a Final EIR:

- 1. The Final EIR has been completed in compliance with CEQA.
- 2. The Final EIR was presented to the decision-making body of the Lead Agency, and the decision-making body reviewed and considered the information in the Final EIR prior to approving the project.
- 3. The Final EIR reflects the Lead Agency’s independent judgment and analysis.

Under CEQA Guidelines Section 15091, a public agency shall not approve or carry out a project for which an EIR has been certified that identifies one or more significant environmental effects of the project unless the public agency makes one or more written findings (Findings of Fact) for each of those significant effects. Findings of Fact must be accompanied by a brief explanation of the rationale for each finding supported by substantial evidence in the record. The Findings of Fact are included in a separate document that will be considered for adoption by the County’s decision-makers.

Pursuant to CEQA Guidelines, Section 15093(b), when a Lead Agency approves a project that would result in significant and unavoidable impacts, the agency must state in writing the reasons supporting the action (Statement of Overriding Considerations). The Statement of Overriding Considerations shall be supported by substantial evidence, and are subject to adoption by the County’s decision-makers along with the Findings of Fact. The Creekview Ranch Project would result in a significant and unavoidable impact related to substantially degrading the existing visual character or the quality of public views (Impact 4-2) and causing long-term changes in the visual character associated with cumulative development of the proposed project in combination with future buildout of the Dry Creek West Placer Community Plan (DCWPCP) (Impact 4-4); thus, a Statement of Overriding Considerations must be adopted if the project is approved.

**1.4 LIST OF COMMENTERS**

Placer County received six comment letters during the public comment period on the Draft EIR for the proposed project. The comment letters were authored by the following agencies and individuals:

**Agencies**

- Letter 1 ..... Federal Emergency Management Agency
- Letter 2 ..... Central Valley Regional Water Quality Control Board



**Individuals**

Letter 3 ..... Richard and Maisie Conrad (Letter 1 of 2, 1/15/23)  
Letter 4 ..... Richard and Maisie Conrad (Letter 2 of 2, 1/30/23)  
Letter 5 ..... Richard Lingsjo  
Letter 6 ..... Sheri Walkin

In addition, two verbal comments were received during the public meeting held before the Planning Commission on January 12, 2023 to solicit public comments regarding the Draft EIR. A summary of the comments from the Draft EIR comment hearing are included as Letter 7.

Letter 7 ..... Summary of Verbal Comments: Draft EIR Public Meeting (January 12, 2023)

**1.5 ORGANIZATION OF THE FINAL EIR**

The Final EIR is organized into the following chapters:

**1. Introduction and List of Commenters**

Chapter 1 provides an introduction and overview of the document, describing the background and organization of the Final EIR. Chapter 1 also provides a list of commenters who submitted letters in response to the Draft EIR.

**2. Responses to Comments**

Chapter 2 presents the comment letters received and responses to each comment. Each comment letter received has been numbered at the top and bracketed to indicate how the letter has been divided into individual comments. Each comment is given a number with the letter number appearing first, followed by the comment number. For example, the first comment in Letter 1 would have the following format: 1-1. The response to each comment will reference the comment number.

**3. Revisions to the Draft EIR Text**

Chapter 3 summarizes minor changes made to the Draft EIR text since its release.

**4. Mitigation Monitoring and Reporting Program**

CEQA Guidelines, Section 15097, requires lead agencies to adopt a program for monitoring the mitigation measures required to avoid the significant environmental impacts of a project. The intent of the Mitigation Monitoring and Reporting Program (MMRP) is to ensure implementation of the mitigation measures identified within the EIR for the Creekview Ranch Project.





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## **2. Responses to Comments**

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## 2. RESPONSES TO COMMENTS

### 2.1 INTRODUCTION

The Responses to Comments chapter contains responses to each of the comment letters submitted regarding the Creekview Ranch Project (proposed project) Draft EIR during the public review period and a response to the verbal comments received at the Planning Commission meeting to receive public comment on the Draft EIR.

The County appreciates the time and effort taken by commenters to express their views and concerns as a part of this process. These views and recommendations are considered by County staff in developing the staff recommendation, and by the Planning Commission and Board of Supervisors in their deliberations and decision-making regarding certification of the EIR and the proposed project.

Section 15088(a) of the CEQA Guidelines directs that lead agencies must prepare written responses to those comments received during the Draft EIR comment period that raise “significant environmental issues.” The County is not required to respond to comments on non-CEQA issues or to respond to late comments. Nevertheless, the County has chosen to respond to all comments received on the Draft EIR in this Responses to Comments chapter. The County has opted to take this broad approach to facilitate the public process, document the exchange of information, and provide important information about considerations relevant to the proposed project.

Where a comment provides the opinion, preference, or observation of the commenter (e.g., opinions on the merits of the project that are unrelated to its environmental impacts), without substantiation, this is acknowledged for the record, and no further response is provided. All comments, whether substantiated by facts or simply reflecting the position of the commenter, have been considered by the County throughout this process.

According to CEQA Guidelines Section 15088, “The level of detail contained in the response... may correspond to the level of detail provided in the comment (i.e., responses to general comments may be general). A general response may be appropriate when a comment does not contain or specifically refer to readily available information, or does not explain the relevance of evidence submitted with the comment.” Thus, when a commenter expresses general concerns like the proposed project would result in “more traffic,” “increased noise,” “effects on water quality,” or “increased light and glare,” a specific response is not offered. Rather, the commenter is referred to those sections of the Draft EIR where the referenced general concern is evaluated in detail. For example, project-related traffic and its effect on the regional roadway network is evaluated in Chapter 16, Transportation, of the Draft EIR. Potential impacts related to noise and vibration associated with construction and operation of the proposed project are addressed in Chapter 14, Noise, of the Draft EIR. The potential effects of the project on local hydrology and water quality, including groundwater, are addressed in Chapter 12, Hydrology and Water Quality, of the Draft EIR, and project-related effects associated with light and glare are assessed in Chapter 4, Aesthetics, of the Draft EIR.



## **2.2 RESPONSES TO COMMENTS**

The following six letters were received by the County during the public comment period for the Draft EIR. Each bracketed comment letter is followed by numbered responses to each bracketed comment. In addition, comments from two verbal commenters were received during the public meeting held on January 12, 2023 to solicit public comments on the Draft EIR and are identified as Letter 7. A numbered response is provided to the verbal comments, following the responses to the six letters. The responses amplify or clarify information provided in the Draft EIR and/or refer the reader to the appropriate place in the document where the requested information can be found. Comments that are not directly related to environmental issues (e.g., opinions on the merits of the project that are unrelated to its environmental impacts) are either discussed or noted for the record, as appropriate.

Revisions to the Draft EIR text are not required in response to the comments. It should be noted that, as presented in Chapter 3 of this Final EIR, minor corrections, additions, and revisions have been made to the Draft EIR, as initiated by the Lead Agency (Placer County). However, the changes represent minor clarifications/amplifications of the analysis contained in the Draft EIR and do not constitute significant new information that, in accordance with CEQA Guidelines, Section 15088.5, would trigger the need to recirculate portions or all of the Draft EIR. Thus, recirculation of the Draft EIR is not required.

Each letter has been considered by the County and addressed, according to CEQA Guidelines Section 15088, prior to certification of this Final EIR.



Letter 1

U.S. Department of Homeland Security  
FEMA Region IX  
1111 Broadway, Suite 1200  
Oakland, CA. 94607-4052



January 17, 2023

Christopher Schmidt, Project Planner  
Placer County Community Development Resource Agency  
Environmental Coordinator Services  
3091 County Center Drive, Suite 190  
Auburn, CA 95603

Dear Mr. Schmidt:

This is in response to your request for comments regarding Amended Notice of Availability of Draft Environmental Impact Review for Public Review for Creekview Ranch Subdivision (PLN21-00130) (State Clearinghouse No. 2021070362).

1-1

Please review the current effective Flood Insurance Rate Maps (FIRMs) for the County of Placer (Community Number 060239), Maps revised November 2, 2018. Please note that Placer County, California is a participant in the National Flood Insurance Program (NFIP). The minimum, basic NFIP floodplain management building requirements are described in Vol. 44 Code of Federal Regulations (44 CFR), Sections 59 through 65.

A summary of these NFIP floodplain management building requirements are as follows:

1-2

- All buildings constructed within a riverine floodplain, (i.e., Flood Zones A, AO, AH, AE, and A1 through A30 as delineated on the FIRM), must be elevated so that the lowest floor is at or above the Base Flood Elevation level in accordance with the effective Flood Insurance Rate Map.

1-3

- If the area of construction is located within a Regulatory Floodway as delineated on the FIRM, any *development* must not increase base flood elevation levels. **The term *development* means any man-made change to improved or unimproved real estate, including but not limited to buildings, other structures, mining, dredging, filling, grading, paving, excavation or drilling operations, and storage of equipment or materials.** A hydrologic and hydraulic analysis must be performed *prior* to the start of development and must demonstrate that the development would not cause any rise in base flood levels. No rise is permitted within regulatory floodways.

[www.fema.gov](http://www.fema.gov)



Christopher Schmidt, Project Planner  
Page 2  
January 17, 2023

- 1-4
- Upon completion of any development that changes existing Special Flood Hazard Areas, the NFIP directs all participating communities to submit the appropriate hydrologic and hydraulic data to FEMA for a FIRM revision. In accordance with 44 CFR, Section 65.3, as soon as practicable, but not later than six months after such data becomes available, a community shall notify FEMA of the changes by submitting technical data for a flood map revision. To obtain copies of FEMA's Flood Map Revision Application Packages, please refer to the FEMA website at <http://www.fema.gov/business/nfip/forms.shtm>.

**Please Note:**

1-5

Many NFIP participating communities have adopted floodplain management building requirements which are more restrictive than the minimum federal standards described in 44 CFR. Please contact the local community's floodplain manager for more information on local floodplain management building requirements. The Placer County floodplain manager can be reached by calling Mary Keller, Stormwater & Floodplain Program, at (530) 745-7503.

If you have any questions or concerns, please do not hesitate to contact Antoinette Stein at [antoinette.stein@fema.dhs.gov](mailto:antoinette.stein@fema.dhs.gov) of the Mitigation staff.

Sincerely,

Michael Nakagaki, Branch Chief  
Floodplain Management and Insurance Branch

cc:

Mary Keller, Stormwater & Floodplain Program, County of Placer  
Alex Acosta, State of California, Department of Water Resources, North Central Region Office  
Kelly Soule, State of California Department of Water Resources, Sacramento Headquarters Office  
Antoinette Stein, NFIP Floodplain Planner, DHS/FEMA Region IX  
Kenneth Sessa, Acting Environmental Officer, DHS/FEMA Region IX

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[www.fema.gov](http://www.fema.gov)



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**LETTER 1: MICHAEL NAKAGAKI, FEDERAL EMERGENCY  
MANAGEMENT AGENCY**

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**Response to Comment 1-1**

The comment is an introductory statement and does not address the adequacy of the Draft EIR. The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) for the project area was presented as Figure 12-1 of the Draft EIR. The comment has been noted for the record.

**Response to Comment 1-2**

As shown in Figure 12-1 (and described on page 12-2) of the Draft EIR, the entirety of the tributaries and riparian habitat within the Schellhaus parcel, as well as a small portion of the tributaries and riparian habitat in the northern portion of the Placer Greens parcel, are within a FEMA mapped AE floodplain zone. However, as noted on page 12-38 of the Draft EIR, all of the proposed project's parks would be located along the Dry Creek tributaries and open space corridor, avoiding the placement of any structures within the 100-year floodplain. Therefore, following approval of a conditional letter of map revision (CLOMR) and the subsequent letter of map revisions (LOMR), the proposed project would not place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary, FIRM, or flood hazard delineation map.

Furthermore, as discussed on page 12-38 of the Draft EIR, all of the proposed improvements would be subject to Article 15.52, Flood Damage Prevention Regulations, of the Placer County Code, which is intended to minimize public and private losses due to flood conditions, including where public facilities and utilities are located within areas of special flood hazard. The Flood Damage Prevention Regulations provide methods for reducing flood losses and sets forth standards for construction in all areas of special flood hazards. The EIR also included Mitigation Measure 12-4(g), which requires the finished house pad elevations along the floodplain to be a minimum of two feet above the 100-year floodplain line.

**Response to Comment 1-3**

While not a part of the proposed project, the Draft EIR included evaluation of the environmental impacts associated with the development of up to two potential future pedestrian bridges (the East Trail and the West Trail) over the Regulatory Floodway of Dry Creek to connect to the future Dry Creek Greenway West Multi-Use Trail.

As noted on page 12-38 of the Draft EIR, the potential fill within Dry Creek associated with the future pedestrian bridges would consist of approximately eight concrete piles measuring approximately 25 square feet (sf), for both the East Trail and the West Trail, as well as six piles (approximately 19 sf) in the intermittent tributary north of Dry Creek and four piles (approximately 13 sf) in the intermittent tributary south of Dry Creek.

The future pedestrian bridges and associated fill within the floodway were accounted for in the hydraulic modeling performed for the project by King Engineering, and effects on the water surface elevations (WSEs) were shown in Table 12-3 of the Draft EIR. As discussed in Impact 12-4 of the Draft EIR, King Engineering confirmed that the post-construction 100-year increases would be contained in the natural channels of the tributary, and several vertical feet of freeboard would be maintained for existing structures, as well as provided for the proposed building pads.



The Draft EIR noted that compensatory excavation along the south side of Dry Creek could occur during construction of the future pedestrian bridges, in conjunction with a Conditional Letter of Map Revision (CLOMR), if necessary. As such, Mitigation Measure 12-5 of the Draft EIR would require that the project applicant obtain a Conditional Letter of Map Revision (CLOMR) or Conditional Letter of Map Revision based on Fill (CLOMR-F) for fill within a Special Flood Hazard Area, if required, prior to improvement plan approval for the proposed project.

**Response to Comment 1-4**

Please see Responses to Comments 1-2 and 1-3.

**Response to Comment 1-5**

As discussed on page 12-38 of the Draft EIR, all of the proposed improvements would be subject to Article 15.52, Flood Damage Prevention Regulations, of the Placer County Code, which is intended to minimize public and private losses due to flood conditions, including where public facilities and utilities are located within areas of special flood hazard. The Flood Damage Prevention Regulations provide methods for reducing flood losses and sets forth standards for construction in all areas of special flood hazards. The comment has been noted for the record.



Letter 2



Central Valley Regional Water Quality Control Board

1 February 2023

Shirlee Herrington  
Placer County  
3091 County Center Drive  
Auburn, CA 95603  
sherring@placer.ca.gov

2-1

**COMMENTS TO REQUEST FOR REVIEW FOR THE DRAFT ENVIRONMENTAL IMPACT REPORT, CREEKVIEW RANCH SUBDIVISION (PLN21-00130) PROJECT, SCH#2021070362, PLACER COUNTY**

Pursuant to the State Clearinghouse's 19 December 2022 request, the Central Valley Regional Water Quality Control Board (Central Valley Water Board) has reviewed the *Request for Review for the Draft Environmental Impact Report* for the Creekview Ranch Subdivision (PLN21-00130) Project, located in Placer County.

Our agency is delegated with the responsibility of protecting the quality of surface and groundwaters of the state; therefore, our comments will address concerns surrounding those issues.

The project may require a Clean Water Act Section 404 Permit and 401 Permit or a Waste Discharge Requirement permit. For more information on these permits and other Central Valley Water Board permits that may be applicable to this project, please read the sections below.

**I. Regulatory Setting**

**Basin Plan**

The Central Valley Water Board is required to formulate and adopt Basin Plans for all areas within the Central Valley region under Section 13240 of the Porter-Cologne Water Quality Control Act. Each Basin Plan must contain water quality objectives to ensure the reasonable protection of beneficial uses, as well as a program of implementation for achieving water quality objectives with the Basin Plans. Federal regulations require each state to adopt water quality standards to protect the public health or welfare, enhance the quality of water and serve the purposes of the Clean Water Act. In California, the beneficial uses, water quality objectives, and the Antidegradation Policy are the State's water quality standards. Water quality standards are also contained in the National Toxics Rule, 40 CFR Section 131.36, and the California Toxics Rule, 40 CFR Section 131.38.

The Basin Plan is subject to modification as necessary, considering applicable laws, policies, technologies, water quality conditions and priorities. The original Basin

2-2

MARK BRADFORD, CHAIR | PATRICK PULUPA, ESQ., EXECUTIVE OFFICER

11020 Sun Center Drive #200, Rancho Cordova, CA 95670 | [www.waterboards.ca.gov/centralvalley](http://www.waterboards.ca.gov/centralvalley)



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Plans were adopted in 1975, and have been updated and revised periodically as required, using Basin Plan amendments. Once the Central Valley Water Board has adopted a Basin Plan amendment in noticed public hearings, it must be approved by the State Water Resources Control Board (State Water Board), Office of Administrative Law (OAL) and in some cases, the United States Environmental Protection Agency (USEPA). Basin Plan amendments only become effective after they have been approved by the OAL and in some cases, the USEPA. Every three (3) years, a review of the Basin Plan is completed that assesses the appropriateness of existing standards and evaluates and prioritizes Basin Planning issues. For more information on the *Water Quality Control Plan for the Sacramento and San Joaquin River Basins*, please visit our website:

[http://www.waterboards.ca.gov/centralvalley/water\\_issues/basin\\_plans/](http://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/)

#### **Antidegradation Considerations**

All wastewater discharges must comply with the Antidegradation Policy (State Water Board Resolution 68-16) and the Antidegradation Implementation Policy contained in the Basin Plan. The Antidegradation Implementation Policy is available on page 74 at:

[https://www.waterboards.ca.gov/centralvalley/water\\_issues/basin\\_plans/sacsjr\\_2018\\_05.pdf](https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/sacsjr_2018_05.pdf)

In part it states:

*Any discharge of waste to high quality waters must apply best practicable treatment or control not only to prevent a condition of pollution or nuisance from occurring, but also to maintain the highest water quality possible consistent with the maximum benefit to the people of the State.*

*This information must be presented as an analysis of the impacts and potential impacts of the discharge on water quality, as measured by background concentrations and applicable water quality objectives.*

The antidegradation analysis is a mandatory element in the National Pollutant Discharge Elimination System and land discharge Waste Discharge Requirements (WDRs) permitting processes. The environmental review document should evaluate potential impacts to both surface and groundwater quality.

## **II. Permitting Requirements**

### **Construction Storm Water General Permit**

Dischargers whose project disturb one or more acres of soil or where projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, are required to obtain coverage under the General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit), Construction General Permit Order No. 2009-0009-DWQ. Construction activity subject to this permit includes clearing, grading, grubbing, disturbances to the ground, such as stockpiling, or excavation, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility. The Construction General Permit

2-2 cont.

2-3



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2-3 cont.	<p>requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP). For more information on the Construction General Permit, visit the State Water Resources Control Board website at: <a href="http://www.waterboards.ca.gov/water_issues/programs/stormwater/constpermits.shtml">http://www.waterboards.ca.gov/water_issues/programs/stormwater/constpermits.shtml</a></p>
2-4	<p><b><u>Phase I and II Municipal Separate Storm Sewer System (MS4) Permits<sup>1</sup></u></b> The Phase I and II MS4 permits require the Permittees reduce pollutants and runoff flows from new development and redevelopment using Best Management Practices (BMPs) to the maximum extent practicable (MEP). MS4 Permittees have their own development standards, also known as Low Impact Development (LID)/post-construction standards that include a hydromodification component. The MS4 permits also require specific design concepts for LID/post-construction BMPs in the early stages of a project during the entitlement and CEQA process and the development plan review process.</p> <p>For more information on which Phase I MS4 Permit this project applies to, visit the Central Valley Water Board website at: <a href="http://www.waterboards.ca.gov/centralvalley/water_issues/storm_water/municipal_permits/">http://www.waterboards.ca.gov/centralvalley/water_issues/storm_water/municipal_permits/</a></p> <p>For more information on the Phase II MS4 permit and who it applies to, visit the State Water Resources Control Board at: <a href="http://www.waterboards.ca.gov/water_issues/programs/stormwater/phase_ii_municipal.shtml">http://www.waterboards.ca.gov/water_issues/programs/stormwater/phase_ii_municipal.shtml</a></p>
2-5	<p><b><u>Industrial Storm Water General Permit</u></b> Storm water discharges associated with industrial sites must comply with the regulations contained in the Industrial Storm Water General Permit Order No. 2014-0057-DWQ. For more information on the Industrial Storm Water General Permit, visit the Central Valley Water Board website at: <a href="http://www.waterboards.ca.gov/centralvalley/water_issues/storm_water/industrial_general_permits/index.shtml">http://www.waterboards.ca.gov/centralvalley/water_issues/storm_water/industrial_general_permits/index.shtml</a></p>
2-6	<p><b><u>Clean Water Act Section 404 Permit</u></b> If the project will involve the discharge of dredged or fill material in navigable waters or wetlands, a permit pursuant to Section 404 of the Clean Water Act may be needed from the United States Army Corps of Engineers (USACE). If a Section 404 permit is required by the USACE, the Central Valley Water Board will review the permit application to ensure that discharge will not violate water quality standards. If the project requires surface water drainage realignment, the applicant is advised to contact the Department of Fish and Game for information on Streambed Alteration</p>

<sup>1</sup> Municipal Permits = The Phase I Municipal Separate Storm Water System (MS4) Permit covers medium sized Municipalities (serving between 100,000 and 250,000 people) and large sized municipalities (serving over 250,000 people). The Phase II MS4 provides coverage for small municipalities, including non-traditional Small MS4s, which include military bases, public campuses, prisons and hospitals.



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Permit requirements. If you have any questions regarding the Clean Water Act Section 404 permits, please contact the Regulatory Division of the Sacramento District of USACE at (916) 557-5250.

**Clean Water Act Section 401 Permit – Water Quality Certification**

If an USACE permit (e.g., Non-Reporting Nationwide Permit, Nationwide Permit, Letter of Permission, Individual Permit, Regional General Permit, Programmatic General Permit), or any other federal permit (e.g., Section 10 of the Rivers and Harbors Act or Section 9 from the United States Coast Guard), is required for this project due to the disturbance of waters of the United States (such as streams and wetlands), then a Water Quality Certification must be obtained from the Central Valley Water Board prior to initiation of project activities. There are no waivers for 401 Water Quality Certifications. For more information on the Water Quality Certification, visit the Central Valley Water Board website at:  
[https://www.waterboards.ca.gov/centralvalley/water\\_issues/water\\_quality\\_certification/](https://www.waterboards.ca.gov/centralvalley/water_issues/water_quality_certification/)

**Waste Discharge Requirements – Discharges to Waters of the State**

If USACE determines that only non-jurisdictional waters of the State (i.e., “non-federal” waters of the State) are present in the proposed project area, the proposed project may require a Waste Discharge Requirement (WDR) permit to be issued by Central Valley Water Board. Under the California Porter-Cologne Water Quality Control Act, discharges to all waters of the State, including all wetlands and other waters of the State including, but not limited to, isolated wetlands, are subject to State regulation. For more information on the Waste Discharges to Surface Water NPDES Program and WDR processes, visit the Central Valley Water Board website at:  
[https://www.waterboards.ca.gov/centralvalley/water\\_issues/waste\\_to\\_surface\\_water/](https://www.waterboards.ca.gov/centralvalley/water_issues/waste_to_surface_water/)

Projects involving excavation or fill activities impacting less than 0.2 acre or 400 linear feet of non-jurisdictional waters of the state and projects involving dredging activities impacting less than 50 cubic yards of non-jurisdictional waters of the state may be eligible for coverage under the State Water Resources Control Board Water Quality Order No. 2004-0004-DWQ (General Order 2004-0004). For more information on the General Order 2004-0004, visit the State Water Resources Control Board website at:  
[https://www.waterboards.ca.gov/board\\_decisions/adopted\\_orders/water\\_quality/2004/wqo/wqo2004-0004.pdf](https://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2004/wqo/wqo2004-0004.pdf)

**Dewatering Permit**

If the proposed project includes construction or groundwater dewatering to be discharged to land, the proponent may apply for coverage under State Water Board General Water Quality Order (Low Threat General Order) 2003-0003 or the Central Valley Water Board’s Waiver of Report of Waste Discharge and Waste Discharge Requirements (Low Threat Waiver) R5-2018-0085. Small temporary construction dewatering projects are projects that discharge groundwater to land from excavation activities or dewatering of underground utility vaults. Dischargers seeking coverage

2-6 cont.

2-7



Creekview Ranch Subdivision  
(PLN21-00130) Project  
Placer County

- 5 -

1 February 2023

2-7 cont.

under the General Order or Waiver must file a Notice of Intent with the Central Valley Water Board prior to beginning discharge.

For more information regarding the Low Threat General Order and the application process, visit the Central Valley Water Board website at:  
[http://www.waterboards.ca.gov/board\\_decisions/adopted\\_orders/water\\_quality/2003/wqo/wqo2003-0003.pdf](http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2003/wqo/wqo2003-0003.pdf)

For more information regarding the Low Threat Waiver and the application process, visit the Central Valley Water Board website at:  
[https://www.waterboards.ca.gov/centralvalley/board\\_decisions/adopted\\_orders/waivers/r5-2018-0085.pdf](https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/waivers/r5-2018-0085.pdf)

2-8

**Limited Threat General NPDES Permit**

If the proposed project includes construction dewatering and it is necessary to discharge the groundwater to waters of the United States, the proposed project will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit. Dewatering discharges are typically considered a low or limited threat to water quality and may be covered under the General Order for *Limited Threat Discharges to Surface Water* (Limited Threat General Order). A complete Notice of Intent must be submitted to the Central Valley Water Board to obtain coverage under the Limited Threat General Order. For more information regarding the Limited Threat General Order and the application process, visit the Central Valley Water Board website at:

[https://www.waterboards.ca.gov/centralvalley/board\\_decisions/adopted\\_orders/general\\_orders/r5-2016-0076-01.pdf](https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2016-0076-01.pdf)

2-9

**NPDES Permit**

If the proposed project discharges waste that could affect the quality of surface waters of the State, other than into a community sewer system, the proposed project will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit. A complete Report of Waste Discharge must be submitted with the Central Valley Water Board to obtain a NPDES Permit. For more information regarding the NPDES Permit and the application process, visit the Central Valley Water Board website at: <https://www.waterboards.ca.gov/centralvalley/help/permit/>

If you have questions regarding these comments, please contact me at (916) 464-4838 or [Kelly.Boyle@waterboards.ca.gov](mailto:Kelly.Boyle@waterboards.ca.gov).

*Kelly Boyle*

Kelly Boyle  
Environmental Scientist

cc: State Clearinghouse unit, Governor's Office of Planning and Research,  
Sacramento



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## LETTER 2: KELLY BOYLE, CENTRAL VALLEY REGIONAL WATER QUALITY CONTROL BOARD

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### **Response to Comment 2-1**

It should be noted that Letter 2 is a standard letter provided by the Central Valley Regional Water Quality Control Board (CVRWQCB) that outlines potential permits that may be required for the proposed project. However, the letter does not specifically reference the proposed project or address the adequacy of the Draft EIR.

The comment serves as an introductory statement. Nonetheless, the proposed project would require a Section 404 and Section 401 permit. To address permitting requirements set forth by the California Fish and Game Code (CFG) Section 1600, et seq, and Sections 404 and 401 of the Clean Water Act (CWA), the Draft EIR sets forth Mitigation Measures 7-11(d), 7-11(e), and 7-12(g) through 7-12(j), which would ensure the proposed project's compliance with such requirements. Please see Response to Comment 2-6 for further details.

### **Response to Comment 2-2**

The comment provides regulatory information concerning water quality and does not address the adequacy of the Draft EIR. Impacts of the project on water quality are addressed in Chapter 10, Geology & Soils, and Chapter 12, Hydrology & Water Quality, of the Draft EIR.

### **Response to Comment 2-3**

The proposed project's requirements related to the Construction General Permit are discussed in Chapter 10, Geology & Soils, of the Draft EIR. Page 10-15 of the Draft EIR states the following:

Improvement Plans provided to the County prior to authorization of construction would conform to provisions of the County Grading Ordinance (Article 15.48 of the Placer County Code) and the Stormwater Quality Ordinance (Article 8.38 of the Placer County Code) that are in effect at the time of submittal. The preparation of and compliance with a stormwater pollution prevention plan (SWPPP) would be part of the project's National Pollutant Discharge Elimination System (NPDES) construction stormwater quality permit, issued by the Central Valley Regional Water Quality Control Board (CVRWQCB). Before Improvement Plan approval, the Placer County Engineering and Surveying Division (ESD) would require evidence of the State-issued Waste Discharge Identification Number or filing of the Notice of Intent and fees. The SWPPP would include strategies to manage stormwater from the construction site and treat runoff before being discharged from the site. The site-specific SWPPP developed for the proposed project would have protocols to be followed and monitored during construction, including effective response actions if necessary. The SWPPP is considered a "living document" that could be modified as construction activities progress.

Additionally, pages 10-15 and 10-16 of the Draft EIR set forth Mitigation Measure 10-2(a), which requires the project applicant to provide evidence of a Waste Discharger Identification number generated by the CVRWQCB to the Placer County Engineering and Surveying Division, which would serve as the Regional Water Quality Control Board (RWQCB) approval or permit under the NPDES construction stormwater quality permit.



### **Response to Comment 2-4**

The proposed project's consistency with Placer County's MS4 Permit (NPDES General Permit No. CAS000004, Order No. 2013-0001-DWQ), pursuant to the NPDES Phase II program, is discussed in Chapter 12, Hydrology & Water Quality, of the Draft EIR. Specifically, pages 12-25 and 12-16 of the Draft EIR include the following:

#### **Phase II MS4 Permit Requirements**

As discussed previously, the proposed project is located within the permit area covered by Placer County's MS4 Permit (NPDES General Permit No. CAS000004, Order No. 2013-0001-DWQ), pursuant to the NPDES Phase II program. Project-related stormwater discharges are subject to all applicable requirements of said permit. Specifically, as noted above, regulated projects are required to divide the project area into DMAs and implement and direct water to appropriately-sized SDMs and Baseline Hydromodification Measures to each DMA. Source control measures must be designed for pollutant-generating activities or sources consistent with recommendations from the California Stormwater Quality Association (CASQA) Stormwater BMP Handbook for New Development and Redevelopment, or equivalent manual, and must be shown on the Improvement Plans.

The Draft EIR sets forth Mitigation Measures 12-2(a), 12-2(c) and 12-2(d) (see pages 12-29 and 12-30 of the Draft EIR), which detail the requirements to which the proposed project would be subject to ensure the project is consistent with the provisions of the County's MS4 Permit. Mitigation Measure 12-2(a) necessitates that the project Improvement Plans show water quality treatment facilities/Best Management Practices (BMPs), designed in accordance with applicable standards, with all permanent BMPs maintained, as required, to ensure effectiveness. Mitigation Measure MM 12-2(c) requires the proposed project to implement permanent and operational source control measures, as applicable, as well as Low Impact Development (LID) standards designed to reduce runoff, treat stormwater, and provide baseline hydromodification management as outlined in the West Placer Storm Water Quality Design Manual. Finally, Mitigation Measure 12-2(d) mandates that the proposed project submit a final Storm Water Quality Plan (SWQP), as well as incorporate site design measures, source control measures, and LID standards, as necessary, into the project design and Improvement Plans.

With incorporation of Mitigation Measures 12-2(a), 12-2(c), and 12-2(d), as well as all other applicable mitigation measures, the Draft EIR concluded the proposed project would not create or contribute runoff water which would include substantial additional sources of polluted runoff or otherwise substantially degrade surface water quality.

### **Response to Comment 2-5**

The proposed project consists of a 597-lot single-family residential subdivision and associated improvements. Therefore, the project does not require a NPDES Industrial General Permit.

### **Response to Comment 2-6**

Project requirements related to discharges to waters of the State, including Section 401 and Section 404 Permit requirements are discussed in Chapter 7, Biological Resources, of the Draft EIR. As detailed under Impact 7-12 of the Draft EIR (and as revised as presented in Chapter 3, Revisions to the Draft EIR Text, of this Final EIR), development of the proposed project with the required sewer pipeline and potential future trails would result in the following impacts:



- Within the Placer County Conservation Program (PCCP) portion of the study area, 1.586 to 1.638 acres of aquatic resources would be permanently disturbed, and 0.499 to 0.720 acres of aquatic resources would be temporarily disturbed;
- Within the non-PCCP portion of the study area, 0.797 to 0.819 acre of aquatic resources would be permanently disturbed, and zero to 0.132 acre would be temporarily disturbed; and
- Overall, the proposed project, off-site sewer pipeline, and potential trails would result in permanent impacts to 2.381 to 2.456 acres of aquatic resources and 0.499 to 0.852 acres of temporary impacts.

As discussed on page 7-37 of the Draft EIR, on September 1, 2020, Placer County adopted the PCCP, which is a Habitat Conservation Plan (HCP) under the federal Endangered Species Act and a Natural Community Conservation Plan (NCCP) under the California Natural Community Conservation Planning Act. The PCCP includes the County Aquatic Resources Program (CARP) to issue permits related to the CWA and CFGC. The CARP allows a streamlined 404 permitting process for covered activities under the PCCP that will result in impacts to aquatic resources subject to Section 404 jurisdiction.

For potential impacts to federally or State-protected wetlands outside of the PCCP plan area, the project would require a Section 404 permit from the USACE and a Section 401 permit from the CVRWQCB and would be subject to all the conditions set forth by said permits. The project would also be subject to the regulations set forth under CFGC Section 1600, et seq.

To address permitting requirements set forth by CFGC Section 1600, et seq, and Sections 404 and 401 of the CWA, the Draft EIR sets forth Mitigation Measures 7-11(d), 7-11(e), and 7-12(g) through 7-12(j), which would ensure the proposed project's compliance with such requirements.

With incorporation of Mitigation Measures 7-11(d), 7-11(e), and 7-12(g) through 7-12(j), the Draft EIR concluded the proposed project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife (CDFW) or U.S. Fish and Wildlife Service (USFWS), or 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.

### **Response to Comment 2-7**

The proposed project is not anticipated to include dewatering activities. However, if, during construction activities, any groundwater is encountered, the project contractor will contact the CVRWQCB for requisite Dewatering Permits to conduct limited dewatering.

### **Response to Comment 2-8**

Please see Response to Comment 2-7.

### **Response to Comment 2-9**

The proposed project's operations would be residential in nature and would not discharge water that could affect the quality of surface waters of the State.



Letter 3

**Shirlee Herrington**

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**Subject:** Creekview Ranch EIR -- a sham?

-----Original Message-----

From: Richard Conrad <rconrad@sonic.net>  
Sent: Sunday, January 15, 2023 11:45 AM  
To: Planning External <PlanningDivision@roseville.ca.us>  
Subject: Creekview Ranch EIR -- a sham?

The Placer County Planning Commission recently released information about Creekview Ranch – a proposed 597-home gated subdivision off of PFE Road immediately adjacent to the Roseville City line – and invited public comments about the accompanying draft EIR. One of its paragraphs immediately stood out – the section entitled “Affordable Housing.” This paragraph proposes that 60 ADUs should satisfy the county’s affordable housing requirement. Our view is that this proposal is a sham and a devious attempt to exempt the developer from meeting its obligation to provide affordable housing one way or another. And we imagine this proposal would not fly if its developer approached your department. The project proposal states:

Placer County’s affordable housing regulations require a minimum of ten percent of the units within the proposed project be affordable housing, which the proposed project would meet by providing a minimum of 60 accessory dwelling units (ADUs). It should be noted that ADUs are allowed by-right, pursuant to state and county regulations, within the project site’s proposed land use and zoning designations. The unit count reflected in the Village and Lot Size Table above does not include the minimum 60 ADUs required to fulfill the County’s ten percent affordable housing requirement. The EIR evaluates the potential environmental impacts associated with the total number of anticipated units however (i.e., 597 single-family residences and 60 ADUs). <https://www.placer.ca.gov/DocumentCenter/View/66280/SR-F-PC-21-00130-Creekview-Ranch-DEIR-11223-All?bidId=>

While we intend to submit our concerns to Placer County, we don’t expect the County to pay much attention to a couple of retired seniors from a gated community in Rocklin. We would hope that your objections to the existing EIR would be more persuasive and would cause the developer to address the state’s and county’s affordable housing requirements more constructively.

Thank you,

Richard & Maisie Conrad

4560 Scenic Drive, Rocklin 95765

3-1



## **LETTER 3: RICHARD AND MAISIE CONRAD**

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### **Response to Comment 3-1**

The comment does not address the adequacy of the Draft EIR. Rather, the commenter's concerns are related to the County's affordable housing regulations. The comment has been noted for the record and provided to the decision-makers for their consideration. It should be noted, nonetheless, that the proposed project would include 60 accessory dwelling units (ADUs), which would be consistent with the County's affordable housing regulations, which require a minimum of 10 percent of new units to be affordable housing.



**Letter 4**

**Placer County Environmental Coordination Services**

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**From:** Richard Conrad <rconrad@sonic.net>  
**Sent:** Monday, January 30, 2023 10:51 AM  
**To:** Placer County Environmental Coordination Services  
**Subject:** [EXTERNAL] Comments re Creekview Ranch Project

January 30, 2023

To: Placer County Planning Department

**Re: Creekview Ranch Project EIR**

Comments:

Creekview Ranch developers propose to satisfy Placer County's Affordable Housing Ordinance by constructing a minimum of sixty accessory dwelling units (ADUs) above garages among the 597 homes in the proposed subdivision.

Our view is that offering ADUs to prospective buyers is a terrific option for families who want to house an aging parent, an au pair, an out-of-work adult child, or a home healthcare worker. But clearly the proposed ADUs are not equivalent to commercially available affordable rental units. While the ADUs do offer additional living space on some lots, and some affordable housing credit might be considered for such units, their benefit really extends primarily to the individual homeowner and does not address Placer County's need for workforce housing.

In order to satisfy the county's Affordable Housing Ordinance, it seems essential to us that the county require the developer to include a minimum number of lower-priced, modest-sized units – perhaps duplexes or fourplexes.

If Creekview's developers are unwilling to include any lower-priced units in their mix of housing options, then we believe that the County should require the developer to pay the in-lieu fee that would be charged if the project were for less than 100 homes -- namely \$2.45 per square foot. If this in-lieu fee were to be imposed and the average size of the houses in the development was 2400 square feet, then the fee for the Creekview subdivision would be \$3.5 million. This amount might provide a down payment on some affordable housing elsewhere in the County.

Over the past twenty years, Placer County real estate has become unaffordable for many middle-income and lower-income residents. Placer County's Affordable Housing Ordinance provides a vehicle for addressing this problem, but only if it is conscientiously enforced.

Thank you,

Richard & Maisie Conrad

4560 Scenic Drive, Rocklin, CA 95765

4-1



**LETTER 4: RICHARD AND MAISIE CONRAD**

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**Response to Comment 4-1**

Please see Response to Comment 3-1.



Letter 5

**Shirlee Herrington**

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**From:** Richard Lingsjo <lingsjo@hotmail.com>  
**Sent:** Wednesday, January 11, 2023 9:27 AM  
**To:** Shirlee Herrington  
**Subject:** [EXTERNAL] Re: Creekview Ranch (PLN21-00130), Public Meeting will be VIRTUAL only!

Shirlee,

5-1

I am disappointed the meet was changed to virtually.  
Please continue to alert me to all public planning meetings.

Richard

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**From:** Shirlee Herrington <SHerring@placer.ca.gov>  
**Sent:** Tuesday, January 3, 2023 12:13 PM  
**Subject:** Creekview Ranch (PLN21-00130), Public Meeting will be VIRTUAL only!

The Public Meeting on January 12, 2023, is scheduled for **10:40am** and will be held **VIRTUALLY ONLY!**

Draft Environmental Impact Report (DEIR) for the subject project was released for public review on **December 19, 2022, and will end on February 1, 2023**. The Amended Notice of Available of the Draft EIR is attached for your convenience, and you can access the DEIR at the link below:

<https://www.placer.ca.gov/7448/Creekview-Ranch>

The Planning Commission will accept verbal comments on the DEIR at the following meeting:

**Thursday, January 12, 2023**

A public meeting will be held **VIRTUALLY** on **January 12, 2023, at 10:40 a.m.**, to receive comments on the Draft EIR. Public comment can be provided through the following means:

- Virtually: Zoom meeting webinar <https://us06web.zoom.us/j/83891807945> utilizing the "raise hand" function; or by calling 877-853-5247 or 888-788-0099, Webinar ID: 838 9180 7945.

Please refer to the meeting agendas at the following link up to 1 week prior to the meetings for updated information:  
<https://www.placer.ca.gov/AgendaCenter/Planning-Commission-53>

*Thank you,*

*Shirlee*

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Shirlee I. Herrington  
Environmental Coordination Services  
Placer County Community Development Resource Agency  
3091 County Center Drive, Suite #190  
Auburn, CA 95603  
530-745-3089  
[sherring@placer.ca.gov](mailto:sherring@placer.ca.gov)



**LETTER 5: RICHARD LINGENSJO**

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**Response to Comment 5-1**

The comment does not address the adequacy of the Draft EIR. The comment has been noted for the record and provided to the decision-makers for their consideration.



Letter 6

**Placer County Environmental Coordination Services**

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**From:** SR W <walkinceremony@yahoo.com>  
**Sent:** Monday, January 2, 2023 11:03 PM  
**To:** Placer County Environmental Coordination Services  
**Subject:** [EXTERNAL] 597 house development 1.71 miles of trail

6-1

Hi, I was reading the comment on next-door about the 1.71 miles of trails. Would that be more like 17 miles of trails with five parks? You have not revealed what kind of hearts they are? I don't have the opportunity to see the plans, but I do have this question. With all the wildlife in the area, it seems absolutely sickening to condemn, the land to only houses and not easements of required 25% at least wetland areas or field areas in between villages. Please answer this question if you can. Thank you very much. Sincerely SHERI W., Lincoln

[Sent from Yahoo Mail for iPad](#)



## **LETTER 6: SHERI WALKIN**

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### **Response to Comment 6-1**

The comment does not address the adequacy of the Draft EIR. Nonetheless, as discussed within Chapter 3, Project Description, of the Draft EIR, the trail system would comprise 1.78 miles in length and the combined acreage of the on-site parks within the project site would comprise a total of approximately 7.7 acres. Additionally, approximately 33 acres of the Schellhous parcel, along Dry Creek, is anticipated to be accepted by the PCCP Reserve System. The remaining open space on the Schellhous parcel, and 14 acres on the Placer Greens parcel, would be preserved as open space within the project site and maintained by the homeowner's association (HOA). Overall, a total of 79.7 acres of green space, including the proposed parks, landscape corridors, and open space areas, representing 43 percent of the project site, would exist on-site following development of the proposed project. Such preservation would ensure that portions of the existing habitat within the project site remain undisturbed, following implementation of the proposed project. Potential impacts to wildlife are discussed within Chapter 7, Biological Resources, of the Draft EIR. As noted therein, with implementation of the mitigation measures that would be required of the proposed project, all impacts would be less than significant.



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**CREEKVIEW RANCH PROJECT  
DRAFT EIR COMMENT MEETING SUMMARY**

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**Letter 7**

**Date:** January 12, 2023  
**Time:** 10:40 AM  
**Location:** Virtual Zoom Meeting

**Verbal Comments (arranged in order of “appearance” of commenter):**

**Public Comments**

**Commenter 1 (Nanette Johnson)**

7-1

- Commenter notes that large amounts of development are occurring in the area and elsewhere in the County, and asks why requirements to widen roads do not exist.

**Commenter 2 (Troy Simpson)**

7-2

- Commenter asks when groundbreaking for the project proposed is anticipated to occur.

7-3

- Commenter asks how traffic will be impeded at the PFE Road/Antelope Road intersection during construction of the proposed project.



## **LETTER 7: PUBLIC COMMENT MEETING SUMMARY**

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### **Response to Comment 7-1**

The comment does not address the adequacy of the Draft EIR. However, it should be noted that, as discussed on page 16-16 of the Draft EIR, the Countywide Traffic Impact Fee Program requires new development within the County to mitigate impacts to the roadway system by paying traffic impact fees to fund the County's Capital Improvement Program (CIP). Table 16-2 of the Draft EIR shows the current study area improvements included in the fee program, several of which include roadway widening improvements. Furthermore, as discussed on pages 3-13 and 3-14 of the Draft EIR, in addition to the installation of the two signalized intersections along PFE Road, a number of other off-site and frontage roadway improvements are proposed as part of the project such as the widening of PFE Road and Antelope Road. The proposed project would complete several roadway improvements, that upon completion, would result in the following configurations:

- The westerly segment of PFE Road would include single through lanes in each eastbound and westbound direction with a center two-way left turn lane for neighboring property driveway access and acceleration lane egress. The improvements will include bike lanes and Class 1 trail facilities along the project frontage.
- The easterly segment of PFE Road would include two through lanes in each eastbound and westbound direction with dedicated left and right turn lanes into the Village 1 and 4 entrances. The improvements will include bike lanes and Class 1 trail facilities along the project frontage.
- North Antelope Road would include two through lanes in each northbound and southbound direction with dedicated left and right turn lanes into Village 4. The improvements will include bike lanes and Class 1 trail facilities along the project frontage.
- North Antelope Road/PFE Road Intersection: The eastbound PFE Road approach would include a dedicated left turn into Village 3, a dedicated right turn onto southbound North Antelope Road, and a single through lane to PFE Road. The westbound approach would include dual left turn lanes onto North Antelope Road, a single through lane to PFE Road and dedicated right turn into Village 3. The northbound approach would include a single dedicated left, single shared left/through lane into Village 3, and dual right turn lanes onto PFE Road. The initial width of the west leg of PFE Road would include two receiving lanes for the northbound left and shared left-thru from North Antelope Road.
- From the East and South Village intersection, PFE Road would transition beyond Viking Place to the existing roadway configuration near the Roseville city limits.
- The proposed project would include improvements to the PFE Road/Cook Riolo Road intersection to install a 65-foot, free right-turn lane onto Cook Riolo Road from westbound PFE Road (see Figure 3-8 of the Draft EIR). The intersection improvements would include a separate free right-turn lane from the westbound through lane along PFE Road. The final design of all improvements would be subject to approval by the County.

The comment has been noted for the record and provided to the decision-makers for their consideration.

### **Response to Comment 7-2**

The comment does not address the adequacy of the Draft EIR. Nonetheless, as stated on page 6-36 of the Draft EIR, construction was assumed to commence in August of 2023 and occur over an approximately four-year period. However, the construction timeline is tentative, and is



dependent upon a variety of factors, including, but not limited to, County review and processing timelines for the initial phase improvement plans, timely completion of mitigation requirements such as preconstruction nesting bird surveys, etc.

### **Response to Comment 7-3**

The potential for the proposed project to conflict with a program, plan, ordinance, or policy, except LOS, addressing the circulation system during construction activities is addressed under Impact 16-1 of the Draft EIR. As noted therein, the project would include a number of on- and off-site roadway improvements, such as widening PFE Road and Antelope Road, the provision of approximately 500 feet of off-site sidewalk along PFE Road from the site's southeastern boundary to Viking Place, and a separated sidewalk on the east side of North Antelope Road. The implementation of the foregoing improvements would directly influence the transportation network near the site during construction, and could result in roadway or lane closures that adversely affect residents in the project area. However, the Draft EIR determined that with implementation of Mitigation Measure 16-1, impacts would be less than significant. Mitigation Measure 16-1 would ensure that construction traffic would not interfere with existing roadway operations during the construction phase through requiring project Improvement Plans to include a striping and signing plan, and show all on- and off-site traffic control devices. Mitigation Measure 16-1 would also require preparation and implementation of a construction signing and traffic control plan that sets forth measures and performance standards to minimize traffic impacts throughout project construction.





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## **3. Revisions to the Draft EIR Text**

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## 3. REVISIONS TO THE DRAFT EIR TEXT

### 3.1 INTRODUCTION

The Revisions to the Draft EIR Text chapter presents minor corrections, additions, and revisions made to the Draft EIR published by the Lead Agency (Placer County).

The changes represent minor clarifications/amplifications of the analysis contained in the Draft EIR and do not constitute significant new information that, in accordance with CEQA Guidelines, Section 15088.5, would trigger the need to recirculate portions or all of the Draft EIR.

### 3.2 DESCRIPTION OF CHANGES

Based on recent conversations with the project's potable water provider, the California American Water Company (CAL-AM), an additional option for providing potable water to the project site has been identified. The additional option would include the construction of a new, 1,300-foot, 16- to 24-inch water line within the County's right-of-way (ROW) roadway pavement limits of PFE Road, from the southwest corner of the Schellhaus parcel to the Cook Riolo Road/PFE Road intersection, where an existing water line is currently located. As such, the following changes to Chapter 3, Project Description, and Chapter 15, Public Services and Utilities, of the Draft EIR are implemented to reflect the additional option for providing potable water to the project site. However, it should be noted that revisions to other chapters of the Draft EIR are not warranted. More specifically, because the off-site improvements would occur simultaneously with the proposed project, the off-site improvement would not require any modifications to the overall project construction phasing, types and number of pieces of equipment, and equipment use durations that were assumed in the California Emissions Estimator Model (CalEEMod) modeling conducted for the proposed project. Because the off-site improvement location is in the project vicinity, a reasonable assumption is made that the off-site improvement would use the same pieces of equipment that would be at the project site being used for on-site construction activities. For example, during the duration of the off-site improvement, those pieces of equipment needed to construct the off-site improvement would be moved from the project site to the off-site location for the necessary duration, and then brought back to the project site for further on-site use. Thus, the overall construction duration and equipment assumptions, and the associated air quality and greenhouse gas (GHG) emissions would not change.

Chapter 7, Biological Resources, of the Draft EIR is comprised of a conservative impact analysis based on an earlier set of plans, which had minor differences in park and trail design as compared to the plans included in Chapter 3 of the Draft EIR. Specifically, modifications included the removal of the on-site trail located in the northeastern portion of the project site, along the southern boundary of Dry Creek, and the removal of Park 5, which was located in the southeastern portion of the project site. Since the release of the Draft EIR, the County has deemed it important to refine the estimated habitat impact acreages based on the current project plans. Therefore, the Biological Resources Assessment (BRA) prepared for the proposed project by Madrone Ecological Consulting was revised to reflect the updated disturbance area (see Appendix A to this



Final EIR). The following changes to Chapter 7, Biological Resources, of the Draft EIR are implemented to ensure the analysis in the chapter is consistent with the updated BRA. However, it should be noted that habitat impacts are generally less than, or similar to, the impacts included in the original analysis, due to the overall decrease in the proposed project's disturbance area.

In addition, the following staff-initiated changes to Chapter 15, Public Services and Utilities, of the Draft EIR were made in order to correct the text and provide additional information regarding the proposed on-site trails.

New text is double underlined and deleted text is ~~struck through~~. Text changes are presented in the page order in which they appear in the Draft EIR.

## **2 EXECUTIVE SUMMARY**

For clarification purposes, Table 2-1 in Chapter 2, Executive Summary, of the Draft EIR is hereby revised to reflect minor revisions made to Mitigation Measures 7-6(a), 7-8(c), 7-11(c), 7-12(a) through 7-12(c), 7-12(e), 7-14(b), 7-14(e), and 7-14(f) as part of this Final EIR, as presented throughout this chapter. Rather than include the entirety of Table 2-1 with revisions shown where appropriate, only the impact for which mitigation has been revised is presented in this chapter. The revisions to Table 2-1 are for clarification purposes only and do not change the conclusions of the Draft EIR. Please refer to the end of the Description of Changes section of this chapter for Table 2-1.

## **3 PROJECT DESCRIPTION**

The following paragraph within the Parks, Open Space, Trails, and Landscaping section on page 3-16 of Chapter 3, Project Description, of the Draft EIR is hereby revised as follows:

The proposed project would provide a total of 1.74~~8~~ miles of trails within the project site, not including the trail along the PFE Road frontage. The trails would vary in width from six feet to 12 feet and would provide access to the various on-site park and open space amenities. The combined acreage of the parks ~~and the trail system~~ within the project site would comprise a total of approximately ~~9.44~~ 7.7 acres.

The Utilities and Public Services section on page 3-16 of Chapter 3, Project Description, of the Draft EIR is hereby revised as follows:

### **Utilities and Public Services**

Treated water service for the project would be provided by California American Water (CAL-AM) through an agreement with Placer County Water Agency (PCWA). The proposed project would connect to existing 36-inch and 24-inch water lines that run along Antelope Road and PFE Road, respectively. It should be noted that, based on recent conversations with CAL-AM, an additional option for providing potable water to the project site has been identified. The additional option would include the construction of a new, 1,300-foot, 16- to 24-inch water line within the County's right-of-way (ROW) roadway pavement limits of PFE Road, from the southwest corner of the Schellhaus parcel to the Cook Riolo Road/PFE Road intersection, where an existing water line is currently located. Underground infrastructure improvements for the proposed project would include new public water mains on-site, as well as on-site gravity and force main sanitary sewer and storm drain collection systems. Development of the project site would require installation of on-site drainage facilities and alteration of site topography to accommodate the proposed land uses. The proposed project would include on-site construction of stormwater



quality treatment facilities, including low impact development (LID) features such as stormwater basins. The project site would be divided into 14 drainage management areas (DMAs), and stormwater runoff would be conveyed into an associated stormwater basin for each DMA.

The Variance section on page 3-20 of Chapter 3, Project Description, of the Draft EIR is hereby revised as follows:

Section 17.52.040 of the Placer County Code includes development standards for projects with a -B combining district zoning designation. The proposed project is requesting a variance to the setback, lot coverage, lot width, height, and parking standards for the proposed residences. Table 3-3 presents the requirements of each development standard as defined by Section 17.52.040 of the Placer County Code and includes a description of each requested variance.

It should be noted that the aforementioned variance description is referenced in several locations throughout the Draft EIR. The revision presented above is hereby applied to all such similar variance discussions throughout the Draft EIR.

In addition, Table 3-3, on page 3-20 of the Draft EIR is hereby revised as shown below.

<b>Table 3-3 Requested Variance to B-3 Zoning District Development Standards</b>		
Standard	Required	Requested
Front Setback	12.5'	<del>12.5 10.5'</del> ; however, covered, unenclosed projections attached to the primary structure may encroach up to 6' into any front yard setback. Front setback (and streetside setbacks) measured from back of walk. In the absence of sidewalk, setbacks <u>is 12.5' and</u> measured from the edge of right-of-way. <u>Setbacks may be reduced up to 2.5' if all utilities agree to reduce the multi-purpose easement to 10'.</u>
Side Setback	5' one-story, 7.5' two-story	<del>5' for both one and two story. 4' for standard lots 0' to 3' for alley-loaded lots</del>
Streetside Setback	10'	<del>10.5'. Side yard fencing within 10' must be set back at least 5' from back of walk where facing a street. Fence side yard setback is 5' from back of walk where facing a street.</del> In the absence of sidewalk, setbacks <u>are 12.5'</u> measured from the edge of right-of-way.
Rear Setback	10'	For alley-loaded Villages, 5' to garage face from edge of alleyway easement.
Lot Coverage	40 percent maximum <u>for one and two-story homes</u>	40 percent for two-story homes and 50 percent for one-story homes. Maximum coverage for "alley-loaded" Villages is not expressed as a percentage, but is a function of lot size and setbacks.
Lot Width	35'	35' corner, 30' interior.
<u>Height</u>	<u>30'</u>	<u>32' for alley-loaded lots</u>
Parking	Four off-street parking spaces on roads < 32' in width	For alley-loaded villages, two garage parking spaces per unit plus one off-street guest parking space per unit.



## **7 BIOLOGICAL RESOURCES**

Impact 7-5, regarding western spadefoot toad, on page 7-63 of Chapter 7, Biological Resources, of the Draft EIR is hereby revised as follows:

Project construction would permanently disturb a total of approximately 1.279 acres of suitable breeding habitat, approximately ~~58.53~~ 58.02 acres of suitable upland habitat, and temporarily disturb approximately ~~8.12~~ 3.37 acres of suitable upland habitat within the overall project site. With respect to the proposed off-site sewer pipeline alignment alternatives and potential trails, suitable habitat for western spadefoot is not present within any of the potential locations. Therefore, the foregoing project components would not result in impacts to the species.

Impact 7-6, regarding western pond turtle, on page 7-65 of Chapter 7, Biological Resources, of the Draft EIR is hereby revised as follows:

Within the PCCP portion of the site, approximately ~~0.196~~ 0.246-acre of western pond turtle habitat within the intermittent drainages, and approximately ~~0.86~~ 1.40-acres of movement habitat in adjacent woodlands, would be permanently disturbed by the proposed project. Additionally, approximately ~~0.55~~ 0.499-acre of habitat within the intermittent drainages and ~~0.84~~ 1.04-acres of movement habitat in adjacent woodlands would be temporarily disturbed. Within the non-PCCP portion of the site, approximately ~~0.209~~ 0.199-acre of western pond turtle habitat in the intermittent drainages and approximately ~~4.99~~ 1.76 acres of movement habitat in adjacent woodlands would be permanently affected; however, western pond turtle habitat within intermittent drainages or adjacent woodlands would not be temporarily affected. Altogether, the project would permanently disturb a total of approximately ~~0.405~~ 0.444-acre of habitat within intermittent drainages and temporarily disturb a total of ~~0.550~~ 0.499-acre in intermittent drainages within the project site.

With respect to off-site project components, the proposed project would result in similar impacts related to the sewer pipeline alignment alternatives as those discussed under Impact 7-4 for special-status salmonids. Options 1A, 1B, and 1C would not result in direct impacts to Dry Creek; however, Options 1A and 1B could ~~indirectly~~ result in water quality impacts to the creek during jack-and-bore operations if appropriate erosion control measures are not implemented during work on either side of the creek. In addition, Options 1A and 1B would temporarily disturb approximately ~~0.19~~ 0.122-acre of adjacent woodlands (e.g., movement habitat) within the non-PCCP portion of the project site. Option 1C could similarly result in indirect water quality impacts during construction, when hanging the pipeline under the existing bridge, should proper ~~erosion control~~ water quality protection measures not be implemented.

Impact 7-6, regarding western pond turtle, on page 7-67 of Chapter 7, Biological Resources, of the Draft EIR is hereby revised as follows:

The West Trail alignment would result in the following permanent and temporary impacts:

1. The bridges would result in permanent indirect impacts to approximately 0.031-acre of Dry Creek and ~~0.213~~ 0.019-acre of intermittent drainages that serve as western pond turtle aquatic habitat;
2. The bridges would also result in approximately 0.14-acre of permanent direct impacts to movement habitat in adjacent woodlands within the PCCP;
3. The West Trail alignment could also result in direct temporary impacts to approximately ~~0.070~~ 0.074-acre of Dry Creek and ~~0.587~~ 0.043-acre of intermittent drainages that



- serve as western pond turtle aquatic habitat, as well as ~~0.16~~ 0.18-acre of movement habitat in adjacent woodlands within the PCCP; and
4. Combined, the potential West Trail alignment would result in permanent indirect impacts to a total of approximately ~~0.244~~ 0.050-acre of aquatic habitat, permanent direct impacts to a total of 0.14-acre to upland movement habitat, and temporary direct impacts to a total of ~~0.673~~ 0.117-acre associated with the West Trail.

In regard to the potential East Trail, the trail would also include a bridge constructed across Dry Creek as shown in Figure 7-9, which would result in the aforementioned eight concrete piles of fill within the creek. The East Trail alignment would result in the following permanent and temporary impacts:

1. The bridge could result in permanent indirect impacts to approximately 0.002-acre of habitat within Dry Creek in the PCCP portion of the site and 0.022-acre of the creek and 0.02 acre of adjacent woodlands that represent movement habitat outside of the PCCP plan area;
2. The East Trail alignment would result in direct temporary impacts to approximately 0.036-acre of habitat in Dry Creek within the PCCP plan area;
3. The East Trail alignment would also result in approximately 0.044-acre of direct temporary impacts to aquatic habitat provided by Dry Creek and ~~0.19~~ 0.06-acre of movement habitat provided by adjacent woodlands, each of which would be outside of the PCCP plan area; and
4. Overall, the East Trail alignment would result in a total of approximately 0.024-acre of permanent indirect impacts and ~~0.27~~ 0.080-acre of temporary direct impacts.

A portion of Mitigation Measure 7-6(a) on page 7-70 of Chapter 7, Biological Resources, of the Draft EIR is hereby revised as follows:

- *7-11(c) [PCCP Community Condition 2.2]: Prior to land conversion authorization, the applicant shall coordinate with the PCA to determine which In-Stream and Stream System Best Management Practices (BMPs) from Table 7-1 of the User's Guide apply to the proposed project. The applicant shall identify the applicable BMPs on the project's improvement or grading plans. The selected BMPs shall be incorporated into the project's Land Conversion Authorization letter.*

*Prior to land conversion authorization approval, the unavoidable effects to ~~1.00 to 1.48~~ 0.50 to 1.65 0.67 to 1.12 acres riverine and riparian habitat or their buffers shall be mitigated through payment of special habitat fees. The fees to be paid shall be those in effect at the time of land conversion authorization.*

Impact 7-8, regarding Swainson's hawk, on page 7-76 of Chapter 7, Biological Resources, of the Draft EIR is hereby revised as follows:

Within the PCCP portion of the project site, approximately ~~6.48~~ 6.49 acres of VPC High land cover, ~~48.98~~ 51.57 acres of VPC Intermediate land cover, and ~~27.86~~ 28.67 acres of VPC Low land cover that currently provides Swainson's hawk foraging habitat would be permanently impacted by the proposed project (see Figure 7-7). Within the non-PCCP portion, approximately ~~33.57~~ 33.23 acres of annual brome grassland that currently provides Swainson's hawk foraging habitat would be permanently impacted. Overall, a total of ~~116.89~~ 119.96 acres of hawk foraging habitat would be permanently impacted.



Mitigation Measure 7-8(c) on pages 7-78 and 7-79 of Chapter 7, Biological Resources, of the Draft EIR is hereby revised as follows:

7-8(c) *Approximately ~~33.57~~ 33.23 acres of annual brome grassland that represents suitable foraging habitat for Swainson's hawks will be permanently impacted during construction of the portion of the proposed project outside of the PCCP plan area, and as much as an additional 1.27 acres could be impacted, depending on which sewer alternative is selected. Swainson's hawk foraging habitat outside of the PCCP does not exist for either of the potential future trails. The aforementioned impacts shall be mitigated through purchase and conservation of similar habitat as follows:*

*Two Swainson's hawk nests have been documented approximately 2.5 miles west of the study area; one south of PFE Road, and one west of Walerga Road. Prior to project construction, a qualified biologist shall conduct a review of Swainson's hawk nest data available, including the California Natural Diversity Database (CNDDDB), unprocessed CNDDDB records, and contacting CDFW to determine if they have any additional nest data. If desired by the project applicant, the biologist may conduct a survey of the aforementioned nests to determine if they are still present. The biologist shall provide the Placer County Community Development Resource Agency with a summary of the findings.*

*If it has been determined that a portion of the overall project site is within 10 miles of an active Swainson's hawk nest (an active nest is defined as a nest with documented Swainson's hawk use within the past five years), the applicant shall mitigate for the loss of suitable Swainson's hawk foraging habitat by implementing the following measures:*

- One acre of suitable foraging habitat shall be protected for each acre of suitable foraging habitat that is proposed to be developed that is within one mile of an active nest. Protection shall be by way of purchase of mitigation bank credits or other land protection mechanism acceptable to the County.*
- 0.75-acre of suitable foraging habitat shall be protected for each acre of suitable foraging habitat that is proposed to be developed that is between one and five miles from an active nest. Protection shall be by way of purchase of mitigation bank credits or other land protection mechanism acceptable to the County.*
- 0.5-acre of suitable foraging habitat shall be protected for each acre of suitable foraging habitat that is proposed to be developed that is between five and 10 miles from an active nest. Protection shall be by way of purchase of mitigation bank credits or other land protection mechanism acceptable to the County.*
- If the proposed project is built in phases, the purchase of this foraging habitat mitigation may be phased as well, such that all areas are mitigated prior to impact.*

Impact 7-9, regarding burrowing owl, on page 7-80 of Chapter 7, Biological Resources, of the Draft EIR is hereby revised as follows:



Within the PCCP portion of the project site, approximately ~~6.48~~ 6.49 acres of VPC High land cover, ~~48.98~~ 51.57 acres of VPC Intermediate land cover, and ~~27.86~~ 28.67 acres of VPC Low land cover, all of which currently provide burrowing owl habitat, would be permanently impacted by the proposed project (see Figure 7-7). Within the non-PCCP portion, approximately ~~33.57~~ 32.79 acres of annual brome grassland, which currently provides burrowing owl habitat, would be permanently impacted. Together, a total of approximately ~~146.89~~ 119.96 acres would be permanently impacted by the project.

Impact 7-11, regarding adverse effects on riparian or other sensitive habitats, on page 7-91 of Chapter 7, Biological Resources, of the Draft EIR is hereby revised as follows:

The proposed on-site and off-site project components, in combination with the potential off-site trail alignments, could result in permanent impacts to up to ~~4.33~~ 1.31 acres of Riparian/Riparian Woodland. Specifically, within the PCCP portion of the project site, ~~0.06~~ 0.05-acre of Riparian land cover would be permanently impacted by the project. In the non-PCCP portion of the site, 0.94-acre of riparian woodlands would be permanently impacted. In addition, 0.17-acre of riparian woodlands in the non-PCCP portion of the study area would be permanently impacted if sewer pipeline alignment Option 1A were selected, 0.12-acre of riparian woodlands outside of the PCCP would be permanently impacted if Option 1B were chosen, 0.14-acre of Riparian land cover within the PCCP would be permanently impacted if the West Trail alignment is constructed, and 0.02-acre of riparian woodlands outside the PCCP would be permanently impacted if the East Trail alignment were constructed.

Overall, the proposed on-site components, the off-site sewer pipeline alignment, and the potential trail alignments could result in the following ranges of permanent impacts to Riparian/Riparian Woodland:

- Within the PCCP portion of the study area, ~~0.06~~ 0.05 to ~~0.20~~ 0.18-acre of permanent impacts to Riparian land cover;
- Within the non-PCCP portion of the study area, 0.94 to 1.13 acres of permanent impacts to riparian woodlands; and
- A combined total of ~~4.00~~ 0.99 to ~~4.33~~ 1.31 acres of permanent impacts to Riparian/Riparian Woodland.

Mitigation Measure 7-11(c) on pages 7-92 and 7-93 of Chapter 7, Biological Resources, of the Draft EIR is hereby revised as follows:

7-11(c) *PCCP Community Condition 2.2: Prior to land conversion authorization, the applicant shall coordinate with the PCA to determine which In-Stream and Stream System Best Management Practices (BMPs) from Table 7-1 of the User's Guide apply to the proposed project. The applicant shall identify the applicable BMPs on the project's improvement or grading plans. The selected BMPs shall be incorporated into the project's Land Conversion Authorization letter.*

*Prior to land conversion authorization approval, the unavoidable effects to ~~1.00 to 1.48~~ 0.67 to 1.12 acres riverine and riparian habitat or their buffers shall be mitigated through payment of special habitat fees. The fees to be paid shall be those in effect at the time of land conversion authorization.*



Impact 7-12, regarding adverse effects on State or federally protected wetlands, on page 7-95 of Chapter 7, Biological Resources, of the Draft EIR is hereby revised as follows:

As detailed in the tables and shown on Figure 7-10, within the PCCP portion of the project site, which is primarily located north of PFE Road, approximately ~~45.302~~ 15.285 acres of aquatic resources have been mapped, ~~4.597~~ 1.567 acres of which would be permanently disturbed and ~~0.550~~ 0.509-acre of which would be temporarily disturbed by the proposed project.

Within the non-PCCP portion of the site, primarily south of PFE Road, approximately ~~2.372~~ 2.389 acres of aquatic resources have been mapped, ~~0.806~~ 0.796-acre would be permanently disturbed by the project. None of the on-site aquatic resources in the non-PCCP portions of the site would be temporarily affected by the project. Overall, of the total acres of mapped aquatic resources, the project would permanently disturb approximately ~~2.403~~ 2.364 acres, temporarily disturb ~~0.550~~ 0.509-acre, and avoid ~~44.720~~ 14.529 acres.

With respect to the proposed off-site components of the project, Options 1A and 1B would not result in impacts to the mapped aquatic resources, as the proposed sewer pipeline under each scenario would be bored under Dry Creek. Similarly, Option 1C would not result in impacts, as the sewer line would be hung below an existing bridge to cross the creek.

With respect to the two potential trail alternatives, combined, the trails would result in permanent impacts to approximately 0.033-acre of Dry Creek within the PCCP plan area and 0.022-acre of Dry Creek outside of the PCCP, and temporary impacts to 0.178-acre of Dry Creek within the PCCP and 0.132-acre of Dry Creek outside of the PCCP. Overall, combined trail construction would result in a total of approximately 0.055-acre of permanent impacts and 0.310-acre of temporary impacts.

Overall, development of the proposed project with the required sewer pipeline and potential future trails would result in the following impacts:

- Within the PCCP portion of the study area, ~~4.549~~ 1.586 to ~~4.843~~ 1.638 acres of aquatic resources would be permanently disturbed, and ~~0.550~~ 0.499 to ~~4.345~~ 0.720 acres of aquatic resources would be temporarily disturbed;
- Within the non-PCCP portion of the study area, ~~0.806~~ 0.797 to ~~0.828~~ 0.819 acre of aquatic resources would be permanently disturbed, and zero to 0.132 acre would be temporarily disturbed; and
- Overall, the proposed project, off-site sewer pipeline, and potential trails would result in permanent impacts to ~~2.403~~ 2.381 to ~~2.674~~ 2.456 acres of aquatic resources and ~~0.550~~ 0.499 to ~~4.447~~ 0.852 acres of temporary impacts.

Mitigation Measures 7-12(a) through 7-12(c), and 7-12(e) on pages 7-98 through 7-99 of Chapter 7, Biological Resources, of the Draft EIR are hereby revised as follows:

*Placer County Conservation Program Plan Area*

7-12(a)

*The Permittee shall apply for coverage under the PCCP to mitigate for all impacts to Covered Species, land cover, and sensitive natural communities. Prior to application approval, additional species surveys may be necessary, and prior to construction land cover and special habitat fees shall be paid. The Permittee shall comply with the terms of the PCCP Coverage Certificate, including compliance with all avoidance and*



minimization measures, which may include pre-construction surveys, construction monitoring, and BMPs.

PCCP General Condition 3: The proposed project shall pay a land conversion fee or dedicate land in lieu of fee or a combination thereof for the permanent conversion of ~~0.322~~ 0.344-acre of Riparian/Riverine land cover (an additional 0.215-acre if the East Trail and West Trail are developed). If fees are paid, they shall be those in effect at the time of ground disturbance authorization for each project phase and shall be the per-acre fee based on the final amount of land disturbance resulting from the activity.

In addition to land conversion, the project would result in permanent direct effects and temporary effects to PCCP Special Habitats as detailed in Table 11 of the Biological Resources Assessment (BRA) prepared for the proposed project. The total special habitat fee obligation including temporary effect fees shall be paid prior to issuance of a land conversion authorization that allows ground disturbance of a special habitat.

7-12(b) PCCP General Condition 4: The applicant shall restore all temporarily disturbed areas and, one year after project groundbreaking, provide the County with a written assessment of how the performance standards were met. The project would result in ~~40.90 to 42.08~~ 9.14 to 9.68 acres of temporary effects to special habitats. Prior to issuance of land conversion authorization, the project shall pay a fee based on the final acres of impact. The fee to be paid shall be that in effect at the time of land conversion authorization issuance. If it is determined by the County or the PCCP biologist that the effects remain one year after groundbreaking activities have commenced, the effects shall be considered permanent and the County project lead shall reassess fees based on those effects.

7-12(c) PCCP Community Condition 1.1: Prior to land conversion authorization approval, the unavoidable effects to ~~4.334~~ 1.338 acres of vernal pool type wetlands or their buffers shall be mitigated through payment of special habitat fees. The fees to be paid to the PCA shall be that in effect at the time of land conversion authorization issuance.

7-12(e) PCCP Stream System Condition 2: The project's development footprint is directly impacting the Stream System. The area of encroachment (~~9.88 to 40.18~~ 12.57 to 12.68 acres of permanent impact and ~~40.88 to 11.32~~ 7.19 to 7.33 acres of temporary impact) is subject to the Stream System Encroachment Special Habitats Fee as described in Chapter 5 of the PCCP User's Guide. Fees shall be paid to the PCA prior to the issuance of any permit or authorization that results in ground disturbance within the Stream System.

Impact 7-14, regarding conflicts with any local policies or ordinances protecting biological resources, on pages 7-107 and 7-108 of Chapter 7, Biological Resources, of the Draft EIR is hereby revised as follows:

As detailed in the tables, within the PCCP portion of the study area, development of the on-site and off-site components, as well as the potential trails, would result in permanent disturbances of ~~92.49~~ 96.58 to ~~93.24~~ 97.29 acres to vegetation communities/land covers



and temporary disturbances of ~~44.67~~ 8.01 to ~~42.26~~ 8.66 acres. Within the non-PCCP portions of the study area, such activities would result in permanent disturbances of ~~44.37~~ 42.07 to ~~48.24~~ 45.51 acres to vegetation communities/land covers and temporary disturbances of 0.01 to ~~1.48~~ 1.41 acres. Overall, the project would permanently disturb ~~136.86~~ 138.65 to ~~141.45~~ 142.80 acres and temporarily disturb ~~41.68~~ 8.03 to ~~43.74~~ 10.07 acres of vegetation communities/land covers within the study area.

Mitigation Measures 7-11(d) and 7-11(e) under Impact 7-11 address potential impacts to riparian woodlands within the non-PCCP portion of the project site and off-site areas. Impacts to native trees and oak woodlands in the non-PCCP portion of the site and off-site areas are discussed below. Valley needlegrass grassland is the only other protected sensitive natural community that is present on-site and could require mitigation. However, as shown in the tables above, the small area of valley needlegrass grassland within the non-PCCP portion of the study area would not be impacted by the proposed project. With respect to the proposed off-site Cook Riolo Road/PFE Road intersection improvements, ~~less than approximately~~ 0.11-acre of Rural Residential land cover would be impacted within the PCCP as part of construction of the free right-turn lane onto Cook Riolo Road.

Impact 7-14, regarding conflicts with any local policies or ordinances protecting biological resources, on pages 7-111 and 7-112 of Chapter 7, Biological Resources, of the Draft EIR is hereby revised as follows:

As shown in Table 7-10, within the non-PCCP County portions of the project site and off-site areas that could be developed, and outside of the County's defined oak woodland areas, between 41 and 51 native trees would be impacted with a cumulative DBH between 803.5 and 1,071.1. In addition, as shown in Table 7-11, the non-PCCP portion of the site contains ~~40~~ 9 "significant trees" with a cumulative DBH of ~~332~~ 298 inches. Such trees are protected under the County Tree Ordinance and Interim Guidelines. Finally, within the large stand of blue oak woodland and riparian woodland south of PFE Road, the proposed project would impact ~~0.9~~ 0.6-acre of blue oak woodland, and 0.9-acre of riparian woodland, for a combined total of ~~1.8~~ 1.5 acres of direct impacts. In addition, 0.3-acre of oak woodland (including riparian woodland) within 10 feet of the edge of direct development-related project impacts could be indirectly impacted. Such areas would be subject to mitigation requirements set forth by the County's Interim Guidelines.

Mitigation Measure 7-14(b) on pages 7-113 and 7-114 of Chapter 7, Biological Resources, of the Draft EIR is hereby revised as follows:

7-14(b) *PCCP General Condition 3: The project shall pay a land conversion fee or dedicate land in lieu of fee or a combination thereof for the permanent conversion of ~~89.24~~ 93.29 acres of the following natural land cover types: VPC Low, VPC Intermediate, VPC High, Blue Oak Woodland, Orchard, and Rural Residential (an additional ~~0.58~~ 0.59-acre if both potential trails are developed and the most impactful sewer alternative) (for Riparian/Riverine, see Mitigation Measure 7-12(a)). If fees are paid, they shall be those in effect at the time of ground disturbance authorization for each project phase and shall be the per acre fee based on the final amount of land disturbance resulting from the activity.*

Mitigation Measure 7-14(e) on pages 7-115 through 7-116 of Chapter 7, Biological Resources, of the Draft EIR is hereby revised as follows:



*County Areas Outside of the Placer County Conservation Program*

7-14(e) Individual Tree Mitigation: The non-PCCP portion of the project site within unincorporated Placer County would result in impacts to a total of 41 Protected Trees with a combined DBH of 803.5 inches. An additional nine “significant trees” in oak woodlands mitigated in accordance with the Interim Guidelines would be impacted with a combined DBH of ~~332.0~~ 298.0 inches. Cumulatively, this totals 50 individual trees with a combined DBH of ~~1,135.5~~ 1,101.5 inches.

To mitigate for the loss of Protected Trees, the project applicant shall obtain a Tree Permit from the Placer County Planning Services Division prior to improvement plan approval. The Planning Services Division shall review the Tree Permit application as well as the final site improvement plans and determine the precise mitigation requirement at that time. The fee shall be paid into the Placer County Tree Preservation Fund at \$125 per DBH removed or impacted (or the applicable fee at that time).

Efforts shall be made to save trees where feasible. This may include the use of retaining walls, planter islands, pavers, or other techniques commonly associated with tree preservation. The improvement plans shall include a note and show placement of temporary construction fencing around trees to be saved: The applicant shall install a four-foot-tall, brightly colored (typically orange), synthetic mesh material fence (or an equivalent) approved by Placer County at the following locations prior to any construction equipment being moved on-site or any construction activities taking place: at the limits of construction; outside the Protected Zone of all single-trunk trees six inches DBH or greater, or 10 inches DBH aggregate for multi-trunk trees; within 50 feet of any grading, road improvements, underground utilities, or other development activity; or as otherwise shown on the Tentative Subdivision Map.

Development of the project, including grading, shall not be allowed until this requirement is satisfied. Any encroachment within the aforementioned areas, including Protected Zones of trees to be saved, shall first be approved by Placer County. Temporary fencing shall not be altered during construction without written approval of Placer County. No grading, clearing, storage of equipment or machinery, etc., may occur until a representative of Placer County has inspected and approved all temporary construction fencing.

Mitigation Measure 7-14(f) on pages 7-116 through 7-117 of Chapter 7, Biological Resources, of the Draft EIR is hereby revised as follows:

7-14(f) Oak Woodland Mitigation: The project applicant shall obtain a Tree Permit from the Placer County Planning Services Division prior to improvement plan approval for impacted native oak trees and comply with all requirements of the Tree Permit. The Planning Services Division shall review the Tree Permit application as well as the final site improvement plans and determine the precise mitigation requirement at that time. To support the approval process, an exhibit shall be submitted showing the extent of the proposed activity within oak woodlands (as defined by the Interim Guidelines), and the resulting acreage of impacts to oak woodlands. If that impact acreage is one



acre or greater, the project applicant may choose to mitigate for oak woodlands as follows:

- Compensatory mitigation shall occur off-site and may consist of one of the following, based on the acreage of oak woodland impacted:
  - Submit payment of fees for oak woodland conservation at a 2:1 ratio consistent with Chapter 19.50 of the Placer County Code: Woodland Conservation. The fees shall be calculated based upon the current market value of similar oak woodland acreage preservation and an endowment to maintain the land in perpetuity.
  - Purchase off-site conservation easements at a location approved by Placer County to mitigate the loss of oak woodlands at a 2:1 ratio.
  - Provide for a combination of payment to the Tree Preservation Fund and creation of an off-site Oak Preservation Easement.

Removal of significant trees (greater than 24 inches DBH or clumps greater than 72 inches in circumference measured at ground level) within oak woodlands requires additional mitigation on a per-inch DBH removed (\$125 per DBH inch).

As an example, oak woodland direct and indirect impacts proposed within the large stand of blue oak and riparian woodlands south of PFE Road total ~~2.4~~ 1.8 acres. As mitigation for those impacts, the project applicant would be required to purchase off-site conservation easements, pay fees for oak woodland conservation, or a combination of the two for ~~4.2~~ 3.6 acres of oak woodland. In addition, nine significant trees occur within this oak woodland area, and must be mitigated on a per-inch DBH removed. The trees have been included in the individual native tree mitigation discussion above.

In order to reflect the aforementioned changes, Table 7-5 through Table 7-8, and Table 7-11 of the Draft EIR are revised as shown on the pages following the Description of Changes section of this chapter, below. In addition, Figure 7-1, Figure 7-7 through Figure 7-10, and Figure 7-12 of the Draft EIR are replaced with the figures shown on the pages following the Description of Changes section of this chapter, below.

### **13 LAND USE AND PLANNING/POPULATION AND HOUSING**

Table 13-6, on page 13-18 of the Draft EIR has been revised as shown below.

<b>Table 13-6 Requested Variance to B-3 Zoning District Development Standards</b>		
<b>Standard</b>	<b>Required</b>	<b>Requested</b>
Front Setback	12.5'	<del>12.5</del> <u>10.5'</u> ; however, covered, unenclosed projections attached to the primary structure may encroach up to 6' into any front yard setback. Front setback (and streetside setbacks) measured from back of walk. In the absence of sidewalk, setbacks is <u>12.5'</u> and measured from the edge of right-of-way. <u>Setbacks may be</u>



		<u>reduced up to 2.5' if all utilities agree to reduce the multi-purpose easement to 10'.</u>
Side Setback	5' one-story, 7.5' two-story	<u>5' for both one and two-story. 4' for standard lots 0' to 3' for alley-loaded lots</u>
Streetside Setback	10'	<u>10.5'. Side yard fencing within 10' must be set back at least 5' from back of walk where facing a street. Fence side yard setback is 5' from back of walk where facing a street. In the absence of sidewalk, setbacks are 12.5' measured from the edge of right-of-way.</u>
Rear Setback	10'	For alley-loaded Villages, 5' to garage face from edge of alleyway easement.
Lot Coverage	40 percent maximum <u>for one and two-story homes</u>	40 percent for two-story homes and 50 percent for one-story homes. Maximum coverage for "alley-loaded" Villages is not expressed as a percentage, but is a function of lot size and setbacks.
Lot Width	35'	35' corner, 30' interior.
<u>Height</u>	<u>30'</u>	<u>32' for alley-loaded lots</u>
Parking	Four off-street parking spaces on roads < 32' in width	For alley-loaded villages, two garage parking spaces per unit plus one off-street guest parking space per unit.

## **15 PUBLIC SERVICES AND UTILITIES**

Impact 15-4 regarding the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage, electric power, natural gas, or telecommunications facilities, on page 15-37 of Chapter 15, Public Services and Utilities, of the Draft EIR is hereby revised as follows:

Based on the County's requirement of five acres of parkland per 1,000 residents (Section 16.08.100 of the Placer County Code and General Plan Policy 5.A.1), the proposed project would be required to provide a minimum of approximately 7.59 acres of active recreation, ~~including parks and trails (0.005 acres/resident X 1,517 estimated residents), and with the inclusion of 60 ADUs, would require 8.16 acres of active recreation. Thus, by providing 7.7 acres of park area, and 1.7 acres of trails (calculated using the width of each type of trail multiplied by its respective length), the proposed project would not provide a total of 9.4 acres of active recreation, thus meet or exceeding the park requirements, and payment of an in-lieu fee would not be required. The project would be eligible for up to 50 percent of in-lieu fees in accordance with Section 16.08.100 (I) of the Placer County Code. It is also noted that the provision of 1.78 miles of trails exceeds the County General Plan Policy (5.A.2) requirement to provide one mile of recreational trail per 1,000 residents.<sup>39</sup> Given that the project would include development of enough parkland and trails to meet the demand created by future residents, and would be subject to the payment of in-lieu fees,~~ the project would not be anticipated to substantially increase demand on existing or future parks or recreational facilities in the surrounding area. Furthermore, pursuant to Article 15.34 of the Placer County Code, the project applicant would be required to pay a parks and recreational facility fee because the proposed parks would be private. The purpose of the park and recreation facilities impact fee is to provide funding for expansion of parkland and recreation facilities required to serve new development in unincorporated Placer County. Therefore, the proposed project would not result in an increase in the use of

<sup>39</sup> For example, using 2.54 persons per household in order to maintain consistency with the Fee Study, the project's trail requirement would be approximately 1.517 acres.



existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of such facilities would occur or be accelerated.

Impact 15-6 regarding the increase in the use of existing neighborhood and regional parks or other recreational facilities, on page 15-40 of Chapter 15, Public Services and Utilities, of the Draft EIR is hereby revised as follows:

As shown in the aforementioned figures, the proposed project ~~would~~ is anticipated to connect to existing 36-inch and 24-inch water lines that run along Antelope Road and PFE Road, respectively. Both water lines would connect to the interior of the project site by way of a series of new eight-inch lines extending throughout the proposed on-site roadways. However, it should be noted that, based on recent conversations with CAL-AM, an additional option for providing potable water to the project site has been identified. The additional option would include the construction of a new, 1,300-foot, 16- to 24-inch water line within the County's right-of-way (ROW) roadway pavement limits of PFE Road, from the southwest corner of the Schellhous parcel to the Cook Riolo Road/PFE Road intersection, where an existing water line is currently located.

The existing 36-inch and 24-inch water lines in Antelope Road and PFE Road, respectively, as well as the potential new 1,300 foot, 16- to 24-inch water line and new eight-inch lines extending throughout the proposed on-site roadways, would be consistent with CAL-AM's minimum sizing requirements for public water lines. In addition, all water utility improvements would be required to comply with CAL-AM standards and specifications, as well as local and State codes. CAL-AM's Engineering and Operations staff would review the project and evaluate the adequacy of the proposed improvements.

The foregoing minor changes are for clarification purposes and do not affect the adequacy of the environmental analysis contained in the Draft EIR.



**Table 2-1  
Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
<b>7. Biological Resources</b>			
<p><b>7-6</b> <i>Impacts to western pond turtle either directly (e.g., cause a wildlife population to drop below self-sustaining levels, threaten to eliminate an animal community) or through substantial habitat modifications.</i></p>	S	<p><i>Placer County Conservation Program Plan Area</i></p> <p><b>7-6(a)</b> <i>Implement the following Mitigation Measures set forth in this EIR:</i></p> <ul style="list-style-type: none"> <li>• <i>7-4(a) [PCCP General Condition 1]: Prior to improvement plan approval, the proposed project shall obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit Order 2009-0009-DWQ), including requirements to develop a project-based Storm Water Pollution Prevention Plan (SWPPP) and applicable NPDES program requirements as implemented by the County. Construction activity subject to this permit includes clearing, grading and disturbances to the ground such as stockpiling, or excavation.</i></li> </ul> <p><i>The project shall comply with the West Placer Storm Water Quality Design Manual (Design Manual). The project shall implement the following BMPs. This list shall be included on the notes page of the improvement/grading plans and shall be shown on the plans:</i></p> <ol style="list-style-type: none"> <li>1. <i>When possible, vehicles and equipment shall be parked on pavement, existing roads, and previously disturbed areas. When</i></li> </ol>	LS



**Table 2-1  
 Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<p><i>vehicle parking areas are to be established as a temporary facility, the site shall be recovered to pre-project or ecologically improved conditions within one year of start of groundbreaking to ensure effects are temporary (refer to Section 6.3.1.4, General Condition 4, Temporary Effects, for the process to demonstrate temporary effects).</i></p> <p><i>2. Trash generated by Covered Activities shall be promptly and properly removed from the site.</i></p> <p><i>3. Appropriate erosion control measures (e.g., fiber rolls, filter fences, vegetative buffer strips) shall be used on site to reduce siltation and runoff of contaminants into avoided wetlands, ponds, streams, or riparian vegetation.</i></p> <p><i>a. Erosion control measures shall be of material that will not entrap wildlife (i.e., no plastic monofilament). Erosion control blankets shall be used as a last resort because of their tendency to biodegrade slowly and trap reptiles and amphibians.</i></p>	



**Table 2-1  
 Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<p>b. Erosion control measures shall be placed between the area of disturbance and any avoided aquatic feature, within an area identified with highly visible markers (e.g., construction and erosion-control fencing, flagging, silt barriers) prior to commencement of construction activities. Such identification will be properly maintained until construction is completed and the soils have been stabilized.</p> <p>c. Fiber rolls used for erosion control shall be certified by the California Department of Food and Agriculture or any agency that is a successor or receives delegated authority during the permit term as weed free.</p> <p>d. Seed mixtures applied for erosion control shall not contain California Invasive Plant Council–designated invasive species (<a href="http://www.cal-ipc.org/paf/">http://www.cal-ipc.org/paf/</a>) but shall be composed of native species appropriate for the site or sterile non-native</p>	



**Table 2-1  
 Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<p><i>species. If sterile non-native species are used for temporary erosion control, native seed mixtures must be used in subsequent treatments to provide long-term erosion control and slow colonization by invasive non-natives.</i></p> <p><i>If the runoff from the development will flow within 100 feet of a wetland or pond, vegetated storm water filtration features, such as rain gardens, grass swales, tree box filters, infiltration basins, or similar LID features to capture and treat flows, shall be installed consistent with local programs and ordinances.</i></p> <ul style="list-style-type: none"> <li><i>7-12(c) [PCCP Community Condition 1.1]: Prior to land conversion authorization approval, the unavoidable effects to 1.334 acres of vernal pool type wetlands or their buffers shall be mitigated through payment of special habitat fees. The fees to be paid to the PCA shall be that in effect at the time of land conversion authorization issuance.</i></li> <li><i>7-11(b) [PCCP Community Condition 2.1]: To the maximum extent possible, the proposed project shall not modify any area within a</i></li> </ul>	



**Table 2-1  
 Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<p><i>buffer that extends 50 feet outward from the outermost bounds of the riparian vegetation. The improvement or grading plans shall show the location of the riverine/riparian buffer.</i></p> <ul style="list-style-type: none"> <li><i>7-11(c) [PCCP Community Condition 2.2]: Prior to land conversion authorization, the applicant shall coordinate with the PCA to determine which In-Stream and Stream System Best Management Practices (BMPs) from Table 7-1 of the User's Guide apply to the proposed project. The applicant shall identify the applicable BMPs on the project's improvement or grading plans. The selected BMPs shall be incorporated into the project's Land Conversion Authorization letter.</i></li> </ul> <p><i>Prior to land conversion authorization approval, the unavoidable effects to <del>4.00 to 4.48</del> <del>acres</del> <del>0.50 to 1.65</del> <u>0.67 to 1.12</u> acres riverine and riparian habitat or their buffers shall be mitigated through payment of special habitat fees. The fees to be paid shall be those in effect at the time of land conversion authorization.</i></p> <ul style="list-style-type: none"> <li><i>7-4(b) [PCCP Stream System Condition 1]: The project shall be designed to minimize development activities within the stream system to the maximum extent possible.</i></li> </ul>	



**Table 2-1  
 Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<ul style="list-style-type: none"> <li>7-10(a) [PCCP Species Condition 4]: Prior to initiation of PCCP Covered Activities associated with the proposed project, the qualified biologist(s) shall conduct preconstruction surveys to evaluate the presence of tricolored blackbird nesting colonies for each phase of the project. In instances where an adjacent parcel is not accessible to survey because the qualified biologist was not granted permission to enter, the qualified biologist shall scan all potential nest colony site(s) from the adjacent property, roadsides, or other safe, publicly accessible viewpoints, without trespassing, using binoculars and/or a spotting scope to look for tricolored blackbird nesting activity.</li> </ul> <p>Surveys shall be conducted at least twice, with at least one month between surveys, during the nesting season one year prior to initial ground disturbance for the Covered Activity (if feasible), and the year of ground disturbance for the Covered Activity (required). If Covered Activities will occur in the project work area during the nesting season, three surveys shall be conducted within 15 days prior to the Covered Activity, with one of the surveys occurring within five days prior to the start of the Covered Activity. The survey methods will be based on Kelsey (2008) or a similar protocol approved by the PCA and the</p>	



**Table 2-1  
 Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<p><i>USFWS and CDFW based on site-specific conditions.</i></p> <p><i>If the first survey indicates that suitable nesting habitat is not present on the project site or within 1,300 feet of the project work area, additional surveys for nest colonies are not required.</i></p> <p><i>If an active colony is known to occur within three miles of the project site, a qualified biologist shall conduct two surveys of foraging habitat within the project site and within a 1,300-foot radius around the project site to determine whether foraging habitat is being actively used by foraging tricolored blackbirds. The qualified biologist shall map foraging habitat, as defined by the land cover types listed above, within a 1,300-foot radius around the project site to delineate foraging habitat that will be surveyed. The surveys shall be conducted approximately one week apart, with the second survey occurring no more than five calendar days prior to ground-disturbing activities.</i></p> <p><i>Construction activity or other covered activities that may disturb an occupied nest colony site, as determined by a qualified biologist, shall be prohibited during the nesting season (March 15 through July 31) or until the</i></p>	



**Table 2-1  
 Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<p><i>chicks have fledged or the colony has been abandoned on its own) within a 1,300-foot buffer zone around the nest colony, to the extent practicable. The intent of this condition is to prevent disturbance to occupied nest colony sites on or near project sites so they can complete their nesting cycle. This condition is not intended to preserve suitable breeding habitat on project sites but to ensure impacts to active colony sites only take place once the site is no longer occupied by the nesting colony. The buffer shall be applied to extend beyond the nest colony site as follows: 1) if the colony is nesting in a wetland, the buffer must be established from the outer edge of all hydric vegetation associated with the colony, or 2) if the colony is nesting in non-wetland vegetation (e.g., Himalayan blackberry), the buffer must be established from the edge of the colony substrate. This buffer may be modified to a minimum of 300 feet, with written approval from the USFWS and CDFW, in areas with dense forest, buildings, or other features between the Covered Activities and the occupied active nest colony; where there is sufficient topographic relief to protect the colony from excessive noise or visual disturbance; where sound curtains have been installed; or other methods developed in consultation with the USFWS and CDFW where conditions warrant</i></p>	



**Table 2-1  
 Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<p><i>reduction of the buffer distance. If tricolored blackbirds colonize habitat adjacent to Covered Activities after the activities have been initiated, the project applicant shall reduce disturbance through establishment of buffers or noise reduction techniques or visual screens, as determined in consultation with the USFWS, CDFW, and PCA. The buffer must be clearly marked to prevent project-related activities from occurring within the buffer zone.</i></p> <p><i>Active nesting colonies that occur within the non-disturbance buffer shall be monitored by the qualified biologist(s) to verify the Covered Activity is not disrupting the nesting behavior of the colony. The frequency of monitoring shall be approved by the PCA and based on the frequency and intensity of construction activities and the likelihood of disturbance of the active nest. In most cases, monitoring will occur at least every other day, but in some cases, daily monitoring may be appropriate to ensure that direct effects on tricolored blackbird are minimized. The biologist shall train construction personnel on the avoidance procedures and buffer zones.</i></p> <p><i>If the qualified biologist(s) determines that the Covered Activity is disrupting nesting and/or foraging behavior, the qualified biologist(s)</i></p>	



**Table 2-1  
 Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<p><i>shall notify the project applicant immediately, and the project applicant shall notify the PCA within 24 hours to determine additional protective measures that can be implemented. The qualified biologist(s) shall have the authority to stop Covered Activities until additional protective measures are implemented. Additional protective measures shall remain in place until the qualified biologist(s) determine(s) tricolored blackbird behavior has normalized. If additional protective measures are ineffective, the qualified biologist(s) shall have the authority to stop Covered Activities as needed until the additional protective measures are modified and nesting behavior of tricolored blackbird returns to normal.</i></p> <p><i>Additional protective measures may include increasing the size of the buffer (within the constraints of the project site), delaying Covered Activities (or the portion of Covered Activities causing the disruption) until the colony is finished breeding and chicks have left the nest site, temporarily relocating staging areas, or temporarily rerouting access to the project work area. The project proponent shall notify the PCA and USFWS and CDFW within 24 hours if nests or nestlings are abandoned. If the nestlings are still alive, the qualified biologist(s) shall work</i></p>	



**Table 2-1  
 Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<p><i>with the USFWS and CDFW to determine appropriate actions for salvaging the eggs or nestlings. Notification to PCA and USFWS and CDFW shall be via telephone or email, followed by a written incident report. Notification shall include the date, time, location, and circumstances of the incident.</i></p> <p><i>Foraging habitat within the buffer shall be monitored by the qualified biologist(s) to verify that the Covered Activity is not disrupting tricolored blackbird foraging behavior. The frequency of monitoring shall be approved by the PCA and based on the frequency and intensity of construction activities and the likelihood of disturbance of foraging tricolored blackbirds. In most cases, monitoring will occur at least every other day, but in some cases, daily monitoring may be appropriate to ensure that effects on tricolored blackbird are minimized. The biologist shall train construction personnel on the avoidance procedures and buffer zones.</i></p> <p><i>If the qualified biologist(s) determines that the Covered Activity is disrupting foraging behavior, the qualified biologist(s) shall notify project applicant immediately, and the project applicant shall notify the PCA within 24 hours to determine additional protective measures that can be implemented. The qualified</i></p>	



**Table 2-1  
Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<p><i>biologist(s) shall have the authority to stop Covered Activities until additional protective measures are implemented. Additional protective measures shall remain in place until the qualified biologist(s) determine(s) tricolored blackbird behavior has normalized. If additional protective measures are ineffective, the qualified biologist(s) shall have the authority to stop Covered Activities as needed until the additional protective measures are modified and foraging behavior of tricolored blackbird returns to normal. Additional protective measures may include increasing the size of the buffer (within the constraints of the project site), temporarily relocating staging areas, or temporarily rerouting access to the project work area.</i></p> <p><i>No additional avoidance and minimization measures specific to these species are required by the PCCP. If individual western pond turtle are identified on-site, the project proponent shall obtain an incidental take permit from CDFW and/or USFWS before relocating or otherwise impacting the species.</i></p>	
<p><b>7-8 Have a substantial adverse effect, either directly (e.g., cause a wildlife population to drop below self-sustaining levels, threaten to eliminate an animal community) or through substantial habitat</b></p>	<p>S</p>	<p>7-8(c) Approximately <del>33.57</del> <u>33.23</u> acres of annual brome grassland that represents suitable foraging habitat for Swainson's hawks will be permanently impacted during construction of the portion of the proposed project outside of the PCCP plan area, and as much as an additional 1.27 acres could be impacted, depending on which sewer alternative is selected.</p>	<p>LS</p>



**Table 2-1  
 Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
<p><i>modifications, on Swainson's hawk.</i></p>		<p><i>Swainson's hawk foraging habitat outside of the PCCP does not exist for either of the potential future trails. The aforementioned impacts shall be mitigated through purchase and conservation of similar habitat as follows:</i></p> <p><i>Two Swainson's hawk nests have been documented approximately 2.5 miles west of the study area; one south of PFE Road, and one west of Walerga Road. Prior to project construction, a qualified biologist shall conduct a review of Swainson's hawk nest data available, including the California Natural Diversity Database (CNDDDB), unprocessed CNDDDB records, and contacting CDFW to determine if they have any additional nest data. If desired by the project applicant, the biologist may conduct a survey of the aforementioned nests to determine if they are still present. The biologist shall provide the Placer County Community Development Resource Agency with a summary of the findings.</i></p> <p><i>If it has been determined that a portion of the overall project site is within 10 miles of an active Swainson's hawk nest (an active nest is defined as a nest with documented Swainson's hawk use within the past five years), the applicant shall mitigate for the loss of suitable Swainson's hawk foraging habitat by implementing the following measures:</i></p> <ul style="list-style-type: none"> <li><i>• One acre of suitable foraging habitat shall be protected for each acre of suitable foraging</i></li> </ul>	



**Table 2-1  
Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<p><i>habitat that is proposed to be developed that is within one mile of an active nest. Protection shall be by way of purchase of mitigation bank credits or other land protection mechanism acceptable to the County.</i></p> <ul style="list-style-type: none"> <li>• <i>0.75-acre of suitable foraging habitat shall be protected for each acre of suitable foraging habitat that is proposed to be developed that is between one and five miles from an active nest. Protection shall be by way of purchase of mitigation bank credits or other land protection mechanism acceptable to the County.</i></li> <li>• <i>0.5-acre of suitable foraging habitat shall be protected for each acre of suitable foraging habitat that is proposed to be developed that is between five and 10 miles from an active nest. Protection shall be by way of purchase of mitigation bank credits or other land protection mechanism acceptable to the County.</i></li> </ul> <p><i>If the proposed project is built in phases, the purchase of this foraging habitat mitigation may be phased as well, such that all areas are mitigated prior to impact.</i></p>	
<p><b>7-11 Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies,</b></p>	<p>S</p>	<p>7-11(c) <u>PCCP Community Condition 2.2</u>: Prior to land conversion authorization, the applicant shall coordinate with the PCA to determine which In-Stream and Stream System Best Management Practices (BMPs) from Table 7-1 of the User's Guide</p>	<p>LS</p>



**Table 2-1  
Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
<p><i>regulations or by the CDFW or USFWS.</i></p>		<p><i>apply to the proposed project. The applicant shall identify the applicable BMPs on the project's improvement or grading plans. The selected BMPs shall be incorporated into the project's Land Conversion Authorization letter.</i></p> <p><i>Prior to land conversion authorization approval, the unavoidable effects to <del>4.00 to 4.48</del> <u>0.67 to 1.12</u> acres riverine and riparian habitat or their buffers shall be mitigated through payment of special habitat fees. The fees to be paid shall be those in effect at the time of land conversion authorization.</i></p>	
<p><b>7-12</b> <i>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.</i></p>	<p>S</p>	<p><i>Placer County Conservation Program Plan Area 7-12(a)</i></p> <p><i>The Permittee shall apply for coverage under the PCCP to mitigate for all impacts to Covered Species, land cover, and sensitive natural communities. Prior to application approval, additional species surveys may be necessary, and prior to construction land cover and special habitat fees shall be paid. The Permittee shall comply with the terms of the PCCP Coverage Certificate, including compliance with all avoidance and minimization measures, which may include pre-construction surveys, construction monitoring, and BMPs.</i></p> <p><i><u>PCCP General Condition 3:</u> The proposed project shall pay a land conversion fee or dedicate land in lieu of fee or a combination thereof for the permanent conversion of <del>0.322</del> <u>0.344</u>-acre of Riparian/Riverine land cover (an additional 0.215-acre if the East Trail and West Trail are developed). If fees are paid, they</i></p>	<p>LS</p>



**Table 2-1  
 Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<p><i>shall be those in effect at the time of ground disturbance authorization for each project phase and shall be the per-acre fee based on the <u>final</u> amount of land disturbance resulting from the activity.</i></p> <p><i>In addition to land conversion, the project would result in permanent direct effects and temporary effects to PCCP Special Habitats as detailed in Table 11 of the Biological Resources Assessment (BRA) prepared for the proposed project. The total special habitat fee obligation including temporary effect fees shall be paid prior to issuance of a land conversion authorization that allows ground disturbance of a special habitat.</i></p> <p><i>7-12(b) <u>PCCP General Condition 4</u>: The applicant shall restore all temporarily disturbed areas and, one year after project groundbreaking, provide the County with a written assessment of how the performance standards were met. The project would result in <del>10.90 to 12.08</del> <u>9.14 to 9.68</u> acres of temporary effects to special habitats. Prior to issuance of land conversion authorization, the project shall pay a fee based on the <u>final</u> acres of impact. The fee to be paid shall be that in effect at the time of land conversion authorization issuance. If it is determined by the County or the PCCP biologist that the effects remain one year after groundbreaking activities have commenced, the effects shall be considered permanent and the County project lead shall reassess fees based on those effects.</i></p>	



**Table 2-1  
Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<p>7-12(c) <i>PCCP Community Condition 1.1: Prior to land conversion authorization approval, the unavoidable effects to <del>4.334</del> <u>1.338</u> acres of vernal pool type wetlands or their buffers shall be mitigated through payment of special habitat fees. The fees to be paid to the PCA shall be that in effect at the time of land conversion authorization issuance.</i></p> <p>7-12(e) <i>PCCP Stream System Condition 2: The project's development footprint is directly impacting the Stream System. The area of encroachment (<del>9.88 to 10.18</del> <u>12.57 to 12.68</u> acres of permanent impact and <del>10.88 to 11.32</del> <u>7.19 to 7.33</u> acres of temporary impact) is subject to the Stream System Encroachment Special Habitats Fee as described in Chapter 5 of the PCCP User's Guide. Fees shall be paid to the PCA prior to the issuance of any permit or authorization that results in ground disturbance within the Stream System.</i></p>	
<p><b>7-14 Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance, or have a substantial adverse effect on the environment by converting oak woodlands or impacting individual trees.</b></p>	<p>S</p>	<p>7-14(b) <i>PCCP General Condition 3: The project shall pay a land conversion fee or dedicate land in lieu of fee or a combination thereof for the permanent conversion of <del>89.24</del> <u>93.29</u> acres of the following natural land cover types: VPC Low, VPC Intermediate, VPC High, Blue Oak Woodland, Orchard, and Rural Residential (an additional <del>0.58</del> <u>0.59</u>-acre if both potential trails are developed and the most impactful sewer alternative) (for Riparian/Riverine, see Mitigation Measure 7-12(a)). If fees are paid, they shall be those in effect at the time of ground</i></p>	<p>LS</p>



**Table 2-1  
 Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<p><i>disturbance authorization for each project phase and shall be the per acre fee based on the <u>final</u> amount of land disturbance resulting from the activity.</i></p> <p><i>County Areas Outside of the Placer County Conservation Program</i></p> <p><i>7-14(e) Individual Tree Mitigation: The non-PCCP portion of the project site within unincorporated Placer County would result in impacts to a total of 41 Protected Trees with a combined DBH of 803.5 inches. An additional nine “significant trees” in oak woodlands mitigated in accordance with the Interim Guidelines would be impacted with a combined DBH of <del>332.0</del> <u>298.0</u> inches. Cumulatively, this totals 50 individual trees with a combined DBH of <del>1,135.5</del> <u>1,101.5</u> inches.</i></p> <p><i>To mitigate for the loss of Protected Trees, the project applicant shall obtain a Tree Permit from the Placer County Planning Services Division prior to improvement plan approval. The Planning Services Division shall review the Tree Permit application as well as the final site improvement plans and determine the precise mitigation requirement at that time. The fee shall be paid into the Placer County Tree Preservation Fund at \$125 per DBH removed or impacted (or the applicable fee at that time).</i></p> <p><i>Efforts shall be made to save trees where feasible. This may include the use of retaining walls, planter islands, pavers, or other techniques commonly</i></p>	



**Table 2-1  
 Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<p><i>associated with tree preservation. The improvement plans shall include a note and show placement of temporary construction fencing around trees to be saved: The applicant shall install a four-foot-tall, brightly colored (typically orange), synthetic mesh material fence (or an equivalent) approved by Placer County at the following locations prior to any construction equipment being moved on-site or any construction activities taking place: at the limits of construction; outside the Protected Zone of all single-trunk trees six inches DBH or greater, or 10 inches DBH aggregate for multi-trunk trees; within 50 feet of any grading, road improvements, underground utilities, or other development activity; or as otherwise shown on the Tentative Subdivision Map.</i></p> <p><i>Development of the project, including grading, shall not be allowed until this requirement is satisfied. Any encroachment within the aforementioned areas, including Protected Zones of trees to be saved, shall first be approved by Placer County. Temporary fencing shall not be altered during construction without written approval of Placer County. No grading, clearing, storage of equipment or machinery, etc., may occur until a representative of Placer County has inspected and approved all temporary construction fencing.</i></p> <p><i>7-14(f) <u>Oak Woodland Mitigation:</u> The project applicant shall obtain a Tree Permit from the Placer County Planning Services Division prior to improvement</i></p>	



**Table 2-1  
 Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<p><i>plan approval for impacted native oak trees and comply with all requirements of the Tree Permit. The Planning Services Division shall review the Tree Permit application as well as the final site improvement plans and determine the precise mitigation requirement at that time. To support the approval process, an exhibit shall be submitted showing the extent of the proposed activity within oak woodlands (as defined by the Interim Guidelines), and the resulting acreage of impacts to oak woodlands. If that impact acreage is one acre or greater, the project applicant may choose to mitigate for oak woodlands as follows:</i></p> <ul style="list-style-type: none"> <li>• <i>Compensatory mitigation shall occur off-site and may consist of one of the following, based on the acreage of oak woodland impacted:</i> <ul style="list-style-type: none"> <li>○ <i>Submit payment of fees for oak woodland conservation at a 2:1 ratio consistent with Chapter 19.50 of the Placer County Code: Woodland Conservation. The fees shall be calculated based upon the current market value of similar oak woodland acreage preservation and an endowment to maintain the land in perpetuity.</i></li> <li>○ <i>Purchase off-site conservation easements at a location approved by Placer County to mitigate the loss of oak woodlands at a 2:1 ratio.</i></li> </ul> </li> </ul>	



**Table 2-1  
 Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<ul style="list-style-type: none"> <li>○ Provide for a combination of payment to the Tree Preservation Fund and creation of an off-site Oak Preservation Easement.</li> </ul> <p>Removal of significant trees (greater than 24 inches DBH or clumps greater than 72 inches in circumference measured at ground level) within oak woodlands requires additional mitigation on a per-inch DBH removed (\$125 per DBH inch).</p> <p>As an example, oak woodland direct and indirect impacts proposed within the large stand of blue oak and riparian woodlands south of PFE Road total <del>2.4</del> <u>1.8</u> acres. As mitigation for those impacts, the project applicant would be required to purchase off-site conservation easements, pay fees for oak woodland conservation, or a combination of the two for <del>4.2</del> <u>3.6</u> acres of oak woodland. In addition, nine significant trees occur within this oak woodland area, and must be mitigated on a per-inch DBH removed. The trees have been included in the individual native tree mitigation discussion above.</p>	



**Table 7-5  
Impacts to Aquatic Resources Associated with the Project**

Aquatic Resources	Permanent Impacts						Temporary Impacts						Avoided						Total					
	PCCP		Non-PCCP		Total		PCCP		Non-PCCP		Total		PCCP		Non-PCCP		Total		PCCP		Non-PCCP		Total	
	Acres	Linear Feet	Acres	Linear Feet	Acres	Linear Feet	Acres	Linear Feet	Acres	Linear Feet	Acres	Linear Feet	Acres	Linear Feet	Acres	Linear Feet	Acres	Linear Feet	Acres	Linear Feet	Acres	Linear Feet	Acres	Linear Feet
Seasonal Wetland	0.018	-	0.519	-	<del>0.537</del> 0.536	-	0	-	0	-	0	-	0	-	0.025	-	0.025	-	0.018	-	0.544	-	0.562	-
Seasonal Wetland Swale	<del>0.572</del> 0.511	-	<del>0.013</del> 0.014	-	<del>0.585</del> 0.525	-	0	-	0	-	0	-	<del>0.004</del> 0.067	-	<del>0.012</del> 0.011	-	<del>0.016</del> 0.078	-	<del>0.576</del> 0.578	-	0.025	-	<del>0.601</del> 0.602	-
Vernal Pool	0.742	-	0	-	0.742	-	0	-	0	-	0	-	0	-	0	-	0	-	0.742	-	0	-	0.742	-
Dry Creek	0	0	0	0	0	0	0	0	0	0	0	0	5.964	<del>2,616</del> 2,687	0.361	<del>151</del> 210	6.325	<del>2,767</del> 2,897	5.964	<del>2,616</del> 2,897	0.361	<del>151</del> 210	6.325	<del>2,767</del> 2,897
Ephemeral Drainage	<del>0.037</del> 0.021	<del>513</del> 332	0	0	<del>0.037</del> 0.021	<del>513</del> 332	0	0	0	0	0	0	<del>0.081</del> 0.088	466	0	0	0.088	466	0.118	<del>979</del> 880	0	-	0.118	<del>979</del> 880
Intermittent Drainage	<del>0.196</del> 0.246	<del>338</del> 349	<del>0.209</del> 0.199	<del>779</del> 792	<del>0.405</del> 0.444	<del>1117</del> 1141	<del>0.550</del> 0.499	<del>647</del> 404	0	0	<del>0.55</del> 0.499	<del>647</del> 404	<del>7.106</del> 7.090	7,516	<del>1.168</del> 1.195	4,478	<del>8.274</del> 8.285	11,994	<del>7.852</del> 7.834	<del>8,501</del> 8,269	<del>1.377</del> 1.394	<del>5,257</del> 5,270	9.229	<del>13,758</del> 13,539
Roadside Ditch	0.032	<del>654</del> 658	0.065	1,341	0.097	<del>1995</del> 1999	<del>&lt;0.001</del> 0	<del>4</del> 0	0	0	<del>&lt;0.001</del> 0	<del>4</del> 0	0	0	0	0	0	0	0.032	658	0.065	1,341	0.097	1,999
<b>Total Aquatic Resources</b>	<del>1.597</del> 1.567	<del>1,505</del> 1,339	<del>0.806</del> 0.796	<del>2,120</del> 2,133	<del>2.403</del> 2.364	<del>3,625</del> 3,472	<del>0.550</del> 0.509	<del>651</del> 486	0	0	<del>0.55</del> 0.509	<del>651</del> 486	<del>13.155</del> 13.209	<del>10,598</del> 10,669	<del>1.566</del> 1.592	<del>4629</del> 4688	<del>14.720</del> 14.801	<del>15,227</del> 15,357	<del>15.302</del> 15.285	<del>12,754</del> 12,494	<del>2.372</del> 2.389	<del>6,749</del> 6,821	17.674	<del>19,503</del> 19,315

Note: Small summation errors may occur due to rounding.

Source: Madrone Ecological Consulting, 2022.

**Table 7-6  
Impacts to Aquatic Resources Associated with the Project Plus Sewer Alignment and Potential Future Trails**

Aquatic Resources	Permanent Impacts						Temporary Impacts						Total Impacts					
	PCCP		Non-PCCP		Total		PCCP		Non-PCCP		Total		PCCP		Non-PCCP		Total	
	Acres	Linear Feet	Acres	Linear Feet	Acres	Linear Feet	Acres	Linear Feet	Acres	Linear Feet	Acres	Linear Feet	Acres	Linear Feet	Acres	Linear Feet	Acres	Linear Feet
Seasonal Wetland	0.018	-	0.519	-	<del>0.537</del> 0.536	-	0.000	-	0.000	-	0.000	-	0.018	-	0.519	-	<del>0.537</del> 0.536	-
Seasonal Wetland Swale	<del>0.572</del> 0.511	-	<del>0.013</del> 0.014	-	<del>0.585</del> 0.525	-	0.000	-	0.000	-	0.000	-	<del>0.572</del> 0.511	-	<del>0.013</del> 0.014	-	<del>0.585</del> 0.525	-
Vernal Pool	0.742	-	0.000	-	0.742	-	0.000	-	0.000	-	0.000	-	0.742	-	0.000	-	0.742	-
Dry Creek	0.000- 0.033	0-18	0.000- 0.022	0-12	0.000- 0.055	0-30	0.000- 0.178	0-96	0.000- 0.132	0-75	0.000- 0.310	0-171	0.000- 0.211	0-114	0.000- 0.154	0-87	0.000- 0.365	0-201
Ephemeral Drainage	<del>0.037</del> 0.021	<del>513</del> 332	0.000	0	<del>0.037</del> 0.021	<del>513</del> 332	0.000	0	0.000	0	<del>0.000</del> 0.010	<del>0</del> 82	<del>0.037</del> 0.031	<del>513</del> 414	0.000	0	<del>0.037</del> 0.031	<del>513</del> 414
Intermittent Drainage	<del>0.196</del> 0.409 0.246 0.265	<del>338</del> 668 349-381	<del>0.209</del> 0.199	<del>779</del> 792	<del>0.405</del> 0.618 0.444 0.542	<del>1,117</del> 1,447 1,141- 1,173	<del>0.550</del> 1.137 0.499- 0.542	<del>647</del> 1,356 404-470	0.000	0	<del>0.550</del> 1.137 0.499- 0.542	<del>647</del> 1,356 404-470	<del>0.746</del> 1.546 0.744- 0.807	<del>985</del> 2,024 753-851	<del>0.209</del> 0.199	<del>779</del> 792	<del>1.755</del> 1.545- 1.006	<del>2,803</del> 1,545- 1,643
Roadside Ditch	0.032	<del>654</del> 658	0.065	1,341	0.097	<del>1995</del> 1,999	<del>&lt;0.001</del> 0	<del>4</del> 0	0.000	0	<del>&lt;0.001</del> 0	<del>4</del> 0	0.032	658	0.065	1341	0.097	1999
<b>Total Aquatic Resources</b>	<del>1.597</del> 1.843 1.567- 1.638	<del>1,505</del> 1,863 1,520- 1,570	<del>0.806</del> 0.828 0.797- 0.819	<del>2,120</del> 2,132 2,133- 2,145	<del>2.403</del> 2.671 2.364- 2.456	<del>3,625</del> 3,986 3,653- 3,715	<del>0.550</del> 1.315 0.509- 0.720	<del>651</del> 1,456 486-648	0.000- 0.132	0-75	<del>0.550</del> 1.447 0.509- 0.852	<del>651</del> 1,531 486-723	<del>2.147</del> 3.158 2.084- 2.358	<del>2,156</del> 3,309 1,924- 2,136	<del>0.806</del> 0.960 0.797- 0.951	<del>2,120</del> 2,207 2,133- 2,220	<del>2.953</del> 4.118 2.880- 3.308	<del>4,276</del> 5,516 4,057- 4,356

Note: Small summation errors may occur due to rounding. The lower end of the impact ranges assumes the least impactful sewer alternative and neither of the trails are implemented. The upper end of the impact ranges assumes the most impactful sewer alternative and both trails are implemented.

Source: Madrone Ecological Consulting, 2022.



<b>Table 7-7 Disturbances to Land Covers/Vegetation Communities From On-Site Project Components (acres)</b>			
Land Cover/Vegetation Community	PCCP	Non-PCCP	Total
<b>Permanently Disturbed</b>			
Annual Brome Grassland	-	<u>33.22</u> 33.23	<u>33.22</u> 33.23
VPC High	6.48 6.49	-	6.48 6.49
VPC Intermediate	<del>48.98</del> 51.57	-	<del>48.98</del> 51.57
VPC Low	<del>27.86</del> 28.67	-	<del>27.86</del> 28.67
Blue Oak Woodland	1.60 2.21	1.84 1.48	3.44 3.69
Orchard/Abandoned Almond Orchard	2.69 2.70	1.66 1.67	4.35 4.37
Riparian/Riparian Woodland	0.06 0.05	0.94	1.00 0.99
Rural Residential	1.63 1.64	-	1.63 1.64
Urban	3.19 3.24	6.71 4.75	9.90 7.99
Valley Needlegrass Grassland	0.00	0.00	0.00
<b>Total</b>	<b><del>92.49</del> 96.58</b>	<b><del>44.37</del> 42.07</b>	<b><del>136.86</del> 138.65</b>
<b>Temporarily Disturbed</b>			
Annual Brome Grassland	-	0.00	0.00
VPC High	0.01 0.00	-	0.01 0.00
VPC Intermediate	2.93 1.84	-	2.93 1.84
VPC Low	6.25 4.95	-	6.25 4.95
Blue Oak Woodland	1.52 0.92	0.00	1.52 0.92
Orchard/Abandoned Almond Orchard	0.03 0.02	0.00	0.03 0.02
Riparian/Riparian Woodland	0.82 0.13	0.00	0.82 0.13
Rural Residential	0.08 0.11	-	0.08 0.11
Urban	0.04	0.01	0.05
Valley Needlegrass Grassland	0.00	0.00	0.00
<b>Total</b>	<b><del>11.68</del> 8.01</b>	<b>0.01</b>	<b><del>11.69</del> 8.03</b>
<b>Avoided</b>			
Annual Brome Grassland	-	5.26 5.25	5.26 5.25
VPC High	0.00	-	0.00
VPC Intermediate	8.38 6.84	-	8.38 6.84
VPC Low	8.21 8.66	-	8.21 8.66
Blue Oak Woodland	4.45 4.44	11.86 12.22	16.31 16.66
Orchard/Abandoned Almond Orchard	0.12	0.00	0.12

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**Table 7-7  
Disturbances to Land Covers/Vegetation Communities From On-Site Project Components (acres)**

Land Cover/Vegetation Community	PCCP	Non-PCCP	Total
Riparian/Riparian Woodland	<del>46.67</del> <u>17.37</u>	1.49	<del>48.16</del> <u>18.86</u>
Rural Residential	1.29	-	1.29
Urban	2.03	<del>6.67</del> <u>8.63</u>	<del>8.71</del> <u>10.66</u>
Valley Needlegrass Grassland	0.00	0.03	0.03
<b>Total</b>	<del><b>41.45</b></del> <b>40.75</b>	<del><b>25.34</b></del> <b>27.59</b>	<del><b>66.46</b></del> <b>68.34</b>
<b>Overall Total</b>			
Annual Brome Grassland	-	38.48	38.48
VPC High	6.49	-	6.49
VPC Intermediate	<del>60.29</del> <u>60.25</u>	-	<del>60.29</del> <u>60.25</u>
VPC Low	<del>42.32</del> <u>42.28</u>	-	<del>42.32</del> <u>42.28</u>
Blue Oak Woodland	7.57	13.70	21.27
Orchard/Abandoned Almond Orchard	2.84	<del>1.66</del> <u>1.67</u>	<del>4.50</del> <u>4.51</u>
Riparian/Riparian Woodland	17.55	2.43	19.98
Rural Residential	<del>3.00</del> <u>3.04</u>	-	<del>3.00</del> <u>3.04</u>
Urban	<del>5.26</del> <u>5.31</u>	13.39	<del>18.66</del> <u>18.70</u>
Valley Needlegrass Grassland	0.00	0.03	0.03
<b>Total</b>	<del><b>145.32</b></del> <b>145.33</b>	<del><b>69.69</b></del> <b>69.70</b>	<del><b>215.01</b></del> <b>215.02</b>

*Source: Madrone Ecological Consulting, 2022.*

**Table 7-8  
Range of Disturbances to Land Covers/Vegetation Communities From On-Site and Off-Site Project Components and Potential Trails (acres)**

Land Cover/Vegetation Community	PCCP	Non-PCCP	Total
<b>Permanently Disturbed</b>			
Annual Brome Grassland	-	<del>33.22-34.49</del> <u>32.79 – 34.01</u>	<del>33.22-34.49</del> <u>32.79 – 34.01</u>
VPC High	6.48 6.49	-	6.48 6.49
VPC Intermediate	<del>48.98-49.05</del> <u>51.57 – 51.65</u>	-	<del>48.98-49.05</del> <u>51.57 – 51.65</u>
VPC Low	<del>27.86-28.37</del> <u>28.67 – 29.18</u>	-	<del>27.86-28.37</del> <u>28.67 – 29.18</u>
Blue Oak Woodland	1.60 2.21	<del>1.84-1.90</del> <u>1.48 – 1.59</u>	<del>3.44-3.50</del> <u>3.69 – 3.80</u>
Orchard/Abandoned Almond Orchard	2.69 2.70	1.66 1.67	4.35 4.37
Riparian/Riparian Woodland	<del>0.06-0.20</del> <u>0.05 – 0.18</u>	<del>0.94-1.13</del> <u>0.94 – 1.13</u>	<del>1.00-1.33</del> <u>0.99 – 1.31</u>
Rural Residential	<del>1.63</del> 1.64	-	<del>1.63</del> 1.64
Urban	3.19	6.71-9.06	9.90-12.25

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<b>Table 7-8</b>			
<b>Range of Disturbances to Land Covers/Vegetation Communities From On-Site and Off-Site Project Components and Potential Trails (acres)</b>			
<b>Land Cover/Vegetation Community</b>	<b>PCCP</b>	<b>Non-PCCP</b>	<b>Total</b>
	3.24	4.75 – 7.11	7.99 – 10.35
Valley Needlegrass Grassland	-	0.00	0.00
<b>Total</b>	<del>92.49</del> <b>93.24</b> <del>96.58</del> <b>– 97.29</b>	<del>44.37</del> <b>48.24</b> <del>42.07</del> <b>– 45.51</b>	<del>136.86</del> <b>141.45</b> <del>138.65</del> <b>–</b> <del>142.80</del>
<b>Temporarily Disturbed</b>			
Annual Brome Grassland	-	0.00-0.98 0.00 – 0.93	0.00-0.98 0.00 – 0.93
VPC High	0.04 0.00	-	0.04 0.00
VPC Intermediate	2.93-2.99 1.84 – 1.93	-	2.93-2.99 1.84 – 1.93
VPC Low	6.25-6.58 4.95 – 5.30	-	6.25-6.58 4.95 – 5.30
Blue Oak Woodland	1.51 0.92	0.00-0.06 0.00 – 0.11	1.51-1.57 0.92 – 1.03
Orchard/Abandoned Almond Orchard	0.03 0.02	0.00	0.03 0.02
Riparian/Riparian Woodland	0.82-1.02 0.13 – 0.33	0.00-0.42 0.00 – 0.35	0.82-1.44 0.13 – 0.68
Rural Residential	0.08 0.11	-	0.08 0.11
Urban	0.04	0.01-0.02	0.05-0.06 0.05 – 0.07
Valley Needlegrass Grassland	-	0.00	0.00
<b>Total</b>	<del>11.67</del> <b>12.26</b> <del>8.01</del> <b>– 8.66</b>	<del>0.01</del> <b>1.48</b> <del>0.01</del> <b>– 1.41</b>	<del>11.68</del> <b>13.74</b> <del>8.03</del> <b>– 10.07</b>
<b>Total</b>			
Annual Brome Grassland	-	33.22-34.49 32.79 – 34.94	33.22-34.49 32.79 – 34.94
VPC High	6.49	-	6.49
VPC Intermediate	51.91-52.04 53.41 – 53.58	-	51.91-52.04 53.41 – 53.58
VPC Low	34.11-34.95 33.62 – 34.48	-	34.11-34.95 33.62 – 34.48
Blue Oak Woodland	3.11 3.13	1.84-1.96 1.48 – 1.70	4.95-5.07 4.61 – 4.83
Orchard/Abandoned Almond Orchard	2.72	1.66 1.67	4.38 4.39
Riparian/Riparian Woodland	0.88-1.22 0.18 – 0.51	0.94-1.55 0.94 – 1.48	1.82-2.77 1.12 – 1.99
Rural Residential	1.70 1.75	-	1.70 1.75
Urban	3.23 3.28	6.72-9.08 4.76 – 7.13	9.95-12.34 8.04 – 10.41
Valley Needlegrass Grassland	-	0.00	0.00
<b>Total</b>	<del>104.15</del> <b>105.46</b> <del>104.58</del> <b>– 105.</b> <b>94</b>	<del>44.38</del> <b>48.74</b> <del>41.64</del> <b>– 46.92</b>	<del>148.53</del> <b>154.20</b> <del>146.22</del> <b>–</b> <del>152.86</del>
<i>Source: Madrone Ecological Consulting, 2022.</i>			



**Table 7-11**  
**Summary of Significant Tree Impacts Within Oak Woodland in**  
**Non-PCCP Study Area Portions of Placer County**

<b>Species</b>	<b>Number of Trees</b>	<b>DBH</b>
Blue Oak	<del>65</del>	<del>202.0</del> 168.0
Interior Live Oak	4	130.0
<b>Total</b>	<b>40 <u>9</u></b>	<b>332.0 <u>298.0</u></b>

*Source: Madrone Ecological Consulting, 2022.*



Figure 7-1  
 Study Area and Project Components (Final EIR Version)

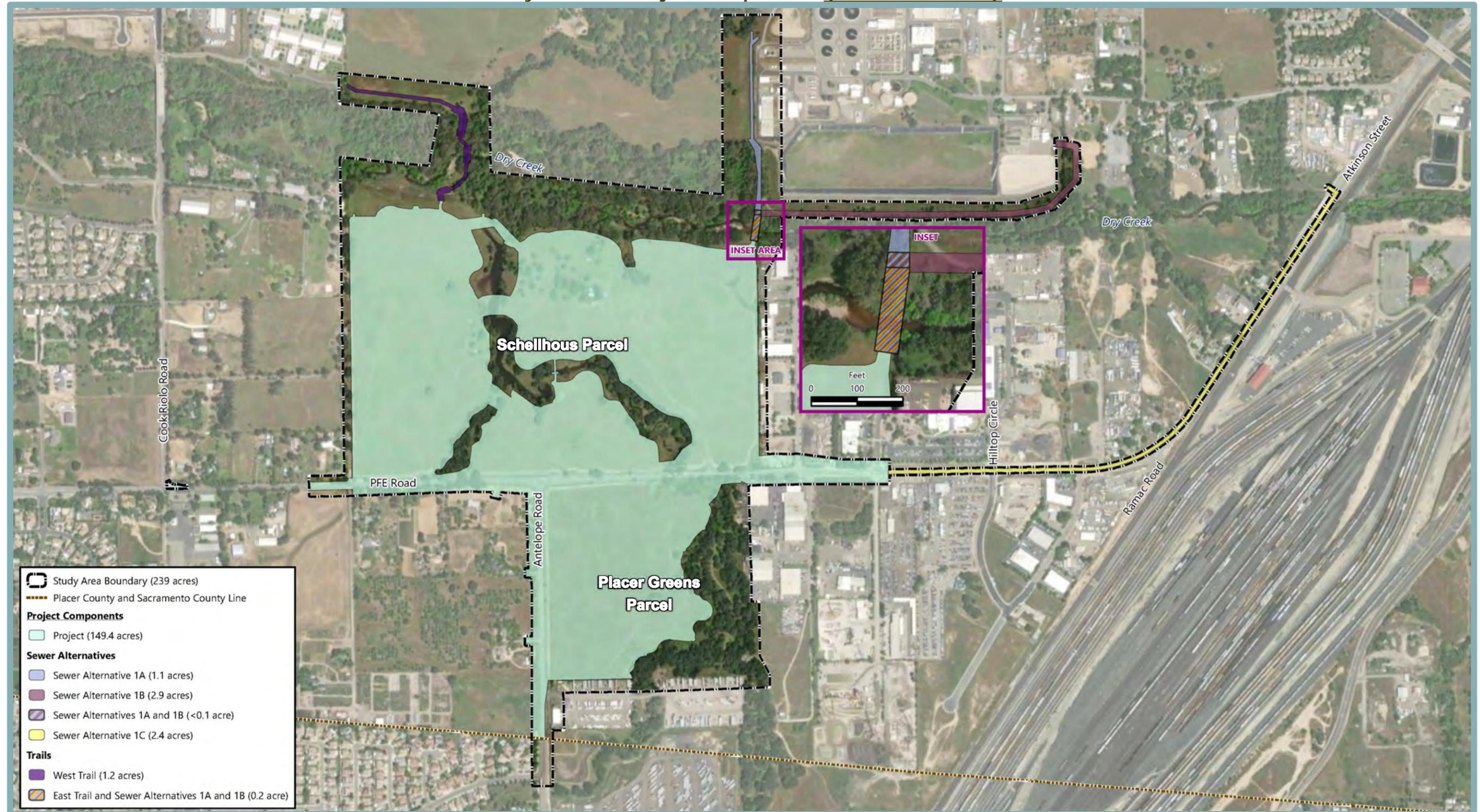




Figure 7-7  
 Disturbances to Vegetation Communities/Land Covers (Final EIR Version)

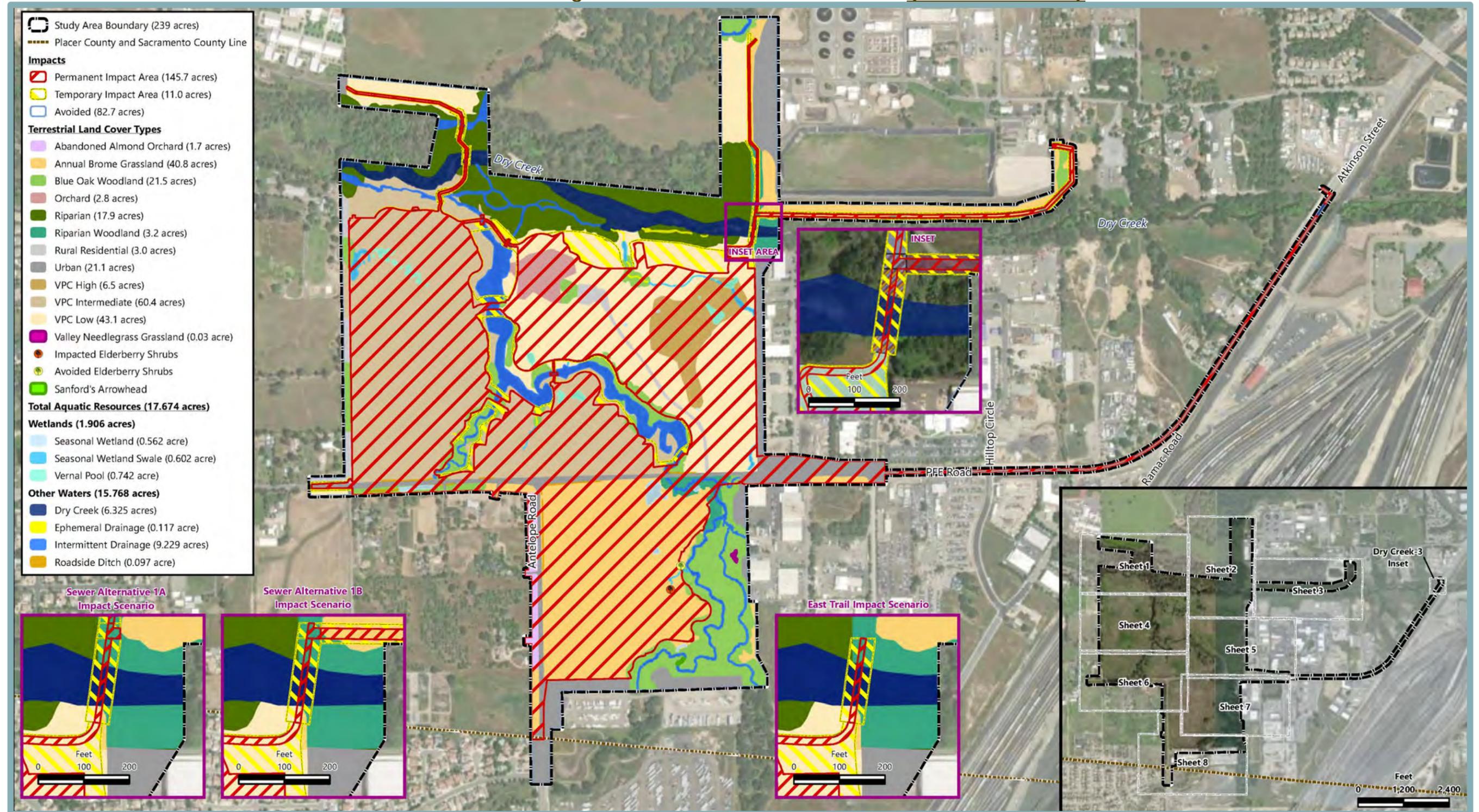
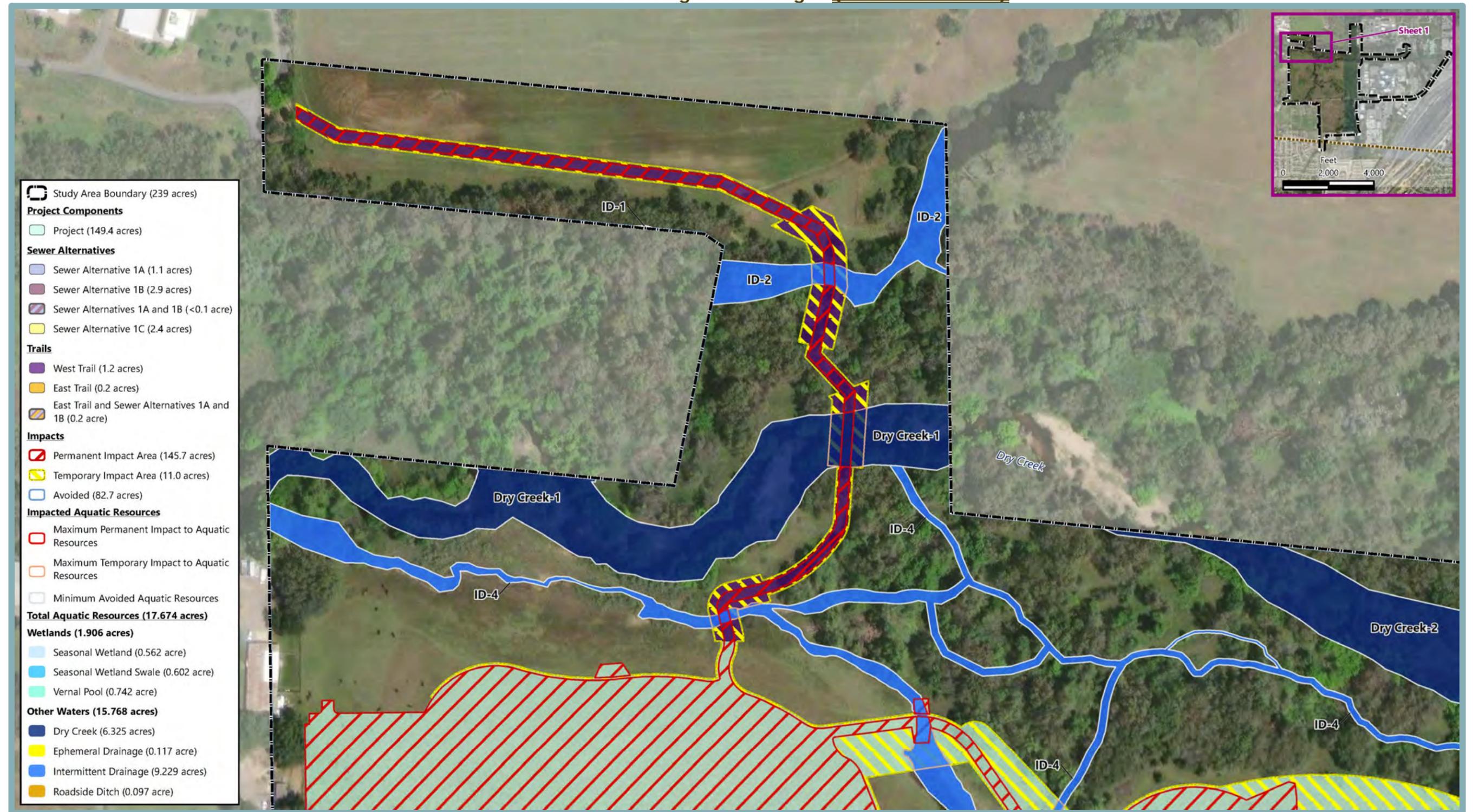




Figure 7-8  
 Potential West Trail Alignment Bridges (Final EIR Version)





**Figure 7-9  
 Potential East Trail Alignment Bridge (Final EIR Version)**

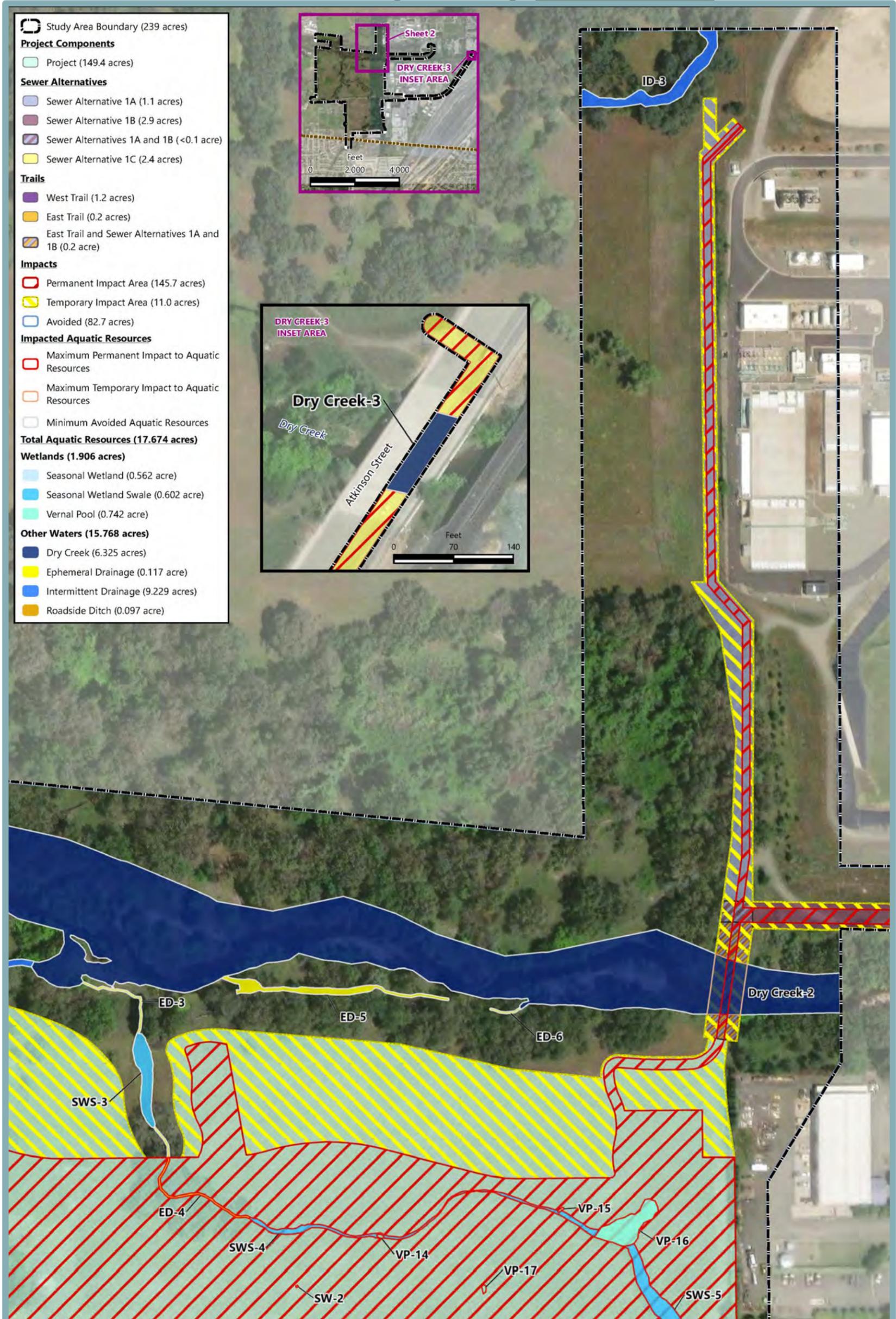
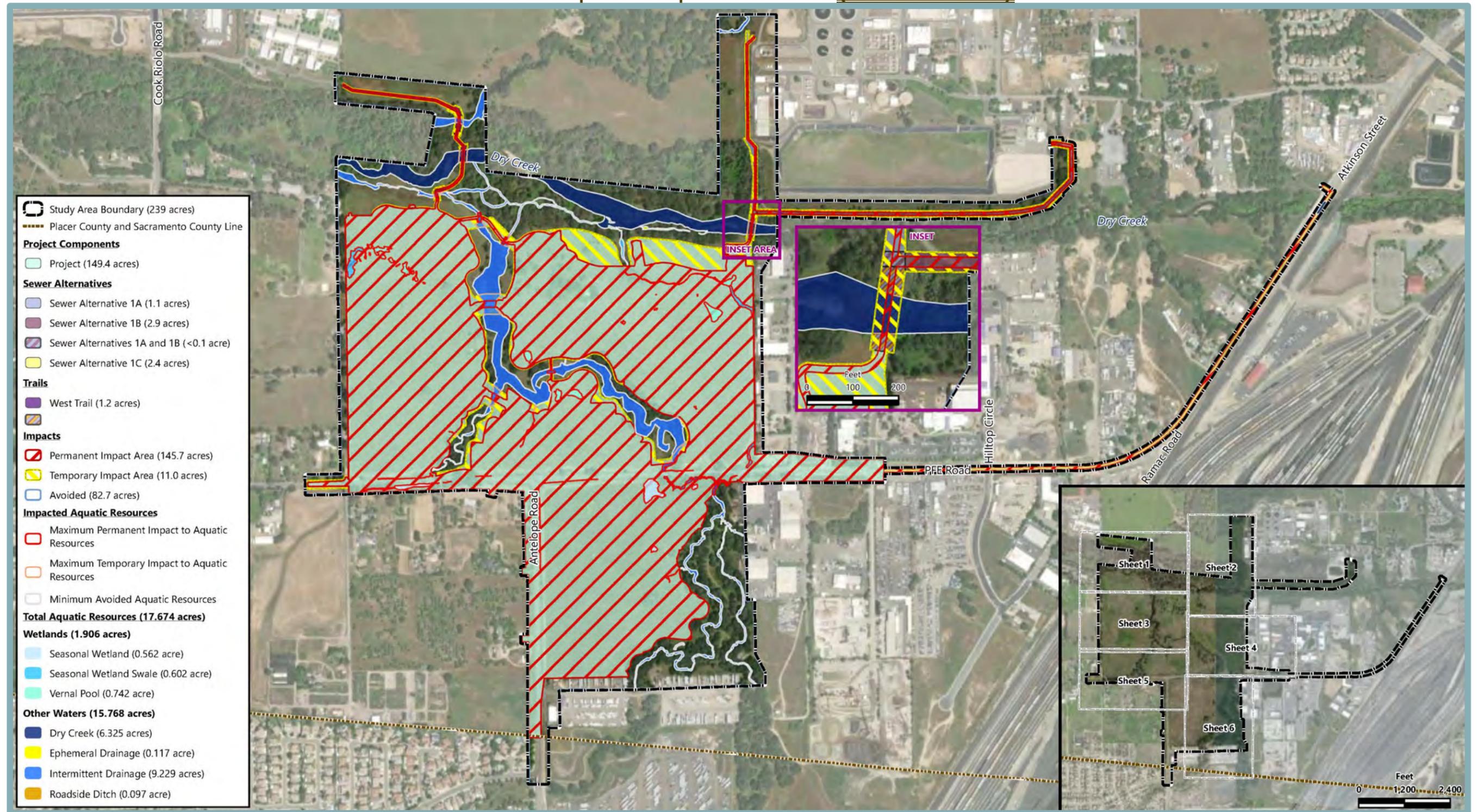




Figure 7-10  
 Potential Impacts to Aquatic Resources (Final EIR Version)





**Figure 7-12**  
**Impacts to Oak Woodlands and Individual Native Trees in Non-PCCP Placer County (Final EIR Version)**





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## **4. Mitigation Monitoring and Reporting Program**

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## 4. MITIGATION MONITORING AND REPORTING PROGRAM

### 4.1 INTRODUCTION

Section 15097 of the California Environmental Quality Act (CEQA) requires all State and local agencies to establish monitoring or reporting programs for projects approved by a public agency whenever approval involves the adoption of either a “mitigated negative declaration” or specified environmental findings related to environmental impact reports.

The following is the Mitigation Monitoring and Reporting Program (MMRP) for the Creekview Ranch Project (proposed project). The intent of the MMRP is to ensure implementation of the mitigation measures identified within the EIR for the proposed project. Unless otherwise noted, the cost of implementing the mitigation measures as prescribed by this MMRP shall be funded by the applicant.

### 4.2 COMPLIANCE CHECKLIST

The MMRP contained herein is intended to satisfy the requirements of CEQA as they relate to the EIR prepared for the proposed project. This MMRP is intended to be used by Placer County staff and mitigation monitoring personnel to ensure compliance with mitigation measures during project implementation. Mitigation measures identified in this MMRP were developed in the EIR.

The EIR presents a detailed set of mitigation measures that will be implemented throughout the lifetime of the project. Mitigation is defined by CEQA Guidelines, Section 15370, as a measure that:

- Avoids the impact altogether by not taking a certain action or parts of an action;
- Minimizes impacts by limiting the degree or magnitude of the action and its implementation;
- Rectifies the impact by repairing, rehabilitating, or restoring the impacted environment;
- Reduces or eliminates the impact over time by preservation and maintenance operations during the life of the project; or
- Compensates for the impact by replacing or providing substitute resources or environments.

The intent of the MMRP is to ensure the implementation of adopted mitigation measures. The MMRP will provide for monitoring of construction activities as necessary and in-the-field identification and resolution of environmental concerns.

Monitoring and documenting the implementation of mitigation measures will be coordinated by Placer County. The table attached to this report identifies the mitigation measures, the monitoring action for each mitigation measure, the responsible party for the monitoring action, and timing of the monitoring action. The applicant will be responsible for fully understanding and effectively



implementing the mitigation measures contained within the MMRP. The County will be responsible for monitoring compliance.

### **4.3 MITIGATION MONITORING AND REPORTING PROGRAM**

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The following table indicates the mitigation measure number, the impact the measure is designed to address, the measure text, the monitoring agency, implementation schedule, and an area for sign-off indicating compliance.



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Impact Number	Impact	Mitigation Measures	Monitoring Agency	Implementation Schedule	Sign-off
<b>4. Aesthetics</b>					
4-2	In a non-urbanized area, substantially degrade the existing visual character or quality of public views of the site and its surroundings (public views are those that are experienced from publicly accessible vantage point) or, in an urbanized area, conflict with applicable zoning and other regulations governing scenic quality.	4-2 <i>In conjunction with submittal of improvement plans, the project applicant shall submit a Final Landscape Plan. As part of the Final Landscape Plan, primary trees at project entries shall be a minimum of 24-inch box size. Vine plantings shall be required on all concrete masonry unit (CMU) wall facades within the landscape buffers. The Final Landscape Plan shall be subject to review and approval by Placer County.</i>	Placer County Community Development Resource Agency	In conjunction with submittal of Improvement Plans for each project phase	
4-3	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.	4-3 <i>Prior to Improvement Plan approval, the project applicant shall submit a lighting plan for the project to Placer County Planning Services for review and approval, demonstrating that proposed lighting is Dark-Sky compliant as specified by the International Dark-Sky Association. The lighting plan shall include, but not necessarily be limited to, the following provisions:</i> <ul style="list-style-type: none"> <li>• <i>Shield or screen lighting fixtures to direct the light downward and prevent light spill on adjacent properties;</i></li> <li>• <i>Place and shield or screen area lighting needed for construction activities and/or security so as not to disturb adjacent residential areas;</i></li> </ul>	Placer County Community Development Resource Agency	Prior to the approval of Improvement Plans for each project phase	



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		<ul style="list-style-type: none"> <li>For public lighting, prohibit the use of light fixtures that are of unusually high intensity or brightness (e.g., harsh mercury vapor, low-pressure sodium, or fluorescent bulbs) or that blink or flash; and</li> <li>Use appropriate building materials (such as low-glare glass, low-glare building glaze or finish, neutral, earth-toned colored paint and roofing materials), shielded or screened lighting, and appropriate signage to prevent light and glare from adversely affecting adjacent properties.</li> </ul>			
4-4	Long-term changes in visual character associated with cumulative development of the proposed project in combination with future buildout of the DCWPCP.	4-4 Implement Mitigation Measure 4-2.	See Mitigation Measure 4-2	See Mitigation Measure 4-2	
4-5	Creation of new sources of light or glare associated with cumulative development of the proposed project in combination with future buildout of the DCWPCP.	4-5 Implement Mitigation Measure 4-3.	See Mitigation Measure 4-3	See Mitigation Measure 4-3	



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Impact Number	Impact	Mitigation Measures	Monitoring Agency	Implementation Schedule	Sign-off
<b>6. Air Quality and Greenhouse Gas Emissions</b>					
6-1	Conflict with or obstruct implementation of the applicable air quality plan during project construction.	<p>6-1 <i>Prior to approval of any Improvement Plans, the project applicant shall provide proof of compliance with the following to the satisfaction of the Placer County Community Development Resource Agency:</i></p> <ul style="list-style-type: none"> <li><i>Prior to the approval of Grading or Improvement Plans, whichever occurs first, the applicant shall provide a written calculation to the PCAPCD for approval demonstrating that the heavy-duty (&gt;50 horsepower) off-road vehicles to be used in the construction project, including owned, leased and subcontractor vehicles, will achieve a project wide fleet-average of 20 percent of NOx and 45 percent of DPM reduction as compared to CARB statewide fleet average emissions. Acceptable options for reducing emissions may include use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, and/or other options as they become available. The following link shall be used to calculate compliance with this condition and shall be submitted to the PCAPCD as described above: <a href="http://www.airquality.org/businesses/c-ega-land-use-planning/mitigation">http://www.airquality.org/businesses/c-ega-land-use-planning/mitigation</a>.</i></li> </ul>	Placer County Community Development Resource Agency	Prior to the approval of any Improvement Plans	



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<b>Impact Number</b>	<b>Impact</b>	<b>Mitigation Measures</b>	<b>Monitoring Agency</b>	<b>Implementation Schedule</b>	<b>Sign-off</b>
6-2	Conflict with or obstruct implementation of the applicable air quality plan during project operation.	<p>6-2 <i>Prior to issuance of building permits for the proposed project, the project applicant shall demonstrate via project design and/or notation included on project design that wood-burning hearths shall be prohibited.</i></p> <p><i>Conformance with the foregoing requirement shall be confirmed through review and approval of building permit plans by the Placer County Community Development Resource Agency.</i></p>	Placer County Community Development Resource Agency	Prior to the issuance of building permits	
<b>7. Biological Resources</b>					
7-1	Impacts to special-status plant species either directly (e.g., threaten to eliminate a plant community) or through substantial habitat modifications.	<p>7-1 <i>If construction has not commenced prior to the first day of spring 2024 (March 19, 2024), a new round of special-status plant surveys shall be conducted in areas proposed for disturbance, prior to the commencement of construction.</i></p> <p><i>The surveys shall be conducted in accordance with the USFWS Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed, and Candidate Plants, the CNPS Botanical Survey Guidelines of the California Native Plant Society, and Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities. If special-status plant species are not found, further mitigation shall not be required.</i></p> <p><i>If special-status plants are found within the proposed impact area and they are perennials such as Sanford’s arrowhead or big-scale</i></p>	Placer County Community Development Resource Agency	Prior to the commencement of construction, if construction has not commenced prior to the first day of spring 2024 (March 19, 2024)	



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		<p><i>balsamroot, then mitigation shall consist of digging up the plants and transplanting them into a suitable avoided area on-site prior to construction. If the plant found is an annual such as dwarf downingia, then mitigation shall consist of collecting seed-bearing soil and spreading it into a suitable constructed wetland at a mitigation site. If special-status plants are impacted, a mitigation plan shall be developed and approved by the Placer County Community Development Resource Agency. The Mitigation Plan shall describe the proposed mitigation for impacts to the plant species, and include (at minimum) details regarding success criteria, monitoring, reporting, and contingency in case of failure. Mitigation for the transplantation/establishment of rare plants shall not result in the net loss of individual plants after a five-year monitoring period.</i></p>			
7-2	<p>Impacts to special-status branchiopods either directly (e.g., cause a wildlife population to drop below self-sustaining levels, threaten to eliminate an animal community) or through substantial habitat modifications.</p>	<p>7-2 <u>PCCP Species Condition 10: Wet-season surveys to determine occupancy of vernal pools by vernal pool fairy shrimp and vernal pool tadpole shrimp shall be required if the proposed project is implemented while the PCCP is still in the Initial Survey Phase. The Placer Conservation Authority (PCA) shall inform the applicant if the PCCP is in the Initial Survey Phase and surveys are required. If required, wet season surveys shall be conducted for vernal pool fairy shrimp and vernal pool tadpole shrimp in vernal pools, as determined by wetland delineation. A qualified biologist shall conduct protocol-level wet</u></p>	<p>Placer County Community Development Resource Agency  Placer Conservation Authority</p>	<p>Prior to construction activities, if the proposed project is implemented while the PCCP is in the Initial Survey Phase</p>	



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		<p><i>season surveys, using modified Survey Guidelines for the Listed Large Branchiopods (Guidelines), as approved by USFWS. Modifications include requiring that all vernal pools at a site be surveyed, rather than allowing for the survey to be terminated when presence on a project site is confirmed. This modification is necessary to obtain data on presence and absence in all the available vernal pools, to facilitate the determination of the Occupancy Rate Standards. This, and other exceptions and additions to the Guidelines, are as follows:</i></p> <ol style="list-style-type: none"> <li><i>1. If presence is confirmed for vernal pool fairy shrimp and/or vernal pool tadpole shrimp in an individual vernal pool, surveys may be stopped for that vernal pool.</i></li> <li><i>2. All vernal pools on the project site must be surveyed. Surveys cannot be suspended prior to completion, as allowed by the Guidelines, if one or more of the six listed large branchiopods, identified in the Guidelines is determined to be present.</i></li> <li><i>3. The Guidelines define a complete survey as consisting of one wet-season and one dry-season survey conducted and completed in accordance with the Guidelines within a three-year period. For the purposes of the PCCP, only one wet-season</i></li> </ol>			



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		<p><i>survey is required; dry-season surveys are not required. Applicants must plan ahead to allow sufficient time to complete the surveys.</i></p> <p>4. <i>Data that will be collected at each vernal pool surveyed during the wet-season survey shall include the presence or absence of vernal pool fairy shrimp and vernal pool tadpole shrimp, species identity and the estimated abundance (10s, 100s, 1,000s) of immature and mature vernal pool fairy shrimp and vernal pool tadpole shrimp present and estimated maximum surface area of the vernal pool. Other information on the USFWS data sheet is not required to be collected (i.e., air and water temperature, average and estimated maximum depth of the vernal pool, presence of non-target crustaceans, insects, and platyhelminths, and habitat condition). This will allow surveys to be conducted more efficiently, while providing the essential information necessary to calculate the Pool-based Occupancy Rate Standard and the Area-based Occupancy Rate Standard. Because the vernal pools will be affected by Covered Activities, collection of additional information is not necessary.</i></p>			



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		<p>5. Information shall be recorded on the PCA-provided data sheet, which will be the USFWS data sheet (included as Appendix A to the Guidelines), modified to include the above information.</p> <p>6. Voucher specimens shall not be collected during wet season surveys unless the identity of the mature shrimp is uncertain and cannot be identified in the field. The Guidelines allow for a limited number of voucher specimens to be collected for each vernal pool. For the purpose of the PCCP, the modified survey protocol further limits the collection of voucher specimens to instances where identity is uncertain.</p> <p>7. The surveys must be conducted far enough in advance of development that the pools can dry out sufficiently for inoculum to be salvaged.</p> <p>The biologist conducting a survey for vernal pool fairy shrimp and vernal pool tadpole shrimp shall participate in the wetland delineation to map the area of each vernal pool. If the biologist cannot participate in the wetland delineation, and the wetland delineation does not provide area for each vernal pool, the biologist shall conduct follow-up surveys to map the perimeter of each vernal pool with a global positioning system (GPS). Each vernal pool shall be given a unique</p>			



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Impact Number	Impact	Mitigation Measures	Monitoring Agency	Implementation Schedule	Sign-off
		<p><i>identification number that will be used to track survey data collected during wet-season surveys.</i></p> <p><i>The results of the wet-season surveys shall be submitted to the Placer County Community Development Resource Agency and PCA.</i></p>			
7-3	Impacts to VELB either directly (e.g., cause a wildlife population to drop below self-sustaining levels, threaten to eliminate an animal community) or through substantial habitat modifications.	<p>7-3 <i>Potential impacts that could occur to VELB in portions of the project site and off-site areas within the PCCP shall be addressed through compliance with applicable requirements set forth by the PCCP, including AMMs set forth in Chapter 6 of the PCCP and payment of impact fees.</i></p> <p><i>If construction does not commence prior to February 2025 within non-PCCP areas, then prior to the commencement of construction activities, a qualified biologist shall conduct comprehensive VELB surveys within the areas proposed for disturbance, no more than three years prior to commencement of construction. Surveys may be conducted at any time of the year, but elderberry shrubs tend to be most visible in spring. Surveys shall be conducted in accordance with the USFWS Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle, or the most recent USFWS VELB guidance at the time. The results of the survey shall be submitted to the Placer County Community Development Resource Agency.</i></p> <p><i>If VELB are not identified, further mitigation shall not be required. If VELB are located, prior</i></p>	Placer County Community Development Resource Agency  USFWS	Prior to the commencement of construction, if construction does not commence prior to February 2025	



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		<p><i>to the start of construction, the following provisions shall be implemented:</i></p> <ul style="list-style-type: none"> <li>• <i>All occupied elderberry shrubs (which are defined for the purposes of this section as those with stems greater than one inch in diameter at ground level) shall be avoided completely during construction with a buffer of at least 20 feet, except as permitted under paragraph 2 below, and the following avoidance and minimization measures during construction (as outlined in the Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle) shall be implemented for all work within 165 feet of a shrub:</i> <ul style="list-style-type: none"> <li>• <i>All areas to be avoided during construction activities shall be fenced and/or flagged as close to construction limits, as feasible;</i></li> <li>• <i>Activities that could damage or kill an elderberry shrub (e.g., trenching, paving, etc.) shall receive an avoidance area of at least 20 feet from the dripline;</i></li> <li>• <i>A qualified biologist shall provide training for all contractors, work crews, and any on-site personnel on the</i></li> </ul> </li> </ul>			



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Impact Number	Impact	Mitigation Measures	Monitoring Agency	Implementation Schedule	Sign-off
		<p><i>status of the VELB, its host plant and habitat, the need to avoid damaging the elderberry shrubs, and the possible penalties for noncompliance;</i></p> <ul style="list-style-type: none"> <li>• <i>A qualified biologist shall monitor the work area at project appropriate intervals to assure that all avoidance and minimization measures are implemented;</i></li> <li>• <i>As much as feasible, all activities within 165 feet of an elderberry shrub shall be conducted between August and February;</i></li> <li>• <i>Elderberry shrubs shall not be trimmed;</i></li> <li>• <i>Herbicides shall not be used within the dripline of the shrub. Insecticides shall not be used within 100 feet of an elderberry shrub; and</i></li> <li>• <i>Mechanical weed removal within the dripline of the shrub shall be limited to the season when adults are not active (August to February) and shall avoid damaging the elderberry.</i></li> </ul>			



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Impact Number	Impact	Mitigation Measures	Monitoring Agency	Implementation Schedule	Sign-off
		<ul style="list-style-type: none"> <li>If an elderberry shrub occupied with VELB must be removed to accommodate construction, then the applicant shall notify the Placer County Community Development Resource Agency and consult with USFWS, which could issue a Biological Opinion. At a minimum, the removal of elderberry shrubs found to be occupied with VELB shall be mitigated through the purchase of one (1) VELB mitigation credit from an agency-approved mitigation bank for each occupied shrub removed or through the planting of five (5) elderberry seedlings and five (5) native California trees or shrubs at a USFWS-approved location for each shrub removed. If the latter option is selected, then the seedlings and associated natives shall achieve an 80 percent survival rate measured at the end of a five-year monitoring period.</li> </ul>			
7-4	Impacts to special-status salmonids either directly (e.g., cause a wildlife population to drop below self-sustaining levels, threaten to eliminate an animal community) or through substantial habitat modifications.	<p><u>Placer County Conservation Program Plan Area</u></p> <p>7-4(a) <u>PCCP General Condition 1</u>: Prior to improvement plan approval, the proposed project shall obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit Order 2009-0009-DWQ), including requirements to develop a project-based Storm Water Pollution Prevention Plan (SWPPP) and applicable</p>	Placer County Department of Public Works	Prior to Improvement Plan approval for each project phase	



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		<p><i>NPDES program requirements as implemented by the County. Construction activity subject to this permit includes clearing, grading and disturbances to the ground such as stockpiling, or excavation.</i></p> <p><i>The project shall comply with the West Placer Storm Water Quality Design Manual (Design Manual). The project shall implement the following BMPs. This list shall be included on the notes page of the improvement/grading plans and shall be shown on the plans:</i></p> <ol style="list-style-type: none"> <li><i>1. When possible, vehicles and equipment shall be parked on pavement, existing roads, and previously disturbed areas. When vehicle parking areas are to be established as a temporary facility, the site shall be recovered to pre-project or ecologically improved conditions within one year of start of groundbreaking to ensure effects are temporary (refer to Section 6.3.1.4, General Condition 4, Temporary Effects, for the process to demonstrate temporary effects).</i></li> <li><i>2. Trash generated by Covered Activities shall be promptly and properly removed from the site.</i></li> <li><i>3. Appropriate erosion control measures (e.g., fiber rolls, filter fences, vegetative buffer strips) shall be used on site to reduce siltation and runoff of</i></li> </ol>			



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		<p><i>contaminants into avoided wetlands, ponds, streams, or riparian vegetation.</i></p> <p>(a) <i>Erosion control measures shall be of material that will not entrap wildlife (i.e., no plastic monofilament). Erosion control blankets shall be used as a last resort because of their tendency to biodegrade slowly and trap reptiles and amphibians.</i></p> <p>(b) <i>Erosion control measures shall be placed between the area of disturbance and any avoided aquatic feature, within an area identified with highly visible markers (e.g., construction and erosion-control fencing, flagging, silt barriers) prior to commencement of construction activities. Such identification will be properly maintained until construction is completed and the soils have been stabilized.</i></p> <p>(c) <i>Fiber rolls used for erosion control shall be certified by the California Department of Food and Agriculture or any agency that is a successor or receives delegated authority during the permit term as weed free.</i></p>			



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		<p>(d) Seed mixtures applied for erosion control shall not contain California Invasive Plant Council–designated invasive species (<a href="http://www.cal-ipc.org/paf/">http://www.cal-ipc.org/paf/</a>) but shall be composed of native species appropriate for the site or sterile non-native species. If sterile non-native species are used for temporary erosion control, native seed mixtures must be used in subsequent treatments to provide long-term erosion control and slow colonization by invasive non-natives.</p> <p>4. If the runoff from the development will flow within 100 feet of a wetland or pond, vegetated storm water filtration features, such as rain gardens, grass swales, tree box filters, infiltration basins, or similar LID features to capture and treat flows, shall be installed consistent with local programs and ordinances.</p> <p>7-4(b) <u>PCCP Stream System Condition 1</u>: The project shall be designed to minimize development activities within the stream system to the maximum extent possible.</p>	Placer County Department of Public Works	Prior to the approval of Improvement Plans for each project phase	



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		<p>7-4(c) <i>Work adjacent to Dry Creek associated with the sewer alternatives or the potential future East trail could result in water quality impacts if appropriate runoff, erosion, and sediment control Best Management Practices (BMPs) are not implemented. Therefore, the applicant shall prepare a Storm Water Pollution Prevention Plan (SWPPP) for the proposed project prior to issuance of the grading permit and implement the SWPPP during construction. Examples of BMPs that may be specified by the Certified Professional in Erosion and Sediment Control (CPESC) that prepares the SWPPP include silt fencing between any areas of ground disturbance and Dry Creek, straw wattles or straw bales around drop inlets, compaction and hydroseeding of bare soil following construction, and locating concrete washouts, refueling areas, and materials storage, etc., a minimum of 300 feet from Dry Creek. The SWPPP shall be submitted for review and approval to the Placer County Department of Public Works.</i></p> <p><i>If off-site sewer pipeline alignment Options 1A or 1B are selected, the jack and bore or horizontal directional drilling (HDD) under Dry Creek has a very small potential to result in a “frac-out”. Frac-out, or inadvertent return of drilling lubricant, is a potential concern when the HDD is used under sensitive habitats and waterways. If one of the foregoing alternatives is selected, then prior to construction, the contractor shall be required to develop a Frac-</i></p>	Placer County Department of Public Works	Prior to issuance of the grading permit for work adjacent to Dry Creek associated with the sewer alternatives or the potential future East trail	



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		<p><i>Out Contingency Plan. The Frac-Out Contingency Plan shall be prepared to ensure that preventive and responsive measures can be implemented by the contractor. To minimize the potential for a frac-out, the Frac-Out Contingency Plan shall include design protocols to be implemented for the protection of sensitive biological resources and design protocols to require a geotechnical engineer or qualified geologist to make recommendations regarding the suitability of the formations to be bored to minimize the potential for frac-out conditions. In addition, the jack and bore may only be conducted between June 15 and October 15 to avoid any impacts to salmonid upstream or downstream migration in the unlikely event that a frac-out should occur. The Frac-Out Contingency Plan shall be submitted for review and approval to the Placer County Department of Public Works.</i></p>			
7-5	<p>Impacts to western spadefoot either directly (e.g., cause a wildlife population to drop below self-sustaining levels, threaten to eliminate an animal community) or through substantial habitat modifications.</p>	<p><i>7-5 During the spring prior to the commencement of construction activities, the project applicant shall ensure that a qualified biologist surveys all suitable aquatic habitat within the project site (including features proposed for avoidance) by sampling the features thoroughly with dipnets during March or early April, when spadefoot tadpoles could be present. In addition, one nocturnal acoustic survey of all areas within 300 feet of vernal pools and seasonal wetlands shall be conducted. Acoustic surveys shall consist of walking through the area and listening for the distinctive snore-like call of the species.</i></p>	Placer County Community Development Resource Agency	During the spring, prior to the commencement of construction activities	



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		<p><i>Timing and methodology for the aquatic and acoustic surveys shall be based on those described in Distribution of the Western Spadefoot (Spea hammondi) in the Northern Sacramento Valley of California, with Comments on Status and Survey Methodology. The results of the surveys shall be submitted to the Placer County Community Development Resource Agency.</i></p> <p><i>If both the aquatic survey and the nocturnal acoustic survey are negative, further mitigation shall not be necessary. If western spadefoots are observed within aquatic habitat proposed for impact, the tadpoles shall be captured and relocated to an off-site open space preserve with suitable habitat in the vicinity of the overall project site. If western spadefoots are observed within aquatic habitat proposed for avoidance, then the project applicant may either relocate the tadpoles to an off-site open space preserve with habitat of equivalent or greater value (e.g., vernal pools and seasonal wetlands in a grassland/woodland matrix) in the vicinity of the overall project site, or install silt fence along the edge of the proposed area of disturbance within 300 feet of the occupied aquatic habitat to prevent metamorphosed individuals from dispersing into the construction area.</i></p>			
7-6	Impacts to western pond turtle either directly (e.g., cause a wildlife population to drop below	<p><u>Placer County Conservation Program Plan Area 7-6(a)</u> Implement the following Mitigation Measures set forth in this EIR:</p>	See Mitigation Measures 7-4(a), 7-4(b), 7-	See Mitigation Measures 7-4(a), 7-4(b), 7-10(a), 7-	



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	self-sustaining levels, threaten to eliminate an animal community) or through substantial habitat modifications.	<ul style="list-style-type: none"> <li>• <i>7-4(a) [PCCP General Condition 1]: Prior to improvement plan approval, the proposed project shall obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit Order 2009-0009-DWQ), including requirements to develop a project-based Storm Water Pollution Prevention Plan (SWPPP) and applicable NPDES program requirements as implemented by the County. Construction activity subject to this permit includes clearing, grading and disturbances to the ground such as stockpiling, or excavation.</i></li> </ul> <p><i>The project shall comply with the West Placer Storm Water Quality Design Manual (Design Manual). The project shall implement the following BMPs. This list shall be included on the notes page of the improvement/grading plans and shall be shown on the plans:</i></p> <ol style="list-style-type: none"> <li>1. <i>When possible, vehicles and equipment shall be parked on pavement, existing roads, and previously disturbed areas. When vehicle parking areas are to be established as a temporary facility, the site</i></li> </ol>	10(a), 7-11(b), 7-11(c), and 7-12(c)  USFWS  CDFW	11(b), 7-11(c), and 7-12(c)	



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		<p>shall be recovered to pre-project or ecologically improved conditions within one year of start of groundbreaking to ensure effects are temporary (refer to Section 6.3.1.4, General Condition 4, Temporary Effects, for the process to demonstrate temporary effects).</p> <p>2. Trash generated by Covered Activities shall be promptly and properly removed from the site.</p> <p>3. Appropriate erosion control measures (e.g., fiber rolls, filter fences, vegetative buffer strips) shall be used on site to reduce siltation and runoff of contaminants into avoided wetlands, ponds, streams, or riparian vegetation.</p> <p>a. Erosion control measures shall be of material that will not entrap wildlife (i.e., no plastic monofilament). Erosion control blankets shall be used as a last resort because of their</p>			



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		<p><i>tendency to biodegrade slowly and trap reptiles and amphibians.</i></p> <p><i>b. Erosion control measures shall be placed between the area of disturbance and any avoided aquatic feature, within an area identified with highly visible markers (e.g., construction and erosion-control fencing, flagging, silt barriers) prior to commencement of construction activities. Such identification will be properly maintained until construction is completed and the soils have been stabilized.</i></p> <p><i>c. Fiber rolls used for erosion control shall be certified by the California Department of Food and Agriculture or any agency that is a successor or receives delegated authority</i></p>			



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		<p><i>during the permit term as weed free.</i></p> <p><i>d. Seed mixtures applied for erosion control shall not contain California Invasive Plant Council–designated invasive species (<a href="http://www.cal-ipc.org/paf/">http://www.cal-ipc.org/paf/</a>) but shall be composed of native species appropriate for the site or sterile non-native species. If sterile non-native species are used for temporary erosion control, native seed mixtures must be used in subsequent treatments to provide long-term erosion control and slow colonization by invasive non-natives.</i></p> <p><i>If the runoff from the development will flow within 100 feet of a wetland or pond, vegetated storm water filtration features, such as rain gardens, grass swales, tree box filters, infiltration basins, or similar LID features to</i></p>			



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		<p><i>capture and treat flows, shall be installed consistent with local programs and ordinances.</i></p> <ul style="list-style-type: none"> <li>• <u>7-12(c) [PCCP Community Condition 1.1]:</u> <i>Prior to land conversion authorization approval, the unavoidable effects to 1.334 acres of vernal pool type wetlands or their buffers shall be mitigated through payment of special habitat fees. The fees to be paid to the PCA shall be that in effect at the time of land conversion authorization issuance.</i></li> <li>• <u>7-11(b) [PCCP Community Condition 2.1]:</u> <i>To the maximum extent possible, the proposed project shall not modify any area within a buffer that extends 50 feet outward from the outermost bounds of the riparian vegetation. The improvement or grading plans shall show the location of the riverine/riparian buffer.</i></li> <li>• <u>7-11(c) [PCCP Community Condition 2.2]:</u> <i>Prior to land conversion authorization, the applicant shall coordinate with the PCA to determine which In-Stream and Stream System Best Management Practices (BMPs) from Table 7-1 of the User's Guide apply to the proposed project. The applicant shall identify the applicable</i></li> </ul>			



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		<p><i>BMPs on the project's improvement or grading plans. The selected BMPs shall be incorporated into the project's Land Conversion Authorization letter.</i></p> <p><i>Prior to land conversion authorization approval, the unavoidable effects to 0.67 to 1.12 acres riverine and riparian habitat or their buffers shall be mitigated through payment of special habitat fees. The fees to be paid shall be those in effect at the time of land conversion authorization.</i></p> <ul style="list-style-type: none"> <li>• <u>7-4(b) [PCCP Stream System Condition 1]:</u> <i>The project shall be designed to minimize development activities within the stream system to the maximum extent possible.</i></li> <li>• <u>7-10(a) [PCCP Species Condition 4]:</u> <i>Prior to initiation of PCCP Covered Activities associated with the proposed project, the qualified biologist(s) shall conduct preconstruction surveys to evaluate the presence of tricolored blackbird nesting colonies for each phase of the project. In instances where an adjacent parcel is not accessible to survey because the qualified biologist was not granted permission to enter, the qualified biologist shall scan all potential nest colony site(s) from the</i></li> </ul>			



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		<p><i>adjacent property, roadsides, or other safe, publicly accessible viewpoints, without trespassing, using binoculars and/or a spotting scope to look for tricolored blackbird nesting activity.</i></p> <p><i>Surveys shall be conducted at least twice, with at least one month between surveys, during the nesting season one year prior to initial ground disturbance for the Covered Activity (if feasible), and the year of ground disturbance for the Covered Activity (required). If Covered Activities will occur in the project work area during the nesting season, three surveys shall be conducted within 15 days prior to the Covered Activity, with one of the surveys occurring within five days prior to the start of the Covered Activity. The survey methods will be based on Kelsey (2008) or a similar protocol approved by the PCA and the USFWS and CDFW based on site-specific conditions.</i></p> <p><i>If the first survey indicates that suitable nesting habitat is not present on the project site or within 1,300 feet of the project work area, additional surveys for nest colonies are not required.</i></p> <p><i>If an active colony is known to occur within three miles of the project site, a</i></p>			



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		<p><i>qualified biologist shall conduct two surveys of foraging habitat within the project site and within a 1,300-foot radius around the project site to determine whether foraging habitat is being actively used by foraging tricolored blackbirds. The qualified biologist shall map foraging habitat, as defined by the land cover types listed above, within a 1,300-foot radius around the project site to delineate foraging habitat that will be surveyed. The surveys shall be conducted approximately one week apart, with the second survey occurring no more than five calendar days prior to ground-disturbing activities.</i></p> <p><i>Construction activity or other covered activities that may disturb an occupied nest colony site, as determined by a qualified biologist, shall be prohibited during the nesting season (March 15 through July 31) or until the chicks have fledged or the colony has been abandoned on its own) within a 1,300-foot buffer zone around the nest colony, to the extent practicable. The intent of this condition is to prevent disturbance to occupied nest colony sites on or near project sites so they can complete their nesting cycle. This condition is not intended to preserve suitable breeding habitat on project</i></p>			



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		<p><i>sites but to ensure impacts to active colony sites only take place once the site is no longer occupied by the nesting colony. The buffer shall be applied to extend beyond the nest colony site as follows: 1) if the colony is nesting in a wetland, the buffer must be established from the outer edge of all hydric vegetation associated with the colony, or 2) if the colony is nesting in non-wetland vegetation (e.g., Himalayan blackberry), the buffer must be established from the edge of the colony substrate. This buffer may be modified to a minimum of 300 feet, with written approval from the USFWS and CDFW, in areas with dense forest, buildings, or other features between the Covered Activities and the occupied active nest colony; where there is sufficient topographic relief to protect the colony from excessive noise or visual disturbance; where sound curtains have been installed; or other methods developed in consultation with the USFWS and CDFW where conditions warrant reduction of the buffer distance. If tricolored blackbirds colonize habitat adjacent to Covered Activities after the activities have been initiated, the project applicant shall reduce disturbance through establishment of buffers or noise reduction techniques</i></p>			



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		<p><i>or visual screens, as determined in consultation with the USFWS, CDFW, and PCA. The buffer must be clearly marked to prevent project-related activities from occurring within the buffer zone.</i></p> <p><i>Active nesting colonies that occur within the non-disturbance buffer shall be monitored by the qualified biologist(s) to verify the Covered Activity is not disrupting the nesting behavior of the colony. The frequency of monitoring shall be approved by the PCA and based on the frequency and intensity of construction activities and the likelihood of disturbance of the active nest. In most cases, monitoring will occur at least every other day, but in some cases, daily monitoring may be appropriate to ensure that direct effects on tricolored blackbird are minimized. The biologist shall train construction personnel on the avoidance procedures and buffer zones.</i></p> <p><i>If the qualified biologist(s) determines that the Covered Activity is disrupting nesting and/or foraging behavior, the qualified biologist(s) shall notify the project applicant immediately, and the project applicant shall notify the PCA within 24 hours to determine additional</i></p>			



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		<p><i>protective measures that can be implemented. The qualified biologist(s) shall have the authority to stop Covered Activities until additional protective measures are implemented. Additional protective measures shall remain in place until the qualified biologist(s) determine(s) tricolored blackbird behavior has normalized. If additional protective measures are ineffective, the qualified biologist(s) shall have the authority to stop Covered Activities as needed until the additional protective measures are modified and nesting behavior of tricolored blackbird returns to normal.</i></p> <p><i>Additional protective measures may include increasing the size of the buffer (within the constraints of the project site), delaying Covered Activities (or the portion of Covered Activities causing the disruption) until the colony is finished breeding and chicks have left the nest site, temporarily relocating staging areas, or temporarily rerouting access to the project work area. The project proponent shall notify the PCA and USFWS and CDFW within 24 hours if nests or nestlings are abandoned. If the nestlings are still alive, the qualified biologist(s) shall work with the USFWS and CDFW to determine</i></p>			



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		<p><i>appropriate actions for salvaging the eggs or nestlings. Notification to PCA and USFWS and CDFW shall be via telephone or email, followed by a written incident report. Notification shall include the date, time, location, and circumstances of the incident.</i></p> <p><i>Foraging habitat within the buffer shall be monitored by the qualified biologist(s) to verify that the Covered Activity is not disrupting tricolored blackbird foraging behavior. The frequency of monitoring shall be approved by the PCA and based on the frequency and intensity of construction activities and the likelihood of disturbance of foraging tricolored blackbirds. In most cases, monitoring will occur at least every other day, but in some cases, daily monitoring may be appropriate to ensure that effects on tricolored blackbird are minimized. The biologist shall train construction personnel on the avoidance procedures and buffer zones.</i></p> <p><i>If the qualified biologist(s) determines that the Covered Activity is disrupting foraging behavior, the qualified biologist(s) shall notify project applicant immediately, and the project applicant shall notify the PCA within</i></p>			



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		<p><i>24 hours to determine additional protective measures that can be implemented. The qualified biologist(s) shall have the authority to stop Covered Activities until additional protective measures are implemented. Additional protective measures shall remain in place until the qualified biologist(s) determine(s) tricolored blackbird behavior has normalized. If additional protective measures are ineffective, the qualified biologist(s) shall have the authority to stop Covered Activities as needed until the additional protective measures are modified and foraging behavior of tricolored blackbird returns to normal. Additional protective measures may include increasing the size of the buffer (within the constraints of the project site), temporarily relocating staging areas, or temporarily rerouting access to the project work area.</i></p> <p><i>No additional avoidance and minimization measures specific to this species are required by the PCCP. If individual western pond turtles are identified on-site, the project proponent shall obtain an incidental take permit from CDFW and/or USFWS before relocating or otherwise impacting the species.</i></p>			



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		<p><u>Areas Outside of the Placer County Conservation Program</u> 7-6(b) <i>A western pond turtle survey shall be conducted by a qualified biologist no more than 48 hours prior to construction in the non-PCCP portion of the Overall Project where construction activities overlap with Dry Creek, intermittent drainages, and woodlands within 150 feet of these aquatic resources.</i></p> <p><i>The results of the survey shall be submitted to the Placer County Community Development Resource Agency.</i></p> <p><i>If western pond turtles or nests are not found, further mitigation is not necessary. If a western pond turtle is observed within the proposed impact area, a qualified biologist shall relocate the individual to habitat of equivalent or greater value (e.g., riparian wetlands or riparian woodlands adjacent to a perennial creek or intermittent drainage) outside of the proposed impact area prior to construction. If a western pond turtle nest is observed within the proposed impact area, the nest shall be fenced off and avoided until the eggs hatch. The exclusion fencing shall be placed no less than 25 feet from the nest. A qualified biologist shall monitor the nest daily during construction to ensure that hatchlings do not disperse into the construction area. Relocation of hatchlings shall occur as stipulated above, if necessary.</i></p>	Placer County Community Development Resource Agency	No more than 48 hours prior to construction in the non-PCCP portion of the Overall Project where construction activities overlap with Dry Creek, intermittent drainages, and woodlands within 150 feet of these aquatic resources	
7-7	Impacts to roosting bats either directly (e.g.,	7-7 <i>Prior to the commencement of construction activities, a qualified biologist shall conduct a</i>	Placer County Community	Prior to the commencement of	



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	<p>cause a wildlife population to drop below self-sustaining levels, threaten to eliminate an animal community) or through substantial habitat modifications.</p>	<p><i>bat habitat assessment of all potential roosting habitat features, including trees and structures within the proposed impact footprint within the project vicinity. The habitat assessment shall identify all potentially suitable roosting habitat and may be conducted up to one year prior to the start of construction. The results of the assessment shall be submitted to the Placer County Community Development Resource Agency.</i></p> <ul style="list-style-type: none"> <li>• <i>If potential roosting habitat is identified (cavities in trees or potential roosts within structures) within the areas proposed for impact, the biologist shall survey the potential roosting habitat during the active season (generally April through October or from January through March on days with temperatures in excess of 50 degrees Fahrenheit) to determine the presence of roosting bats. The surveys are recommended to be conducted utilizing methods that are considered acceptable by CDFW and bat experts. Methods may include evening emergence surveys, acoustic surveys, inspecting potential roosting habitat with fiberoptic cameras, or a combination thereof.</i></li> <li>• <i>If roosting bats are identified within any of the trees planned for removal, or if presence is assumed, the trees shall be removed outside of pup</i></li> </ul>	<p>Development Resource Agency  CDFW</p>	<p>construction activities</p>	



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		<p><i>season, only on days with temperatures in excess of 50 degrees Fahrenheit. Pup season is generally during the months of May through August. Two-step tree removal shall be utilized under the supervision of the qualified biologist. Two-step tree removal involves removal of all branches of the tree that do not provide roosting habitat on the first day, and then the next day cutting down the remaining portion of the tree.</i></p> <ul style="list-style-type: none"> <li><i>• Additionally, it is recommended that all other tree removal shall be conducted from January through March on days with temperatures in excess of 50 degrees Fahrenheit to avoid potential impacts to foliage-roosting bat species.</i></li> <li><i>• If roosting bats are identified within any structures planned for removal, a bat exclusion plan shall be prepared by a qualified bat biologist describing the methods to be used to humanely exclude bats prior to disturbance. The plan shall be approved by the Placer County Community Development Resource Agency and CDFW and shall be implemented prior to the start of construction.</i></li> </ul>			
7-8	Have a substantial adverse effect, either directly (e.g., cause a wildlife population to	<p><u>Placer County Conservation Program Plan Area</u> 7-8(a) <u>PCCP Species Condition 1: If construction must occur during the nesting season (approximately February 1 to September 15),</u></p>	Placer Conservation Authority	A year in advance of construction activities that would	



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	<p>drop below self-sustaining levels, threaten to eliminate an animal community) or through substantial habitat modifications, on Swainson’s hawk.</p>	<p><i>planning-level Swainson’s hawk surveys shall be required a year in advance of construction using the survey guidelines developed for the PCCP. Planning-level surveys are intended to identify nest trees to guide avoidance during project tree removal and construction.</i></p> <p><i>Additionally, year of construction (starting in February) and pre-construction (no more than 15 days prior to ground disturbance) surveys shall be conducted within a 1,320-foot radius of the project. Surveys shall be conducted consistent with PCCP guidelines (based on Swainson’s Hawk Technical Advisory Committee 2000). In instances where an adjacent parcel is not accessible to a survey, the qualified biologist shall scan all potential nest trees from the adjacent property, roadsides, or other safe, publicly accessible viewpoints, without trespassing, using binoculars and/or a spotting scope. Surveys are typically required from February 1 to September 15 (or sooner if it is determined that birds are nesting earlier in the year). The applicant shall contact the PCA for assistance with survey timing. If a Swainson’s hawk nest is located and presence confirmed, only one follow-up visit is required.</i></p> <p><i>During the nesting season (approximately February 1 to September 15 or sooner if it is determined that birds are nesting earlier in the year), ground-disturbing activities within 1,320 feet of occupied nests or nests under</i></p>	<p>Placer County Community Development Resource Agency</p>	<p>occur during the nesting season (approximately February 1 to September 15)</p> <p>For additional surveys, year of construction (starting in February) and pre-construction (no more than 15 days prior to ground disturbance), within a 1,320-foot radius of the project</p> <p>For prohibited construction activities, during the nesting season (approximately February 1 to September 15 or sooner if it is determined that birds are nesting earlier in the year), within 1,320 feet of occupied nests or nests under construction</p>	



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		<p><i>construction shall be prohibited to minimize the potential for nest abandonment. While the nest is occupied, activities outside the buffer can take place provided they do not stress the breeding pair.</i></p> <p><i>If the active nest site is shielded from view and noise from the project site by other development, topography, or other features, the project applicant can apply to the PCA for a reduction in the buffer distance or waiver. A qualified biologist shall be required to monitor the nest and determine that the reduced buffer does not cause nest abandonment. If a qualified biologist determines nestlings have fledged, PCCP Covered Activities can proceed normally.</i></p> <p><i>Construction monitoring shall be conducted by a qualified biologist if work is to continue outside of the nest buffer, and shall focus on ensuring that activities do not occur within the buffer zone. The qualified biologist performing the construction monitoring shall ensure that effects on Swainson's hawks are minimized. If monitoring indicates that construction outside of the buffer is affecting nesting, the buffer shall be increased if space allows (e.g., move staging areas farther away). If space does not allow, all construction activities shall cease until the young have fledged from the nest (as confirmed by a qualified biologist).</i></p> <p><i>The frequency of monitoring shall be approved</i></p>			



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		<p><i>by the PCA and based on the frequency and intensity of construction activities and the likelihood of disturbance of the active nest. In most cases, monitoring shall occur at least every other day, but in some cases, daily monitoring may be appropriate to ensure that direct effects on Swainson's hawks are minimized. The qualified biologist shall train construction personnel on the avoidance procedures and buffer zones.</i></p> <p><u>Areas Outside of the Placer County Conservation Program</u>                      7-8(b) <i>A targeted Swainson's hawk nest survey shall be conducted throughout the non-PCCP portion of the overall project area and all accessible areas within a 0.25-mile radius of the proposed construction area, at most, 15 days prior to construction activities. If active Swainson's hawk nests are found within 0.25-mile of a construction area, construction shall cease within 0.25-mile of the nest until the project biologist determines that the young have fledged or it is determined that the nesting attempt has failed. The 0.25-mile buffer may be reduced if a smaller, sufficiently protective buffer is proposed by the project biologist and approved by the County after taking into consideration the natural history of the Swainson's hawk, the proposed activity level adjacent to the nest, the nest occupants' habituation to existing or ongoing activity, nest concealment (i.e., whether there are visual or acoustic barriers between the proposed</i></p>	<p>Placer County Community Development Resource Agency</p>	<p>Prior to the initiation of construction activities, at most, 15 days prior to construction activities</p>	



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		<p><i>activity and the nest), and what (if any) nest monitoring is proposed. The results of the Swainson's hawk nest survey shall be submitted to the Placer County Community Development Resource Agency.</i></p> <p>7-8(c) <i>Approximately 33.23 acres of annual brome grassland that represents suitable foraging habitat for Swainson's hawks will be permanently impacted during construction of the portion of the proposed project outside of the PCCP plan area, and as much as an additional 1.27 acres could be impacted, depending on which sewer alternative is selected. Swainson's hawk foraging habitat outside of the PCCP does not exist for either of the potential future trails. The aforementioned impacts shall be mitigated through purchase and conservation of similar habitat as follows:</i></p> <p><i>Two Swainson's hawk nests have been documented approximately 2.5 miles west of the study area; one south of PFE Road, and one west of Walerga Road. Prior to project construction, a qualified biologist shall conduct a review of Swainson's hawk nest data available, including the California Natural Diversity Database (CNDDDB), unprocessed CNDDDB records, and contacting CDFW to determine if they have any additional nest data. If desired by the project applicant, the biologist may conduct a survey of the aforementioned nests to determine if they are</i></p>	<p>Placer County Community Development Resource Agency</p>	<p>Prior to the initiation of construction activities</p>	



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		<p><i>still present. The biologist shall provide the Placer County Community Development Resource Agency with a summary of the findings.</i></p> <p><i>If it has been determined that a portion of the overall project site is within 10 miles of an active Swainson's hawk nest (an active nest is defined as a nest with documented Swainson's hawk use within the past five years), the applicant shall mitigate for the loss of suitable Swainson's hawk foraging habitat by implementing the following measures:</i></p> <ul style="list-style-type: none"> <li><i>• One acre of suitable foraging habitat shall be protected for each acre of suitable foraging habitat that is proposed to be developed that is within one mile of an active nest. Protection shall be by way of purchase of mitigation bank credits or other land protection mechanism acceptable to the County.</i></li> <li><i>• 0.75-acre of suitable foraging habitat shall be protected for each acre of suitable foraging habitat that is proposed to be developed that is between one and five miles from an active nest. Protection shall be by way of purchase of mitigation bank credits or other land protection mechanism acceptable to the County.</i></li> <li><i>• 0.5-acre of suitable foraging habitat shall be protected for each acre of</i></li> </ul>			



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		<p><i>suitable foraging habitat that is proposed to be developed that is between five and 10 miles from an active nest. Protection shall be by way of purchase of mitigation bank credits or other land protection mechanism acceptable to the County.</i></p> <ul style="list-style-type: none"> <li><i>If the proposed project is built in phases, the purchase of this foraging habitat mitigation may be phased as well, such that all areas are mitigated prior to impact.</i></li> </ul>			
7-9	Impacts to burrowing owl either directly (e.g., cause a wildlife population to drop below self-sustaining levels, threaten to eliminate an animal community) or through substantial habitat modifications.	<p><u>Placer County Conservation Program Plan Area</u></p> <p>7-9(a) <u>PCCP Species Condition 3:</u> <i>Two surveys shall be conducted within 15 days prior to ground disturbance to establish the presence or absence of burrowing owls. The surveys shall be conducted at least seven days apart (if burrowing owls are detected on the first survey, a second survey is not needed) for both breeding and non-breeding season surveys. All burrowing owls observed shall be counted and mapped.</i></p> <p><i>During the breeding season (February 1 to August 31), surveys shall document whether burrowing owls are nesting in or within 250 feet of the project area.</i></p> <p><i>During the non-breeding season (September 1 to January 31), surveys shall document whether burrowing owls are using habitat in or directly adjacent to any area to be disturbed. Survey results will be valid only for the season</i></p>	<p>Placer County Community Development Resource Agency</p> <p>Placer Conservation Authority</p> <p>USFWS</p> <p>CDFW</p>	<p>Within 15 days prior to ground disturbance during the breeding season (February 1 to August 31) and during the non-breeding season (September 1 to January 31)</p>	



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		<p><i>(breeding or non-breeding) during which the survey was conducted. The results of the burrowing owl surveys shall be submitted to the Placer County Community Development Resource Agency and PCA.</i></p> <p><i>The qualified biologist shall survey the proposed footprint of disturbance and a 250-foot radius from the perimeter of the proposed footprint to determine the presence or absence of burrowing owls. The site shall be surveyed by walking line transects, spaced 20 to 60 feet apart, adjusting for vegetation height and density. At the start of each transect and, at least, every 300 feet, the surveyor, with use of binoculars, shall scan the entire visible project area for burrowing owls. During walking surveys, the surveyor shall record all potential burrows used by burrowing owls, as determined by the presence of one or more burrowing owls, pellets, prey remains, whitewash, or decoration. Some burrowing owls may be detected by their calls; therefore, observers shall also listen for burrowing owls while conducting the survey. Adjacent parcels under different land ownership shall be surveyed only if access is granted. If portions of the survey area are on adjacent sites for which access has not been granted, the qualified biologist shall get as close to the non-accessible area as possible, and use binoculars to look for burrowing owls.</i></p> <p><i>The presence of burrowing owls or their sign</i></p>			



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		<p><i>anywhere on the site or within the 250-foot accessible radius around the site shall be recorded and mapped. Surveys shall map all burrows and occurrence of sign of burrowing owl on the project site. Surveys must begin one hour before sunrise and continue until two hours after sunrise (three hours total) or begin two hours before sunset and continue until one hour after sunset. Additional time may be required for large project sites.</i></p> <p><i>If burrowing owls are found during the breeding season (approximately February 1 to August 31, the project applicant shall avoid all nest sites that could be disturbed by project construction during the remainder of the breeding season or while the nest is occupied by adults or young (occupation includes individuals or family groups foraging on or near the site following fledging). The applicant shall establish a 250-foot non-disturbance buffer zone around nests. The buffer zone shall be flagged or otherwise clearly marked. Should construction activities cause the nesting bird to vocalize, make defensive flights at intruders, or otherwise display agitated behavior, then the exclusionary buffer shall be increased such that activities are far enough from the nest so that the bird(s) no longer display this agitated behavior. The exclusionary buffer shall remain in place until the chicks have fledged or as otherwise determined by a qualified biologist. Construction may only occur within the 250-foot buffer zone during the breeding season if</i></p>			



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		<p><i>a qualified raptor biologist monitors the nest and determines that the activities do not disturb nesting behavior, or the birds have not begun egg-laying and incubation, or that the juveniles from the occupied burrows have fledged and moved off site. Measures such as visual screens may be used to further reduce the buffer with CDFW approval and provided a biological monitor confirms that such measures do not cause agitated behavior.</i></p> <p><i>If burrowing owls are found during the non-breeding season (approximately September 1 to January 31), the project applicant shall establish a 160-foot buffer zone around active burrows. The buffer zone shall be flagged or otherwise clearly marked. Measures such as visual screens may be used to further reduce the buffer with CDFW approval and provided a biological monitor confirms that such measures do not cause agitated behavior.</i></p> <p><i>After all alternative avoidance and minimization measures are exhausted as confirmed by CDFW, a qualified biologist may passively exclude birds from those burrows during the non-breeding season. A burrowing owl exclusion plan shall be developed by a qualified biologist consistent with the most recent guidance from the USFWS and/or CDFW and submitted to and approved by the PCA and the USFWS and CDFW. Burrow exclusion shall be conducted for burrows located in the project footprint and within a</i></p>			



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		<p>160-foot buffer zone as necessary.</p> <p>A biological monitor shall be present on site daily to ensure that no Covered Activities occur within the buffer zone. The qualified biologist performing the construction monitoring shall ensure that effects on burrowing owls are minimized. If monitoring indicates that construction outside of the buffer is affecting nesting, the buffer shall be increased if space allows (e.g., move staging areas farther away). If space does not allow, construction shall cease until the young have fledged from all the nests in the colony (as confirmed by a qualified biologist) or until the end of the breeding season, whichever occurs first.</p> <p>A biological monitor shall conduct training of construction personnel on the avoidance procedures, buffer zones, and protocols in the event a burrowing owl flies into an active construction zone.</p> <p><u>Areas Outside of the Placer County Conservation Program</u> 7-9(b) If project construction begins during the nesting season (February 15 to August 31), a qualified biologist shall conduct a targeted burrowing owl nest survey of all accessible areas within 500 feet of the non-PCCP portion of the proposed construction footprint within 14 days prior to construction activities, utilizing 60-foot transects as outlined in the Staff Report on Burrowing Owl Mitigation (Staff Report).</p>	<p>Placer County Community Development Resource Agency</p> <p>CDFW</p>	<p>Within 14 days prior to construction activities, if project construction begins during the nesting season (February 15 to August 31)</p>	



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		<p><i>The results of the survey shall be submitted to the Placer County Community Development Resource Agency.</i></p> <p><i>If an active burrowing owl nest burrow (i.e., occupied by more than one adult owl and/or juvenile owls are observed) is found within 250 feet of a construction area, construction shall cease within 250 feet of the nest burrow until a qualified biologist determines that the young have fledged or the biologist determines that the nesting attempt has failed. If the project applicant desires to work within 250 feet of the nest burrow, the applicant shall consult with CDFW and the Placer County Community Development Resource Agency to determine if the nest buffer can be reduced.</i></p> <p><i>If construction begins during the non-nesting season, (September 1 through the 14 February), a qualified biologist shall conduct a survey for burrows or debris that represent suitable nesting habitat for burrowing owls within areas of proposed ground disturbance. The results of the survey shall be submitted to the Placer County Community Development Resource Agency. If overwintering owls are located, the biologist may exclude any burrowing owls observed, and collapse any burrows or remove the debris in accordance with the methodology outlined in the Staff Report.</i></p>			



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		<p>7-9(c) <i>If any nesting burrowing owls are found during the breeding season preconstruction survey, mitigation for the permanent loss of burrowing owl foraging habitat (defined as all areas of suitable habitat within 250 feet of an active nest burrow) shall be accomplished at a 1:1 ratio. The mitigation provided shall be consistent with recommendations in the Staff Report and may be accomplished within the Swainson's Hawk Foraging Habitat mitigation area (as detailed in Mitigation Measure 7-8[c]), if burrowing owls have been documented utilizing that area, or if the qualified biologist and the Placer County Community Development Resource Agency determine that the area is suitable. The Staff Report recommendations for mitigation land for burrowing owls are as follows:</i></p> <ol style="list-style-type: none"> <li>1. <i>Where habitat will be temporarily disturbed, restore the disturbed area to pre-project condition including decompacting soil and revegetating. Permanent habitat protection may be warranted if there is the potential that the temporary impacts may render a nesting site (nesting burrow and satellite burrows) unsustainable or unavailable depending on the time frame, resulting in reduced survival or abandonment. For the latter potential impact, see the permanent impact measures below.</i></li> </ol>	Placer County Community Development Resource Agency	Prior to the initiation of construction activities	



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		<p>2. Mitigate for permanent impacts to nesting, occupied and satellite burrows and/or burrowing owl habitat such that the habitat acreage, number of burrows and burrowing owls impacted are replaced based on the information provided in Appendix A. Note: A minimum habitat replacement recommendation is not provided here as it has been shown to serve as a default, replacing any site-specific analysis and discounting the wide variation in natal area, home range, foraging area, and other factors influencing burrowing owls and burrowing owl population persistence in a particular area.</p> <p>3. Mitigate for permanent impacts to nesting, occupied and satellite burrows and burrowing owl habitat with (a) permanent conservation of similar vegetation communities (grassland, scrublands, desert, urban, and agriculture) to provide for burrowing owl nesting, foraging, wintering, and dispersal (i.e., during breeding and non-breeding seasons) comparable to or better than that of the impact area, and (b) sufficiently large acreage, and presence of fossorial mammals. The mitigation lands may require habitat enhancements including enhancement or expansion of burrows for breeding, shelter and</p>			



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		<p><i>dispersal opportunity, and removal or control of population stressors. If the mitigation lands are located adjacent to the impacted burrow site, ensure the nearest neighbor artificial or natural burrow clusters are at least within 210 meters (Fisher et al. 2007).</i></p> <p>4. <i>Permanently protect mitigation land through a conservation easement deeded to a nonprofit conservation organization or public agency with a conservation mission, for the purpose of conserving burrowing owl habitat and prohibiting activities incompatible with burrowing owl use. If the project is located within the service area of a Department approved burrowing owl conservation bank, the project proponent may purchase available burrowing owl conservation bank credits.</i></p> <p>5. <i>Develop and implement a mitigation land management plan to address long-term ecological sustainability and maintenance of the site for burrowing owls (see Management Plan and Artificial Burrow sections below, if applicable).</i></p> <p>6. <i>Fund the maintenance and management of mitigation land through the establishment of a long-term funding mechanism such as an endowment.</i></p>			



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		<p>7. <i>Habitat should not be altered or destroyed, and burrowing owls should not be excluded from burrows, until mitigation lands have been legally secured, are managed for the benefit of burrowing owls according to Department-approved management, monitoring and reporting plans, and the endowment or other long-term funding mechanism is in place or security is provided until these measures are completed.</i></p> <p>8. <i>Mitigation lands should be on, adjacent or proximate to the impact site where possible and where habitat is sufficient to support burrowing owls present. Where there is insufficient habitat on, adjacent to, or near project sites where burrowing owls will be excluded, acquire mitigation lands with burrowing owl habitat away from the project site. The selection of mitigation lands should then focus on consolidating and enlarging conservation areas located outside of urban and planned growth areas, within foraging distance of other conserved lands. If mitigation lands are not available adjacent to other conserved lands, increase the mitigation land acreage requirement to ensure a selected site is of sufficient size. Offsite mitigation may not adequately offset the biological and</i></p>			



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		<p><i>habitat values impacted on a one to one basis. Consult with the Department when determining offsite mitigation acreages.</i></p> <p>9. <i>Evaluate and select suitable mitigation lands based on a comparison of the habitat attributes of the impacted and conserved lands, including but not limited to: type and structure of habitat being impacted or conserved; density of burrowing owls in impacted and conserved habitat; and significance of impacted or conserved habitat to the species range-wide. Mitigate for the highest quality burrowing owl habitat impacted first and foremost when identifying mitigation lands, even if a mitigation site is located outside of a lead agency's jurisdictional boundary, particularly if the lead agency is a city or special district.</i></p> <p>10. <i>Select mitigation lands taking into account the potential human and wildlife conflicts or incompatibility, including but not limited to, human foot and vehicle traffic, and predation by cats, loose dogs and urban-adapted wildlife, and incompatible species management (i.e., snowy plover).</i></p> <p>11. <i>Where a burrowing owl population appears to be highly adapted to heavily altered habitats such as golf courses, airports, athletic fields, and business complexes, permanently</i></p>			



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		<p><i>protecting the land, augmenting the site with artificial burrows, and enhancing and maintaining those areas may enhance sustainability of the burrowing owl population onsite. Maintenance includes keeping lands grazed or mowed with weedeaters or push mowers, free from trees and shrubs, and preventing excessive human and human-related disturbance (e.g., walking, jogging, off-road activity, dog-walking) and loose and feral pets (chasing and, presumably, preying upon owls) that make the environment uninhabitable for burrowing owls (Wesemann and Rowe 1985, Millsap and Bear 2000, Lincer and Bloom 2007). Items 4, 5 and 6 also still apply to this mitigation approach.</i></p> <p><i>12. If there are no other feasible mitigation options available and a lead agency is willing to establish and oversee a Burrowing Owl Mitigation and Conservation Fund that funds on a competitive basis acquisition and permanent habitat conservation, the project proponent may participate in the lead agency's program.</i></p>			
7-10	Impacts to other nesting birds and raptors protected under the MBTA and CFGC either directly (e.g., cause a	<p><u>Placer County Conservation Program Plan Area 7-10(a) PCCP Species Condition 4 (Tricolored Blackbird):</u> Prior to initiation of PCCP Covered Activities associated with the proposed project, the qualified biologist(s) shall conduct</p>	Placer County Community Development	Prior to the initiation of PCCP Covered Activities associated with the proposed	



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	wildlife population to drop below self-sustaining levels, threaten to eliminate an animal community) or through substantial habitat modifications.	<p><i>preconstruction surveys to evaluate the presence of tricolored blackbird nesting colonies for each phase of the project. In instances where an adjacent parcel is not accessible to survey because the qualified biologist was not granted permission to enter, the qualified biologist shall scan all potential nest colony site(s) from the adjacent property, roadsides, or other safe, publicly accessible viewpoints, without trespassing, using binoculars and/or a spotting scope to look for tricolored blackbird nesting activity.</i></p> <p><i>Surveys shall be conducted at least twice, with at least one month between surveys, during the nesting season one year prior to initial ground disturbance for the Covered Activity (if feasible), and the year of ground disturbance for the Covered Activity (required). If Covered Activities will occur in the project work area during the nesting season, three surveys shall be conducted within 15 days prior to the Covered Activity, with one of the surveys occurring within five days prior to the start of the Covered Activity. The survey methods will be based on Kelsey (2008) or a similar protocol approved by the PCA and the USFWS and CDFW based on site-specific conditions.</i></p> <p><i>If the first survey indicates that suitable nesting habitat is not present on the project site or within 1,300 feet of the project work area, additional surveys for nest colonies are not required.</i></p>	Resource Agency Placer Conservation Authority CDFW USFWS	project	



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		<p><i>If an active colony is known to occur within three miles of the project site, a qualified biologist shall conduct two surveys of foraging habitat within the project site and within a 1,300-foot radius around the project site to determine whether foraging habitat is being actively used by foraging tricolored blackbirds. The qualified biologist shall map foraging habitat, as defined by the land cover types listed above, within a 1,300-foot radius around the project site to delineate foraging habitat that will be surveyed. The surveys shall be conducted approximately one week apart, with the second survey occurring no more than five calendar days prior to ground-disturbing activities.</i></p> <p><i>Construction activity or other covered activities that may disturb an occupied nest colony site, as determined by a qualified biologist, shall be prohibited during the nesting season (March 15 through July 31) or until the chicks have fledged or the colony has been abandoned on its own) within a 1,300-foot buffer zone around the nest colony, to the extent practicable. The intent of this condition is to prevent disturbance to occupied nest colony sites on or near project sites so they can complete their nesting cycle. This condition is not intended to preserve suitable breeding habitat on project sites but to ensure impacts to active colony sites only take place once the site is no longer occupied by the nesting colony. The buffer shall be applied</i></p>			



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		<p><i>to extend beyond the nest colony site as follows: 1) if the colony is nesting in a wetland, the buffer must be established from the outer edge of all hydric vegetation associated with the colony, or 2) if the colony is nesting in non-wetland vegetation (e.g., Himalayan blackberry), the buffer must be established from the edge of the colony substrate. This buffer may be modified to a minimum of 300 feet, with written approval from the USFWS and CDFW, in areas with dense forest, buildings, or other features between the Covered Activities and the occupied active nest colony; where there is sufficient topographic relief to protect the colony from excessive noise or visual disturbance; where sound curtains have been installed; or other methods developed in consultation with the USFWS and CDFW where conditions warrant reduction of the buffer distance. If tricolored blackbirds colonize habitat adjacent to Covered Activities after the activities have been initiated, the project applicant shall reduce disturbance through establishment of buffers or noise reduction techniques or visual screens, as determined in consultation with the USFWS, CDFW, and PCA. The buffer must be clearly marked to prevent project-related activities from occurring within the buffer zone.</i></p> <p><i>Active nesting colonies that occur within the non-disturbance buffer shall be monitored by the qualified biologist(s) to verify the Covered Activity is not disrupting the nesting behavior</i></p>			



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		<p><i>of the colony. The frequency of monitoring shall be approved by the PCA and based on the frequency and intensity of construction activities and the likelihood of disturbance of the active nest. In most cases, monitoring will occur at least every other day, but in some cases, daily monitoring may be appropriate to ensure that direct effects on tricolored blackbird are minimized. The biologist shall train construction personnel on the avoidance procedures and buffer zones.</i></p> <p><i>If the qualified biologist(s) determines that the Covered Activity is disrupting nesting and/or foraging behavior, the qualified biologist(s) shall notify the project applicant immediately, and the project applicant shall notify the PCA within 24 hours to determine additional protective measures that can be implemented. The qualified biologist(s) shall have the authority to stop Covered Activities until additional protective measures are implemented. Additional protective measures shall remain in place until the qualified biologist(s) determine(s) tricolored blackbird behavior has normalized. If additional protective measures are ineffective, the qualified biologist(s) shall have the authority to stop Covered Activities as needed until the additional protective measures are modified and nesting behavior of tricolored blackbird returns to normal.</i></p> <p><i>Additional protective measures may include</i></p>			



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		<p><i>increasing the size of the buffer (within the constraints of the project site), delaying Covered Activities (or the portion of Covered Activities causing the disruption) until the colony is finished breeding and chicks have left the nest site, temporarily relocating staging areas, or temporarily rerouting access to the project work area. The project proponent shall notify the PCA and USFWS and CDFW within 24 hours if nests or nestlings are abandoned. If the nestlings are still alive, the qualified biologist(s) shall work with the USFWS and CDFW to determine appropriate actions for salvaging the eggs or nestlings. Notification to PCA and USFWS and CDFW shall be via telephone or email, followed by a written incident report. Notification shall include the date, time, location, and circumstances of the incident.</i></p> <p><i>Foraging habitat within the buffer shall be monitored by the qualified biologist(s) to verify that the Covered Activity is not disrupting tricolored blackbird foraging behavior. The frequency of monitoring shall be approved by the PCA and based on the frequency and intensity of construction activities and the likelihood of disturbance of foraging tricolored blackbirds. In most cases, monitoring will occur at least every other day, but in some cases, daily monitoring may be appropriate to ensure that effects on tricolored blackbird are minimized. The biologist shall train</i></p>			



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		<p><i>construction personnel on the avoidance procedures and buffer zones.</i></p> <p><i>If the qualified biologist(s) determines that the Covered Activity is disrupting foraging behavior, the qualified biologist(s) shall notify project applicant immediately, and the project applicant shall notify the PCA within 24 hours to determine additional protective measures that can be implemented. The qualified biologist(s) shall have the authority to stop Covered Activities until additional protective measures are implemented. Additional protective measures shall remain in place until the qualified biologist(s) determine(s) tricolored blackbird behavior has normalized. If additional protective measures are ineffective, the qualified biologist(s) shall have the authority to stop Covered Activities as needed until the additional protective measures are modified and foraging behavior of tricolored blackbird returns to normal. Additional protective measures may include increasing the size of the buffer (within the constraints of the project site), temporarily relocating staging areas, or temporarily rerouting access to the project work area.</i></p>			
		<p>7-10(b) <i>A preconstruction nesting bird survey shall be conducted by the qualified biologist (project biologist) throughout the portion of the project proposed for construction and all accessible areas within a 500-foot radius of proposed construction areas for each phase, no more</i></p>	Placer County Community Development Resource Agency	No more than three days prior to the initiation of construction	



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		<p><i>than three days prior to the initiation of construction. If there is a break in construction activity of more than three days, then subsequent surveys shall be conducted.</i></p> <p><i>A report summarizing the survey(s) shall be provided to the Placer County Community Development Resource Agency and the PCA within 30 days of the completed survey and is valid for one construction season, assuming that a break in construction activities of more than three days does not occur. If nests are not found, further mitigation is not required.</i></p> <p><i>If an active raptor nest is found, construction activities shall not take place within 500 feet of the nest until the young have fledged. If active songbird nests are found, a 100-foot non-disturbance buffer shall be established. The non-disturbance buffers may be reduced if a smaller, sufficiently protective buffer is proposed by the project biologist and approved by the County after taking into consideration the natural history of the species of bird nesting, the proposed activity level adjacent to the nest, the nest occupants' habituation to existing or ongoing activity, and nest concealment (i.e., whether there are visual or acoustic barriers between the proposed activity and the nest). The project biologist can visit the nest as needed to determine when the young have fledged the nest and are independent of the site or the nest can be left</i></p>	Placer Conservation Authority		



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		<p><i>undisturbed until the end of the nesting season.</i></p> <p>7-10(c) <i>When it is determined that the size of the non-disturbance buffer requires the project biologist to monitor the nest, that monitoring shall include observations about the bird's behaviors relative to the construction activities. Should construction activities cause a nesting bird to do any of the following in a way that would be considered a result of construction activities, then the exclusionary buffer shall be increased such that activities are far enough from the nest to stop the following agitated behavior: vocalize, make defensive flights at intruders, get up from a brooding position, or fly off the nest. The revised non-disturbance buffer shall remain in place until the chicks have fledged or as otherwise determined by a qualified biologist in consultation with the County.</i></p> <p><i>Construction activities may only resume within the non-disturbance buffer after a follow-up survey by the project biologist has been conducted and a report has been prepared indicating that the nest (or nests) are no longer active, and that no new nests have been identified.</i></p> <p><u>Areas Outside of the Placer County Conservation Program</u></p>	Placer County Community Development Resource Agency	During construction activities, when it is determined that the size of the non-disturbance buffer requires the project biologist to monitor the nest	
		<p>7-10(d) <i>A preconstruction nesting bird survey shall be conducted by the project biologist throughout</i></p>	Placer County Community	Within a 500-foot radius of proposed	



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		<p><i>the project area and all accessible areas within a 500-foot radius of proposed construction areas for each phase, at most, three days prior to the initiation of construction. If there is a break in construction activity of more than three days, then subsequent surveys shall be conducted.</i></p> <p><i>A report summarizing the survey(s) shall be provided to the Placer County Community Development Resource Agency within 30 days of the completed survey and is valid for one construction season, assuming that a break in construction activities of more than three days does not occur. If nests are not found, further mitigation is not required.</i></p> <p><i>If active raptor or a tricolored blackbird nesting colony are found, construction activities shall not take place within 500 feet of the nest/colony until the young have fledged. If active songbird nests are found, a 100-foot non-disturbance buffer shall be established. The non-disturbance buffers may be reduced if a smaller, sufficiently protective buffer is proposed by the project biologist and approved by the County (and CDFW if it is a tricolored blackbird nesting colony) after taking into consideration the natural history of the species of bird nesting, the proposed activity level adjacent to the nest, the nest occupants' habituation to existing or ongoing activity, and nest concealment (i.e., whether there are visual or acoustic barriers between the</i></p>	<p>Development Resource Agency                      CDFW</p>	<p>construction areas for each phase, at most, three days prior to the initiation of construction</p>	



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		<p><i>proposed activity and the nest). The project biologist can visit the nest as needed to determine when the young have fledged the nest and are independent of the site or the nest can be left undisturbed until the end of the nesting season.</i></p> <p>7-10(e) <i>When it has been determined that the size of the non-disturbance buffer requires the project biologist to monitor the nest, that monitoring shall include observations about the bird's behaviors relative to the construction activities. Should construction activities cause a nesting bird to do any of the following in a way that would be considered a result of construction activities, then the exclusionary buffer shall be increased such that activities are far enough from the nest to stop the following agitated behavior(s): vocalize, make defensive flights at intruders, get up from a brooding position, or fly off the nest. The revised non-disturbance buffer shall remain in place until the chicks have fledged or as otherwise determined by a qualified biologist in consultation with the County.</i></p> <p><i>Construction activities may only resume within the non-disturbance buffer after a follow-up survey by the project biologist has been conducted and a report has been prepared indicating that the nest (or nests) is no longer active, and that new nests have not been identified.</i></p>	<p>Placer County Community Development Resource Agency</p>	<p>During construction activities, when it has been determined that the size of the non-disturbance buffer requires the project biologist to monitor the nest</p>	



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7-11	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS.	<p><i>Placer County Conservation Program Plan Area</i></p> <p>7-11(a) <i>Implement Mitigation Measures 7-12(a) and (b).</i></p> <p>7-11(b) <i>PCCP Community Condition 2.1: To the maximum extent possible, the proposed project shall not modify any area within a buffer that extends 50 feet outward from the outermost bounds of the riparian vegetation. The improvement or grading plans shall show the location of the riverine/riparian buffer.</i></p> <p>7-11(c) <i>PCCP Community Condition 2.2: Prior to land conversion authorization, the applicant shall coordinate with the PCA to determine which In-Stream and Stream System Best Management Practices (BMPs) from Table 7-1 of the User's Guide apply to the proposed project. The applicant shall identify the applicable BMPs on the project's improvement or grading plans. The selected BMPs shall be incorporated into the project's Land Conversion Authorization letter.</i></p> <p><i>Prior to land conversion authorization approval, the unavoidable effects to 0.67 to 1.12 acres riverine and riparian habitat or their buffers shall be mitigated through payment of special habitat fees. The fees to be paid shall be those in effect at the time of land conversion authorization.</i></p>	<p>See Mitigation Measures 7-12(a) and (b)</p> <p>Placer County Community Development Resource Agency</p> <p>Placer Conservation Authority</p>	<p>See Mitigation Measures 7-12(a) and (b)</p> <p>Prior to the approval of improvement or grading plans</p> <p>Prior to land conversion authorization</p>	



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		<p>7-11(d) <i>Prior to the commencement of ground-disturbing activities, the applicant shall apply for a Section 1600 Lake or Streambed Alteration Agreement from CDFW for the entire Project or by phase as needed. The Lake and Streambed Alteration Agreement program is not fully integrated into the PCCP and must be applied for separate and apart from the PCCP. The information provided shall include a description of all activities associated with the Project, not just those closely associated with the drainages and/or riparian vegetation. Impacts shall be outlined in the application and are expected to be in substantial conformance with the impacts to biological resources outlined in this document. Impacts for each activity shall be broken down by temporary and permanent, and a description of the proposed mitigation for biological resource impacts shall be outlined per activity and then by temporary and permanent. Information regarding Project-specific drainage and hydrology changes resulting from project implementation shall be provided as well as a description of storm water treatment methods. Minimization and avoidance measures shall be proposed as appropriate and may include: preconstruction species surveys and reporting, protective fencing around avoided biological resources, worker environmental awareness training, seeding disturbed areas adjacent to open space areas with native seed, and installation of project-specific storm water BMPs.</i></p>	<p>CDFW</p>	<p>Prior to the commencement of ground-disturbing activities</p>	



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		<p><i>Mitigation shall be determined by CDFW and result in no net loss of riparian habitat.</i></p> <p><u>Areas Outside of the Placer County Conservation Program</u></p> <p>7-11(e) <i>Prior to the commencement of ground-disturbing activities, the applicant shall apply for a Section 1600 LSAA from CDFW. The information provided shall include a description of all activities associated with the proposed project, not just those closely associated with the drainages and/or riparian vegetation. Impacts shall be outlined in the application and are expected to be in substantial conformance with the impacts to biological resources outlined in the BRA prepared for the Creekview Ranch Project by Madrone Ecological Consulting. Impacts for each activity shall be broken down by temporary and permanent impacts, and a description of the proposed mitigation for biological resource impacts shall be outlined per activity, and then by temporary and permanent impacts. Information regarding project-specific drainage and hydrology changes resulting from project implementation shall be provided, as well as a description of storm water treatment methods. Minimization and avoidance measures shall be proposed as appropriate and may include: preconstruction species surveys and reporting, protective fencing around avoided biological resources, worker environmental awareness training, seeding disturbed areas adjacent to open</i></p>	<p>Placer County Community Development Resource Agency</p> <p>CDFW</p>	<p>Prior to the commencement of ground-disturbing activities</p>	



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		space areas with native seed, and installation of project-specific storm water BMPs. Mitigation for impacts to riparian woodland may include restoration or enhancement of resources on- or off-site, purchase habitat credits from an agency-approved mitigation/conservation bank, off-site, working with a local land trust to preserve land, or any other method acceptable to CDFW. Mitigation shall not result in a net loss of riparian woodland. Written verification of the Section 1600 LSAA shall be submitted to the Placer County Community Development Resource Agency.			
7-12	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.	<p><u>Placer County Conservation Program Plan Area</u></p> <p>7-12(a) <i>The Permittee shall apply for coverage under the PCCP to mitigate for all impacts to Covered Species, land cover, and sensitive natural communities. Prior to application approval, additional species surveys may be necessary, and prior to construction land cover and special habitat fees shall be paid. The Permittee shall comply with the terms of the PCCP Coverage Certificate, including compliance with all avoidance and minimization measures, which may include pre-construction surveys, construction monitoring, and BMPs.</i></p> <p><u>PCCP General Condition 3:</u> <i>The proposed project shall pay a land conversion fee or dedicate land in lieu of fee or a combination thereof for the permanent conversion of 0.344-acre of Riparian/Riverine land cover (an</i></p>	Placer County Community Development Resource Agency	Prior to PCCP coverage application approval	



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		<p><i>additional 0.215-acre if the East Trail and West Trail are developed). If fees are paid, they shall be those in effect at the time of ground disturbance authorization for each project phase and shall be the per-acre fee based on the final amount of land disturbance resulting from the activity.</i></p> <p><i>In addition to land conversion, the project would result in permanent direct effects and temporary effects to PCCP Special Habitats as detailed in Table 11 of the Biological Resources Assessment (BRA) prepared for the proposed project. The total special habitat fee obligation including temporary effect fees shall be paid prior to issuance of a land conversion authorization that allows ground disturbance of a special habitat.</i></p> <p><i>7-12(b) PCCP General Condition 4: The applicant shall restore all temporarily disturbed areas and, one year after project groundbreaking, provide the County with a written assessment of how the performance standards were met. The project would result in 9.14 to 9.68 acres of temporary effects to special habitats. Prior to issuance of land conversion authorization, the project shall pay a fee based on the final acres of impact. The fee to be paid shall be that in effect at the time of land conversion authorization issuance. If it is determined by the County or the PCCP biologist that the effects remain one year after groundbreaking activities have commenced, the effects shall</i></p>	<p>Placer County Community Development Resource Agency</p> <p>Placer Conservation Authority</p>	<p>Prior to the issuance of land conversion authorization</p>	



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		<p><i>be considered permanent and the County project lead shall reassess fees based on those effects.</i></p> <p>7-12(c) <u>PCCP Community Condition 1.1</u>: Prior to land conversion authorization approval, the unavoidable effects to 1.338 acres of vernal pool type wetlands or their buffers shall be mitigated through payment of special habitat fees. The fees to be paid to the PCA shall be that in effect at the time of land conversion authorization issuance.</p> <p>7-12(d) <u>PCCP Community Condition 1.4</u>: Prior to ground disturbance, the applicant shall schedule grading and construction in coordination with the PCA to provide the PCA the opportunity to salvage topsoil from the vernal pool wetland if they choose to do so. The applicant shall notify the PCA of their construction schedule within 30 days of the construction start date to allow the PCA the opportunity to salvage soils while the pools are completely dry (generally July through September) and the PCA must make salvage plans sufficiently far in advance so as to not unreasonably impair construction.</p> <p>7-12(e) <u>PCCP Stream System Condition 2</u>: The project's development footprint is directly impacting the Stream System. The area of encroachment (12.57 to 12.68 acres of permanent impact and 7.19 to 7.33 acres of temporary impact) is subject to the Stream</p>	<p>Placer Conservation Authority</p> <p>Placer Conservation Authority</p> <p>Placer Conservation Authority</p>	<p>Prior to land conversion authorization approval</p> <p>Prior to the initiation of ground disturbing activities</p> <p>Prior to the issuance of any permit or authorization that results in ground disturbance within</p>	



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		<p><i>System Encroachment Special Habitats Fee as described in Chapter 5 of the PCCP User's Guide. Fees shall be paid to the PCA prior to the issuance of any permit or authorization that results in ground disturbance within the Stream System.</i></p>		the Stream System	
		<p>7-12(f) <i>Implement Mitigation Measure 7-11(d) regarding LSAA.</i></p>	See Mitigation Measure 7-11(d)	See Mitigation Measure 7-11(d)	
		<p>7-12(g) <i>The Project applicant shall apply for coverage under the streamlined PCCP Letter of Permission (LOP) process directly with the USACE using avoidance and minimization guidance from the CARP, a component of the PCCP.</i></p>	USACE	Prior to the initiation of construction activities	
		<p>7-12(h) <i>The applicant shall submit an application to the RWQCB for water quality certification of the PCCP LOP, and adhere to the certification conditions.</i></p>	RWQCB	Prior to the initiation of construction activities	
		<p>7-12(i) <i>PCCP CARP Authorization Conditions: The project applicant shall comply with the PCCP CARP Authorization Conditions, which are as follows:</i></p> <p><i>All work within the PCCP plan area that impacts Aquatic Resources of Placer County shall be completed according to the plans and documents included in the CARP application, Water Quality Certification, and, if applicable, WDRs. All changes to those plans shall be</i></p>	<p>Placer County Community Development Resource Agency</p> <p>RWQCB</p> <p>CDFW</p> <p>NMFS</p>	<p>Prior to and during project construction</p> <p>For temporary crossings as described in the application, no earlier than April 15</p>	



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		<p><i>reported to Placer County. Minor changes may require an amendment to the CARP Authorization, Water Quality Certification, and, if applicable, Waste Discharge Requirements (WDRs). Substantial changes may render the authorization, Water Quality Certification, and, if applicable, WDRs, void, and a new application may be required.</i></p> <p><i>A copy of the CARP conditions and Water Quality Certification and WDRs shall be given to individuals responsible for activities on the site. Site personnel, (employees, contractors, and subcontractors) shall be adequately informed and trained to implement all permit, Water Quality Certification, and WDR conditions and shall have a copy of all permits available on-site at all times for review by site personnel and agencies.</i></p> <p><i>Any construction within the Stream System shall be implemented in a way to avoid and minimize impacts to vegetation outside the construction area. All preserved wetlands, other Aquatic Resources of Placer County, and the Stream Zone shall be protected with bright construction fencing. Temporary fencing shall be removed immediately upon completion of the project.</i></p> <p><i>Before beginning construction, the project applicant shall have a valid CARP authorization or waiver notice. In order to obtain a permit, the project applicant shall pay</i></p>			



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		<p><i>all mitigation fees or purchase appropriate credits from an agency-approved mitigation bank.</i></p> <p><i>All deviations from plans and documents provided with the application and approved by Placer County Community Development Resource Agency shall be reported to Placer County Community Development Resource Agency immediately.</i></p> <p><i>Erosion control measures shall be specified as part of the CARP application, and the application shall not be complete without them. All erosion control specified in the permit application shall be in place and functional before the beginning of the rainy season and shall remain in place until the end of the season. Site supervisors shall be aware of weather forecasts year-round and shall be prepared to establish erosion control on short notice for unusual rain events. Erosion control features shall be inspected and maintained after each rainfall period. Maintenance includes, but is not limited to, removal of accumulated silt and the replacement of damaged barriers and other features.</i></p> <p><i>All required setbacks shall be implemented according to the HCP/NCCP Condition 4 (HCP/NCCP Section 6.1.2).</i></p> <p><i>All work in aquatic resources within the Stream System shall be restricted to periods of low</i></p>			



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		<p><i>flow and dry weather between April 15 and October 15, unless otherwise permitted by the Placer County Community Development Resource Agency and approved by the appropriate State and federal regulatory agency. Work within aquatic resources in the Stream System outside of the specified periods may be permitted under some circumstances. The project applicant shall provide Placer County Community Development Resource Agency with the following information: a) the extent of work already completed; b) specific details about the work yet to be completed; and c) an estimate of the time needed to complete the work in the Stream System.</i></p> <p><i>Following work in a stream channel, the low flow channel shall be returned to its natural state to the extent possible. The shape and gradient of the streambed shall be restored to the same gradient that existed before the work to the extent possible.</i></p> <p><i>Work shall not disturb active bird nests until young birds have fledged. To avoid impacts to nesting birds, any disturbance shall occur between September 1 and February 1 prior to the nesting season. Tree removal, earthmoving or other disturbance at other times is at the Placer County Community Development Resource Agency's discretion and shall require surveys by a qualified</i></p>			



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		<p><i>biologist to determine the absence of nesting birds prior to the activity.</i></p> <p><i>All trees marked for removal within the Stream System must be shown on maps included with the Application. Native trees over five inches diameter at breast height (DBH) shall not be removed without the consent of the Placer County Community Development Resource Agency.</i></p> <p><i>Except for site preparation for the installation and removal of dewatering structures, no excavation is allowed in flowing streams unless dredging WDRs are issued by the RWQCB. Detailed plans for dewatering must be part of the application.</i></p> <p><i>Temporary crossings as described in the application shall be installed no earlier than April 15 and shall be removed no later than October 15, unless otherwise permitted by the Placer County Community Development Resource Agency and approved by the appropriate State and federal regulatory agency. This work window could be modified at the discretion of Placer County and the CDFW.</i></p> <p><i>Vehicles other than necessary earthmoving and construction equipment shall not be allowed within the Stream System after the section of stream where work is performed is dewatered. The equipment and vehicles used</i></p>			



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		<p><i>in the Stream System shall be described in the application.</i></p> <p><i>Staging areas for equipment, materials, fuels, lubricants, and solvents shall be located outside the stream channel and banks and away from all preserved aquatic resources. All stationary equipment operated within the Stream System shall be positioned over drip-pans. Equipment entering the Stream System shall be inspected daily for leaks that could introduce deleterious materials into aquatic resources. All discharges, unintentional or otherwise, shall be reported immediately to the Placer County Community Development Resource Agency. The Placer County Community Development Resource Agency shall then immediately notify the appropriate state and federal agencies.</i></p> <p><i>Cement, concrete, washings, asphalt, paint, coating materials, oil, other petroleum products, and other materials that could be hazardous to aquatic life shall be prevented from reaching streams, lakes, or other water bodies. These materials shall be placed a minimum of 50 feet away from aquatic environments. All discharges, unintentional or otherwise, shall be reported immediately to the Placer County Community Development Resource Agency. The Placer County Community Development Resource Agency shall then immediately notify the appropriate State and federal agencies.</i></p>			



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		<p><i>During construction, litter or construction debris shall not be dumped into water bodies or other aquatic resources, nor shall it be placed in a location where it might be moved by wind or water into aquatic resources. All construction debris shall be removed from the site upon completion of the project.</i></p> <p><i>Only herbicides registered with the California Department of Pesticide Regulation shall be used in streams, ponds, and lakes, and shall be applied in accordance with label instructions. A list of all pesticides that may be used in the project area shall be submitted to the Placer County Community Development Resource Agency before use. The PCCP does not authorize the use of herbicides; herbicide application is not a Covered Activity.</i></p> <p><i>The Placer County Community Development Resource Agency shall be notified immediately if threatened or endangered species that are not Covered Species are discovered during construction activities. Placer County Community Development Resource Agency shall suspend work and notify the USFWS, National Marine Fisheries Service (NMFS), and the CDFW for guidance.</i></p> <p><i>Wildlife entering the construction site shall be allowed to leave the area unharmed or shall be flushed or herded humanely in a safe direction away from the site.</i></p>			



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		<p><i>All pipe sections shall be capped or inspected for wildlife before being placed in a trench. Pipes within a trench shall be capped at the end of each day to prevent entry by wildlife, except for those pipes that are being used to divert stream flow.</i></p> <p><i>At the end of each workday, all open trenches will be provided with a ramp of dirt or wood to allow trapped animals to escape.</i></p> <p><i>If human remains or cultural artifacts are discovered during construction, the applicant shall stop work in the area and notify the Placer County Community Development Resource Agency immediately. Work shall not continue in the area until the County Coroner and a qualified archaeologist have evaluated the remains, conducted a survey, prepared an assessment, and required consultations are completed.</i></p> <p><u>Areas Outside of the Placer County Conservation Program</u>                      7-12(j) <i>To address potential impacts to federally or State-protected wetlands in non-PCCP portions of the study area, prior to the issuance of grading permits, the project applicant shall complete the following requirements:</i></p> <ul style="list-style-type: none"> <li><i>The project applicant shall apply for a Section 404 permit from the USACE. Waters that would be impacted shall</i></li> </ul>	<p>USACE                      RWQCB</p>	<p>Prior to the issuance of grading permits</p>	



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		<p><i>be replaced or rehabilitated on a “no-net-loss” basis. Habitat restoration, rehabilitation, and/or replacement shall be at a location and by methods acceptable to the USACE;</i></p> <ul style="list-style-type: none"> <li><i>The applicant shall apply for a Section 401 water quality certification from the RWQCB and adhere to the certification conditions therein; and</i></li> <li><i>Implement Mitigation Measure 7.11-(e) regarding LSAA.</i></li> </ul>			
7-14	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance, or have a substantial adverse effect on the environment by converting oak woodlands or impacting individual trees.	<p><u>Placer County Conservation Program Plan Area</u> 7-14(a) <u>PCCP General Condition 2: The project shall minimize effects on adjacent conservation lands through implementation of the following design requirements:</u></p> <ol style="list-style-type: none"> <li><i>Signage shall be posted to notify of any usage restrictions and to educate the public on the sensitivity of the area and usage restrictions.</i></li> <li><i>Fencing shall be installed at the boundary between developed areas and reserves to prevent illegal access by people and pets, unless the conditions on the reserve make trespass unlikely (i.e., surrounded by canals that are difficult to cross). Fences shall be suitable to the conditions in the adjacent reserve. The type of fence required shall be at the discretion of the County or City, as permitted by County and City codes. Fences shall have limited gates and</i></li> </ol>	<p>Placer County Community Development Resource Agency</p> <p>Placer Conservation Authority</p> <p>USFWS</p> <p>CDFW</p> <p>NMFS</p>	During the construction and development phase of the proposed project	



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		<p><i>be designed with consideration to not allowing movement of people and their pets. Access shall be limited to maintenance and monitoring activities unless a habitat management plan specifies otherwise.</i></p> <p>3. <i>Natural or artificial barriers or other access restrictions may be installed around development to protect sensitive land-cover types and Covered Species in the reserves. If used, barriers shall be designed so they are appropriate for site conditions and the resources being protected. Some barriers should keep domestic pets outside the reserve, other barriers should keep Covered Species inside the reserve. Before installation of a barrier, consideration shall be given to freedom of movement by Covered Species. If the barrier would prevent movement, or if the barrier would encourage species to use other, less-favorable crossings, alternative solutions shall be considered.</i></p> <p>4. <i>Roads constructed adjacent to reserves shall be fenced to restrict unauthorized public access. Through the conditional approval process, the permittee shall only approve fencing that is appropriate (e.g., chain link, post and cable, barbwire) to allow movement of wildlife between reserves.</i></p>			



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		<p>5. <i>Development shall be designed to minimize the length of the shared boundary between development and the reserves (i.e., minimize the urban edge, perimeter).</i></p> <p>6. <i>Incorporation of high-intensity lighting (e.g., floodlights used for recreational facilities and commercial parking lots) into site improvement standards near reserves shall be avoided. Low-glare, no-glare, or shielded lighting shall be installed in developed areas adjacent to reserves to minimize artificial lighting of reserve lands at night. The height and intensity of lights shall be kept to a minimum. Resources providing technical support include publications of the Illuminating Engineering Society of North America and its Lighting Handbook, Reference &amp; Application, Ninth Edition, and Recommended Practices. The intent of this avoidance and minimization measure is to design a lighting system, where determined necessary, that maintains public safety and security in the project area while curtailing the degradation of the nighttime visual environment on the reserve property by limiting nighttime light radiation and/or light spill.</i></p> <p>7. <i>Public facilities, such as ballparks and fields that require high-intensity night lighting (i.e., floodlights), shall be sited</i></p>			



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		<p><i>at least 0.5-mile from the reserve boundary to minimize light pollution. Facilities may be sited closer to the Reserve System if the PCA determines the lighting system will not be intrusive to wildlife within the Reserve System (e.g., hills block the lighting).</i></p> <p><i>8. For any landscaping adjacent to reserve properties, non-invasive plants shall be required, and the use of native plants will be highly encouraged, consistent with County Landscape Design Guidelines or similar standards for the City of Lincoln.</i></p> <p><i>Any of the above design requirements, or similar requirements developed over time, that are incorporated into projects shall be located within the development footprint. The foregoing project features shall be maintained by the property owners. Conditions of approval on projects are monitored by County or City staff during the construction and development phase and are enforced over time through the efforts of professional land development staff familiar with the project or a code enforcement division. If projects are found to be out of compliance, standard remedial actions shall be applied and may include code enforcement, use of securities, revocation or modification of entitlement. Violations will be reported to the</i></p>			



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		<p><i>PCA, USFWS, NMFS, CDFW, and applicable local jurisdiction for potential enforcement.</i></p> <p>7-14(b) <i>PCCP General Condition 3: The project shall pay a land conversion fee or dedicate land in lieu of fee or a combination thereof for the permanent conversion of 93.29 acres of the following natural land cover types: VPC Low, VPC Intermediate, VPC High, Blue Oak Woodland, Orchard, and Rural Residential (an additional 0.59-acre if both potential trails are developed and the most impactful sewer alternative) (for Riparian/Riverine, see Mitigation Measure 7-12(a)). If fees are paid, they shall be those in effect at the time of ground disturbance authorization for each project phase and shall be the per acre fee based on the final amount of land disturbance resulting from the activity.</i></p> <p>7-14(c) <i>PCCP General Condition 5: Prior to initiation of construction activities, all project construction personnel shall participate in a Worker Environmental Training Program that will educate workers regarding the Covered Species and their habitats, the need to avoid impacts, state and federal protection, and the legal implications of violating environmental laws and regulations. At a minimum this training may be accomplished through tailgate presentations at the project site and the distribution of informational brochures, with descriptions of sensitive biological resources and regulatory protections, to construction</i></p>	<p>Placer County Community Development Resource Agency</p> <p>Placer Conservation Authority</p> <p>Placer County Community Development Resource Agency</p> <p>Placer Conservation Authority</p>	<p>Prior to approval of Improvement Plans</p> <p>Prior to the initiation of construction activities</p>	



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		<p>personnel prior to initiation of construction work. The signed documentation of training completion by all construction workers shall be submitted to the Placer County Resource Development Agency and the PCA.</p> <p><u>City of Roseville</u>                      7-14(d) If Sewer Pipeline Alignment Option 1A, 1B, and/or the East Trail alignment are chosen, the project applicant shall obtain a Tree Permit in accordance with the requirements set forth in Chapter 19.66 of the Roseville Municipal Code. The City of Roseville Tree Ordinance requires a Tree Permit for any activity affecting 20 percent or more of the Protected Zone of a Protected Tree related to a discretionary project. A number of items must be submitted with the permit application, including an Arborist Report. The Arborist Report must be prepared by an arborist or registered professional forester and include specific information on the tree locations, condition, potential impacts of development, recommended actions and mitigation measures.</p> <ol style="list-style-type: none"> <li>If Option 1A is selected, the non-PCCP portion of Option 1A within the City of Roseville would result in impacts to a total of 58 Protected Trees with a combined DBH of 753.6 inches.</li> <li>If Option 1B is selected, the non-PCCP portion of Option 1B within the</li> </ol>	City of Roseville Planning Department	Prior to the approval of Improvement Plans	



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		<p><i>City would result in impacts to a total of 38 Protected Trees with a combined DBH of 343.5 inches.</i></p> <p><i>3. If the East Trail is constructed, the non-PCCP portion of the potential future East Trail within the City of Roseville would result in impacts to a total of seven Protected Trees with a combined DBH of 106 inches.</i></p> <p><i>To mitigate for the loss of Protected Trees, the project applicant shall obtain a Tree Permit from the Roseville Planning Department prior to improvement plan approval. The Planning Department shall review the Tree Permit application as well as the final site improvement plans and determine the precise mitigation requirement at that time.</i></p> <p><i>Removal of Protected Trees shall be mitigated by planting of new trees (replacement) or by payment of an in-lieu fee of \$118 per inch of DBH. If the applicant chooses replacement, the replacement requirement shall be calculated based upon an inch for an inch replacement of the DBH of the removed tree(s) where a 15-gallon tree would replace one inch DBH of the removed tree; a 24-inch box tree would replace two inches, and a 36-inch box tree would replace three inches. The replacement trees shall have a combined diameter equivalent to not less than the total diameter of the tree(s) removed. A minimum of 50 percent of the replacement requirement</i></p>			



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		<p><i>shall be met by native oaks. Up to 50 percent may be met by non-native species.</i></p> <p><i>Efforts shall be made to save trees where feasible. This may include the use of retaining walls, planter islands, pavers, or other techniques commonly associated with tree preservation. The improvement plans shall include a note and show placement of temporary construction fencing around trees to be saved: The applicant shall install a four-foot-tall, brightly colored (typically orange), synthetic mesh material fence (or an equivalent) approved by the City Planning Department at the following locations prior to any construction equipment being moved on-site or any construction activities taking place: at the limits of construction; outside the Protected Zone of all single-trunk trees six inches DBH or greater, or 10 inches DBH aggregate for multi-trunk trees; within 50 feet of any grading, road improvements, underground utilities, or other development activity; or as otherwise shown on the Tentative Subdivision Map.</i></p> <p><i>Development of the sewer pipeline and East Trail, including grading, shall not be allowed until this requirement is satisfied. Any encroachment within the foregoing areas, including Protected Zones of trees to be saved, shall first be approved by the City Planning Department. Temporary fencing shall not be altered during construction without</i></p>			



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		<p><i>written approval of the City Planning Department. Grading, clearing, storage of equipment or machinery, etc., shall not occur until a representative of the City Planning Department has inspected and approved all temporary construction fencing.</i></p> <p><u>County Areas Outside of the Placer County Conservation Program</u></p> <p>7-14(e) <u>Individual Tree Mitigation:</u> <i>The non-PCCP portion of the project site within unincorporated Placer County would result in impacts to a total of 41 Protected Trees with a combined DBH of 803.5 inches. An additional nine “significant trees” in oak woodlands mitigated in accordance with the Interim Guidelines would be impacted with a combined DBH of 298.0 inches. Cumulatively, this totals 50 individual trees with a combined DBH of 1,101.5 inches.</i></p> <p><i>To mitigate for the loss of Protected Trees, the project applicant shall obtain a Tree Permit from the Placer County Planning Services Division prior to improvement plan approval. The Planning Services Division shall review the Tree Permit application as well as the final site improvement plans and determine the precise mitigation requirement at that time. The fee shall be paid into the Placer County Tree Preservation Fund at \$125 per DBH removed or impacted (or the applicable fee at that time).</i></p>	<p>Placer County Planning Services Division</p> <p>Placer County Development Review Committee</p>	<p>Prior to the approval of Improvement Plans</p>	



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		<p><i>Efforts shall be made to save trees where feasible. This may include the use of retaining walls, planter islands, pavers, or other techniques commonly associated with tree preservation. The improvement plans shall include a note and show placement of temporary construction fencing around trees to be saved: The applicant shall install a four-foot-tall, brightly colored (typically orange), synthetic mesh material fence (or an equivalent) approved by the Placer County Development Review Committee at the following locations prior to any construction equipment being moved on-site or any construction activities taking place: at the limits of construction; outside the Protected Zone of all single-trunk trees six inches DBH or greater, or 10 inches DBH aggregate for multi-trunk trees; within 50 feet of any grading, road improvements, underground utilities, or other development activity; or as otherwise shown on the Tentative Subdivision Map.</i></p> <p><i>Development of the project, including grading, shall not be allowed until this requirement is satisfied. Any encroachment within the aforementioned areas, including Protected Zones of trees to be saved, shall first be approved by the Development Review Committee. Temporary fencing shall not be altered during construction without written approval of the Development Review Committee. No grading, clearing, storage of equipment or machinery, etc., may occur until</i></p>			



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		<p><i>a representative of the Development Review Committee has inspected and approved all temporary construction fencing.</i></p> <p>7-14(f) <i><u>Oak Woodland Mitigation:</u> The project applicant shall obtain a Tree Permit from the Placer County Planning Services Division prior to improvement plan approval for impacted native oak trees and comply with all requirements of the Tree Permit. The Planning Services Division shall review the Tree Permit application as well as the final site improvement plans and determine the precise mitigation requirement at that time. To support the approval process, an exhibit shall be submitted showing the extent of the proposed activity within oak woodlands (as defined by the Interim Guidelines), and the resulting acreage of impacts to oak woodlands. If that impact acreage is one acre or greater, the project applicant may choose to mitigate for oak woodlands as follows:</i></p> <ul style="list-style-type: none"> <li>• <i>Compensatory mitigation shall occur off-site and may consist of one of the following, based on the acreage of oak woodland impacted:</i> <ul style="list-style-type: none"> <li>○ <i>Submit payment of fees for oak woodland conservation at a 2:1 ratio consistent with Chapter 19.50 of the Placer County Code: Woodland Conservation. The fees shall be calculated based upon the</i></li> </ul> </li> </ul>	Placer County Planning Services Division	Prior to the Improvement Plan approval for impacted native oak trees	



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		<p><i>current market value of similar oak woodland acreage preservation and an endowment to maintain the land in perpetuity.</i></p> <ul style="list-style-type: none"> <li>○ <i>Purchase off-site conservation easements at a location approved by Placer County to mitigate the loss of oak woodlands at a 2:1 ratio.</i></li> <li>○ <i>Provide for a combination of payment to the Tree Preservation Fund and creation of an off-site Oak Preservation Easement.</i></li> </ul> <p><i>Removal of significant trees (greater than 24 inches DBH or clumps greater than 72 inches in circumference measured at ground level) within oak woodlands requires additional mitigation on a per-inch DBH removed (\$125 per DBH inch).</i></p> <p><i>As an example, oak woodland direct and indirect impacts proposed within the large stand of blue oak and riparian woodlands south of PFE Road total 1.8 acres. As mitigation for those impacts, the project applicant would be required to purchase off-site conservation easements, pay fees for oak woodland conservation, or a combination of the two for 3.6 acres of oak woodland. In addition, nine significant trees occur within this oak woodland area, and must be mitigated on</i></p>			



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		<p><i>a per-inch DBH removed. The trees have been included in the individual native tree mitigation discussion above.</i></p> <p>7-14(g) <u>Sewer Option 1B</u>: Implementation of Sewer Option 1B would result in impacts to 10 Protected Trees with a combined DBH of 269.6 inches. To mitigate for the loss of Protected Trees, the project applicant shall implement the Individual Tree Mitigation requirements set forth in Mitigation Measure 7-14(e).</p>	See Mitigation Measure 7-14(e)	See Mitigation Measure 7-14(e)	
7-15	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.	7-15(a) Implement Mitigation Measures 7-2, 7-4(a), 7-4(b), 7-4(c), 7-6(a), 7-8(a), 7-9(a), 7-10(a), 7-10(b), 7-10(c), 7-11(a), 7-11(b), 7-11(c), 7-11(d), 7-12(a), 7-12(b), 7-12(c), 7-12(d), 7-12(e), 7-12(f), 7-12(g), 7-12(h), 7-12(i), 7-14(a), 7-14(b), and 7-14(c).	See Mitigation Measures 7-2, 7-4(a), 7-4(b), 7-4(c), 7-6(a), 7-8(a), 7-9(a), 7-10(a), 7-10(b), 7-10(c), 7-11(a), 7-11(b), 7-11(c), 7-11(d), 7-12(a), 7-12(b), 7-12(c), 7-12(d), 7-12(e), 7-12(f), 7-12(g), 7-12(h), 7-12(i), 7-14(a), 7-14(b), and 7-14(c).	See Mitigation Measures 7-2, 7-4(a), 7-4(b), 7-4(c), 7-6(a), 7-8(a), 7-9(a), 7-10(a), 7-10(b), 7-10(c), 7-11(a), 7-11(b), 7-11(c), 7-11(d), 7-12(a), 7-12(b), 7-12(c), 7-12(d), 7-12(e), 7-12(f), 7-12(g), 7-12(h), 7-12(i), 7-14(a), 7-14(b), and 7-14(c).	
<b>8. Cultural Resources</b>					
8-1	Cause a substantial adverse change in the significance of a historical resource	8-1 <i>The Improvement Plans shall include a note stating that a qualified archaeologist (36 CFR Part 61) shall be present to monitor all ground-disturbing activities conducted within the</i>	Placer County Community Development	Prior to the approval of Improvement Plans	



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	pursuant to CEQA Guidelines, Section 15064.5.	<i>boundaries of cultural resource site NIC-2020-Schellhous-01. If subgrade historical deposits are discovered during ground-disturbing activities, all work shall cease within 100 feet of the find. The qualified archaeologist shall assess the significance of the find and make recommendations for further evaluation and treatment as necessary, such as excavation and evaluation of the finds in accordance with Section 15064.5 of the CEQA Guidelines, which shall be documented in the project record. Work in the area of the find shall only proceed after authorization is granted by the Placer County Community Development Resource Agency following coordination with the qualified archaeologist.</i>	Resource Agency		
8-2	Cause a substantial adverse change in the significance of a unique archeological resource pursuant to CEQA Guidelines Section 15064.5.	8-2(a) <i>Prior to initiation of ground-disturbing activities, a qualified archaeologist shall conduct a short awareness training session for all construction workers and supervisory personnel. The course shall explain the importance of, and legal basis for, the protection of significant archaeological resources. Each worker shall also learn the proper procedures to follow in the event cultural resources or human remains/burials are uncovered during construction activities, including work curtailment or redirection and to immediately contact their supervisor and the archaeological monitor. The worker education session shall include visuals of artifacts (prehistoric and historic) that might be found in the project vicinity, and take place on the construction site immediately prior to the start of construction.</i>	Placer County Community Development Resource Agency	Prior to the initiation of ground-disturbing activities	



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		<p><i>All ground-disturbing equipment operators shall be required to receive the training and sign a form that acknowledges receipt of the training. This training may be conducted concurrently with the tribal cultural resource awareness training required by Mitigation Measure 17-1(a) included in Chapter 17, Tribal Cultural Resources, of this EIR. The signed form shall be submitted to the Placer County Community Development Resource Agency.</i></p>			
		<p>8-2(b) <i>During any ground-disturbing activities within 100 feet of the recorded boundaries of prehistoric site P-31-000193 (CA-PLA-67), and within the approximately 0.88-acre area that was covered with brambles in the northeastern corner of the Placer Greens parcel along the Dry Creek tributary, a qualified archaeologist shall be present to act as a monitor. The monitor shall meet the Secretary of the Interior's Standards and Guidelines for Archaeology (36 CFR Part 61; National Park Service 1983). The aforementioned requirement shall be noted on construction drawings, subject to review and approval by the Placer County Community Development Resource Agency. This monitoring requirement may be combined with the tribal monitoring requirement described in Mitigation Measure 17-1(c) included in Chapter 17, Tribal Cultural Resources, of this EIR.</i></p>	Placer County Community Development Resource Agency	During any ground-disturbing activities within 100 feet of the recorded boundaries of prehistoric site P-31-000193 (CA-PLA-67), and within the approximately 0.88-acre area that was covered with brambles in the northeastern corner of the Placer Greens parcel along the Dry Creek tributary	
		<p>8-2(c) <i>In the event that cultural resources are inadvertently discovered during project activities when an archeological monitor is not</i></p>	Placer County Community Development	During project activities when an archeological	



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		<p><i>present, work in the area must be halted within a 100-foot radius of the find and a qualified archaeologist (pursuant to the Standards at 36 CFR Part 61) shall be notified immediately to evaluate the resource(s) encountered. Construction activities may continue in other areas. If the discovery proves to be significant, additional work, such as data recovery excavation, may be warranted and would be discussed in consultation the project applicant and the relevant regulatory agencies (Placer County, State Historic Preservation Officer [SHPO], or any other relevant regulatory agency).</i></p>	<p>Resource Agency State Historic Preservation Officer</p>	<p>monitor is not present</p>	
8-3	Disturb any human remains, including those interred outside of dedicated cemeteries.	<p>8-3 <i>The following language shall be noted on the project improvement plans, subject to review and approval by the Placer County Community Development Resource Agency:</i></p> <p><i>If articulated or disarticulated human remains are encountered on the proposed project site during construction activities, all work within 100 feet of the find must cease, and any necessary steps to ensure the integrity of the immediate area must be taken. The Placer County Coroner shall be immediately notified. If the Coroner determines the remains are of Native American origin, the Coroner shall notify the Native American Heritage Commission (NAHC) within 24 hours. The NAHC shall determine and notify a Most Likely Descendant (MLD). Further actions shall be determined, in part, by the desires of the MLD. The MLD shall be afforded 48 hours to make</i></p>	<p>Placer County Community Development Resource Agency Placer County Coroner NAHC</p>	<p>Prior to the approval of Improvement Plans for each project phase</p>	





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		<p><i>estimates (per the requirements of Section II of the Land Development Manual (LDM) that are in effect at the time of submittal) to the Engineering and Surveying Division (ESD) for review and approval of each project phase, The plans shall show all physical improvements as required by the conditions for the project as well as pertinent topographical features both on and offsite. All existing and proposed utilities and easements, onsite and adjacent to the project, which may be affected by planned construction, shall be shown on the plans. All landscaping and irrigation facilities within the public right-of-way (or public easements), or landscaping within sight distance areas at intersections, shall be included in the Improvement Plans. The applicant shall pay plan check and inspection fees and Placer County Fire Department improvement plan review and inspection fees with the 1st Improvement Plan submittal. (NOTE: Prior to plan approval, all applicable recording and reproduction costs shall be paid). The cost of the above-noted landscape and irrigation facilities shall be included in the estimates used to determine these fees. It is the applicant's responsibility to obtain all required agency signatures on the plans and to secure department approvals. If the Design/Site Review process is required as a condition of approval for the project, said review process shall be completed prior to submittal of Improvement Plans.</i></p>	<p>and Surveying Division</p>	<p>Plans for each project phase</p>	



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		<p><i>Conceptual landscape plans submitted prior to project approval may require modification during the Improvement Plan process to resolve issues of drainage and traffic safety.</i></p> <p><i>The Final Subdivision Map(s) shall not be submitted to the Engineering and Surveying Division (ESD) until the Improvement Plans are submitted for the second review. Final technical review of the Final Subdivision Map(s) shall not conclude until after the Improvement Plans are approved by the ESD.</i></p> <p><i>Any Building Permits associated with this project shall not be issued until, at a minimum, the Improvement Plans reapproved by the Engineering and Surveying Division.</i></p> <p><i>Prior to the County's final acceptance of the project's improvements, submit to the Engineering and Surveying Division one copy of the Record Drawings in digital format (on compact disc or other acceptable media) along with one blackline hardcopy (black print on bond paper) and one PDF copy. The digital format is to allow integration with Placer County's Geographic Information System (GIS). The final approved blackline hardcopy Record Drawings will be the official document of record.</i></p> <p>10-2(c) <i>The Improvement Plans shall show all proposed grading, drainage improvements, vegetation and tree removal and all work shall</i></p>	Placer County Engineering	Prior to the approval of Improvement Plans for each	



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		<p><i>conform to provisions of the County Grading Ordinance (Ref. Article 15.48, Placer County Code) and Stormwater Quality Ordinance (Ref. Article 8.28, Placer County Code) that are in effect at the time of submittal. No grading, clearing, or tree disturbance shall occur until the Improvement Plans are approved and all temporary construction fencing has been installed and inspected by a member of the Development Review Committee. All cut/fill slopes shall be at a maximum of 2:1 (horizontal: vertical) unless a soils report supports a steeper slope and the ESD concurs with said recommendation.</i></p> <p><i>The applicant shall revegetate all disturbed areas. Revegetation, undertaken from April 1 to October 1, shall include regular watering to ensure adequate growth. A winterization plan shall be provided with project Improvement Plans. It is the applicant's responsibility to ensure proper installation and maintenance of erosion control/winterization before, during, and after project construction. Soil stockpiling or borrow areas, shall have proper erosion control measures applied for the duration of the construction as specified in the Improvement Plans. Provide for erosion control where roadside drainage is off of the pavement, to the satisfaction of the ESD.</i></p> <p><i>The applicant shall submit to the ESD a letter of credit or cash deposit in the amount of 110 percent of an approved engineer's estimate for</i></p>	<p>and Surveying Division</p>	<p>project phase</p>	



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		<p><i>winterization and permanent erosion control work prior to Improvement Plan approval to guarantee protection against erosion and improper grading practices. One year after the County's acceptance of improvements as complete, if there are no erosion or runoff issues to be corrected, unused portions of said deposit shall be refunded to the project applicant or authorized agent.</i></p> <p><i>If, at any time during construction, a field review by County personnel indicates a significant deviation from the proposed grading shown on the Improvement Plans, specifically with regard to slope heights, slope ratios, erosion control, winterization, tree disturbance, and/or pad elevations and configurations, the plans shall be reviewed by Placer County ESD for a determination of substantial conformance to the project approvals prior to any further work proceeding. Failure of the Placer County ESD to make a determination of substantial conformance may serve as grounds for the revocation/modification of the project approval by the appropriate hearing body.</i></p>			
10-3	Be located on a geological unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction,	10-3(a) <i>The Improvement Plan submittal shall include a final geotechnical engineering report produced by a California Registered Civil Engineer or Geotechnical Engineer for Engineering and Surveying Division (ESD) review and approval. The report shall address and make recommendations on the following:</i>	Placer County Engineering and Surveying Division	Prior to the approval of Improvement Plans for each project phase and issuance of Building Permits	



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	<p>or collapse, or be located on expansive soil, as defined in Table 18-1B of the Uniform Building Code.</p>	<p>A. Road, pavement, and parking area design;                      B. Structural foundations, including retaining wall design (if applicable);                      C. Grading practices;                      D. Erosion/winterization;                      E. Special problems discovered on-site, (i.e., groundwater, expansive/unstable soils, potential for smectite clays etc.); and                      F. Slope stability.</p> <p>Once approved by the ESD, two copies of the final report shall be provided to the ESD and one copy to the Building Services Division for its use. It is the responsibility of the developer to provide for engineering inspection and certification that earthwork has been performed in conformity with recommendations contained in the report.</p> <p>If the geotechnical engineering report indicates the presence of critically expansive or other soil problems that, if not corrected, could lead to structural defects, a certification of completion of the requirements of the soils report shall be required for subdivisions, prior to issuance of Building Permits. This certification may be completed on a lot- by-lot basis or on a Tract basis. This shall be so noted on the Improvement Plans, in the Development Notebook (if required), in the Conditions, Covenants and Restrictions</p>			



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		<p><i>(CC&amp;Rs), and on the Informational Sheet filed with the Final Subdivision Map(s).</i></p> <p>10-3(b) <i>The preliminary geotechnical engineering reports performed by Wallace and Kuhl dated December 1, 2020 for the Schellhous parcel and September 17, 2014 for the Placer Greens parcel indicated the presence of critically expansive soils or other soil problems which, if not corrected, would lead to structural defects.</i></p> <p>A) <i>For pad graded lots, prior to final acceptance of project improvements or consideration of early Building Permits and after the completion of the pad grading for all lots, the applicant shall submit to the Engineering and Surveying Division (ESD) for review and approval, a soil investigation of each lot produced by a California Registered Civil or Geotechnical Engineer (Section 17953-17955 California Health and Safety Code). Once approved by the ESD, two copies of the final soil investigation and certification for each lot shall be provided to the ESD and one copy to the Building Services Division for its use.</i></p> <p><i>The soil investigations shall include recommended corrective action that is likely to prevent structural damage to each proposed dwelling. In addition, the applicant shall include</i></p>	<p>Placer County Engineering and Surveying Division</p>	<p>Prior to the approval of Improvement Plans for each project phase</p>	



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		<p><i>in the Development Notebook (or modify the Development Notebook) to include the soil problems encountered on each specific lot as well as the recommended corrective actions. A note shall be included on the Improvement Plans, Conditions, Covenants and Restrictions (CC&amp;Rs), and the Informational Sheet filed with the Final Subdivision Map(s), which indicates the requirements of this condition.</i></p>			
10-4	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.	<p>10-4 <i>Should paleontological resources be discovered during ground disturbing activities, work shall be halted in the area within 50 feet of the find. The applicant shall notify the Placer County Community Development Resource Agency and retain a qualified paleontologist to inspect the discovery. If deemed significant under criteria established by the Society for Vertebrate Paleontology with respect to authenticity, completeness, preservation, and identification, the resource(s) shall then be salvaged and deposited in an accredited and permanent scientific institution (e.g., University of California Museum of Paleontology [UCMP] or Sierra College), where the discovery would be properly curated and preserved for the benefit of current and future generations. The language of this mitigation measure shall be included on any future grading plans, utility plans, and improvement plans approved by the Placer County Engineering and Surveying Division for the proposed project, where excavation work would be required. Construction may continue in areas outside of the buffer zone.</i></p>	Placer County Community Development Resource Agency	During ground-disturbing activities	



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10-5	Result in significant disruptions, displacements, compaction or overcrowding of the soil, or substantial change in topography or ground surface relief features.	10-5 Implement Mitigation Measures 10-2(b), 10-2(c), 10-3(a), and 10-3(b).	See Mitigation Measures 10-2(b), 10-2(c), 10-3(a), and 10-3(b)	See Mitigation Measures 10-2(b), 10-2(c), 10-3(a), and 10-3(b)	
<b>11. Hazards and Hazardous Materials</b>					
11-1	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.	11-1 Implement Mitigation Measure 7-4(a).	See Mitigation Measure 7-4(a)	See Mitigation Measure 7-4(a)	
11-2	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment.	11-2(a) Prior to issuance of a demolition permit by the County for any on-site structures, the project applicant shall provide a site assessment that determines whether any structures to be demolished contain lead-based paint (LBP) or asbestos. If structures do not contain LBP or asbestos, further mitigation is not required; however, if LBP is found, all loose and peeling paint shall be removed and disposed of by a licensed and certified lead paint removal contractor, in accordance with California Air Resources Board recommendations and OSHA requirements. If asbestos is found, all construction activities shall comply with all requirements and regulations promulgated through the Placer County Air Pollution Control District (PCAPCD) Asbestos Dust Mitigation Plan. The demolition contractor shall be informed that all paint on the buildings shall be	Placer County <a href="#">Engineer/Environmental Health Division</a>	Prior to the issuance of a demolition permit by the County for any on-site structures	



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		<p><i>considered as containing lead and/or asbestos. The contractor shall follow all work practice standards set forth in the Asbestos National Emission Standards for Hazardous Air Pollutants (Asbestos NESHAP, 40 CFR, Part 61, Subpart M) regulations, as well as Section V, Chapter 3 of the OSHA Technical Manual. Work practice standards generally include appropriate precautions to protect construction workers and the surrounding community, and appropriate disposal methods for construction waste containing lead paint or asbestos in accordance with federal, State, and local regulations subject to approval by the County Engineer.</i></p> <p>11-2(b) <i>Prior to commencement of construction activities associated with the improvement plan set/phase, the limits of which includes Existing Structure 1 on the Schellhous parcel, the project applicant shall conduct additional testing of soils at the location of the on-site Schellhous residence (Existing Structure 1) for total lead concentrations to determine both the lateral and vertical extent of the lead contamination. Additional testing shall be conducted in accordance with USEPA Method 6010B. Where the lead concentrations exceed the applicable California DTSC Human and Ecological Risk Office Note 3 Screening Level, the soil shall be excavated, and that portion of material may be transported, and disposed of offsite at an appropriate Class I or Class II facility permitted by DTSC, or other options</i></p>	Placer County Community Development Resource Agency	Prior to the commencement of construction activities associated with the improvement plan set/phase	



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		<p><i>implemented as deemed satisfactory to PCEHD and/or DTSC. The results of soil sampling and analysis, as well as verification of proper remediation and disposal, shall be submitted to the Placer County Community Development Resource Agency for review and approval. Any remediation shall be completed prior to acceptance of the site improvements for that phase.</i></p> <p>11-2(c) <i>Prior to Improvement Plan approval, the project applicant shall hire a licensed well contractor to obtain a well abandonment permit from the Placer County Environmental Health Division (PCEHD) for all on-site wells, and properly abandon the on-site wells, pursuant to Department of Water Resources Bulletin 74-81 (Water Well Standards, Part III), for review and approval by the PCEHD. In addition, prior to Improvement Plan approval, the project applicant shall ensure that any on-site septic systems are abandoned in compliance with applicable PCEHD standards. Verification of abandonment shall be ensured by the Placer County Community Development Resource Agency.</i></p> <p>11-2(d) <i>Prior to commencement of grading and construction, the construction contractor, a representative from PG&amp;E, and a representative from the County Engineering and Surveying Division shall meet on the project site and the applicant shall prepare site-specific safety guidelines for construction</i></p>	<p>Placer County Community Development Resource Agency</p> <p>Placer County Environmental Health Division</p> <p>Placer County Engineering and Surveying Division</p>	<p>Prior to the approval of Improvement Plans</p> <p>Prior to the commencement of grading and construction activities</p>	



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		<i>in the field to the satisfaction of the Engineering and Surveying Division. The safety guidelines and field-verified location of the pipeline shall be noted on the Improvement Plans and be included in all construction contracts involving the project site.</i>			
<b>12. Hydrology and Water Quality</b>					
12-1	Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality during construction.	12-1 Implement Mitigation Measures 10-2(a), 10-2(b), and 10-2(c).	See Mitigation Measures 10-2(a) through 10-2(c)	See Mitigation Measures 10-2(a) through 10-2(c)	
12-2	Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality during operations.	12-2(a) <i>The Improvement Plans shall show water quality treatment facilities/Best Management Practices (BMPs) designed according to the guidance of the California Stormwater Quality Association Stormwater Best Management Practice Handbooks for Construction, for New Development/ Redevelopment, and for Industrial and Commercial (or other similar source as approved by the Engineering and Surveying Division (ESD).</i>  <i>Storm drainage from on- and off-site impervious surfaces (including roads) shall be collected and routed through specially designed catch basins, vegetated swales, vaults, infiltration basins, water quality basins, filters, etc. for entrapment of sediment, debris and oils/greases or other identified pollutants, as approved by the ESD. BMPs shall be designed in accordance with the West Placer</i>	Placer County Engineering and Surveying Division	Prior to the approval of Improvement Plans for each project phase	



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		<p><i>Storm Water Quality Design Manual for sizing of permanent post-construction Best Management Practices for stormwater quality protection. No water quality facility construction shall be permitted within any identified wetlands area, floodplain, or right-of-way, except as authorized by project approvals.</i></p> <p><i>All permanent BMPs shall be maintained as required to ensure effectiveness. The applicant shall provide for the establishment of vegetation, where specified, by means of proper irrigation. Proof of on-going maintenance, such as contractual evidence, shall be provided to ESD upon request. The project owners/permittees shall provide maintenance of these facilities and annually report a certification of completed maintenance to the County DPW Stormwater Coordinator, unless, and until, a County Service Area is created and said facilities are accepted by the County for maintenance. Prior to Improvement Plan approval or Final Subdivision Map recordation, easements shall be created and offered for dedication to the County for maintenance and access to these facilities in anticipation of possible County maintenance.</i></p> <p><i>12-2(b) The Improvement Plans shall include the message details, placement, and locations showing that all storm drain inlets and bio-retention planters within the project area shall</i></p>	<p>Placer County Engineering and Surveying Division</p>	<p>Prior to the approval of Improvement Plans for each project phase</p>	



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		<p><i>be permanently marked/embossed with prohibitive language such as “No Dumping! Flows to Creek.” or other language and/or graphical icons to discourage illegal dumping as approved by the Engineering and Surveying Division (ESD). ESD-approved signs and prohibitive language and/or graphical icons, which prohibit illegal dumping, shall be posted at public access points along channels and creeks within the project area. The Property Owners’ association is responsible for maintaining the legibility of stamped messages and signs.</i></p> <p>12-2(c) <i>This project is located within the permit area covered by Placer County’s Small Municipal Separate Storm Sewer System (MS4) Permit (State Water Resources Control Board National Pollutant Discharge Elimination System (NPDES)). Project-related storm water discharges are subject to all applicable requirements of said permit.</i></p> <p><i>The project shall implement permanent and operational source control measures as applicable. Source control measures shall be designed for pollutant generating activities or sources consistent with recommendations from the California Stormwater Quality Association (CASQA) Stormwater BMP Handbook for New Development and Redevelopment, or equivalent manual, and shall be shown on the Improvement Plans.</i></p>	<p>Placer County Engineering and Surveying Division</p>	<p>Prior to the approval of Improvement Plans for each project phase</p>	



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		<p><i>The project is also required to implement Low Impact Development (LID) standards designed to reduce runoff, treat storm water, and provide baseline hydromodification management as outlined in the West Placer Storm Water Quality Design Manual.</i></p> <p>12-2(d) <i>Pursuant to the State of California NPDES Phase II MS4 Permit, this project is a Regulated Project that creates and/or replaces 5,000 square feet or more of impervious surface. A final Stormwater Quality Plan (SWQP) shall be submitted, either within the final Drainage Report or as a separate document that identifies how this project will meet the Phase II MS4 permit obligations. Site design measures, source control measures, and Low Impact Development (LID) standards, as necessary, shall be incorporated into the design and shown on the Improvement Plans. In addition, pursuant to the Phase II MS4 permit, projects creating and/or replacing one acre or more of impervious surface are also required to demonstrate hydromodification management of stormwater such that post-project runoff is maintained to equal or below pre-project flow rates for the 2 year, 24-hour storm event, generally by way of infiltration, rooftop and impervious area disconnection, bio-retention, and other LID measures that result in post-project flows that mimic pre-project conditions.</i></p>	Placer County Engineering and Surveying Division	Prior to the approval of Improvement Plans for each project phase	
12-4	Substantially alter the existing drainage pattern	12-4(a) <i>As part of the Improvement Plan submittal process, the preliminary drainage report</i>	Placer County Engineering	Prior to the approval of Improvement	





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		<p><i>improvements. Prior to Improvement Plan or Final Subdivision Map(s) approval, the applicant shall obtain all drainage easements and necessary permits required by outside agencies.</i></p> <p>A) <i>Drainage along the intersection improvements at Cook Riolo and PFE Road intersection.</i></p> <p>B) <i>The culverts and associated grading under PFE Road and Antelope Road along the project frontage.</i></p> <p>12-4(c) <i>The Improvement Plans shall show that drainage facilities, for purposes of collecting runoff on individual lots, are designed in accordance with the requirements of the County Stormwater Management Manual that are in effect at the time of submittal, and shall comply with applicable storm water quality standards, to the satisfaction of the Engineering and Surveying Division (ESD). These facilities shall be constructed with subdivision improvements. Prior to Improvement Plan approval for projects without Final Subdivision/Parcel Maps or Final Subdivision/Parcel Map(s) recordation, easements shall be created and offered for dedication as required by the ESD. Maintenance of these facilities shall be provided by the homeowners'/property owners' association and annual notification to the county that annual maintenance of the</i></p>	Placer County Engineering and Surveying Division	Prior to the approval of Improvement Plans for each project phase	



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		<p><i>storm water quality BMPs has occurred is required.</i></p> <p>12-4(d) <i>This project is subject to the one-time payment of drainage improvement and flood control fees pursuant to the “Dry Creek Watershed Interim Drainage Improvement Ordinance” (Ref. Article 15.32, Placer County Code). The current estimated development fee is \$133,728 (\$224 per single family residential unit), payable to the Engineering and Surveying Division prior to Building Permit issuance. The fees to be paid shall be based on the fee program in effect at the time that the application is deemed complete.</i></p>	Placer County Engineering and Surveying Division	Prior to the issuance of Building Permits	
		<p>12-4(e) <i>This project is subject to payment of annual drainage improvement and flood control fees pursuant to the “Dry Creek Watershed Interim Drainage Improvement Ordinance” (Ref. Chapter 15, Article 15.32, Placer County Code). Prior to Building Permit issuance, the applicant shall cause the subject property to become a participant in the existing Dry Creek Watershed County Service Area for purposes of collecting such annual assessments. The current estimated annual fee is \$20,895 (\$35 per single family residential unit).</i></p>	Placer County Engineering and Surveying Division	Prior to the issuance of Building Permits	
		<p>12-4(f) <i>On the Improvement Plans and Informational Sheet(s) filed with the Final Subdivision Map(s), show the limits of the future, unmitigated, fully developed, 100-year flood plain (after grading) for the Dry Creek Antelope</i></p>	Placer County Engineering and Surveying Division	Prior to the <a href="#">submittal approval</a> of Improvement Plans and Informational	



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Impact Number	Impact	Mitigation Measures	Monitoring Agency	Implementation Schedule	Sign-off
		<p><i>North Road Tributary (western drainageway) and the FEMA floodplain and designate same as a building setback line unless greater setbacks are required by other conditions contained herein.</i></p> <p>12-4(g) <i>On the Improvement Plans and Informational Sheet(s) filed with the Final Subdivision Map(s), show that finished house pad elevations for all Lot's along the floodplain shall be a minimum of two feet above the 100-year flood plain line (or finished floor -three feet above the 100-year floodplain line). The final pad elevation shall be certified by a California registered civil engineer or licensed land surveyor and submitted to the Engineering and Surveying Division. This certification shall be done prior to construction of the foundation or at the completion of final grading, whichever comes first. No building construction is allowed until the certification has been received by the Engineering and Surveying Division and approved by the floodplain manager. Benchmark elevation and location shall be shown on the Improvement Plans and Informational Sheet(s) to the satisfaction of Development Review Committee.</i></p>	Placer County Engineering and Surveying Division	<p>Sheet(s) filed with the Final Subdivision Map(s)</p> <p>Prior to the <a href="#">submittal approval</a> of Improvement Plans and Informational Sheet(s) filed with the Final Subdivision Map(s)</p>	
12-5	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of	12-5 <i>Prior to Improvement Plan approval, the applicant shall obtain from the Federal Emergency Management Agency (FEMA), a Conditional Letter of Map Revision (CLOMR) or Conditional Letter of Map Revision based on Fill (CLOMR-F) for fill within a Special Flood Hazard Area, if required. A copy of the letter</i>	Placer County Engineering and Surveying Division	Prior to the approval of Improvement Plans	



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	impervious surfaces, in a manner which would impede or redirect flood flows or expose people or structures to risk of loss, injury or death involving flooding through the placement of housing in a flood hazard area, or risk release of pollutants due to project inundation.	<i>shall be provided to the Engineering and Surveying Division. A Letter of Map Revision (LOMR), or a Letter of Map Revision based on Fill (LOMR-F) from FEMA shall be provided to the Engineering and Surveying Division prior to acceptance of project improvements as complete.</i>			
<b>15. Public Services and Utilities</b>					
15-6	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.	<p>15-6 <i>The Improvement Plans shall show all utilities, including the existing main overhead utilities along the project's frontage, placed underground with the project improvements. This project is located within an underground utility district established pursuant to Placer County Code Article 13.36.040.</i></p> <p><i>The Improvement Plans shall show that all new and modified electrical, communications, and television services associated with the project shall be placed underground in accordance with current construction standards. All existing overhead utility poles and wires impacted by the project construction shall be replaced with underground facilities, or provisions made to accommodate future facilities undergrounding, to the satisfaction of Placer County and the serving utility companies. Any existing utility pole-mounted lights within the parcel boundaries, which are</i></p>	Placer County Engineering and Surveying Division	Prior to the approval of Improvement Plans for each project phase	



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Impact Number	Impact	Mitigation Measures	Monitoring Agency	Implementation Schedule	Sign-off
		<p><i>privately owned/operated/funded for the benefit of that property, shall be replaced with building-mounted or freestanding light poles, with underground electrical services, to the satisfaction of Placer County.</i></p> <p><i>Alternatively, if all of the serving utility companies state in writing that undergrounding their services can be deferred, to a future area-wide undergrounding project scheduled construction date, a cash in-lieu contribution based on an Engineer's Estimate of the cost of undergrounding the utilities plus 25% contingency shall be paid to Placer County prior to Improvement Plan approval.</i></p>			
<b>16. Transportation</b>					
16-1	Conflict with a program, plan, ordinance, or policy, except LOS, addressing the circulation system during construction activities.	<p>16-1 <i>The Improvement Plans shall include a striping and signing plan and shall include all on- and off-site traffic control devices. Prior to the commencement of construction, a construction signing and traffic control plan shall be provided to the Engineering and Surveying Division for review and approval. The construction signing and traffic control plan shall include (but not be limited to) items such as:</i></p> <ul style="list-style-type: none"> <li>• <i>Guidance on the number and size of trucks per day entering and leaving the project site;</i></li> <li>• <i>Identification of arrival/departure times that would minimize traffic impacts;</i></li> <li>• <i>Approved truck circulation patterns;</i></li> </ul>	Placer County Engineering and Surveying Division	Prior to the initiation of construction activities	



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Impact Number	Impact	Mitigation Measures	Monitoring Agency	Implementation Schedule	Sign-off
		<ul style="list-style-type: none"> <li>• Locations of staging areas;</li> <li>• Locations of employee parking and methods to encourage carpooling and use of alternative transportation;</li> <li>• Methods for partial/complete street closures (e.g., timing, signage, location and duration restrictions);</li> <li>• Criteria for use of flaggers and other traffic controls;</li> <li>• Preservation of safe and convenient passage for bicyclists and pedestrians through/around construction areas;</li> <li>• Monitoring for roadbed damage and timing for completing repairs;</li> <li>• Limitations on construction activity during peak/holiday weekends and special events;</li> <li>• Preservation of emergency vehicle access;</li> <li>• Coordination of construction activities with construction of other projects that occur concurrently in the DCWPCP to minimize potential additive construction traffic disruptions, avoid duplicative efforts (e.g., multiple occurrences if similar signage), and maximize effectiveness of traffic mitigation measures (e.g., joint employee alternative transportation programs);</li> <li>• Removing traffic obstructions during emergency evacuation events; and</li> </ul>			



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Impact Number	Impact	Mitigation Measures	Monitoring Agency	Implementation Schedule	Sign-off
		<ul style="list-style-type: none"> <li>• <i>Providing a point of contact for DCWPCP residents and guests to obtain construction information, have questions answered, and convey complaints.</i></li> </ul> <p><i>The construction signing and traffic control plan shall be developed such that the following minimum set of performance standards is achieved throughout project construction. It is anticipated that additional performance standards would be developed once details of project construction are better known.</i></p> <ul style="list-style-type: none"> <li>• <i>All construction employees shall park in designated lots owned by the project applicant or on private lots otherwise arranged for by the project applicant.</i></li> <li>• <i>Roadways shall be maintained clear of debris (e.g., rocks) that could otherwise impede travel and impact public safety.</i></li> </ul>			
<b>17. Tribal Cultural Resources</b>					
17-1	Cause a substantial adverse change in the significance of a tribal cultural resource, defined in PRC Section 21074.	17-1(a) <i>Prior to initiation of construction, all construction crew members, consultants, and other personnel involved in project implementation shall receive project-specific tribal cultural resource awareness training. The training shall be conducted in coordination with qualified cultural resource specialists and representatives from culturally-affiliated Native American Tribes. The training will emphasize</i>	Placer County Community Development Resource Agency  Placer County Coroner	Prior to the initiation of construction activities	



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Impact Number	Impact	Mitigation Measures	Monitoring Agency	Implementation Schedule	Sign-off
		<p><i>the requirement for confidentiality and culturally-appropriate, respectful treatment of any find of significance to culturally-affiliated Native Americans Tribes. All personnel required to receive the training shall also be required to sign a form that acknowledges receipt of the training, which shall be submitted to the Placer County Community Development Resource Agency for review and approval.</i></p> <p><i>As a component of the training, a brochure will be distributed to all personnel associated with project implementation. At a minimum the brochure shall discuss the following topics in clear and straightforward language:</i></p> <ul style="list-style-type: none"> <li><i>• Field indicators of potential archaeological or cultural resources (i.e., what to look for; for example: archaeological artifacts, exotic or non-native rock, unusually large amounts of shell or bone, significant soil color variation, etc.);</i></li> <li><i>• Regulations governing archaeological resources and tribal cultural resources;</i></li> <li><i>• Consequences of disregarding or violating laws protecting archaeological or tribal cultural resources; and</i></li> <li><i>• Steps to take if a worker encounters a possible resource.</i></li> </ul>	NAHC		



**MITIGATION MONITORING AND REPORTING PROGRAM  
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Impact Number	Impact	Mitigation Measures	Monitoring Agency	Implementation Schedule	Sign-off
		<p><i>The training shall include project-specific guidance for on-site personnel including agreed upon protocols for resource avoidance, when to stop work, and who to contact if potential archaeological or tribal cultural resources are identified. The training shall also direct work to stop, and contact with the County Coroner and the NAHC to occur immediately, in the event that potential human remains are identified. NAHC will assign a Most Likely Descendant if the remains are determined by the Coroner to be Native American in origin.</i></p> <p>17-1(b) <i>The following language shall be noted on project Improvement Plans, subject to review and approval by the Placer County Community Development Resource Agency:</i></p> <p><i>If potential tribal cultural resources, archaeological resources, other cultural resources, articulated, or disarticulated human remains are discovered during construction activities, all work shall cease within 100 feet of the find (based on the apparent distribution of cultural resources). Examples of potential cultural materials include midden soil, artifacts, chipped stone, exotic (non-native) rock, or unusual amounts of baked clay, shell, or bone.</i></p> <p><i>A qualified cultural resources specialist and Native American Representative from the traditionally and culturally affiliated Native American Tribe(s) will assess the significance</i></p>	<p>Placer County Community Development Resource Agency</p> <p>County Coroner</p> <p>NAHC</p>	<p>Prior to the approval of Improvement Plans for each project phase</p>	



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Impact Number	Impact	Mitigation Measures	Monitoring Agency	Implementation Schedule	Sign-off
		<p><i>of the find and make recommendations for further evaluation and treatment as necessary. Culturally appropriate treatment that preserves or restores the cultural character and integrity of a Tribal Cultural Resource may be, but is not limited to, processing materials for reburial, minimizing handling of cultural objects, leaving objects in place within the landscape, construction monitoring of further construction activities by Tribal representatives of the traditionally and culturally affiliated Native American Tribe, and/or returning objects to a location within the project area where they will not be subject to future impacts. The UAIC does not consider curation of tribal cultural resources to be appropriate or respectful and requests that materials not be permanently curated, unless specifically requested by the Tribe.</i></p> <p><i>If articulated or disarticulated human remains are discovered during construction activities, the County Coroner and Native American Heritage Commission shall be contacted immediately. Upon determination by the County Coroner that the find is Native American in origin, the Native American Heritage Commission will assign the Most Likely Descendant(s) who will work with the project proponent to define appropriate treatment and disposition of the burials.</i></p> <p><i>Following a review of the find and consultation with appropriate experts, the authority to</i></p>			



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		<p><i>proceed may be accompanied by the addition of development requirements which provide for protection of the site and/or additional measures necessary to address the unique or sensitive nature of the site. The treatment recommendations made by the cultural resource specialist and the Native American Representative will be documented in the project record. Any recommendations made by these experts that are not implemented, must be documented and explained in the project record. Work in the area(s) of the cultural resource discovery may only proceed after authorization is granted by the Placer County Community Development Resource Agency following coordination with cultural resources experts and tribal representatives as appropriate.</i></p> <p>17-1(c) <i>The following language shall be noted on project Improvement Plans, subject to review and approval by the Placer County Community Development Resource Agency:</i></p> <p><i>The developer shall retain one tribal monitor to monitor all ground-disturbing activities in the two mapped sensitive areas agreed to during AB 52 consultation between Placer County and the UAIC (confidential mapped areas previously provided to the developer).</i></p> <p><i>The contractor/construction manager shall provide the UAIC at least 72 hours' notice prior to initiating ground-disturbing activities in the</i></p>	<p>Placer County Community Development Resource Agency</p>	<p>Prior to the approval of Improvement Plans for each project phase</p>	



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Impact Number	Impact	Mitigation Measures	Monitoring Agency	Implementation Schedule	Sign-off
		<p><i>identified areas. In the event the tribal monitor does not report to the job site at the scheduled time, construction activities may proceed without monitoring, as long as the required notice was provided and documented.</i></p> <p><i>Tribal monitoring shall be limited to times when active soil disturbance is occurring, and the monitoring shall be curtailed once an area has been disturbed (with associated tribal monitoring) to a depth of at least two feet, and the tribal monitor determines there is a low potential for tribal cultural resources to be discovered.</i></p> <p><i>The tribal monitor shall have the authority to temporarily pause ground disturbance within 100 feet of a discovery for a duration long enough to examine the resource. If no resources are identified, then construction activities shall proceed, and no agency notifications are required. In the event that a Tribal Cultural Resource is identified, the tribal monitor shall flag off the discovery location and notify the County immediately to coordinate regarding appropriate and respectful treatment pursuant to state law. The County shall also serve to mediate any conflicts between the UAIC and the project proponent related to Tribal Cultural Resources on the project site. No removal or disturbance of any discoveries is permitted until authorized by the County.</i></p>			



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		<p><i>The tribal monitor shall wear appropriate construction safety equipment including steel-toed boots, construction vest and hard hat.</i></p> <p>17-1(d) <i>The UAIC shall be offered access to view soil piles, trenches or other disturbed areas within the Dry Creek corridor following initial grading associated with the walking trails or any other construction activity within the creek corridor. Access shall be allowed within the first five days of ground-breaking activity.</i></p> <p><i>If potential Native American prehistoric, historic, archaeological or cultural resources including midden soil, artifacts, chipped stone, exotic rock (non-native), or unusual amounts of baked clay, shell or bone are identified during this initial post-ground disturbance inspection the following actions shall be taken:</i></p> <ul style="list-style-type: none"> <li><i>Work shall be suspended within 100 feet of the find, and the project applicant shall immediately notify the CEQA lead agency representative. The project applicant shall coordinate any subsequent investigation of the site with a qualified archaeologist approved by the Placer County Community Development Resource Agency, if deemed appropriate, and a tribal representative from the culturally-affiliated tribe(s). The archaeologist shall coordinate with the culturally-affiliated tribe(s) to allow for</i></li> </ul>	<p>Placer County Community Development Resource Agency</p> <p>UAIC Tribal Representative</p>	<p>During construction activities</p>	



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Impact Number	Impact	Mitigation Measures	Monitoring Agency	Implementation Schedule	Sign-off
		<p><i>proper management recommendations should potential impacts to the resources be found by the CEQA lead agency representative to be significant.</i></p> <ul style="list-style-type: none"> <li><i>Possible management recommendations for historical, unique archaeological or TCRs could include resource avoidance, preservation in place, reburial on-site, or other measures deemed acceptable by the applicant, the County, and the tribal representative from the UAIC.</i></li> <li><i>The contractor shall implement any measures deemed by CEQA lead agency representative staff to be necessary and feasible to avoid or minimize significant effects to the TCR, including possible retention of a Tribal Monitor whenever work is occurring within 100 feet of the find.</i></li> </ul> <p>17-1(e) Implement Mitigation Measure 8-2(b).</p>			
<b>18. Wildfire</b>					
18-2	Due to factors such as on-site fuel sources, slope, and prevailing winds, exacerbate wildfire risks, and thereby expose project occupants to, pollutant	18-2 In conjunction with the submittal of and prior to the approval of Improvement Plans, the applicant shall submit a Vegetation Management Plan (VMP) for review and approval by CAL FIRE, PCFD, and Placer County Community Development Resource Agency. The VMP shall identify roles,	Placer County Community Development Resource Agency CAL FIRE	In conjunction with the submittal of and prior to the approval of Improvement Plans	



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	concentrations from a wildfire or the uncontrolled spread of a wildfire.	<p><i>responsibilities, and financial resources to ensure successful implementation. The VMP shall be implemented by the project developer and maintained in perpetuity by the project's proposed homeowner's association and may include, but not necessarily be limited to, the following:</i></p> <ul style="list-style-type: none"> <li>• <i>Management of the Open Spaces During Project Construction or Adjacent Construction:</i> <ul style="list-style-type: none"> <li>○ <i>Prior to construction activities, all Open Space boundaries shall be designated by placing high visibility construction fencing and/or silt fencing. Fencing shall be maintained in good condition until permanent post and cable fencing can be installed; and</i></li> <li>○ <i>Prior to working within Open Space areas adjacent to wetlands, a qualified wetland biologist shall flag the wetland boundary and monitor construction activities to prevent encroachment into the wetland areas.</i></li> </ul> </li> <li>• <i>Open Space Maintenance</i> <ul style="list-style-type: none"> <li>○ <i>Ongoing Fuel Load Management activities shall</i></li> </ul> </li> </ul>	Placer County Fire Department		



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Impact Number	Impact	Mitigation Measures	Monitoring Agency	Implementation Schedule	Sign-off
		<p><i>focus on areas close to homes or on borders, as approved by the County and include activities to mow annual grasses, remove dead and/or diseased trees, snags, and debris, limb live trees up to a height of 10 feet above ground where feasible, and remove understory fuels over one foot in height, where feasible. The use of goats shall be the preferred method of reducing vegetation materials; alternative methods, such as plastic string weed trimmers or other County-approved equipment may be acceptable, but shall be limited to the maximum extent feasible. Chipping of material shall be permitted. Chipped material shall be removed from the site unless otherwise approved by the County. Prescribed burning shall be prohibited and herbicide use shall not be allowed within the fuel load reduction area; and</i></p> <ul style="list-style-type: none"> <li>o <i>Annual monitoring memos shall be submitted to the County and the Open Space Manager/HOA by June 30 of</i></li> </ul>			



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		<p><i>each year. The memos shall include, at a minimum, the following:</i></p> <ul style="list-style-type: none"> <li>➤ <i>An assessment of dead vegetative matter (thatch) and management recommendations, if needed; and</i></li> <li>➤ <i>An evaluation of general site conditions and recommendations for remedial fuel reduction actions to be included in the annual monitoring memo and shared with the Open Space Manager/HOA.</i></li> </ul>			



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# Appendix

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# **Biological Resources Assessment**

Creekview Ranch

Placer County, California

February 2023





**Prepared for:**

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**Recommended Citation:**

Madrone Ecological Consulting, LLC (Madrone). 2022. *Biological Resources Assessment for Creekview Ranch*. Prepared for Raney Planning & Management. Published on 10 February 2023.



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Attachment B. IPaC Trust Resource Report for the Study Area

Attachment C. CNPS Inventory of Rare and Endangered Plants Query for the "Citrus Heights, California" USGS Quadrangle and Eight Surrounding Quadrangles

Attachment D. Aquatic Resources Delineation Report for the Schellhous Property

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## 1.0 INTRODUCTION

This report presents the results of a Biological Resources Assessment (BRA) conducted for the Overall Creekview Ranch Project (Overall Project), which consists of the following three components: the Creekview Ranch Residential Development (Project), three off-site sewer alternatives, and two potential future trails (Figure 1). An area somewhat larger than the Overall Project was surveyed to ensure survey coverage for the Overall Project components and is referred to throughout this document as the Study Area. The Study Area is located north and south of PFE Road, east of Cook Riolo Road, largely north of the Sacramento County line, and west of the Union Pacific railroad tracks in southwestern Placer County, California. The approximately 239-acre Study Area is located in portions of Sections 9, 10, and 16, Township 10 North, Range 6 East (MDB&M) of the "Citrus Heights, California" 7.5-Minute Series USGS Topographic Quadrangle (USGS 2018) (Figure 2).

### 1.1 Project Description

The proposed Project would generally include subdivision of the Project site to develop a total of 597 single-family lots in four distinct neighborhoods with ten villages comprised of a range of lot sizes. The lots would range in size from 3,400 square feet (sf) to 9,700 sf. Various associated improvements would be included in the development of the proposed Project, including, but not limited to, parks, trails, landscaping, and utility installation. Circulation system improvements would include new gated entries along PFE Road and Antelope Road, which would connect to an internal system of private roadways. In addition, the Project would include the widening of PFE Road and Antelope Road along the Project frontages, installation of traffic signals along PFE Road, and construction of a west-bound free right turn lane on PFE Road at its intersection with Cook Riolo Road. Proposed site plans are included as **Attachment A**.

### 1.2 Off-Site Sewer Alternatives

Three off-site sewer alternative alignments are in this document, only one of which will ultimately be implemented (Figure 1). Alternative 1A crosses Dry Creek in the northeast corner of the Study Area and runs north just west of the City of Roseville Wastewater Treatment Plant (WWTP). This alignment ties in near the northern portion of the WWTP. Alternative 1B would also cross Dry Creek in the northeast corner of the Study Area, but would then run east, just south of the WWTP before heading north again to tie in on the eastern edge of the WWTP. The Dry Creek crossing in both Alternative 1A and 1B would involve a jack and bore under the creek. Alternative 1C runs east along PFE Road, would be hung on the Atkinson Road bridge over Dry Creek, and connect to an existing sewer line just north of Dry Creek.

### 1.3 Proposed Future Trail Alignments

Two off-site sections of recreational trail (West Trail and East Trail) are being analyzed in this document, but are not proposed for construction concurrent with the Project. In the future, these segments would cross Dry Creek, and would allow the on-site trail to connect to the Dry Creek Greenway West Trail that is currently in the planning phase. The West Trail would connect Creekview Ranch School to the on-site trail network

and would require a bridge across Dry Creek and bridges across both intermittent tributaries south and north of Dry Creek (**Figure 1**). The East Trail would also involve a bridge across Dry Creek and would connect the on-site trail network to the planned Dry Creek Greenway West Trail (**Figure 1**).

#### **1.4 Regulatory Framework Differences within the Study Area**

The Study Area is located in the Dry Creek/West Placer area of Placer County (County), and north of Sacramento County. The majority of the Study Area is in unincorporated Placer County, but the eastern portion (comprised of portions of the sewer pipeline alternatives) extends into the City of Roseville (City), and the southern portion (several hundred square feet of pavement taper) extends into unincorporated Sacramento County (**Figure 3**). As such, different regulations will apply to work within different portions of the Study Area as follows:

- The Placer County Conservation Plan (PCCP) applies to all Covered Activities within Placer County generally north of PFE Road, but outside of certain non-participating municipalities (Plan Area). The City of Roseville is not participating in the PCCP, so only the portions of the Overall Project Area, that are within Placer County and generally north of PFE Road but outside of the City of Roseville, will participate in the PCCP (**Figure 3**).
- Clean Water Act (CWA) permitting within the PCCP areas will be accomplished through participation in the County Aquatic Resource Program (CARP). Impacts within the portions of the Study Area generally south of PFE Road outside of the PCCP (Non-PCCP Areas) will be accomplished with a separate CWA Section 404 Nationwide Permit or Letter of Permission and CWA Section 401 Water Quality Certification.
- The PCCP will cover biological resources mitigation for most impacts within the Plan Area. However, some resources are not covered by the PCCP, including western spadefoot (*Spea hammondi*) and special-status plant species.
- Biological resources impacts within the City of Roseville must be mitigated in accordance with the City's ordinances, and those within Placer County but outside of the City and outside of the PCCP Plan Area must be mitigated in accordance with the County's ordinances. We did not find any sensitive biological resources within Sacramento County; therefore, Sacramento County ordinances are not detailed below in **Section 2.3**.
- For impacts to species listed on the federal Endangered Species Act (ESA) or California ESA (CESA) occurring within the Non-PCCP Areas, the applicant must consult with the U.S. Fish and Wildlife Service (USFWS) or California Department of Fish and Wildlife (CDFW), as applicable, as detailed below in **Section 2.0**.
- Any work (within the Plan Area or Non-PCCP Areas) that could impact a drainage or riparian habitat will need to obtain a Section 1600 Lake or Streambed Alteration Agreement (LSAA) from CDFW as outlined below in **Section 2.2.6**.

## **2.0 REGULATORY SETTING**

This section describes federal, state and local laws and policies that are relevant to this assessment of biological resources.

## **2.1 Federal Regulations**

### **2.1.1 Federal Endangered Species Act**

The Federal Endangered Species Act (FESA) of 1973 protects species that are federally listed as endangered or threatened with extinction. FESA prohibits the unauthorized “take” of listed wildlife species. Take includes harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing, or collecting wildlife species or any attempt to engage in such activities. Harm includes significant modifications or degradations of habitats that may cause death or injury to protected species by impairing their behavioral patterns. Harassment includes disruption of normal behavior patterns that may result in injury to or mortality of protected species. Civil or criminal penalties can be levied against persons convicted of unauthorized “take.” In addition, FESA prohibits malicious damage or destruction of listed plant species on federal lands or in association with federal actions, and the removal, cutting, digging up, damage, or destruction of listed plant species in violation of state law. FESA does not afford any protections to federally listed plant species that are not also included on a state endangered species list on private lands with no associated federal action.

### **2.1.2 Clean Water Act, Section 404**

Section 404 of the Federal Clean Water Act requires that a Department of the Army permit be issued prior to the discharge of any dredged or fill material into waters of the United States, including wetlands. The U.S. Army Corps of Engineers (USACE) administers this program, with oversight from the U. S. Environmental Protection Agency. Waters of the United States include all navigable waters; interstate waters and wetlands; all intrastate waters and wetlands that could affect interstate or foreign commerce; impoundments of the above; tributaries of the above; territorial seas; and wetlands adjacent to the above.

### **2.1.3 Migratory Bird Treaty Act**

The Migratory Bird Treaty Act (MBTA) prohibits the take, possession, import, export, transport, selling, purchase, barter, or offering for sale, purchase or barter, any native migratory bird, their eggs, parts, and nests, except as authorized under a valid permit (50 CFR 21.11.). Likewise, Section 3513 of the California Fish & Game Code prohibits the “take or possession” of any migratory non-game bird identified under the MBTA. Therefore, activities that may result in the injury or mortality of native migratory birds, including eggs and nestlings, would be prohibited under the MBTA.

## **2.2 State Regulations**

### **2.2.1 California Environmental Quality Act**

The California Environmental Quality Act (CEQA) requires evaluations of project effects on biological resources. Determining the significance of those effects is guided by Appendix G of the CEQA guidelines. These evaluations must consider direct effects on a biological resource within the project site itself, indirect

effects on adjacent resources, and cumulative effects within a larger area or region. Effects can be locally important but not significant according to CEQA if they would not substantially affect the regional population of the biological resource. Significant adverse impacts on biological resources would include the following:

- Substantial adverse effects on any species identified as candidate, sensitive, or special-status in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife (CDFW) or the U.S. Fish and Wildlife Service (USFWS) (these effects could be either direct or via habitat modification);
- Substantial adverse impacts to species designated by the California Department of Fish and Game (2009) as Species of Special Concern;
- Substantial adverse effects on riparian habitat or other sensitive habitat identified in local or regional plans, policies, or regulations or by CDFW and USFWS;
- Substantial adverse effects on federally protected wetlands defined under Section 404 of the Clean Water Act (these effects include direct removal, filling, or hydrologic interruption of marshes, vernal pools, coastal wetlands, or other wetland types);
- Substantial interference with movements of native resident or migratory fish or wildlife species population, or with use of native wildlife nursery sites;
- Conflicts with local policies or ordinances protecting biological resources (e.g., tree preservation policies); and
- Conflict with provisions of an adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or other approved local, regional, or state habitat conservation plan.

### **2.2.2 State Endangered Species Act**

With limited exceptions, the California Endangered Species Act (CESA) of 1984 protects state-designated endangered and threatened species in a way similar to FESA. For projects on private property (i.e. that for which a state agency is not a lead agency), CESA enables CDFW to authorize take of a listed species that is incidental to carrying out an otherwise lawful project that has been approved under CEQA (Fish & Game Code Section 2081).

### **2.2.3 Native Plant Protection Act**

The Native Plant Protection Act (NPPA) was enacted in 1977 and allows the Fish and Game Commission to designate plants as rare or endangered. There are 64 species, subspecies, and varieties of plants that are protected as rare under the NPPA. The NPPA prohibits take of endangered or rare native plants, but includes some exceptions for agricultural and nursery operations; emergencies; and after properly notifying CDFW for vegetation removal from canals, roads, and other sites, changes in land use, and in certain other situations.

#### **2.2.4 Clean Water Act, Section 401**

Section 401 of the Clean Water Act requires any applicant for a 404 permit in support of activities that may result in any discharge into waters of the United States to obtain a water quality certification with the Regional Water Quality Control Board (RWQCB). This program is meant to protect these waters and wetlands by ensuring that waste discharged into them meets state water quality standards. Because the water quality certification program is triggered by the need for a Section 404 permit (and both programs are a part of the Clean Water Act), the definition of waters of the United States under Section 401 is the same as that used by the USACE under Section 404.

#### **2.2.5 California Water Code, Porter-Cologne Act**

The Porter Cologne Act, from Division 7 of the California Water Code, requires any person discharging waste or proposing to discharge waste that could affect the quality of waters of the state to file a report of waste discharge (RWD) with the RWQCB. The RWQCB can waive the filing of a report, but once a report is filed, the RWQCB must either waive or adopt water discharge requirements (WDRs). "Waters of the state" are defined as any surface water or groundwater, including saline waters, within the boundaries of the state.

#### **2.2.6 California Fish and Game Code, Section 1600 – Streambed and Lake Alteration**

The CDFW is responsible for conserving, protecting, and managing California's fish, wildlife, and native plant resources. To meet this responsibility, the Fish and Game Code, Section 1602, requires notification to CDFW of any proposed activity that may substantially modify a river, stream, or lake. Notification is required by any person, business, state or local government agency, or public utility that proposes an activity that will:

- substantially divert or obstruct the natural flow of any river, stream or lake;
- substantially change or use any material from the bed, channel, or bank of any river, stream, or lake;
- or
- deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake.

For the purposes of Section 1602, rivers, streams and lakes must flow at least intermittently through a bed or channel. If notification is required and CDFW believes the proposed activity is likely to result in adverse harm to the natural environment, it will require that the parties enter into a Lake or Streambed Alteration Agreement (LSAA).

#### **2.2.7 California Fish and Game Code, Section 3503.5 - Raptor Nests**

Section 3503.5 of the Fish and Game Code makes it unlawful to take, possess, or destroy hawks or owls, unless permitted to do so, or to destroy the nest or eggs of any hawk or owl.

## **2.3 Local Regulations**

### **2.3.1 Placer County Conservation Plan**

The Placer County Conservation Plan (PCCP) applies to all Covered Activities within Placer County generally north of PFE Road, but outside of certain non-participating municipalities. The City of Roseville is not participating in the PCCP, so only the portions of the Overall Project Area, that are within Placer County, generally north of PFE Road, but outside of the City of Roseville and its sphere of influence, will participate in the PCCP (Figure 3).

The PCCP allows applicants to engage in a streamlined permitting process for mitigating project impacts to aquatic resources and sensitive wildlife species, where previously applicants would need to obtain permits from the reviewing state and federal regulatory agencies (i.e., U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, California Department of Fish and Wildlife, etc.). The PCCP is a multi-component program comprised of:

- Habitat Conservation Plan (HCP) under the Federal Endangered Species Act and a Natural Community Conservation Plan (NCCP) under the California Natural Community Conservation Planning Act,
- County Aquatic Resources Program (CARP) to fulfill the requirements of the federal Clean Water Act and state laws and regulations, and
- In-Lieu Fee Program to fulfill Clean Water Act Section 401/404 compensatory mitigation requirements for impacts to aquatic resources.

The PCCP addresses 14 Covered Species and several Covered Natural Communities and includes conservation measures to protect those Covered Species and their habitats. Projects that occur within the PCCP Plan Area are subject to applicable avoidance and minimization measures, which are intended to ensure that adverse effects on Covered Species and natural communities are avoided and minimized. Any conversion of natural or semi-natural lands, including oak woodland, grasslands, and wetlands will be subject to the applicable permits under the PCCP and associated impact fees. During the local impact authorization process, impact fees including Land Conversion fees and Aquatic/Wetland Special Habitat fees will be calculated utilizing land cover data.

The CARP has a number of additional conditions for work within the vicinity of drainages. Conditions that are relevant to this project include:

- Disturbance within 50 feet of the edge of riparian vegetation shall be limited to exempt activities such as bridge crossings, recreational trails, and outfalls. This 50-foot restricted area is referred to throughout this document as the "Riparian Buffer".
- No structures are permitted within 50 feet of intermittent streams or within 100 feet of perennial streams unless authorized through an approved variance processed by Placer County. In addition, Placer County Code (Chapter 17.54.145) identifies a Watercourse Setback within which no structures are permitted except as approved by the planning director. This "Placer County Watercourse Setback" is defined as designated buffers for various named drainages, and 50-foot buffers for all

other drainages in National Hydrology Dataset (NHD). Within the Overall Project, this is a 300 foot setback from Dry Creek, and a 50 foot setback from all other drainages.

## **2.3.2 Placer County Ordinances**

### 2.3.2.1 Placer County Tree Ordinance

The Placer County (County) Tree Ordinance (Chapter 19.50 of the Placer County Code) (Tree Ordinance) regulates the removal and preservation of trees within the County. "Trees" under the Tree Ordinance includes all tall woody plants native to California (except grey pines and "brush"), with a single main stem or trunk at least six inches in diameter at breast height (DBH), or with multiple trunks with an aggregate of at least ten inches DBH. For all oak species (*Quercus* sp.) the woody plant will be considered a tree when the single main stem is five inches DBH or larger. Each Tree has a "Protected Zone," which is a circle equal to the largest radius of a protected tree's dripline plus one foot. The radius is measured from the trunk at the base of the tree to the greatest extent of the tree's dripline. The Tree Ordinance requires a Tree Permit for any activity within the Protected Zone of a Tree related to a discretionary project. In addition, a Tree Permit is required for the removal of any Protected Tree, unless otherwise exempted.

### 2.3.2.2 Placer County Interim Oak Woodland Guidelines

The County enforces the above Tree Ordinance for cases of impacts to individual, isolated native trees; however, where tree crown canopy coverage is 10 percent/acre or greater and the dominant tree species are native California oaks, the County regulates impacts to these areas as impact to oak woodland under the 2008 *Interim Guidelines for Evaluating Development Impacts on Oak Woodland* (Interim Guidelines). Under the Interim Guidelines, impacts to oak woodlands include all areas within 50 feet of the development footprint (although County staff have clarified that this may be reduced to 10 feet where the avoided oak woodland will be protected), and for every acre of oak woodland impacted, two acres of the same woodland type must be preserved off-site. In addition, any "significant trees" (generally trees >24 inches in diameter at breast height (DBH) or clumps >72 inches in circumference measured at ground level) impacted within the oak woodland must also be mitigated separately in accordance with the Tree Ordinance, above.

### 2.3.2.3 Placer County General Plan Natural Resources Chapter

Chapter 6 of the Placer County General Plan identifies a number of measures to protect natural resources within Placer County, including the following:

*"Policy 6.A.1: The County shall require the provision of sensitive habitat buffers which shall, at a minimum, be measured as follows: 100 feet from the centerline of perennial streams, 50 feet from centerline of intermittent streams, and 50 feet from the edge of sensitive habitats to be protected, including riparian zones, wetlands, old growth woodlands, and the habitat of special status, threatened or endangered species"*

### **2.3.3 City of Roseville Ordinances**

#### 2.3.3.1 City of Roseville Tree Ordinance

The City of Roseville Tree Ordinance (Chapter 19.66 of the City Code) (Tree Ordinance) regulates the removal and preservation of trees within the City of Roseville. "Protected Trees" under the Tree Ordinance include all native oak trees with a diameter at breast height (DBH) equal to or greater than six inches measured as a total of a single trunk or multiple trunks. Each Protected Tree has a "Protected Zone," which is a circle equal to the largest radius of a protected tree's dripline plus one foot. The radius is measured from the trunk at the base of the tree to the greatest extent of the tree's dripline. The Tree Ordinance requires a Tree Permit for any activity within the Protected Zone of a Protected Tree where the encroachment exceeds 20 percent of the Protected Zone, or where the activity is related to a discretionary project. In addition, a Tree Permit is required for the removal of any Protected Tree, unless otherwise exempted.

## **3.0 METHODOLOGY**

### **3.1 Literature Review**

A list of special-status species with potential to occur within the Study Area was developed by conducting a query of the following databases:

- California Natural Diversity Database (CNDDDB) (CNDDDB 2022) query of the Study Area and all areas within 5 miles of the Study Area (**Figures 4 and 5**);
- USFWS Information for Planning and Conservation (IPaC) (USFWS 2021) query for the Study Area (**Attachment B**);
- California Native Plant Society (CNPS) Rare and Endangered Plant Inventory (CNPS 2021) query of the "Citrus Heights, California" USGS topo quadrangle, and the eight surrounding quadrangles (**Attachment C**); and
- Western Bat Working Group (WBWG) Species Matrix (WBWG 2021).

In addition, any special-status species that are known to occur in the region, but that were not identified in any of the above database searches were also analyzed for their potential to occur within the Study Area.

The following documents were reviewed and incorporated into this document as appropriate:

- *Biological Resources Assessment for the 65-acre PFE Assemblage Study Area* (Salix 2015a);
- *Biological Resources Assessment for the 45-acre Placer Greens Study Area* (Salix 2015b);
- *Preliminary Arborist Report & Tree Inventory for PFE Road Widening Study* (Abacus 2018);
- *Arborist Report & Tree Inventory & Assessment for Placer Greens South East Corner of PFE Road & Antelope Road* (Abacus 2015a);
- *Arborist Report & Tree Inventory & Assessment for PFE Road Project* (Abacus 2015b);
- *Special-Status Plant Survey Report for Mill Creek* (Madrone 2018a);
- *2017-2018 Wet Season and Dry Season Branchiopod Surveys 90-Day Report - Mill Creek* (Madrone 2018b);

- *Draft Biological Resources Assessment for Mill Creek* (Madrone 2018c); and
- *Aquatic Resources Delineation Report for the Schellhous Property* (Madrone 2019) (**Attachment D**).

For the purposes of this Biological Resources Assessment, special-status species is defined as those species that are:

- listed as threatened or endangered, or proposed or candidates for listing by the USFWS or National Marine Fisheries Service;
- listed as threatened or endangered and candidates for listing by CDFW;
- identified as Fully Protected species or species of special concern by CDFW;
- identified as Medium or High priority species by the WBWG (WBWG 2022); and
- plant species considered to be rare, threatened, or endangered in California by the CNPS and CDFW [California Rare Plant Rank (CRPR) 1, 2, and 3]:
  - CRPR 1A: Plants presumed extinct.
  - CRPR 1B: Plants rare, threatened, or endangered in California and elsewhere.
  - CRPR 2A: Plants extirpated in California, but common elsewhere.
  - CRPR 2B: Plants rare, threatened, or endangered in California, but more common elsewhere.
  - CRPR 3: Plants about which the CNPS needs more information – a review list.

### 3.2 Field Surveys

Madrone Ecological Consulting, LLC (Madrone) senior biologist Daria Snider conducted field surveys of various portions of the Study Area on 28 February, 18 May, 21 June, 18 July, 26 August, and 17 October 2017; 4 November 2020; 11 and 26 March, 27 October, and 10 November 2021; and 21 January 2022 to map vegetation communities/land covers, assess the suitability of habitats on-site to support special-status species, and to inventory trees in areas that data was required. Protocol-level special-status plant surveys were conducted on 12, 14, and 20 April and 6 and 7 July 2021 and 5 April 2022. Protocol-level Valley elderberry longhorn beetle surveys were conducted throughout the Study Area concurrent with the special-status plant surveys, and the identified clumps of elderberry shrubs were fully surveyed for exit holes on 3 February 2022 when the shrubs were dormant, and thus leaves were not obscuring the stems. Aquatic resources delineations conducted in accordance with USACE protocol were conducted in sewer and trail alignment areas on 11 and 26 March, 27 October, and 10 November 2021 and 21 January 2022. Meandering pedestrian surveys were performed on foot throughout the Study Area. Vegetation communities were classified in accordance with *The Manual of California Vegetation, Second Edition* (Sawyer, Keeler-Wolf and Evens 2009), and plant taxonomy was based on the nomenclature in the *Jepson eFlora* (Jepson Flora Project 2021). PCCP Land Covers were mapped within the portions of the Study Area within the PCCP plan Area. A list of all wildlife species observed during field surveys is included as **Attachment E**.

The results of several additional surveys were also incorporated into this report:

- *Preliminary Arborist Report & Tree Inventory for PFE Road Widening Study* (Abacus 2018),
- *Arborist Report & Tree Inventory & Assessment for Placer Greens South East Corner of PFE Road & Antelope Road* (Abacus 2015a),
- *Arborist Report & Tree Inventory & Assessment for PFE Road Project* (Abacus 2015b),

- An aquatic resources delineation conducted by Madrone in portions of the site for which a verified wetland delineation was not available (Madrone 2021), and
- Special-status plant surveys conducted by Madrone throughout the Study Area (Madrone 2022);
- Tree inventory data from CalTLC

#### 4.0 EXISTING CONDITIONS

The Study Area is largely comprised of annual brome grasslands with interspersed blue oak (*Quercus douglassii*) woodlands (Attachment F). Dry Creek and its associated broad Valley oak (*Quercus lobata*) riparian corridor occur in the northern portion of the Study Area, and two intermittent tributaries to Dry Creek meander through the Study Area, with small ephemeral drainages and seasonal wetland swales branching off of the southern intermittent tributary. Seasonal wetlands and vernal pools are scattered within the annual brome grassland, and a number of roadside ditches occur along the paved roadways. A small homestead and several associated sheds are located within the annual brome grassland in the northern portion of the Study Area. An old orchard is located just to the west of the homestead. Inclusions of disturbed areas are scattered throughout the Study Area along roadways, in residential areas, and in parking areas that encroach along the edges from adjacent properties. The terrain within the Study Area is gently rolling, and generally slopes towards Dry Creek. Elevations range from approximately 110 feet above mean sea level (MSL) along Dry Creek to approximately 140 feet above MSL along the southwestern edges of the Study Area.

The Cook Riolo intersection portion of the Study Area is comprised of an existing roadway and a portion of the adjacent rural residential parcel. No sensitive biological resources were observed within this area during the field surveys. As it is a disjunct portion of the Study Area that lacks sensitive biological resources, it is not shown on any of the subsequent figures or any of the exhibits; however, the acreage of rural residential and urban habitat within that area (and that will be impacted within that area) is incorporated into the numbers presented throughout this document.

Surrounding properties to the south and east are urban industrial, to the west is rural residential, and to the north is the Dry Creek riparian corridor, mowed hay fields, and grazed annual brome grasslands. The Dry Creek Regional Wastewater Treatment Facility is northeast of the project site, north of Dry Creek.

#### 4.1 Terrestrial Vegetation Communities

Table 1 summarizes the PCCP Land Covers/Vegetation Communities mapped within the Study Area, and the following sections provide narrative descriptions of each of them. The PCCP Land Cover classifications are not as descriptive as desired in some cases; as a result, we have provided more specific nomenclature for Non-PCCP areas. As detailed in Table 1, the following Terrestrial Land Covers occur within the PCCP portions of the Study Area: VPC High, VPC Intermediate, VPC Low, Blue Oak Woodland, Orchard, Riparian, Rural Residential, and Urban. The following Vegetation Communities occur within the Non-PCCP portions of the Study Area: Annual Brome Grassland, Blue Oak Woodland, Abandoned Almond Orchard, Riparian Woodland, and Urban.

**Table 1. PCCP Land Covers/Vegetation Communities Within the Study Area**

Land Covers / Vegetation Communities	Total		
	PCCP	Non-PCCP	Total
	(acres)	(acres)	(acres)
<i>Grasslands</i>			
Annual Brome Grassland	-	40.8	40.8
VPC High	6.5	-	6.5
VPC Intermediate	60.4	-	60.4
VPC Low	43.1	-	43.1
Blue Oak Woodland	7.6	13.9	21.5
<i>Orchards</i>			
Orchard	2.8	-	2.8
Abandoned Almond Orchard	-	1.7	1.7
<i>Riparian Habitat</i>			
Riparian	17.9	-	17.9
Riparian Woodland	-	3.2	3.2
<i>Urban Areas</i>			
Rural Residential	3.0	-	3.0
Urban	5.3	15.8	21.1
Valley Needlegrass Grassland	-	<0.1	<0.1
<b>Total Vegetation Communities</b>	<b>146.6</b>	<b>75.4</b>	<b>222.0</b>

**4.1.1 Annual Brome Grassland / VPC Low, VPC Intermediate, and VPC High**

The annual brome grassland within the Study Area is dominated by ripgut brome (*Bromus diandrus*), soft brome (*B. hordeaceus*), wild oat (*Avena fatua*), medusahead (*Elymus caput-medusae*), barbed goatgrass (*Aegilops triuncialis*), and Italian ryegrass (*Festuca perennis*). Other species occurring frequently in this vegetation community within the Study Area include English plantain (*Plantago lanceolata*), turkey mullein (*Croton setiger*), vinegar weed (*Trichostema lanceolatum*), curly dock (*Rumex crispus*), prickly lettuce (*Lactuca serriola*), Fitch’s spikeweed (*Centromadia fitchii*), slender tarweed (*Holocarpha virgata*), yellow star-thistle (*Centaurea solstitialis*), Italian thistle (*Carduus pycnocephalus*), Canadian horseweed (*Erigeron canadensis*), black mustard (*Brassica nigra*), chicory (*Cichorium intybus*), common fiddleneck (*Amsinckia menziesii*), harvest brodiaea (*Brodiaea elegans*), Miniature lupine (*Lupinus bicolor*), filaree (*Erodium botrys*), cut-leaf geranium (*Geranium dissectum*), hairy hawkbit (*Leontodon saxatilis*), rose clover (*Trifolium hirtum*), winter vetch (*Vicia villosa*), and stinkwort (*Dittrichia graveolens*). Seasonal wetlands and swales occur occasionally throughout this community. Isolated trees scattered throughout the annual brome grassland include interior live oak (*Quercus wislizeni*), and Valley oak (*Quercus lobata*).

The areas mapped as Vernal Pool Complex (VPC) Low, VPC Intermediate, and VPC High Land Covers by the PCCP are annual brome grasslands with varying densities of wetlands (1.6%, 5.5%, and 10.5%, respectively).

As such, the description for annual brome grassland also describes VPC Low, VPC Intermediate, and VPC High Land Covers.

#### **4.1.2 Blue Oak Woodland**

Blue oak woodland occurs along intermittent and ephemeral drainages within the Study Area, and in a strip just south of PFE Road, west of Antelope Road. The blue oak woodland has a primarily closed canopy that is dominated by blue oak. Occasional Valley oak, interior live oak (*Quercus wislizenii*), Chinese tallow tree (*Triadica sebifera*), olive (*Olea europaea*), and common fig (*Ficus carica*) also occur. The shrub layer is lacking in most areas, but where present is sparse poison-oak (*Toxicodendron diversilobum*) and Himalayan blackberry (*Rubus armeniacus*). The herbaceous understory is comprised of species typical of the annual brome grassland described above.

#### **4.1.3 Riparian Woodland / Riparian**

Riparian woodland occurs along Dry Creek and its northern tributary, and along the southern tributary just south of PFE Road. The canopy of the Riparian woodland is dense and quite diverse. Common trees include Valley oak, Goodding's black willow (*Salix gooddingii*), arroyo willow (*S. lasiolepis*), Fremont's cottonwood (*Populus fremontii*), box elder (*Acer negundo*), cigar tree (*Catalpa bignonioides*), common fig, sycamore (*Platanus racemosa*), white alder (*Alnus rhombifolia*), Oregon ash (*Fraxinus latifolia*), blue oak, interior live oak, and black walnut (*Juglans hindsii*). The understory is dense in some locations and includes thickets of Himalayan blackberry, wild reed (*Arundo donax*), wild rose (*Rosa californica*), poison-oak, sandbar willow (*Salix exigua*) and California wild grape (*Vitis californica*). Herbaceous species within the understory include western ragweed (*Ambrosia psilostachya*), mugwort (*Artemisia douglasiana*), Italian thistle (*Carduus pycnocephalus*), miner's lettuce (*Claytonia perfoliata*), poison hemlock (*Conium maculatum*), hedgehog grass (*Cynosurus echinatus*), paniced willow-herb (*Epilobium brachycarpum*), fennel (*Foeniculum vulgare*), sticky willy (*Galium aparine*), white horehound (*Marrubium vulgare*), manyflower tobacco (*Nicotiana acuminata*), dallisgrass (*Paspalum dilatatum*), barnyard grass (*Echinochloa crus-galli*), rice cutgrass (*Leersia oryzoides*), tall flatsedge (*Cyperus eragrostis*), curly dock (*Rumex crispus*), cocklebur (*Xanthium strumarium*), soft rush (*Juncus effusus*), and Bermuda grass (*Cynodon dactylon*).

The areas mapped as Riparian Land Cover (for PCCP purposes) are consistent with the Riparian Woodlands.

#### **4.1.4 Valley Needlegrass Grassland**

A small patch of Valley needlegrass (*Stipa pulchra*) grassland was mapped in an opening in the blue oak woodland south of PFE Road. This area supports approximately 30 percent cover of Valley needlegrass. Co-dominants are typical of the herbaceous plant species found throughout the surrounding blue oak woodland.

#### 4.1.5 Abandoned Almond Orchard / Orchard

Abandoned almond (*Prunus dulcis*) orchards occur just west of the homestead in the northern portion of the Study Area, and along the west side of Antelope Road. The orchards have not been maintained since the 1950s or 1960s, and the few remaining almond trees are quite large and do not appear to be irrigated. The understory of the almond orchard is comprised of herbaceous species typical of the annual brome grassland described above. The abandoned almond orchards have been mapped as "Orchard" within areas of PCCP jurisdiction.

#### 4.1.6 Rural Residential / Urban

A number of areas within the Study Area are mapped as Rural Residential or Urban. These include paved roadways, portions of rural residential parcels comprised of houses or landscaping, industrial commercial areas, and the City of Roseville Dry Creek Regional Wastewater Treatment Facility. Most of these areas are paved or otherwise unvegetated, but some areas support maintained landscaping or ruderal vegetation including stinkwort, bindweed (*Convolvulus arvensis*), purple sand-spurrey (*Spergularia rubra*), yellow star-thistle, and turkey mullein.

### 4.2 Aquatic Resources

Aquatic resources have been mapped within the Study Area in accordance with the USACE Sacramento District's *Minimum Standards for Acceptance of Preliminary Wetlands Delineations* (USACE 2016a) (Attachment F). The aquatic resources shown on Attachment F have been submitted to the USACE with a request for a Preliminary Jurisdictional Determination. A total of 17.731 acres of aquatic resources were mapped within the Study Area (Table 2). A description of each of the aquatic resource types is included below. Note that all the wetland types are consistent with PCCP nomenclature. All the Other Waters, including Dry Creek, the intermittent and ephemeral drainages, and the roadside ditches are classified as "Riverine" by the PCCP.

**Table 2. Aquatic Resources Mapped within the Study Area**

Resource Type	Acreage within each Jurisdiction			Total
	City of Roseville	PCCP	Unincorporated Placer County	
<i>Wetlands</i>				
Seasonal Wetland	0.000	0.018	0.544	<b>0.562</b>
Seasonal Wetland Swale	0.000	0.576	0.025	<b>0.601</b>
Vernal Pool	0.000	0.742	0.000	<b>0.742</b>
<i>Other Waters</i>				
Dry Creek	0.361	5.964	0.000	<b>6.325</b>
Ephemeral Drainage	0.000	0.118	0.000	<b>0.118</b>
Intermittent Drainage	0.000	7.852	1.377	<b>9.229</b>
Roadside Ditch	0.000	0.032	0.065	<b>0.097</b>
<b>Total</b>	<b>0.361</b>	<b>15.302</b>	<b>2.011</b>	<b>17.674</b>

#### **4.2.1 Vernal Pool**

Vernal pools are topographic basins that are underlain with an impermeable or semi-permeable hardpan or duripan layer. They inundate during the wet season, and typically dry by late spring and remain dry through the summer months. Vernal pools are differentiated from depression seasonal wetlands based upon the predominance of vernal pool endemic plant species. The vernal pools on-site were largely dominated by coyote thistle (*Eryngium castrense*) and creeping spikerush (*Eleocharis macrostachya*). Other common vegetation within the vernal pools includes Great Valley popcornflower (*Plagiobothrys stipitatus*), hyssop loosestrife (*Lythrum hyssopifolia*), white headed navarretia (*Navarretia leucocephala* subsp. *leucocephala*), Torrey's willow-herb (*Epilobium torreyi*), rabbitsfoot grass (*Polypogon monspeliensis*), curly dock, Mediterranean barley (*Hordeum marinum*), perennial ryegrass, hairy hawkbit, and harvest brodiaea.

#### **4.2.2 Seasonal Wetland**

Seasonal wetlands are depression wetlands that pond water seasonally. These features are often topographically and hydrologically similar to vernal pools, but have a short hydroperiod, and as a result, support a slightly different plant community that is not characterized by a dominance of vernal pool endemics. Vegetation within these features is generally sparse and consists of perennial ryegrass and Mediterranean barley, with other ruderal vegetation common, such as curly dock, slender tarweed, hairy hawkbit, soft chess, and Medusa-head grass. Numerous wetland-oriented species are present in low to moderate quantities, including Great Valley popcornflower, coyote thistle, hyssop loosestrife, Carter's buttercup (*Ranunculus bonariensis*), smooth goldfields (*Lasthenia glaberrima*), Oregon woolly marbles (*Psilocarphus oregonus*), and toad rush (*Juncus bufonius*).

#### **4.2.3 Seasonal Wetland Swale**

Seasonal wetland swales are sloping, linear seasonal wetlands that convey surface runoff, and may detain it for short periods of time. Vegetation within the swales varies, but is generally dominated by perennial ryegrass, and includes an array of wetland and ruderal vegetation such as tall flatsedge, Baltic rush (*Juncus balticus*), Bermuda grass, turkey tangle frogfruit (*Phyla nodiflora*), creeping spikerush, coyote thistle, Carter's buttercup, rabbitsfoot grass, Mediterranean barley, curly dock, English plantain, slender tarweed, hairy hawkbit, rough cocklebur, poison hemlock, Himalayan blackberry, soft chess, and sticky willy. Hydrology within the swales is driven predominantly by precipitation runoff within the annual grassland and from adjacent development, along with draining water from several vernal pools and seasonal wetlands.

#### **4.2.4 Intermittent Drainage**

Several intermittent drainages run through the Study Area. Two portions of one intermittent tributary to Dry Creek occur north of Dry Creek, and a number of branches of an intermittent tributary to Dry Creek run through the portion of the Study Area south of Dry Creek. These features range from approximately 3.5 feet wide in some very narrow reaches to over 175 feet wide adjacent to and south of the abandoned almond orchard. Water ponds for an extended period of time in this wide stretch of drainage but appears

to completely dry every year. The drainage is unvegetated throughout much of its channel due to the depth and scouring effects of water, but it supports a well-developed fringe of hydrophytes along the banks, including rice cutgrass, spotted lady's-thumb (*Persicaria punctata*), stick-tight (*Bidens frondosa*), tall nutsedge, rough cocklebur, and northern water plantain (*Alisma triviale*). Blue oak woodland occurs adjacent to many reaches of intermittent drainage throughout the Study Area.

#### **4.2.5 Roadside Ditch**

Several roadside ditches were mapped within the Study Area along Antelope Road and PFE Road. The roadside ditches serve to convey stormwater runoff from the road into the storm drain system and intermittent drainages. These features are primarily unvegetated due to ditch maintenance, but some ruderal vegetation has become established in portions. Plant species observed in and adjacent to this feature include perennial ryegrass, wild radish (*Raphanus sativus*), tall nutsedge, and Bermuda grass.

#### **4.2.6 Ephemeral Drainage**

Ephemeral drainages convey stormwater runoff for short periods of time directly after precipitation events. The drainages are generally largely unvegetated due to the scouring effects of water, but upland species such as Italian thistle, white horehound, and hedgehog grass occur sparsely. These features drain into intermittent drainages and Dry Creek.

#### **4.2.7 Dry Creek**

Dry Creek runs through the northern portion of the Study Area. Dry Creek is a broad, perennial creek with a gravel/cobble substrate. It is almost entirely unvegetated within the channel due to the scouring effects of high winter flows, but there are a few islands and sand bars where a few plants have managed to establish. This feature is incised, with steep, eroded banks on outer bends, and deep sand deposits on inner bends. The banks support a dense, well-developed Riparian Woodland (described above). Emergent wetland vegetation is present along the edges of the low water channel including tall flatsedge, redroot flatsedge (*Cyperus erythrorhizos*), water primrose (*Ludwigia peploides*), smartweed (*Persicaria sp.*), barnyard grass, rough cocklebur, panicled willow-herb, and curly dock.

### **4.3 Soils**

According to the Natural Resources Conservation Service (NRCS) Soil Survey Database (NRCS 2021), ten soil mapping units occur within the Study Area (**Figure 6**: (141) Cometa-Fiddymment complex, 1-5% slopes; (145) Fiddymment fine sandy loam, 1 to 8% slopes; (146) Fiddymment loam, 1 to 8% slopes; (147) Fiddymment-Kaseberg loams, 2 to 9% slopes; (175) Ramona sandy loam, 2 to 9% slopes; (193) Xerofluvents, occasionally flooded; (194) Xerofluvents, frequently flooded; (242) Xerofluvents, 0 to 2% slopes, flooded; (198) Water; and (229sa) Urban land-Xerarents-Fiddymment complex, 0 to 8% slopes. Note that the area mapped as (198) Water appears to be an artifact of coarse-scale mapping of the water holding ponds at the adjacent waste-

water treatment plant. Unit (194) consists of hydric components, and all units except for (198) and (229sa) may contain hydric inclusions (NRCS 2021).

#### **4.4 PCCP Special Habitats and CARP Setbacks**

Within the PCCP Area, the following PCCP Special Habitats and CARP Setbacks have been mapped consistent with the PCCP and CARP guidelines (**Attachment G**):

- Stream System along Dry Creek and its tributary drainages
- Riparian Buffers, which are any areas within 50 feet of riparian habitat that are outside of the Stream System
- Placer County Watercourse Setback along Dry Creek and its tributary drainages

### **5.0 RESULTS**

**Table 3** provides a list of special-status species that were evaluated, including their listing status, habitat associations, and their potential to occur in the Study Area. The following set of criteria was used to determine each species' potential for occurrence on the site:

- Present: Species occurs on the site based on CNDDDB records, and/or was observed on the site during field surveys.
- High: The site is within the known range of the species and suitable habitat exists.
- Moderate: The site is within the known range of the species and very limited suitable habitat exists.
- Low: The site is within the known range of the species and there is marginally suitable habitat or the species was not observed during protocol-level surveys conducted on-site.
- Absent/No Habitat Present: The site does not contain suitable habitat for the species, the species was not observed during protocol-level floristic surveys conducted on-site, or the site is outside the known range of the species.

**Figures 4 and 5** are exhibits displaying CNDDDB occurrences within five miles of the Study Area. Below is a discussion of all special-status plant and animal species with potential to occur on the site.

#### **5.1 Plants**

Madrone biologists conducted rare plant surveys of the Study Area targeting the species listed below on 12, 14, and 20 April 2021; 6 and 7 July 2021; and 5 April 2022 in accordance with the *Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed, and Candidate Plants* (USFWS 2000), the *Botanical Survey Guidelines of the California Native Plant Society* (CNPS 2001), and *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (CDFW 2018).

**Table 3. Special-Status Species with Potential to Occur within the Creekview Ranch Study Area**

<b>Scientific Name (Common Name)</b>	<b>Federal Status</b>	<b>State Status</b>	<b>Habitat Requirements</b>	<b>Potential for Occurrence</b>
<b>Plants</b>				
<i>Balsamorhiza macrolepis</i> Big-scale balsamroot	--	CRPR 1B.2	Prefers chaparral, cismontane woodland, and valley and foothill grasslands. Often associated with serpentine soils.	<b>Absent.</b> Marginally suitable habitat is present in the annual brome grassland. Protocol-level surveys did not detect this species.
<i>Chloropyron molle</i> ssp. <i>hispidum</i> Hispid bird's-beak	--	CRPR 1B.1	Prefers seasonally flooded , saline-alkali soils at elevations below 500 feet.	<b>No Habitat Present.</b> No saline-alkali soils are present within the Study Area.
<i>Downingia pusilla</i> Dwarf downingia	--	CRPR 2B.2	Vernal pools and other depressional wetlands	<b>Low.</b> The vernal pools, seasonal wetlands, and seasonal wetland swales within the Study Area represent suitable habitat for this species. Protocol-level surveys did not detect this species.
<i>Gratiola heterosepala</i> Bogg's Lake hedge-hyssop	--	CE, CRPR 1B.2	Vernal pools and margins of lakes/ponds	<b>Low.</b> The vernal pools and seasonal wetlands within the Study Area represent marginal habitat for this species. Protocol-level surveys did not detect this species.
<i>Juncus leiospermus</i> var. <i>ahartii</i> Ahart's dwarf rush	--	CRPR 1B.2	Edges of vernal pools and other seasonally ponded features.	<b>Low.</b> The vernal pools and seasonal wetlands within the Study Area represent suitable habitat for this species. Protocol-level surveys did not detect this species.

<b>Scientific Name (Common Name)</b>	<b>Federal Status</b>	<b>State Status</b>	<b>Habitat Requirements</b>	<b>Potential for Occurrence</b>
<i>Juncus leiospermus</i> var. <i>leiospermus</i> Red Bluff dwarf rush	--	CRPR 1B.1	Occurs in vernal mesic areas in chaparral, cismontane woodland, meadows and seeps, valley and foothill grassland, and vernal pools between 100' and 4,100' elevation.	<b>No Habitat Present.</b> The only documented occurrence in Placer County is, according to the notes on this occurrence, considered to be erroneous (CNDDDB 2021).
<i>Legenere limosa</i> Legenere	--	CRPR 1B.1	Vernal pools	<b>Low.</b> The vernal pools and seasonal wetlands within the Study Area represent marginal habitat for this species. Protocol-level surveys did not detect this species.
<i>Navarretia myersii</i> ssp. <i>myersii</i> Pincushion navarretia	--	CRPR 1B.1	Vernal pools	<b>Low.</b> The vernal pools and seasonal wetlands within the Study Area represent suitable habitat for this species. Protocol-level surveys did not detect this species.
<i>Orcuttia tenuis</i> Slender Orcutt grass	FT	CE, CRPR 1B.1	Vernal pools and other seasonally ponded features.	<b>No Habitat Present.</b> The vernal pools within the Study Area do not have sufficient hydrology for this species.
<i>Orcuttia viscida</i> Sacramento Orcutt grass	FE	CE, CRPR 1B.1	Vernal pools	<b>No Habitat Present.</b> The vernal pools within the Study Area do not have sufficient hydrology for this species.
<i>Sagittaria sanfordii</i> Sanford's arrowhead	--	CRPR 1B.2	Emergent marsh habitat, typically associated with drainages, canals, or irrigation ditches.	<b>Present.</b> Sanford's arrowhead is present in the intermittent drainage near the southern boundary of the Study Area.

<b>Scientific Name (Common Name)</b>	<b>Federal Status</b>	<b>State Status</b>	<b>Habitat Requirements</b>	<b>Potential for Occurrence</b>
<b>Invertebrates</b>				
<i>Branchinecta conservatio</i> Conservancy fairy shrimp	FE	--	Very large, turbid vernal pools.	<b>No Habitat Present.</b> The vernal pools within the Study Area are too small to support this species.
<i>Branchinecta lynchi</i> Vernal pool fairy shrimp	FT	--	Vernal pools.	<b>High.</b> Suitable habitat for this species is present in the seasonal wetlands and vernal pools within the Study Area.
<i>Danaus plexippus</i> Monarch butterfly	FC	--	Migratory species; most prevalent in the Central Valley in summer and early fall. Dependent upon milkweed ( <i>Asclepias</i> species) plants as their exclusive larval host.	<b>No Habitat Present.</b> A few scattered milkweed plants are present in the southern portion of the Study Area, but no substantial populations that could support this species.
<i>Desmocerus californicus dimorphus</i> Valley elderberry longhorn beetle	FT	--	Dependent upon elderberry ( <i>Sambucus</i> species) shrubs as primary host species.	<b>Absent.</b> Several elderberry shrubs are present in the eastern portion of Creekview Ranch South. No VELB exit holes were observed on these shrubs.
<i>Lepidurus packardi</i> Vernal pool tadpole shrimp	FE	--	Vernal pools.	<b>Low.</b> Most of the seasonal wetlands and vernal pools within the Study Area are too small to support this species, but the largest represent marginally-suitable habitat for vernal pool tadpole shrimp.

<b>Scientific Name (Common Name)</b>	<b>Federal Status</b>	<b>State Status</b>	<b>Habitat Requirements</b>	<b>Potential for Occurrence</b>
<b>Fish</b>				
<i>Hypomesus transpacificus</i> Delta smelt	FT	CE	Adults are found in the brackish open surface waters of the Delta and Suisun Bay. Though spawning has never been observed, it is believed to occur in tidally influenced sloughs and drainages on the freshwater side of the mixing zone.	<b>No Habitat Present.</b> No tidally influenced sloughs or drainages are present within the Study Area.
<i>Oncorhynchus mykiss irideus</i> Central Valley steelhead	FE	--	Anadromous species requiring freshwater water courses with gravelly substrates for breeding. The young remain in freshwater areas before migrating to estuarine and marine environments.	<b>High.</b> Dry Creek within the Study Area is designated Critical Habitat for Central Valley Steelhead, and the intermittent drainages within the Study Area represent marginally suitable habitat for this species.
<i>Oncorhynchus tshawytscha</i> Central Valley fall-run chinook salmon	--	CSC	Anadromous species requiring freshwater water courses with gravelly substrates for breeding. The young remain in freshwater areas before migrating to estuarine and marine environments.	<b>High.</b> Dry Creek serves as a migration corridor to spawning habitat upstream of the Study Area, and the intermittent drainages within the Study Area represent marginally suitable habitat for this species.
<b>Amphibians</b>				
<i>Ambystoma californiense</i> California tiger salamander	FT	CT, CSC	Breeds in ponds or other deeply ponded wetlands, and uses gopher holes and ground squirrel burrows in adjacent grasslands for upland refugia/foraging.	<b>No Habitat Present.</b> The Study Area is outside of the known range of the species.
<i>Rana draytonii</i> California red-legged frog	FT	CSC	Breeds in permanent to semi-permanent aquatic habitats including lakes, ponds, marshes, creeks, and other drainages.	<b>No Habitat Present.</b> The Study Area is outside of the known range of the species.

<b>Scientific Name (Common Name)</b>	<b>Federal Status</b>	<b>State Status</b>	<b>Habitat Requirements</b>	<b>Potential for Occurrence</b>
<i>Spea hammondi</i> Western spadefoot	--	CSC	Breeds in vernal pools, seasonal wetlands and associated swales. Forages and hibernates in adjacent grasslands.	<b>High.</b> The seasonal wetlands and vernal pools within the Study Area represent suitable habitat for this species.
<b>Reptiles</b>				
<i>Actinemys marmorata</i> Western pond turtle	--	CSC	Ponds, rivers, streams, wetlands, and irrigation ditches with associated marsh habitat.	<b>High.</b> Suitable habitat for this species is present in Dry Creek, and marginally suitable habitat is present in the intermittent drainages.
<i>Thamnophis gigas</i> Giant garter snake	FT	CT	Rivers, canals, irrigation ditches, rice fields, and other aquatic habitats with slow moving water and heavy emergent vegetation.	<b>No Habitat Present.</b> The Study Area is outside of the known range of the species.
<b>Birds</b>				
<i>Agelaius tricolor</i> Tricolored blackbird	--	CE, CSC	Colonial nester in cattails, bulrush, or blackberries associated with marsh habitats.	<b>Low.</b> Blackberry brambles scattered throughout the Study Area represent marginally suitable nesting habitat for this species. The adjacent annual grasslands provide potential foraging habitat.
<i>Ammodramus savannarum</i> Grasshopper sparrow	--	CSC	Typically found in expansive short to middle-height, moderately open grasslands with scattered shrubs or other song perches (Shuford and Gardali 2008).	<b>No Habitat Present.</b> The annual brome grasslands within the Study Area are not sufficiently expansive to support this species.
<i>Aquila chrysaetos</i> Golden eagle	--	CFP	Forages in open areas including grasslands, savannahs, deserts, and early successional stages of shrub and forest communities. Nests in large trees and cliffs.	<b>No Habitat Present.</b> The annual brome grasslands within the Study Area are not sufficiently expansive to support this species.

<b>Scientific Name (Common Name)</b>	<b>Federal Status</b>	<b>State Status</b>	<b>Habitat Requirements</b>	<b>Potential for Occurrence</b>
<i>Athene cunicularia</i> Burrowing owl	--	CSC	Nests in abandoned ground squirrel burrows associated with open grassland habitats.	<b>Moderate.</b> Although few ground squirrel burrows were observed, occasional burrows and debris scattered throughout the Study Area could provide artificial burrows. The annual brome grasslands provide suitable foraging habitat.
<i>Buteo swainsoni</i> Swainson's hawk	--	CT	Nests in large trees, preferably in riparian areas. Forages in fields, cropland, irrigated pasture, and grassland near large riparian corridors.	<b>Present.</b> The annual brome grasslands throughout the Study Area represent suitable foraging habitat for Swainson's hawk, and the trees within the Study Area provide suitable nesting habitat. This species was observed foraging on-site during a field survey.
<i>Circus cyaneus</i> Northern harrier	--	CSC	Nests in emergent wetland/marsh, open grasslands, or savannah habitats. Forages in open areas such as marshes, agricultural fields, and grasslands.	<b>High.</b> The annual brome grassland is suitable nesting and foraging habitat for this species.
<i>Coccyzus americanus occidentalis</i> Western yellow-billed cuckoo	FT	CE	Inhabits extensive deciduous riparian thickets or forests with dense, low-level or understory foliage, adjacent to slow-moving waterways, backwaters, or seeps.	<b>No Habitat Present.</b> The riparian woodland on-site supports only patchy understory, and as such, does not provide suitable habitat for this species. Furthermore, this species is only known from woodlands adjacent to major rivers in northern California.

<b>Scientific Name (Common Name)</b>	<b>Federal Status</b>	<b>State Status</b>	<b>Habitat Requirements</b>	<b>Potential for Occurrence</b>
<i>Elanus leucurus</i> White-tailed kite	--	CFP	Open grasslands, fields, and meadows are used for foraging. Isolated trees in close proximity to foraging habitat are used for perching and nesting.	<b>Present.</b> The annual brome grasslands throughout the Study Area represent suitable foraging habitat for white-tailed kite, and the trees throughout the Study Area provide suitable nesting habitat. This species was observed foraging on-site during a field survey.
<i>Lanius ludovicianus</i> Loggerhead shrike	--	CSC	Occurs in open areas with sparse trees, shrubs, and other perches.	<b>High.</b> The annual brome grasslands throughout the Study Area represent suitable foraging habitat for loggerhead shrike, and the trees and shrubs within the Study Area provide suitable nesting habitat.
<i>Laterallus jamaicensis coturniculus</i> California black rail	--	CT	Nests and forages in salt, brackish, and fresh marshes with abundant vegetative cover.	<b>No Habitat Present.</b> The only marsh vegetation is along the edges of Dry Creek, which lacks the cover this species requires.
<i>Melospiza melodia mailliardi</i> Song sparrow "Modesto" population	--	CSC	Nest in emergent freshwater marshes dominated by tules and cattails as well as riparian willow thickets. This species also nests in riparian forests of valley oak with a blackberry understory, along vegetated irrigation canals and levees, and in recently planted valley oak restoration sites (Shuford and Gardali 2008).	<b>No Habitat Present.</b> Although the riparian woodland would otherwise represent suitable nesting habitat for this species, it has not been documented nesting in Placer County, and only nests in extensive marshes in the Sacramento Valley area (Humple and Guepel 2004), which are not present.

<b>Scientific Name (Common Name)</b>	<b>Federal Status</b>	<b>State Status</b>	<b>Habitat Requirements</b>	<b>Potential for Occurrence</b>
<i>Progne subis</i> Purple martin	--	CSC	Nests in tall bridges and overpasses near water and open areas.	<b>No Habitat Present.</b> The bridge over Dry Creek is the only tall bridge in the Study Area, and there is no suitable substrate on this bridge for this species.
<i>Setophaga petechia</i> Yellow warbler	--	CSC	Occupy riparian vegetation in close proximity to water along streams and in wet meadows. This species no longer breeds in the Central Valley, but occurs as a common migrant in the fall and winter months (Shuford and Gardali 2008).	<b>High.</b> Although the Study Area is outside of this species' breeding range, it has been documented along Dry Creek just downstream of the Study Area (eBird 2021), and suitable winter foraging habitat is present in the riparian woodlands within the Study Area.
<i>Riparia riparia</i> Bank swallow	--	CT	Colonial nester preferring vertical cliffs and banks with fine textured/sandy soils associated with riparian zones along streams, rivers, and lakes.	<b>No Habitat Present.</b> Tall, vertical cliffs with sandy soils occur along Dry Creek; however, this species has only rarely been observed in Placer County (eBird 2021), is not known to nest in Placer County, has high nest fidelity, and no nest holes were observed on the cliffs in the Study Area.

<b>Scientific Name (Common Name)</b>	<b>Federal Status</b>	<b>State Status</b>	<b>Habitat Requirements</b>	<b>Potential for Occurrence</b>
<b>Mammals</b>				
<i>Antrozous pallidus</i> Pallid bat	--	CSC, WBWG H	Roosts in crevices in rocky outcrops and cliffs, caves, mines, trees (e.g., basal hollows of coast redwoods and giant sequoias, bole cavities of oaks, exfoliating bark, deciduous trees in riparian areas, and fruit trees in orchards), bridges, barns, porches, bat boxes, and human-occupied as well as vacant buildings (WBWG 2022).	<b>High.</b> Suitable roosting habitat for this species is present in tree hollows and under exfoliating bark on trees scattered throughout the site.
<i>Corynorhinus townsendii townsendii</i> Townsend's big-eared bat	--	CC, WBWG H	Roosts in caves and cave analogues, such as abandoned mines, buildings, bridges, rock crevices and large basal hollows of coast redwoods and giant sequoias. Extremely sensitive to human disturbance. (WBWG 2022).	<b>Low.</b> Some of the buildings associated with the homestead on Creekview Ranch North could provide marginally suitable roosting habitat for this species.
<i>Lasionycteris noctivagans</i> Silver-haired bat	--	WBWG M	Roosts in abandoned woodpecker holes, under bark, and occasionally in rock crevices. It forages in open wooded areas near water features.	<b>High.</b> Suitable roosting habitat for this species is present in tree hollows and under exfoliating bark on trees scattered throughout the site.
<i>Lasiurus blossevillii</i> Western red bat	--	CSC, WBWG H	Roosts primarily in the foliage of trees or shrubs (WBWG 2017). Day roosts are commonly in edge habitats adjacent to streams or open fields, in orchards, and sometimes in urban areas. There may be an association with intact riparian habitat (particularly willows, cottonwoods, and sycamores) (WBWG 2022).	<b>High.</b> Trees scattered throughout the site are suitable roosting habitat for this species.

<b>Scientific Name (Common Name)</b>	<b>Federal Status</b>	<b>State Status</b>	<b>Habitat Requirements</b>	<b>Potential for Occurrence</b>
<i>Lasiurus cinereus</i> Hoary bat	--	WBWG M	Roosts primarily in foliage of both coniferous and deciduous trees at the edges of clearings (WBWG 2022).	<b>High.</b> Trees scattered throughout the site are suitable roosting habitat for this species.
<i>Taxidea taxus</i> American badger	--	CSC	This species prefers dry open fields, grasslands, and pastures.	<b>No Habitat Present.</b> The annual brome grasslands within the Study Area are not sufficiently expansive to support this species.

Status Codes:

CC - CDFW Candidate for Listing

CE - CDFW Endangered

CFP - CDFW Fully Protected

CRPR - California Rare Plant Rank

CSC - CDFW Species of Concern

CT - CDFW Threatened

FE - Federally Endangered

FT - Federally Threatened

WBWG M - Western Bat Working Group Medium Threat Rank

WBWG H - Western Bat Working Group High Threat Rank



### **5.1.1 Dwarf Downingia**

Dwarf downingia (*Downingia pusilla*) is not federally or state listed, but it is classified as a CRPR List 1B.2 plant. It is a diminutive annual herb that is strongly associated with vernal pools and other seasonally inundated features at elevations ranging from sea level to approximately 1,500 feet (CNPS 2021). Dwarf downingia is typically associated with areas that experience a moderate degree of disturbance, and it blooms from March to May.

The vernal pools, seasonal wetlands and seasonal wetland swales within the Study Area represent suitable habitat for this species. This species was not observed during the 2021 or 2022 special-status plant surveys of the Study Area, which were conducted in April, when this species was observed in bloom at other nearby sites. There are 10 records of dwarf downingia within five miles of the Study Area in the CNDDDB (Figure 4). The nearest of these (CNDDDB Occurrence #142) is located approximately 1.5 miles north of the site in the Silverado Oaks Wetland Preserve (CNDDDB 2022).

### **5.1.2 Bogg's Lake Hedge-Hyssop**

Bogg's Lake hedge-hyssop (*Gratiola heterosepala*) is not federally listed, but it is a California endangered species and a CRPR List 1B.2 plant. Bogg's Lake hedge-hyssop grows in vernal pools and around the perimeter of lakes and ponds between 30 and 7,800 feet (CNPS 2021). This small annual herb favors clay soils, and blooms from April to August (CNPS 2021).

The larger vernal pools and seasonal wetlands within the Study Area represent suitable habitat for this species. This species was not observed during the 2021 special-status plant survey of the Study Area, which was conducted in April. This species did not bloom at most of the reference locations in the region in 2021, and as a result, all suitable habitat was resurveyed in April 2022 after this species had been observed at a nearby reference location. There are three records of Bogg's Lake hedge-hyssop within five miles of the Study Area in the CNDDDB, two of which are extirpated, and the last is potentially extirpated (Figure 4) (CNDDDB 2022). The nearest of these (CNDDDB Occurrence #16) is located approximately 3.5 miles northeast of the site at what is now the Roseville Galleria shopping center (CNDDDB 2022).

### **5.1.3 Ahart's Dwarf Rush**

Ahart's dwarf rush (*Juncus leiospermus* var. *ahartii*) is not federally or state listed, but it is classified as a CRPR List 1B.2 plant. Ahart's dwarf rush grows along the edges of seasonal wet habitats such as vernal pools and swales within valley and foothill grasslands between elevations of approximately 100 feet and 750 feet (CNPS 2021). This annual herb blooms from March to May (CNPS 2021).

The larger vernal pools and seasonal wetlands within the Study Area represent suitable habitat for this species. This species was not observed during the 2021 or 2022 special-status plant surveys of the Study Area, which were conducted in April. This species has not been documented within five miles of the Study Area in the CNDDDB (CNDDDB 2022).

#### **5.1.4 *Legenere***

*Legenere* (*Legenere limosa*) is not federally or state listed, but it is classified as a CRPR List 1B.1 species. This annual herb is primarily associated with seasonal wetlands with a long hydroperiod, such as vernal pools and marsh and pond edges (CNPS 2021). *Legenere* occurs at elevations between sea level and 2,600 feet, and blooms from April to June (CNPS 2021).

The larger vernal pools and seasonal wetlands within the Study Area represent suitable habitat for this species. This species was not observed during the 2021 or 2022 special-status plant surveys of the Study Area, which were conducted in April, when this species was identifiable at a nearby location. There is only one record of *Legenere* within five miles of the Study Area in the CNDDDB, and it is considered extirpated (**Figure 4**) (CNDDDB 2022). This occurrence (CNDDDB Occurrence #32) is located approximately 4.5 miles west of the site in Rio Linda (CNDDDB 2022).

#### **5.1.5 *Pincushion Navarretia***

*Pincushion navarretia* (*Navarretia myersii* ssp. *myersii*) is not federally or state listed, but it is classified as a CRPR List 1B.1 plant. This species is found in vernal pools and other mesic areas in annual grasslands, often on acidic soils (CNPS 2021). *Pincushion navarretia* is found between approximately 65 and 1,100 feet and blooms in April and May (CNPS 2021).

The vernal pools, seasonal wetlands and seasonal wetland swales within the Study Area represent suitable habitat for this species. This species was not observed during the 2021 or 2022 special-status plant surveys of the Study Area, which were conducted in April, when other wetland *Navarretia* species were in bloom on the site. This species has not been documented within five miles of the Study Area in the CNDDDB (CNDDDB 2022).

#### **5.1.6 *Sanford's Arrowhead***

*Sanford's arrowhead* (*Sagittaria sanfordii*) is not federally or state listed, but it is classified as a CRPR List 1B.2 plant. It generally occurs in shallow freshwater habitats associated with drainages, canals, and larger ditches that sustain inundation and/or slow-moving water into early summer. This perennial rhizomatous species blooms from May to October and occurs from sea level to approximately 2,000 feet (CNPS 2021).

This species was documented within the intermittent drainage in the southern portion of the Study Area during the 2021 special-status plant survey (**Figure 4**). The nearest documented occurrence of *Sanford's arrowhead* outside of the Study Area is CNDDDB Occurrence #49, which is located approximately 0.5 mile to the southeast, in a ditch just west of Roseville Road (CNDDDB 2022).

## 5.2 Invertebrates

### 5.2.1 Vernal Pool Fairy Shrimp

The vernal pool fairy shrimp (*Branchinecta lynchi*) is listed as threatened pursuant to the federal Endangered Species Act. Historically, the range of vernal pool fairy shrimp extended throughout the Central Valley of California. Vernal pool fairy shrimp populations have been found in several locations throughout California, with habitat extending from Stillwater Plain in Shasta County through the Central Valley to Pixley in Tulare County, and along the Central Coast range from northern Solano County to Pinnacles National Monument in San Benito County (Eng *et al.* 1990, Fugate 1992). Additional populations occur in San Luis Obispo, Santa Barbara, and Riverside counties. The historic and current ranges of vernal pool fairy shrimp are very similar in extent; however, the remaining populations are more fragmented and isolated than during historical times (USFWS 2005). The life cycle of vernal pool fairy shrimp is adapted to seasonally inundated features such as vernal pools, seasonal wetlands, and seasonal wetland swales. Fairy shrimp embryos survive the dry season in cyst form. Cysts “hatch” soon after pools become inundated during the wet season. Fairy shrimp complete their life cycle quickly and feed on small particles of detritus, algae, and bacteria (Eriksen and Belk 1999).

There are fifteen documented CNDDDB occurrences of vernal pool fairy shrimp within 5 miles of the Study Area, the nearest of which is located approximately 0.5 mile north of the site, just north of Dry Creek Elementary School (**Figure 5**) (CNDDDB 2022). The vernal pools and seasonal wetland swales throughout the Study Area represent suitable habitat for this species. Protocol-level<sup>1</sup> wet-season and dry-season surveys of the wetlands south of and along PFE Road were negative (Madrone 2018b), and vernal pool fairy shrimp is considered absent from this area. No surveys have been conducted within the wetlands north of PFE Road, and the species could be present in this area.

### 5.2.2 Valley Elderberry Longhorn Beetle

The Valley elderberry longhorn beetle (VELB) is listed as threatened pursuant to the federal Endangered Species Act. The historic range of this beetle is limited to moist Valley oak woodlands along margins of rivers and streams in the lower Sacramento and lower San Joaquin Valleys (USFWS 1980). At the time of its listing, the beetle was known from less than 10 localities in Merced, Sacramento, and Yolo Counties (USFWS 1984). Its current distribution is patchy throughout California’s Central Valley and associated foothills (USFWS 1999).

The Valley elderberry longhorn beetle is completely dependent on its host plant, elderberry (*Sambucus* species), which occurs in riparian and other woodland communities in California’s Central Valley and the associated foothills (USFWS 1999). Female beetles lay their eggs in crevices on the stems or on the leaves of living elderberry plants. When the eggs hatch, larvae bore into the stems. The larval stages last for one

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<sup>1</sup> These surveys were conducted in accordance with the 13 November 2017 *Survey Guidelines for the Listed Large Branchiopods* (USFWS 2017a).

to two years. The fifth instar larvae create emergence holes in the stems and then plug the holes and remain in the stems through pupation (Talley 2003). Adults emerge through the emergence holes from late March through June. The short-lived adult beetles forage on leaves and flowers of elderberry shrubs.

Two clusters of elderberry shrubs are present in the southeastern portion of the Study Area (**Attachment F**). Each of these clusters has numerous stems with a diameter of one inch or greater, but no exit holes were observed on any of the shrubs when surveyed by a qualified biologist in early February 2022. This survey was conducted to collect information for analysis of the shrubs consistent with *The Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle* (*Desmocerus californicus dimorphus*) (USFWS 2017b). The shrubs are not in a riparian location. There is only one documented CNDDDB occurrence of Valley elderberry longhorn beetle within five miles of the Study Area (**Figure 5**). This occurrence (CNDDDB Occurrence #270) is located approximately 5 miles northeast of the Study Area near Secret Ravine Parkway and is considered potentially extirpated (CNDDDB 2022). Given the lack of evidence of VELB presence and the long distance to the nearest occupied habitat, VELB are considered absent from the site.

### **5.2.3 Vernal Pool Tadpole Shrimp**

The vernal pool tadpole shrimp (*Lepidurus packardii*) is listed as endangered pursuant to the federal Endangered Species Act. The historic range of the vernal pool tadpole shrimp likely extended throughout the Central Valley of California and has been documented from east of Redding in Shasta County south to Fresno County, and from the San Francisco Bay Wildlife Refuge in Alameda County. The historic and current ranges of vernal pool tadpole shrimp are very similar in extent; however, the remaining populations are more fragmented and isolated than during historical times (USFWS 2005).

This species is associated with long-duration seasonal pools in grasslands throughout the northern and eastern portions of the Central Valley (USFWS 2005). Suitable vernal pools and seasonal swales are generally underlain by hardpan or sandstone. Much like vernal pool fairy shrimp, vernal pool tadpole shrimp are adapted to seasonally inundated features such as vernal pools, seasonal wetlands, and seasonal wetland swales (USFWS 2005).

Large vernal pools within the Project represent marginally suitable habitat for this species. There is one documented CNDDDB occurrence of vernal pool tadpole shrimp within five miles of the Study Area (**Figure 5**). This occurrence (CNDDDB Occurrence #24) is located approximately 2.5 miles north of the Study Area in the Woodcreek Oaks Wetland Preserve and is considered potentially extirpated (CNDDDB 2022). Protocol-level<sup>2</sup> wet-season and dry-season surveys of the wetlands south of and along PFE Road were negative (Madrone 2018b), and vernal pool tadpole shrimp is considered absent from this area. No surveys have been conducted within the wetlands north of PFE Road, and the species could be present in this area.

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<sup>2</sup> These surveys were conducted in accordance with the 13 November 2017 *Survey Guidelines for the Listed Large Branchiopods* (USFWS 2017a).

## **5.3 Fish**

### **5.3.1 Central Valley Steelhead**

Steelhead (*Oncorhynchus mykiss irideus*) populations in the Central Valley ESU have been listed by the NMFS under the ESA as threatened. Steelhead, the anadromous form of rainbow trout, historically inhabited most tributaries to the Sacramento River. Juvenile steelhead may spend up to three years in freshwater prior to emigrating to the ocean as smolts. Typically, juvenile steelhead emigrate as age class 1+ fish (one year in fresh water) through the Sacramento River and the Sacramento-San Joaquin Estuary from November through May. Spawning steelhead require gravel or cobble substrates 0.2 to 5.1 inches in diameter for egg laying. Fine sediments (e.g., silt, fine sand, and clay) may suffocate eggs by preventing the transport of dissolved oxygen from the water to the eggs. The range of water temperatures for optimal survival and growth of rainbow trout is between 59 and 64°F (Moyle 2002). Both fry and older juveniles require instream object cover, cobble or boulders, large woody debris, undercut banks, or submerged and overhanging vegetation for protection against predators.

Dry Creek within the Study Area is Critical Habitat for Central Valley steelhead; the reach of the creek within the Study Area is considered too degraded to provide spawning and rearing habitat but serves as a migration corridor to better habitat upstream in Secret Ravine and Miner's Ravine (CNDDDB 2018). The intermittent drainage is tributary to Dry Creek, but does not have appropriate substrate for spawning, and its intermittent nature renders it unsuitable for rearing habitat. Although it is possible that steelhead could swim through it occasionally, the intermittent drainage is not considered suitable habitat for this species.

### **5.3.2 Central Valley Fall-Run Chinook Salmon**

Chinook salmon are an anadromous species which spawn in freshwater rivers but migrate to the ocean to rear (Moyle 2002). Chinook salmon typically return to their natal stream to spawn. Within the Central Valley there are four races of Chinook salmon: fall-run, late fall-run, winter-run, and spring-run. Adult fall-run Chinook salmon migrate through the Delta and into Central Valley rivers from July through December and spawn from October through December.

Chinook rely on suitable water temperature and substrate for successful spawning and incubation. Rearing habitat for juveniles includes riffles, runs, pools, and inundated floodplains. In streams, Chinook are opportunistic feeders. They eat aquatic insects, terrestrial insects and bottom invertebrates. Juvenile Chinook are significantly affected by predatory nonnative fish (Moyle 2002).

Dry Creek within the Study Area is Essential Fish Habitat for all Pacific Salmon, including the Central Valley fall-run Chinook; the reach of the creek within the Study Area is considered too degraded to provide spawning and rearing habitat for salmonids, but serves as a migration corridor to better habitat upstream in Secret Ravine and Miner's Ravine (CNDDDB 2018). The intermittent drainage is tributary to Dry Creek, but does not have appropriate substrate for spawning, and its intermittent nature renders it unsuitable for

rearing habitat. Although it is possible that Chinook could swim through it occasionally, the intermittent drainage is not considered suitable habitat for this species.

## **5.4 Amphibians**

### **5.4.1 Western Spadefoot**

The western spadefoot (*Spea hammondi*) is not federally or state listed but is a CDFW species of special concern. This amphibian is a nocturnal animal that forages in grassland, open chaparral, and pine-oak woodlands for a variety of invertebrates such as insects and worms (USFWS 2005). Western Spadefoot breeds from January through May in variety of temporary wetlands including creeks, pools in intermittent drainages, vernal pools, and seasonal wetlands, and other fish-free water features. The tadpoles develop in 3 to 11 weeks, and must complete their metamorphosis before the temporary pools dry. Post-metamorphic juveniles feed and then immediately seek underground refugia. Following metamorphosis, the adults are largely terrestrial in nature and will burrow into sandy or gravelly soils utilizing the "spades" on the hind feet. The majority of the adult's life is spent in underground burrows (USFWS 2005). In Placer County, western spadefoot are known to breed in relatively deep man-made features, such as ponded areas adjacent to railroad tracks, and in intermittent drainage plunge pools or similar pools that hold water through late spring (CNDDDB 2022).

Several of the vernal pools and seasonal wetlands within the Project Area represent suitable breeding habitat for western spadefoot and the surrounding annual brome grasslands/VPC provide suitable dry-season habitat. No western spadefoot tadpoles were observed during wet-season vernal pool branchiopod surveys in the portion of the Study Area south of PFE Road. There are five documented CNDDDB occurrences of western spadefoot within five miles of the Study Area, the nearest of which (CNDDDB Occurrence #171) is located approximately 2.25 miles north of the site, in the Woodcreek Oaks Open Space Preserve (Figure 5) (CNDDDB 2022).

## **5.5 Reptiles**

### **5.5.1 Western Pond Turtle**

The western pond turtle (*Emys marmorata*) is not federally or state listed but is a CDFW species of special concern. Its favored habitats include streams, large rivers and canals with slow-moving water, aquatic vegetation, and open basking sites (Jennings and Hayes 1994). Although the turtles must live near water, they can tolerate drought by burrowing into the muddy beds of dried drainages. This species feeds mainly on invertebrates such as insects and worms, but will also consume small fish, frogs, mammals and some plants. Western pond turtle predators include raccoons, coyotes, raptors, weasels, large fish, and bullfrogs. This species breeds from mid to late spring in adjacent open grasslands or sandy banks (Jennings and Hayes 1994).

Dry Creek and the intermittent drainages within the Study Area provide suitable habitat for western pond turtle. Western pond turtle has not been documented in the processed records of the CNDDDB within five miles of the Study Area; however, an unprocessed CNDDDB record of the species has been documented approximately 4 miles east of the site in Upper Linda Creek, a tributary of Dry Creek (CNDDDB 2022).

## **5.6 Birds**

### **5.6.1 Tricolored Blackbird**

Tricolored blackbirds (*Agelaius tricolor*) are not federally listed, but are state listed as threatened. In addition, tricolored blackbird is listed by CDFW as a species of special concern. They are colonial nesters preferring to nest in dense stands of cattails, bulrush, or blackberry thickets associated with perennial water (Shuford and Gardali 2008).

Isolated blackberry brambles and small cattail patches in and around the intermittent drainage running through the Study Area represent marginally suitable nesting habitat for tricolored blackbird. There is one documented CNDDDB occurrence of tricolored blackbird within five miles of the Study Area (**Figure 5**). This occurrence (CNDDDB Occurrence #330) is located approximately 5 miles east of the Study Area, along Wellington Way just north of East Roseville Parkway (CNDDDB 2022).

### **5.6.2 Burrowing Owl**

Burrowing owl (*Athene cunicularia*) is not listed pursuant to either the California or federal Endangered Species Acts; however, it is designated as a species of special concern by the CDFW. They typically inhabit dry open rolling hills, grasslands, desert floors, and open bare ground with gullies and arroyos. This species typically uses burrows created by fossorial mammals, most notably the California ground squirrel, but may also use man-made structures such as culverts; cement, asphalt, or wood debris piles; or openings beneath cement or asphalt pavement (CDFG 1995). The breeding season extends from February 1 through August 31 (CBOC 1993, CDFG 1995).

Although few ground squirrel burrows and no evidence of burrowing owls (such as whitewash or feathers) were observed, debris scattered throughout the Study Area could provide artificial burrows for burrowing owl. The annual brome grasslands provide suitable foraging habitat for this species. There is one documented CNDDDB occurrence of burrowing owl within five miles of the Study Area (**Figure 5**). This occurrence (CNDDDB Occurrence #339) is located approximately 5 miles northwest of the Study Area, along Phillip Way (CNDDDB 2022). This occurrence was most recently observed in May 2019, when two owls were observed utilizing the same burrow and exhibiting nesting behavior (CNDDDB 2022).

### **5.6.3 Swainson's Hawk**

Swainson's hawk (*Buteo swainsoni*) is a raptor species that is not federally listed, but is listed as threatened by CDFW. Breeding pairs typically nest in tall trees associated with riparian corridors, and forage in

grassland, irrigated pasture, and cropland with a high density of rodents (Shuford and Gardali 2008). The Central Valley populations breed and nest in the late spring through early summer before migrating to Central and South America for the winter (Shuford and Gardali 2008).

The annual brome grasslands throughout the Study Area represent suitable foraging habitat for Swainson's hawk, and the trees within the Study Area provide suitable nesting habitat. This species was observed foraging on-site during field surveys. There are five documented occurrences of Swainson's hawk nests in the processed records of the CNDDDB, as well as numerous unprocessed records (**Figure 5**) (CNDDDB 2022). The nearest documented Swainson's hawk nest is an unprocessed record approximately 2.5 miles west of the Study Area, west of Walerga Road (CNDDDB 2022).

#### **5.6.4 Northern Harrier**

The northern harrier (*Circus cyaneus*) is not listed pursuant to either the California or federal Endangered Species Acts; however, it is considered to be a species of special concern by the CDFW. This species is known to nest within the Central Valley, along the Pacific Coast, and in northeastern California (Shuford and Gardali 2008). The northern harrier is a ground nesting species, and typically nests in emergent wetland/marsh, open grasslands, or savannah habitats. Foraging occurs within a variety of open habitats such as marshes, agricultural fields, and grasslands (Shuford and Gardali 2008).

The annual brome grasslands throughout the Study Area are suitable nesting and foraging habitat for this species. Northern harrier has not been documented in the CNDDDB within five miles of the Study Area (CNDDDB 2022).

#### **5.6.5 White-Tailed Kite**

White-tailed kite (*Elanus leucurus*) is not federally or state listed, but is a CDFW fully protected species. This species is a yearlong resident in the Central Valley and is primarily found in or near foraging areas such as open grasslands, meadows, farmlands, savannahs, and emergent wetlands (Shuford and Gardali 2008). White-tailed kites typically nest from March through June in trees within riparian, oak woodland, and savannah habitats of the Central Valley and Coast Range (Shuford and Gardali 2008).

The annual brome grasslands throughout the Study Area represent suitable foraging habitat for white-tailed kite, and the trees within the Study Area provide suitable nesting habitat. This species was observed foraging in the southern portion of the Study Area during a field survey. There are five documented occurrences of white-tailed kite nests within five miles of the site in the CNDDDB (**Figure 5**) (CNDDDB 2022). The nearest documented white-tailed kite nest (CNDDDB Occurrence #56), which is approximately 2.5 miles north of the Study Area, near the Woodcreek Golf Club (CNDDDB 2022).

### **5.6.6 Loggerhead Shrike**

The loggerhead shrike (*Lanius ludovicianus*) is not listed and protected pursuant to either the California or federal Endangered Species Acts; but is a CDFW species of special concern. Loggerhead shrikes nest in small trees and shrubs in woodland and savannah vegetation communities, and forage in open habitats throughout California (Shuford and Gardali 2008). The nesting season ranges from March through June.

The trees and annual brome grassland within the Study Area provide suitable foraging and nesting habitat for loggerhead shrike. Loggerhead shrike has not been documented in the CNDDDB within five miles of the Study Area (CNDDDB 2022).

### **5.6.7 Yellow Warbler**

The yellow warbler (*Setophaga petechia*) is not listed and protected pursuant to either the California or federal Endangered Species Acts; but it is a CDFW species of special concern. The yellow warbler is largely extirpated as a breeder in the Sacramento Valley, but it is a common migrant during the fall and winter months (Shuford and Gardali 2008). Yellow warblers generally occupy riparian vegetation in close proximity to streams. Preferred habitat in northern California is dominated by willows (*Salix* spp.), cottonwoods (*Populus* spp.), and Oregon ash (*Fraxinus latifolia*) (Shuford and Gardali 2008).

Although the Study Area is outside of this species' breeding range, it has been documented along Dry Creek just downstream of the Study Area during the last few days of August and mid-September of several years (eBird 2021), during the beginning of fall migration. Suitable winter foraging habitat is present in the Riparian Woodlands within the Study Area.

## **5.7 Mammals**

### **5.7.1 Pallid Bat**

Pallid bat (*Antrozous pallidus*) is not federally or state listed, but is considered a CDFW species of special concern, and is classified by the WBWG as a High priority species. It favors roosting sites in crevices in rock outcrops, caves, abandoned mines, hollow trees, and human-made structures such as barns, attics, and sheds (WBWG 2021). Though pallid bats are gregarious, they tend to group in smaller colonies of 10 to 100 individuals. It is a nocturnal hunter and captures prey in flight, but unlike most American bats, the species has been observed foraging for flightless insects, which it seizes after landing (WBWG 2021).

Tree hollows and exfoliating bark on trees throughout the Study Area, and outbuildings associated with the homestead represent suitable day and maternity roosting habitat for pallid bat. Pallid bat has not been documented in the CNDDDB within 5 miles of the Study Area (CNDDDB 2022).

### **5.7.2 Townsend's Big-Eared Bat**

Townsend's big-eared bat (*Corynorhinus townsendii townsendii*) is not federally listed, but it is a Candidate for state listing, and is classified by the WBWG as a High priority species. This species roosts primarily in caves and cave-like roosting habitat, including abandoned mines (WBWG 2021). Its habit of roosting pendant-like on open surfaces makes it readily detectable, and it can be the species most readily observed, when present (commonly in low numbers) in caves and abandoned mines throughout its range. It has also been reported to utilize buildings, bridges, rock crevices and hollow trees as roost sites. Forages in edge habitats along streams, and adjacent to and within a variety of wooded habitats (WBWG 2021).

Assorted outbuildings associated with the homestead in Creekview Ranch North represent marginally suitable day and maternity roosting habitat for Townsend's big-eared bat. Townsend's big-eared bat has not been documented in the CNDDDB within 5 miles of the Study Area (CNDDDB 2022).

### **5.7.3 Silver-Haired Bat**

Silver-haired bat (*Lasionycteris noctivagans*) is not federally or state listed, but is classified by the WBWG as a Medium priority species. Primarily considered a coastal and montane forest species, the silver-haired bat occurs in more xeric environments during winter and seasonal migrations (WBWG 2021). It roosts in abandoned woodpecker holes, under bark, and occasionally in rock crevices. This insectivore's favored foraging sites include open wooded areas near water features (WBWG 2021).

Tree hollows and exfoliating bark on trees throughout the Study Area represent suitable day and maternity roosting habitat for silver-haired bat. Silver-haired bat has not been documented in the CNDDDB within 5 miles of the Study Area (CNDDDB 2022).

### **5.7.4 Western Red Bat**

Western red bat (*Lasiurus blossevillii*) is not federally or state listed, but is considered a CDFW species of special concern, and is classified by the WBWG as a High priority species. Western red bat is typically solitary, roosting primarily in the foliage of trees or shrubs (WBWG 2021). Day roosts are commonly in edge habitats adjacent to streams or open fields, in orchards, and sometimes in urban areas. There may be an association with intact riparian habitat (particularly willows, cottonwoods, and sycamores) (WBWG 2021).

Trees within the Riparian Woodland represent suitable day and maternity roosting habitat for western red bat. Western red bat has not been documented in the CNDDDB within 5 miles of the Study Area (CNDDDB 2022).

### **5.7.5 Hoary Bat**

The hoary bat (*Lasiurus cinereus*) is not federally or state listed, but is classified by the WBWG as a Medium priority species. It is considered to be one of the most widespread of all American bats with a range

extending from Canada to central Chile and Argentina as well as Hawaii (WBWG 2021). Hoary bats are solitary and roost primarily in foliage of both coniferous and deciduous trees, near the ends of branches at the edge of a clearing (WBWG 2021). This species may also occasionally roost in caves, beneath a rock ledge, in a woodpecker hole, in a grey squirrel nest, under a wood plank, or clinging to the side of a building (WBWG 2021).

Trees within the oak woodland and Riparian Woodland represent suitable day and maternity roosting habitat for hoary bat. Hoary bat has not been documented in the CNDDDB within 5 miles of the Study Area (CNDDDB 2022).

## **6.0 IMPACTS TO SENSITIVE BIOLOGICAL RESOURCES**

This section details potential impacts to the biological resources discussed above associated with construction of the Project, as discussed in **Section 1.1** and shown on **Figure 1** and in **Attachment A**, those associated with each of the three sewer alternatives (outlined in **Section 1.2** and shown on **Figure 1**), and those associated with the potential future trail alignments (outlined in **Section 1.3** and shown on **Figure 1**).

Impacts analyzed within this section include both permanent and temporary impacts. Permanent impacts range from mass grading and lot construction to pedestrian trail construction and permanent shading of stream areas under bridges. Adjacent to drainages, where bridges are proposed, permanent impacts may include bridge footings and abutments, pan deck, and approach grading. Temporary impacts are impacts that will occur for less than one year's time before the area is restored, and will involve activities including but not limited to: slope grading, utility trenching, environmentally sensitive area fencing, and heavy equipment access into an area for infrastructure installation.

### **6.1 Aquatic Resources**

#### **6.1.1 Project Impacts**

Within the PCCP portion of the Project Area, of the 15.285 acres of mapped aquatic resources, 1.567 acres will be permanently impacted by the Project, 0.509 acre will be temporarily impacted by the Project, and 13.003 acres will be avoided (**Table 4** and **Attachment H**).

Within the Non-PCCP portion of the Project Area, of the 2.389 acres of mapped aquatic resources, 0.796 acres will be permanently impacted by the Project, none will be temporarily impacted by the Project, and 1.527 acres will be avoided (**Table 4** and **Attachment H**).

This combines to a total of 17.674 acres of aquatic resources mapped within the Study Area, a total of 2.364 acres will be permanently impacted by the Project, a total of 0.509 acre will be temporarily impacted by the Project, and a total of 14.529 acres will be avoided (**Table 4** and **Attachment H**).



**Table 4. Impacts to Aquatic Resources Associated with the Project**

Aquatic Resources	Permanent Impacts						Temporary Impacts						Avoided						Total					
	PCCP		Non-PCCP		Total		PCCP		Non-PCCP		Total		PCCP		Non-PCCP		Total		PCCP		Non-PCCP		Total	
	(acres)	(linear feet)	(acres)	(linear feet)	(acres)	(linear feet)	(acres)	(linear feet)	(acres)	(linear feet)	(acres)	(linear feet)	(acres)	(linear feet)	(acres)	(linear feet)	(acres)	(linear feet)	(acres)	(linear feet)	(acres)	(linear feet)	(acres)	(linear feet)
Seasonal Wetland	0.018	-	0.519	-	0.536	-	0	-	0	-	0	-	0	-	0.025	-	0.025	-	0.018	-	0.544	-	0.562	-
Seasonal Wetland Swale	0.511	-	0.014	-	0.525	-	0	-	0	-	0	-	0.067	-	0.011	-	0.078	-	0.578	-	0.025	-	0.602	-
Vernal Pool	0.742	-	0	-	0.742	-	0	-	0	-	0	-	0	-	0	-	0	-	0.742	-	0	-	0.742	-
Dry Creek	0.000	0	0	0	0	0	0	0	0	0	0	0	5.964	2,687	0.361	210	6.325	2,897	5.964	2,687	0.361	210	6.325	2,897
Ephemeral Drainage	0.021	332	0	0	0.021	332	0.010	82	0	0	0.010	82	0.088	466	0	0	0.088	466	0.118	880	0	-	0.118	880
Intermittent Drainage	0.246	349	0.199	792	0.444	1,141	0.499	404	0	0	0.499	404	7.090	7,516	1.195	4,478	8.285	11,994	7.834	8,269	1.394	5,270	9.229	13,539
Roadside Ditch	0.032	658	0.065	1,341	0.097	1,999	0.000	0	0	0	0.000	0	0	0	0	0	0	0	0.032	658	0.065	1,341	0.097	1,999
<b>Total Aquatic Resources</b>	<b>1.567</b>	<b>1,339</b>	<b>0.796</b>	<b>2,133</b>	<b>2.364</b>	<b>3,472</b>	<b>0.509</b>	<b>486</b>	<b>0</b>	<b>0</b>	<b>0.509</b>	<b>486</b>	<b>13.209</b>	<b>10,669</b>	<b>1.592</b>	<b>4,688</b>	<b>14.801</b>	<b>15,357</b>	<b>15.285</b>	<b>12,494</b>	<b>2.389</b>	<b>6,821</b>	<b>17.674</b>	<b>19,315</b>

Note: Small summation errors may occur due to rounding.

**Table 5. Impacts to Aquatic Resources Associated with the Project Plus Sewer Alignment and Proposed Future Trails**

Aquatic Resources	Permanent Impacts						Temporary Impacts						Total Impacts					
	PCCP		Non-PCCP		Total		PCCP		Non-PCCP		Total		PCCP		Non-PCCP		Total	
	(acres)	(linear feet)	(acres)	(linear feet)	(acres)	(linear feet)	(acres)	(linear feet)	(acres)	(linear feet)	(acres)	(linear feet)	(acres)	(linear feet)	(acres)	(linear feet)	(acres)	(linear feet)
Seasonal Wetland	0.018	-	0.519	-	0.536	-	0.000	-	0.000	-	0.000	-	0.018	-	0.519	-	0.536	-
Seasonal Wetland Swale	0.511	-	0.014	-	0.525	-	0.000	-	0.000	-	0.000	-	0.511	-	0.014	-	0.525	-
Vernal Pool	0.742	-	0.000	-	0.742	-	0.000	-	0.000	-	0.000	-	0.742	-	0.000	-	0.742	-
Dry Creek	0.000 - 0.033	0 - 18	0.000 - 0.022	0 - 12	0.000 - 0.055	0 - 30	0.000 - 0.178	0 - 96	0.000 - 0.132	0 - 75	0.000 - 0.310	0 - 171	0.000 - 0.211	0 - 114	0.000 - 0.154	0 - 87	0.000 - 0.365	0 - 201
Ephemeral Drainage	0.021	332	0.000	0	0.021	332	0.010	82	0.000	0	0.010	82	0.031	414	0.000	0	0.031	414
Intermittent Drainage	0.246 - 0.265	349 - 381	0.199	792	0.444 - 0.464	1,141 - 1,173	0.499 - 0.542	404 - 470	0.000	0	0.499 - 0.542	404 - 470	0.744 - 0.807	753 - 851	0.199	792	0.943 - 1.006	1,545 - 1,643
Roadside Ditch	0.032	658	0.065	1,341	0.097	1,999	0.000	0	0.000	0	0.000	0	0.032	658	0.065	1,341	0.097	1,999
<b>Total Aquatic Resources</b>	<b>1.567 - 1.638</b>	<b>1,520 - 1,570</b>	<b>0.797 - 0.819</b>	<b>2,133 - 2,145</b>	<b>2.364 - 2.456</b>	<b>3,653 - 3,715</b>	<b>0.509 - 0.720</b>	<b>486 - 648</b>	<b>0.000 - 0.132</b>	<b>0 - 75</b>	<b>0.509 - 0.852</b>	<b>486 - 723</b>	<b>2.084 - 2.358</b>	<b>1,924 - 2,136</b>	<b>0.797 - 0.951</b>	<b>2,133 - 2,220</b>	<b>2.880 - 3.308</b>	<b>4,057 - 4,356</b>

Note: Small summation errors may occur due to rounding. The lower end of the impact ranges assumes the least impactful sewer alternative and neither of the trails are implemented. The upper end of the impact ranges assumes the most impactful sewer alternative and both trails are implemented.



## **6.1.2 Sewer Alternatives**

### 6.1.2.1 Sewer Alternative Alignment 1A

If Sewer Alternative Alignment 1A were selected, no impacts to aquatic resources are anticipated, as the sewer line would be bored under Dry Creek.

### 6.1.2.2 Sewer Alternative Alignment 1B

If Sewer Alternative Alignment 1B were selected, no impacts to aquatic resources are anticipated, as the sewer line would be bored under Dry Creek.

### 6.1.2.3 Sewer Alternative Alignment 1C

If Sewer Alternative Alignment 1C were selected, no impacts to aquatic resources are anticipated, as the sewer line would be hung below an existing bridge to cross Dry Creek.

## **6.1.3 Potential Future Trail Alignments**

If the two trails are constructed in the future, they would result in permanent impacts to 0.033 acre of Dry Creek within the PCCP Plan Area and 0.022 acre of Dry Creek outside of the PCCP Plan area, and temporary impacts to 0.178 acre of Dry Creek within the PCCP Plan Area and 0.132 acre of Dry Creek outside of the PCCP Plan Area. This combines to a total of 0.055 acres of permanent impacts and 0.310 acre of temporary impacts associated with the Potential Future Trails (**Table 5** and **Attachment H**).

## **6.1.4 Overall Project Impacts**

The Project combined with the required sewer line and potential future trails would result in the following cumulative aquatic resources impacts. The ranges below represent the full range of impacts, with the lower end assuming the least impactful sewer alternative and neither of the trails are implemented, and the upper end assuming the most impactful sewer alternative and both trails are implemented.

- Within the PCCP portion of the Study Area, 1.586 - 1.638 acres of permanent impacts and 0.499 - 0.720 acre of temporary impacts (**Table 5** and **Attachment H**).
- Within the Non-PCCP portion of the Study Area, 0.797 - 0.819 acres of permanent impacts and 0.000 - 0.132 acre of temporary impacts (**Table 5** and **Attachment H**).
- This combines to a total of 2.381 – 2.456 acres of permanent impacts and 0.499 – 0.852 acre of temporary impacts (**Table 5** and **Attachment H**).

## **6.2 Vegetation Communities/Terrestrial Land Covers**

### **6.2.1 Project Impacts**

Within the PCCP portion of the Project Area, of the 145.33 acres of mapped terrestrial land covers, 96.58 acres will be permanently impacted by the Project, 8.01 acres will be temporarily impacted by the Project, and 40.75 acres will be avoided (**Table 6** and **Attachment I**).

Within the Non-PCCP portion of the Project Area, of the 69.70 acres of mapped vegetation communities, 42.07 acres will be permanently impacted by the Project, 0.01 acre will be temporarily impacted by the Project, and 27.59 acres will be avoided (**Table 6** and **Attachment I**).

This combines to a total of 138.65 acres of vegetation communities/land covers that will be permanently impacted by the Project, a total of 8.03 acres will be temporarily impacted by the Project, and a total of 68.34 acres will be avoided (**Table 6** and **Attachment I**).

### **6.2.2 Sewer Alternatives**

#### 6.2.2.1 Sewer Alternative Alignment 1A

Within the PCCP portion of Sewer Alternative Alignment 1A, 0.19 acre of VPC Low land cover will be permanently impacted and 0.16 acre of VPC Low and Riparian land covers will be temporarily impacted.

Within the Non-PCCP portion of Sewer Alternative Alignment 1A, 0.21 acre of annual brome grassland and Riparian Woodland will be permanently impacted and 0.47 acre of annual brome grassland and Riparian Woodland will be temporarily impacted.

This combines to a total of 0.40 acre of vegetation communities/land covers that will be permanently impacted by Sewer Alternative Alignment 1A and 0.63 acre that will be temporarily impacted.

#### 6.2.2.2 Sewer Alternative Alignment 1B

Within the PCCP portion of Sewer Alternative Alignment 1B, 0.01 acre of VPC low land cover will be permanently impacted and 0.03 acre of VPC Low and Riparian land covers will be temporarily impacted.

Within the Non-PCCP portion of Sewer Alternative Alignment 1B, 1.46 acres of annual brome grassland, blue oak woodland, Riparian Woodland, and urban vegetation communities will be permanently impacted and 1.30 acres of annual brome grassland, blue oak woodland, Riparian Woodland, and urban vegetation communities will be temporarily impacted.

This combines to a total of 1.47 acres of vegetation communities/land covers that will be permanently impacted by Sewer Alternative Alignment 1B and 1.33 acres that will be temporarily impacted.

**Table 6. Impacts to Terrestrial Land Covers/Vegetation Communities Associated with the Project**

Land Covers / Vegetation Communities	Permanent Impacts			Temporary Impacts			Avoided			Total		
	PCCP	Non-PCCP	Total	PCCP	Non-PCCP	Total	PCCP	Non-PCCP	Total	PCCP	Non-PCCP	Total
	(acres)	(acres)	(acres)	(acres)	(acres)	(acres)	(acres)	(acres)	(acres)	(acres)	(acres)	(acres)
Annual Brome Grassland	-	33.23	33.23	-	0.00	0.00	-	5.25	5.25	-	38.48	38.48
Vernal Pool Complex (VPC) High	6.49	-	6.49	0.00	-	0.00	0.00	-	0.00	6.49	-	6.49
VPC Intermediate	51.57	-	51.57	1.84	-	1.84	6.84	-	6.84	60.25	-	60.25
VPC Low	28.67	-	28.67	4.95	-	4.95	8.66	-	8.66	42.28	-	42.28
Blue Oak Woodland	2.21	1.48	3.69	0.92	0.00	0.92	4.44	12.22	16.66	7.57	13.70	21.27
Orchard / Abandoned Almond Orchard	2.70	1.67	4.37	0.02	0.00	0.02	0.12	0.00	0.12	2.84	1.67	4.51
Riparian / Riparian Woodland	0.05	0.94	0.99	0.13	0.00	0.13	17.37	1.49	18.86	17.55	2.43	19.98
Rural Residential	1.64	-	1.64	0.11	-	0.11	1.29	0.00	1.29	3.04	-	3.04
Urban	3.24	4.75	7.99	0.04	0.01	0.05	2.03	8.63	10.66	5.31	13.39	18.70
Valley Needlegrass Grassland	-	0.00	0.00	-	0.00	0.00	-	0.03	0.03	-	0.03	0.03
<b>Total Land Covers/Vegetation Communities</b>	<b>96.58</b>	<b>42.07</b>	<b>138.65</b>	<b>8.01</b>	<b>0.01</b>	<b>8.03</b>	<b>40.75</b>	<b>27.59</b>	<b>68.34</b>	<b>145.33</b>	<b>69.70</b>	<b>215.02</b>

Note: Small summation errors may occur due to rounding.

**Table 7. Impacts to Terrestrial Land Covers/Vegetation Communities Associated with the Project Plus Sewer Alignment and Proposed Future Trails**

Land Covers / Vegetation Communities	Permanent Impacts			Temporary Impacts			Total		
	PCCP	Non-PCCP	Total	PCCP	Non-PCCP	Total	PCCP	Non-PCCP	Total
	(acres)	(acres)	(acres)	(acres)	(acres)	(acres)	(acres)	(acres)	(acres)
Annual Brome Grassland	-	32.79 – 34.01	32.79 – 34.01	-	0.00 – 0.93	0.00 – 0.93	-	32.79 – 34.94	32.79 – 34.94
Vernal Pool Complex (VPC) High	6.49	-	6.49	0.00	-	0.00	6.49	-	6.49
VPC Intermediate	51.57 – 51.65	-	51.57 – 51.65	1.84 – 1.93	-	1.84 – 1.93	53.41 – 53.58	-	53.41 – 53.58
VPC Low	28.67 – 29.18	-	28.67 – 29.18	4.95 – 5.30	-	4.95 – 5.30	33.62 – 34.48	-	33.62 – 34.48
Blue Oak Woodland	2.21	1.48 – 1.59	3.69 – 3.80	0.92	0.00 – 0.11	0.92 – 1.03	3.13	1.48 – 1.70	4.61 – 4.83
Orchard / Abandoned Almond Orchard	2.70	1.67	4.37	0.02	0.00	0.02	2.72	1.67	4.39
Riparian / Riparian Woodland	0.05 – 0.18	0.94 – 1.13	0.99 – 1.31	0.13 – 0.33	0.00 – 0.35	0.13 – 0.68	0.18 – 0.51	0.94 – 1.48	1.12 – 1.99
Rural Residential	1.64	-	1.64	0.11	-	0.11	1.75	-	1.75
Urban	3.24	4.75 – 7.11	7.99 – 10.35	0.04	0.01 – 0.02	0.05 – 0.07	3.28	4.76 – 7.13	8.04 – 10.41
Valley Needlegrass Grassland	-	0.00	0.00	-	0.00	0.00	-	0.00	0.00
<b>Total Land Covers/Vegetation Communities</b>	<b>96.58 – 97.29</b>	<b>42.07 – 45.51</b>	<b>138.65 – 142.80</b>	<b>8.01 – 8.66</b>	<b>0.01 – 1.41</b>	<b>8.03 – 10.07</b>	<b>104.58 – 105.94</b>	<b>41.64 – 46.92</b>	<b>146.22 – 152.86</b>

Note: Small summation errors may occur due to rounding. The lower end of the impact ranges assumes the least impactful sewer alternative and neither of the trails are implemented. The upper end of the impact ranges assumes the most impactful sewer alternative and both trails are implemented.



### 6.2.2.3 Sewer Alternative Alignment 1C

There are no PCCP impacts associated with Sewer Alternative Alignment 1C. All of the 2.36 acres of vegetation community permanent impacts associated with Sewer Alternative Alignment 1C are impacts to Urban habitat and are located outside of the PCCP area.

There are no temporary impacts associated with this alignment.

## 6.2.3 Potential Future Trail Alignments

### 6.2.3.1 West Trail

Within the West Trail alignment, 0.54 acre of PCCP land covers, consisting of Riparian, VPC Low, and VPC Intermediate, would be permanently impacted and 0.40 acre of Riparian, VPC Low, and VPC Intermediate land covers would be temporarily impacted.

### 6.2.3.2 East Trail

Within the PCCP portion of the East Trail alignment, 0.01 acre of VPC Low land cover would be permanently impacted and 0.03 acre of Riparian and VPC Low would be temporarily impacted.

Within the Non-PCCP portion of the East Trail alignment, 0.02 acre of Riparian Woodland would be permanently impacted and 0.07 acre of Riparian Woodland and Annual Brome Grassland would be temporarily impacted.

This combines to a total of 0.03 acre of vegetation communities/land covers that would be permanently impacted by the East Trail alignment and 0.10 acre that would be temporarily impacted.

## 6.2.4 Overall Project Impacts

The Project combined with the required sewer line and potential future trails would result in the following cumulative vegetation community/terrestrial land cover impacts and avoidance. The ranges below represent the full range of impacts, with the lower end assuming the least impactful sewer alternative and neither of the trails are implemented, and the upper end assuming the most impactful sewer alternative and both trails are implemented.

- Within the PCCP portion of the Study Area, 96.58 – 97.29 acres of permanent impacts and 8.01 – 8.66 acres of temporary impacts (**Table 7** and **Attachment I**).
- Within the Non-PCCP portion of the Study Area, 42.07 – 45.51 acres of permanent impacts and 0.01 – 1.41 acres of temporary impacts (**Table 7** and **Attachment I**).
- This combines to a total of 104.58 – 105.94 acres of permanent impacts and 41.64 – 46.92 acres of temporary impacts (**Table 7** and **Attachment I**).

### **6.3 Special-Status Plant Species**

The vegetation communities proposed for impact represent suitable habitat for a variety of special-status plant species. Protocol-level special-status plant surveys were conducted throughout the Study Area in 2021 and 2022, and only Sanford's arrowhead was found. The Sanford's arrowhead population is located in the avoidance area and will not be impacted (**Attachment I**). No impacts to special-status plant species are anticipated for the Project, sewer alternatives, or potential future trail alignments.

### **6.4 Vernal Pool Branchiopods**

#### **6.4.1 Project Impacts**

Branchiopod surveys conducted in accordance with USFWS guidelines for documenting presence of federally-listed vernal pool branchiopods (USFWS 2017a) were conducted in all suitable habitat in Non-PCCP portions of the Study Area (Madrone 2018b) with negative results. Surveys are in process in the PCCP portion of the Study Area, but not yet complete. Therefore the 0.742 acre of vernal pool that will be impacted by the Project within the PCCP area is considered potential habitat for vernal pool fairy shrimp and vernal pool tadpole shrimp.

#### **6.4.2 Sewer Alternatives**

No vernal pool branchiopod habitat is present within any of the sewer alternatives; therefore, no impacts to vernal pool branchiopods are anticipated as a result of the sewer alignments.

#### **6.4.3 Potential Future Trail Alignments**

No vernal pool branchiopod habitat is present within any of the potential future trail alignments; therefore, no impacts to vernal pool branchiopods are anticipated as a result of the potential future trail alignments.

#### **6.4.4 Overall Project Impacts**

As there is no vernal pool branchiopod habitat associated with the off-site components, the Project will impact 0.742 acre of vernal pool that is considered potential habitat for vernal pool fairy shrimp and vernal pool tadpole shrimp.

### **6.5 Valley Elderberry Longhorn Beetle**

#### **6.5.1 Project Impacts**

Two clumps of elderberry shrubs that represent potential habitat but are not currently occupied by VELB are present within the non-PCCP portion of the Project Area (**Attachment I**). The western-most clump of elderberry shrubs will be impacted by the Project, while the eastern clump will be avoided by at least 20

feet. As these shrubs are not currently occupied by VELB, the removal of the western clump of shrubs would not have any effect on VELB.

### **6.5.2 Sewer Alternatives**

No elderberry shrubs occur within 165 feet of any of the sewer alternatives; therefore, no impacts to VELB are anticipated as a result of the sewer alignments.

### **6.5.3 Potential Future Trail Alignments**

No elderberry shrubs occur within 165 feet of any of the potential future trail alignments; therefore, no impacts to VELB are anticipated as a result of the potential future trail alignments.

### **6.5.4 Overall Project Impacts**

As there are no elderberry shrubs associated with the off-site components, the Project would result in the impact of one clump of elderberry shrubs and the avoidance of one clump of elderberry shrubs. As these shrubs are not currently occupied by VELB, cumulatively the Overall Project would not have any effect on VELB.

## **6.6 Salmonids**

### **6.6.1 Project Impacts**

Dry Creek within the Study Area is designated Critical Habitat for Central Valley steelhead, Essential Fish Habitat for Central Valley fall- run Chinook and serves as a migration corridor for both Central Valley steelhead and Central Valley fall- run Chinook to suitable spawning and rearing habitat upstream in Secret Ravine and Miner's Ravine. The intermittent drainages do not represent habitat for salmonids. The Project as proposed entirely avoids Dry Creek, and therefore, would not result in any impacts to salmonids.

### **6.6.2 Sewer Alternatives**

#### **6.6.2.1 Sewer Alternative Alignment 1A**

If Sewer Alternative Alignment 1A were selected, the sewer line would be bored under Dry Creek. Under this alternative, no direct impacts to salmonid habitat would be expected, but indirect water quality impacts could occur if appropriate erosion control measures were not implemented during work on either side of the creek.

### 6.6.2.2 Sewer Alternative Alignment 1B

If Sewer Alternative Alignment 1B were selected, the sewer line would be bored under Dry Creek. Under this alternative, no direct impacts to salmonid habitat would be expected, but indirect water quality impacts could occur if appropriate erosion control measures were not implemented during work on either side of the creek.

### 6.6.2.3 Sewer Alternative Alignment 1C

If Sewer Alternative Alignment 1C were selected, the sewer line would be hung on an existing bridge to cross Dry Creek. Under this alternative, no direct impacts to salmonid habitat would be expected, but indirect water quality impacts could occur if appropriate erosion control measures were not implemented during work on either side of the creek.

## **6.6.3 Potential Future Trail Alignments**

### 6.6.3.1 West Trail

If the West Trail were constructed in the future, a bridge would be built across Dry Creek. The only potential fill within the Creek associated with this bridge would be approximately eight concrete piles, for a total of approximately 25 square feet. In addition, it would result in the permanent removal of herbaceous and woody riparian vegetation and minor bankside impacts above the ordinary high-water mark. Permanent shading of 0.031 acre of Dry Creek within the PCCP Plan Area could have a positive effect on salmonids, as it could provide cover from predators during migration events. In addition, direct temporary impacts to salmonid habitat consisting of 0.070 acre of Dry Creek within the PCCP Plan Area would occur (**Attachment H**).

### 6.6.3.2 East Trail

If the East Trail were constructed in the future, a bridge would be built across Dry Creek. The only potential fill within the Creek associated with this bridge would be approximately eight concrete piles, for a total of approximately 25 square feet. In addition, it would result in the permanent removal of herbaceous and woody riparian vegetation and minor bankside impacts above the ordinary high-water mark. Permanent shading of 0.002 acre of Dry Creek within the PCCP Plan Area and 0.022 acre of Dry Creek outside of the PCCP Plan area could have a positive effect on salmonids, as it could provide cover from predators during migration events. In addition, direct temporary impacts to salmonid habitat in 0.036 acre of Dry Creek within the PCCP Plan Area and 0.044 acre of Dry Creek outside of the PCCP Plan Area would occur (**Attachment H**). This combines to a total of 0.024 acre of permanent indirect impacts and 0.080 acre of temporary direct impacts associated with the East Trail (**Attachment H**).

#### **6.6.4 Overall Project Impacts**

The Project combined with the required sewer line and potential future trails would result in the following cumulative impacts and avoidance. The ranges below represent the range of impacts, depending on whether the trails are built.

- Within the PCCP portion of the Study Area, permanent shading of 0.000 – 0.033 acre (0-18 linear feet) of Dry Creek and 0.000 – 0.178 acre (0-96 linear feet) of temporary impacts to salmonid habitat in Dry Creek (**Table 5** and **Attachment H**).
- Within the Non-PCCP portion of the Study Area, permanent shading of 0.000 – 0.022 acre (0-12 linear feet) of Dry Creek, and 0.000 – 0.310 acre (0-171 linear feet) of temporary impacts to salmonid habitat in Dry Creek (**Table 5** and **Attachment H**).
- This combines to a total of 0.000 – 0.055 acres (0-30 linear feet) of permanent indirect shading impacts and 0.000 – 0.310 acre (0-171 linear feet) of temporary impacts to salmonid habitat in Dry Creek (**Table 5** and **Attachment H**).

#### **6.7 Western Spadefoot**

##### **6.7.1 Project Impacts**

The seasonal wetlands and vernal pools being impacted by the Project represent suitable breeding habitat for western spadefoot and the surrounding annual brome grasslands/VPC within 300 feet provide suitable dry-season habitat. A total of 0.760 acre of suitable breeding habitat and 47.99 acres of suitable upland habitat will be permanently impacted by Project construction within the PCCP portion of the Project Area (**Attachment I**). An additional 3.37 acres of suitable upland habitat will be temporarily impacted by Project construction within the PCCP portion of the Project Area.

A total of 0.519 acre of suitable breeding habitat and 10.03 acres of suitable upland habitat will be permanently impacted by Project construction within the non-PCCP portion of the Project Area (**Attachment I**).

This combines to a total of 1.279 acre of suitable breeding habitat and 58.02 acres of suitable upland habitat that will be permanently impacted by Project construction, and 3.37 acres of suitable upland habitat that will be temporarily impacted by Project construction (**Attachment I**).

##### **6.7.2 Sewer Alternatives**

No western spadefoot habitat is present within any of the sewer alternatives; therefore, no impacts to western spadefoot are anticipated as a result of the sewer alignments.

### **6.7.3 Potential Future Trail Alignments**

No western spadefoot habitat is present within any of the potential future trail alignments; therefore, no impacts to western spadefoot are anticipated as a result of the potential future trail alignments.

### **6.7.4 Overall Project Impacts**

The Project combined with the required sewer line and potential future trails would result in the following cumulative western spadefoot habitat impacts.

- Within the PCCP portion of the Study Area, 0.760 acre of suitable breeding habitat and 51.36 acres of suitable upland habitat (**Attachment I**).
- Within the Non-PCCP portion of the Study Area, 0.519 acre of suitable breeding habitat and 10.03 acres of suitable upland habitat (**Attachment I**).
- This combines to a total of 1.279 acre of suitable breeding habitat and 61.39 acres of suitable dry-season habitat (**Attachment I**).

## **6.8 Western Pond Turtle**

Dry Creek and the intermittent drainages within the Study Area provide suitable aquatic habitat for western pond turtle, and the adjacent oak and Riparian Woodlands within 150 feet provide potential movement habitat. Several reaches of intermittent drainage and adjacent woodlands will be temporarily and permanently impacted during Overall Project construction (**Attachment I**). If western pond turtles or their nests were present in those areas during construction, individual turtles could be injured or killed, or nests could be destroyed.

### **6.8.1 Project Impacts**

Within the PCCP portion of the Project Area, 0.246 acre of western pond turtle habitat within intermittent drainages and 1.40 acre of movement habitat in adjacent woodlands will be permanently impacted by the Project, and 0.499 acre of western pond turtle habitat within intermittent drainages and 1.04 acre of movement habitat in adjacent woodlands will be temporarily impacted by the Project (**Attachment I**).

Within the non-PCCP portion of the Project Area, 0.199 acre of western pond turtle habitat within intermittent drainages and 1.76 acre of movement habitat in adjacent woodlands will be permanently impacted by the Project, and no western pond turtle habitat within intermittent drainages or adjacent woodlands will be temporarily impacted by the Project (**Attachment I**).

This combines to a total of 0.444 acre of western pond turtle habitat within intermittent drainages that will be permanently impacted by the Project, and 0.499 acre of western pond turtle habitat within intermittent drainages that will be temporarily impacted by the Project (**Attachment I**).

## **6.8.2 Sewer Alternatives**

### 6.8.2.1 Sewer Alternative Alignment 1A

If Sewer Alternative Alignment 1A were selected, the sewer line would be bored under Dry Creek. Under this alternative, no direct impacts to western pond turtle aquatic habitat would be expected, but indirect water quality impacts could occur if appropriate erosion control measures were not implemented during work on either side of the creek. In addition, 0.122 acre of adjacent woodlands within the Non-PCCP Area that represent movement habitat for the turtle would be temporarily impacted.

### 6.8.2.2 Sewer Alternative Alignment 1B

If Sewer Alternative Alignment 1B were selected, the sewer line would be bored under Dry Creek. Under this alternative, no direct impacts to western pond turtle aquatic habitat would be expected, but indirect water quality impacts could occur if appropriate erosion control measures were not implemented during work on either side of the creek. In addition, 0.122 acre of adjacent woodlands within the Non-PCCP Area that represent movement habitat for the turtle would be temporarily impacted.

### 6.8.2.3 Sewer Alternative Alignment 1C

If Sewer Alternative Alignment 1C were selected, the sewer line would be hung below an existing bridge to cross Dry Creek. Under this alternative, no direct impacts to western pond turtle aquatic or movement habitat would be expected, but indirect water quality impacts could occur if appropriate erosion control measures were not implemented during work on either side of the creek.

## **6.8.3 Potential Future Trail Alignments**

### 6.8.3.1 West Trail

If the West Trail were constructed in the future, a bridge would be built across Dry Creek, and two bridges would be built across intermittent tributaries to Dry Creek. The only potential fill within the Creek and drainages associated with these bridges would be approximately eight concrete piles (approximately 25 square feet of fill) in the creek, six piles (approximately 19 square feet) in the intermittent tributary north of Dry Creek, and four piles (approximately 13 square feet) in the intermittent tributary south of Dry Creek. In addition, they would result in permanent indirect impacts of western pond turtle aquatic habitat in 0.031 acre of Dry Creek and 0.019 acre of intermittent drainages and 0.14 acre of permanent direct impacts to movement habitat in adjacent woodlands within the PCCP Plan Area. In addition, direct temporary impacts to western pond turtle aquatic habitat in 0.074 acre of Dry Creek and 0.043 acre of intermittent drainages and 0.18 acre of movement habitat in adjacent woodlands within the PCCP Plan Area would occur (**Attachment I**). This combines to a total of 0.050 acre of permanent indirect impacts to aquatic habitat, 0.14 acre of permanent direct impacts to upland movement habitat and 0.117 acre of temporary direct impacts to aquatic habitat associated with the West Trail (**Attachment I**).

### 6.8.3.2 East Trail

If the East Trail were constructed in the future, a bridge would be built across Dry Creek. The only potential fill within the Creek associated with this bridge would be approximately eight concrete piles, for a total of approximately 25 square feet. In addition, it would result in permanent indirect impacts of western pond turtle aquatic habitat in 0.002 acre of Dry Creek within the PCCP Plan Area and 0.022 acre of Dry Creek and 0.02 acre of adjacent woodlands that represent movement habitat outside of the PCCP Plan area. In addition, direct temporary impacts to western pond turtle aquatic habitat in 0.036 acre of Dry Creek would occur within the PCCP Plan Area. Lastly, direct temporary impacts to western pond turtle aquatic habitat in 0.044 acre of Dry Creek and 0.06 acre of adjacent woodlands that represent movement habitat would occur outside of the PCCP Plan Area (**Attachment I**). This combines to a total of 0.024 acre of permanent indirect impacts and 0.080 acre of temporary direct impacts to aquatic habitat associated with the East Trail (**Attachment I**).

### 6.8.4 Overall Project Impacts

The Project combined with the required sewer line and potential future trails would result in the following cumulative western pond turtle habitat permanent and temporary impacts. The ranges below represent the range of impacts, depending on whether the trails are built.

- Within the PCCP portion of the Study Area, 1.646 – 1.837 acre of permanent impacts and 1.503 – 1.882 acres of temporary impacts (**Attachment I**).
- Within the Non-PCCP portion of the Study Area, 1.959 – 2.037 acres of permanent impacts and 0.000 – 0.166 acre of temporary impacts (**Attachment I**).
- This combines to a total of 3.605 – 3.874 acres of permanent impacts and 1.503 – 2.048 acres of temporary impacts to western pond turtle habitat (**Attachment I**).

## 6.9 Nesting Raptors and Songbirds

Swainson's hawk, white-tailed kite, northern harrier, tricolored blackbird, and loggerhead shrike have the potential to nest within the Project area, Sewer Alternative Alignments, and Potential Future Trail Alignments, as do other more common bird species protected by the MBTA. If they were nesting on-site, removal of the nests would impact these species. Furthermore, birds nesting in avoided areas adjacent to construction could be disturbed by construction, which could result in nest abandonment.

## 6.10 Foraging Raptors

### 6.10.1 Project Impacts

The annual brome grassland and VPC areas within the Project Area provide suitable foraging habitat for Swainson's hawk, white-tailed kite, northern harrier, and other more common raptors. Removal of this foraging habitat could indirectly impact these species by reducing food available to them.

Within the PCCP portion of the Project Area, 6.49 acres of VPC High Land Cover, 51.57 acres of VPC Intermediate Land Cover, and 28.67 acres of VPC Low Land Cover that currently provides raptor foraging habitat will be permanently impacted by the Project (**Attachment I**).

Within the non-PCCP portion of the Project Area, 33.23 acres of annual brome grassland that currently provides raptor foraging habitat will be permanently impacted by the Project (**Attachment I**).

This combines to a total of 119.96 acres of raptor foraging habitat that will be permanently impacted by the Project (**Attachment I**).

### **6.10.2 Sewer Alternatives**

#### 6.10.2.1 Sewer Alternative Alignment 1A

If Sewer Alternative Alignment 1A were selected, 0.19 acre of VPC Low Land Cover within the PCCP portion of the Alternative, and 0.03 acre of annual brome grassland within the non-PCCP portion of the Alternative that currently provides raptor foraging habitat will be permanently impacted (**Attachment I**). This combines to a total of 0.21 acre of raptor foraging habitat that will be permanently impacted by Sewer Alternative Alignment 1A.

#### 6.10.2.2 Sewer Alternative Alignment 1B

If Sewer Alternative Alignment 1B were selected, 0.01 acre of VPC Low Land Cover within the PCCP portion of the Alternative, and 1.26 acres of annual brome grassland within the non-PCCP portion of the Alternative that currently provides raptor foraging habitat will be permanently impacted (**Attachment I**). This combines to a total of 1.27 acres of raptor foraging habitat that will be permanently impacted by Sewer Alternative Alignment 1B.

#### 6.10.2.3 Sewer Alternative Alignment 1C

No raptor foraging habitat is present within Sewer Alternative Alignment 1C; therefore, no impacts to raptor foraging habitat are anticipated as a result of Sewer Alternative Alignment 1C.

### **6.10.3 Potential Future Trail Alignments**

#### 6.10.3.1 West Trail

If the West Trail were constructed in the future, 0.08 acre of VPC Intermediate Land Cover and 0.32 acre of VPC Low Land Cover within the PCCP portion of the Trail that currently provide raptor foraging habitat would be permanently impacted (**Attachment I**). This combines to a total of 0.40 acre of raptor foraging habitat that would be permanently impacted by the West Trail.

### 6.10.3.2 East Trail

If the East Trail were constructed in the future, 0.01 acre of VPC Low Land Cover within the PCCP portion of the Trail that currently provides raptor foraging habitat would be permanently impacted (**Attachment I**).

### **6.10.4 Overall Project Impacts**

The Project combined with the required sewer line and potential future trails would result in the following cumulative raptor foraging habitat permanent impacts. The ranges below represent the full range of impacts, with the lower end assuming the least impactful sewer alternative and neither of the trails are implemented, and the upper end assuming the most impactful sewer alternative and both trails are implemented.

- Within the PCCP portion of the Study Area, 6.49 acres of permanent impacts to VPC High, 51.57 – 51.65 acres of impacts to VPC Intermediate, and 28.67 – 29.18 acres of impacts to VPC Low (**Attachment I**).
- Within the Non-PCCP portion of the Study Area, 32.79 – 34.01 acres of permanent impacts to annual brome grassland (**Attachment I**).
- This combines to a total of 119.96 – 121.33 acres of permanent impacts to raptor foraging habitat (**Attachment I**).

## **6.11 Burrowing Owl**

### **6.11.1 Project Impacts**

The annual brome grassland and VPC areas within the Project Area provide suitable foraging habitat for burrowing owl, and occasional ground-squirrel burrows and debris throughout the Study Area provide marginally suitable burrow habitat. If ground disturbance occurred while burrowing owls were in burrows, individuals of this species could be killed.

Within the PCCP portion of the Project Area, 6.49 acres of VPC High Land Cover, 51.57 acres of VPC Intermediate Land Cover, and 28.67 acres of VPC Low Land Cover that currently provides burrowing owl habitat will be permanently impacted by the Project (**Attachment I**).

Within the non-PCCP portion of the Project Area, 32.79 acres of annual brome grassland that currently provides burrowing owl habitat will be permanently impacted by the Project (**Attachment I**).

This combines to a total of 119.96 acres of burrowing owl habitat that will be permanently impacted by the Project (**Attachment I**).

### **6.11.2 Sewer Alternatives**

#### 6.11.2.1 Sewer Alternative Alignment 1A

If Sewer Alternative Alignment 1A were selected, 0.19 acre of VPC Low Land Cover within the PCCP portion of the Alternative, and 0.03 acre of annual brome grassland within the non-PCCP portion of the Alternative that currently provides burrowing owl habitat will be permanently impacted (**Attachment I**). This combines to a total of 0.21 acre of burrowing owl habitat that will be permanently impacted by Sewer Alternative Alignment 1A.

#### 6.11.2.2 Sewer Alternative Alignment 1B

If Sewer Alternative Alignment 1B were selected, 0.01 acre of VPC Low Land Cover within the PCCP portion of the Alternative, and 1.26 acres of annual brome grassland within the non-PCCP portion of the Alternative that currently provides burrowing owl habitat will be permanently impacted (**Attachment I**). This combines to a total of 1.27 acres of burrowing owl habitat that will be permanently impacted by Sewer Alternative Alignment 1B.

#### 6.11.2.3 Sewer Alternative Alignment 1C

No burrowing owl habitat is present within Sewer Alternative Alignment 1C; therefore, no impacts to burrowing owl are anticipated as a result of Sewer Alternative Alignment 1C.

### **6.11.3 Potential Future Trail Alignments**

#### 6.11.3.1 West Trail

If the West Trail were constructed in the future, 0.08 acre of VPC Intermediate Land Cover and 0.32 acre of VPC Low Land Cover within the PCCP portion that currently provide burrowing owl habitat would be permanently impacted (**Attachment I**). This combines to a total of 0.40 acre of burrowing owl habitat that would be permanently impacted by the West Trail.

#### 6.11.3.2 East Trail

If the East Trail were constructed in the future, 0.01 acre of VPC Low Land Cover within the PCCP portion of the Trail that currently provides burrowing owl habitat would be permanently impacted (**Attachment I**).

### **6.11.4 Overall Project Impacts**

The Project combined with the required sewer line and potential future trails would result in the following cumulative burrowing owl habitat permanent impacts. The ranges below represent the full range of impacts, with the lower end assuming the least impactful sewer alternative and neither of the trails are

implemented, and the upper end assuming the most impactful sewer alternative and both trails are implemented.

- Within the PCCP portion of the Study Area, 6.49 acres of permanent impacts to VPC High, 51.57 – 51.65 acres of impacts to VPC Intermediate, and 28.67 – 29.18 acres of impacts to VPC Low (**Attachment I**).
- Within the Non-PCCP portion of the Study Area, 32.79 – 34.01 acres of permanent impacts to annual brome grassland (**Attachment I**).
- This combines to a total of 119.96 – 121.33 acres of permanent impacts to burrowing owl habitat (**Attachment I**).

## **6.12 Yellow Warbler**

Yellow warbler has the potential to utilize the Riparian Woodlands within the Study Area for winter foraging. Given the large amount of Riparian Woodland within the Study Area and in adjacent areas, the relatively small extent of impacts to this habitat, the fact that this species only utilizes the habitat for winter foraging, and the fact that most construction activities occur outside of the winter foraging season, the impacts detailed below are not expected to significantly effect this species.

### **6.12.1 Project Impacts**

Within the PCCP portion of the Project Area, 0.05 acre of Riparian habitat will be permanently impacted by the Project. Within the non-PCCP portion of the Project Area, 0.94 acre of Riparian Woodland will be permanently impacted by the Project. This combines to a total of 0.99 acre of yellow warbler winter foraging habitat that will be permanently impacted by the Project (**Attachment I**).

### **6.12.2 Sewer Alternatives**

#### 6.12.2.1 Sewer Alternative Alignment 1A

If Sewer Alternative Alignment 1A were selected, 0.17 acre of Riparian Woodland within the non-PCCP portion of the Alternative that provides yellow warbler winter foraging habitat will be permanently impacted (**Attachment I**).

#### 6.12.2.2 Sewer Alternative Alignment 1B

If Sewer Alternative Alignment 1B were selected, 0.12 acre of Riparian Woodland within the non-PCCP portion of the Alternative that provides yellow warbler winter foraging habitat will be permanently impacted (**Attachment I**).

#### 6.12.2.3 Sewer Alternative Alignment 1C

No yellow warbler winter foraging habitat is present within Sewer Alternative Alignment 1C; therefore, no impacts to yellow warbler are anticipated as a result of Sewer Alternative Alignment 1C.

### **6.12.3 Potential Future Trail Alignments**

#### 6.12.3.1 West Trail

If the West Trail were constructed in the future, 0.14 acre of Riparian habitat within the PCCP that provides yellow warbler winter foraging habitat would be permanently impacted (**Attachment I**).

#### 6.12.3.2 East Trail

If the East Trail were constructed in the future, 0.02 acre of Riparian Woodland within the non-PCCP portion of the Trail that currently provides yellow warbler winter foraging habitat would be permanently impacted (**Attachment I**).

### **6.12.4 Overall Project Impacts**

The Project combined with the required sewer line and potential future trails would result in the following cumulative yellow warbler winter foraging habitat permanent impacts. The ranges below represent the full range of impacts, with the lower end assuming the least impactful sewer alternative and neither of the trails are implemented, and the upper end assuming the most impactful sewer alternative and both trails are implemented.

- Within the PCCP portion of the Study Area, 0.05 – 0.18 acres of permanent impacts to riparian habitat (**Attachment I**).
- Within the Non-PCCP portion of the Study Area, 0.94 – 1.13 acres of permanent impacts to Riparian Woodland (**Attachment I**).
- This combines to a total of 0.99 – 1.31 acres of permanent impacts to yellow warbler winter foraging habitat (**Attachment I**). This represents 5.0% - 6.6% of the total riparian habitat present within the Study Area.

### **6.13 Roosting Bats**

Abandoned buildings and trees throughout the Study area are habitat for various special-status bats species. If special-status bats were roosting in trees or buildings to be removed by construction of the Project, the sewer alignment, or either of the potential future trails, they could be injured or killed during the removal.

### **6.14 Native Trees and Oak Woodlands**

Native tree and oak woodland impacts and mitigation are analyzed differently for the three jurisdictions within which activities are proposed to occur. We have broken the impacts down by jurisdiction below. Note that all trees within temporary impact areas were considered to be permanently impacted. All trees being avoided by the Overall Project could be subject to construction-related impacts if work or staging were to occur within their driplines or Protected Zones.

### 6.14.1 PCCP

Within the PCCP, impacts to native trees and oak woodlands are mitigated through payment of land cover conversion fees, which the PCA uses to set-aside similar or better lands elsewhere. Native trees will be impacted within the Project site and the potential future West Trail alignment, but as those impacts will be mitigated through the PCCP via payment of the land conversion fee, those impacts have not been quantified here.

### 6.14.2 City of Roseville

The City of Roseville Tree Ordinance requires mitigation for all native oak trees that will be removed, or that will experience impacts within 20% or more of the tree’s Protected Zone (which is equivalent to a circle with a radius one foot greater than the tree’s dripline). Potential tree impacts within the City of Roseville are summarized below in Table 8, and shown in Attachment J.

**Table 8. Summary of Tree Impacts within the City of Roseville**

Component	Number of Trees (DBH)			Total Number of Trees	Cumulative DBH
	Valley Oak	Interior Live Oak	Oracle Oak		
Sewer Alt 1A	56 (739.6)	1 (6)	1 (8)	58	753.6
Sewer Alt 1B	35 (316.7)	3 (26.8)	0	38	343.5
Sewer Alt 1C	0	0	0	0	0
Potential Future East Trail	7 (106)	0	0	7	106
<b>Sewer Plus Potential Future Trail</b>	<b>0 – 56 (739.6)</b>	<b>0 – 1 (6)</b>	<b>0 -1 (8)</b>	<b>0 – 58</b>	<b>0 – 753.6</b>

The lower end of the impact ranges assumes the least impactful sewer alternative. The upper end of the impact ranges assumes the most impactful sewer alternative. All trail impacts occur within one of the two sewer footprints, so the trail impacts are not additive to the displayed sewer alternative impacts.

### 6.14.3 Placer County

In accordance with the Interim Guidelines, impacts to individual native trees within any oak woodland areas that are less than two acres in total size are to be assessed and mitigated under the provisions of the Tree Ordinance. Likewise, trees within impact areas that are less than one acre in size are to be assessed and mitigated under the provisions of the Tree Ordinance.

Impacts greater than one acre in oak woodlands that are greater than two acres may be assessed and mitigated in accordance with the Interim Guidelines. The impacts to the Riparian Woodland and blue oak woodland in the southeastern portion of the Project will have greater than one acre of impact (**Attachment K**). Impacts to native trees outside of this area have been analyzed below as impacts to individual native trees.

An additional component of the Interim Guidelines is that any “significant trees” (trees >24 inches DBH or clumps >72 inches in circumference measured at ground level) impacted within the oak woodland must also be mitigated separately in accordance with the Tree Ordinance. These trees have been identified and included in the impacts to individual native trees below.

#### 6.14.3.1 Individual Native Trees

The Placer County Tree Ordinance requires mitigation for all native trees that will be removed, or that will experience impacts within any portion of the tree’s Protected Zone (which is equivalent to a circle with a radius one foot greater than the tree’s dripline). Potential individual native tree impacts within unincorporated Placer County outside of the PCCP area are summarized below in **Table 9**, and shown in **Attachment K**. Potential impacts to all “significant trees” within impacted oak woodland outside of the PCCP area are summarized below in **Table 10**, and shown in **Attachment K**.

**Table 9. Summary of Individual Native Tree Impacts within Non-PCCP Portions of Placer County**

Tree Species	Component		
	Project Number of Trees (DBH)	Sewer Alt 1B Number of Trees (DBH)	Project Plus Sewer Alignment Number of Trees (DBH)
Blue Oak	21 (524.5)	0	21 (524.5)
Fremont Cottonwood	0	1(55)	0-1 (0-55)
Interior Live Oak	9 (150)	1(12.7)	9 (150) - 10 (162.7)
Red Willow	0	1 (12)	0 - 1 (12)
Valley Oak	11 (129)	7 (187.9)	11 (129) - 18 (316.9)
<b>Total</b>	<b>41 (803.5)</b>	<b>10 (267.6)</b>	<b>41 (803.5) - 51 (1,071.1)</b>

The lower end of the impact ranges assumes the least impactful sewer alternative. The upper end of the impact ranges assumes the most impactful sewer alternative.

**Table 10. Summary of Significant Tree Impacts within Impacted Oak Woodlands within Non-PCCP Portions of Placer County**

Tree Species	Number of Trees	DBH
Blue Oak	5	168
Interior Live Oak	4	130
<b>Total</b>	<b>9</b>	<b>298</b>

#### 6.14.3.2 Oak Woodland Impacts

Within the large stand of blue oak woodland and Riparian Woodland south of PFE Road, the Project would impact 0.6 acre of blue oak woodland, and 0.9 acre of Riparian Woodland, for a combined total of 1.5 acre of direct impacts. In addition, 0.3 acre of oak woodland (including Riparian Woodland) within 10 feet of the edge of direct development-related Project impacts could be indirectly impacted.

As noted above, no oak woodland impact areas within non-PCCP portions of unincorporated Placer County along sewer alternatives or proposed future trails are of sufficient size to mitigate under the Interim Guidelines.

## **6.15 Sensitive Natural Communities**

Two vegetation communities/terrestrial land covers mapped on-site are considered to be “Sensitive Natural Communities” by CDFW: Riparian / Riparian Woodland<sup>3</sup>, and Valley Needlegrass Grassland. No impacts are proposed to the small area of Valley Needlegrass Grassland; however, some impacts to Riparian / Riparian Woodland are proposed as part of the various Overall Project components.

### **6.15.1 Project Impacts**

Within the PCCP portion of the Project Area, 0.05 acre of Riparian will be permanently impacted by the Project. Within the non-PCCP portion of the Project Area, 0.94 acre of Riparian Woodland will be permanently impacted by the Project. This combines to a total of 0.99 acres of Riparian / Riparian Woodland that will be permanently impacted by the Project (**Table 6** and **Attachment I**).

### **6.15.2 Sewer Alternatives**

#### 6.15.2.1 Sewer Alternative Alignment 1A

If Sewer Alternative Alignment 1A were selected, 0.17 acre of Riparian Woodland within the non-PCCP portion of the Alternative will be permanently impacted (**Attachment I**).

#### 6.15.2.2 Sewer Alternative Alignment 1B

If Sewer Alternative Alignment 1B were selected, 0.12 acre of Riparian Woodland within the non-PCCP portion of the Alternative will be permanently impacted (**Attachment I**).

#### 6.15.2.3 Sewer Alternative Alignment 1C

No Riparian Woodland is present within Sewer Alternative Alignment 1C.

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<sup>3</sup> As noted previously in Section 4.1.3, these terms refer to the same type of habitat, but the PCCP requires specific nomenclature; therefore, “Riparian” refers to Riparian Woodlands in PCCP areas.

### **6.15.3 Potential Future Trail Alignments**

#### 6.15.3.1 West Trail

If the West Trail were constructed in the future, 0.14 acre of Riparian within the PCCP would be permanently impacted (**Attachment I**).

#### 6.15.3.2 East Trail

If the East Trail were constructed in the future, 0.02 acre of Riparian Woodland within the non-PCCP portion of the Trail would be permanently impacted (**Attachment I**).

### **6.15.4 Overall Project Impacts**

The Project combined with the required sewer line and potential future trails would result in the following cumulative permanent impacts to Riparian / Riparian Woodland. The ranges below represent the full range of impacts, with the lower end assuming the least impactful sewer alternative and neither of the trails are implemented, and the upper end assuming the most impactful sewer alternative and both trails are implemented.

- Within the PCCP portion of the Study Area, 0.05 – 0.18 acres of permanent impacts to Riparian (**Table 7 and Attachment I**).
- Within the Non-PCCP portion of the Study Area, 0.94 – 1.13 acres of permanent impacts to Riparian Woodland (**Table 7 and Attachment I**).
- This combines to a total of 0.99 – 1.31 acres of permanent impacts to Riparian / Riparian Woodland (**Table 7 and Attachment I**).

### **6.16 Wildlife Corridors**

The broad Riparian Woodland along either side of Dry Creek within the Study Area serves as a wildlife corridor for a wide variety of terrestrial wildlife. This wildlife corridor is being preserved within a large avoidance area that includes a substantial amount of adjacent grasslands as well. The main intermittent drainage tributary with its adjacent oak woodlands may also serve as a wildlife corridor. This drainage as well as almost all of the surrounding oak woodlands are also being avoided by the Overall Project. The only potential barrier to wildlife movement along the intermittent drainage will be the relatively long (over 300 foot long) pair of arch culverts under PFE Road to allow for road widening. The existing box culvert under PFE Road provides only a few feet of clearance above the creek, which substantially reduces terrestrial wildlife use of this crossing. This likely results in more wildlife crossing the roadway, and associated mortality. The new 8' tall x 15' wide arch culverts will be a significant improvement over the existing bridge and have been designed to be large enough to accommodate terrestrial wildlife movement in upland areas adjacent to the drainage. As such, negative impacts to wildlife corridors are not expected.

## **6.17 PCCP Special Habitats, Placer County Watercourse Setbacks, and CARP Riparian Buffer**

Impacts to PCCP Special Habitats, Placer County Watercourse Setbacks and CARP Riparian Buffer are summarized in **Table 11** and shown in **Attachment L**. As outlined in **Section 2.3.1**, impacts are allowed within the Placer County Watercourse Setbacks and CARP Riparian Buffer, but those impacts must be associated with certain allowable facilities. Although some permanent impacts within the Placer County Watercourse Setbacks and CARP Riparian Buffer have been proposed, all of the impacts in those areas are associated with trails, bridges or other creek crossings, or critical utility infrastructure or roadway impacts that cannot be avoided. As some of the impacts are associated with creek crossings, some of the work occurs immediately adjacent to the drainages. None of the Placer County Watercourse Setbacks or CARP Riparian Buffer permanent impacts are associated with development of residential parcels, and the only structure proposed to be constructed within this setback is a sewer lift station, which is an allowable structure.

## **7.0 MITIGATION FOR IMPACTS TO SENSITIVE BIOLOGICAL RESOURCES**

Throughout this section, the term "Project" refers to the components of the Overall Project that are proposed at the time. The Project may be constructed in phases over several years. Planning level surveys under the PCCP as well as preconstruction surveys under both the PCCP and non-PCCP permitting frameworks must be implemented according to the timing requirements outlined in each mitigation measure. Therefore, if such surveys are conducted for more than one phase but only a portion of that phase ends up going to construction in a given year, these surveys may have to be redone depending on the life of the survey. The acreages presented throughout this section represent the range of potential impacts and costs associated with the Project being implemented with the least impactful alternative and no potential future trails through to the Project being implemented with the most impactful alternative and both potential future trails.

### **7.1 PCCP Areas**

Within the PCCP Plan Area, mitigation for impacts to PCCP Covered Species and land covers, including riparian habitat and oak resources has been streamlined to participation in the PCCP, and impacts to Waters of the U.S. has been streamlined with participation in the CARP. This Project could result in impacts to special-status plant species, western spadefoot, and roosting bats, none of which are PCCP Covered Species; therefore, mitigation for these species is detailed below.

#### **7.1.1 Aquatic Resources**

1. The Project applicant shall apply for coverage under the streamlined PCCP Letter of Permission (LOP) process directly with the USACE using avoidance and minimization guidance from the CARP, a component of the PCCP.
2. The applicant shall submit an application to the RWQCB for water quality certification of the PCCP LOP, and adhere to the certification conditions.

**Table 11. Impacts to PCCP Special Habitats and CARP Setbacks Associated with Overall Project Components**

Habitat/Setback	Project			Sewer Alternative 1A			Sewer Alternative 1B			West Trail			East Trail		
	Permanent Impacts (acres)	Temporary Impacts (acres)	Total (acres)	Permanent Impacts (acres)	Temporary Impacts (acres)	Total (acres)	Permanent Impacts (acres)	Temporary Impacts (acres)	Total (acres)	Permanent Impacts (acres)	Temporary Impacts (acres)	Total (acres)	Permanent Impacts (acres)	Temporary Impacts (acres)	Total (acres)
<b><i>PCCP Special Habitats</i></b>															
Vernal Pool Direct Effects	1.271	0.000	<b>1.271</b>	0.000	0.000	<b>0.000</b>									
Other Aquatic/Wetland	0.000	0.000	<b>0.000</b>												
Riverine/Riparian	0.344	0.636	<b>0.980</b>	0.000	0.030	<b>0.030</b>	0.000	0.010	<b>0.010</b>	0.191	0.268	<b>0.459</b>	0.024	0.090	<b>0.114</b>
Riverine/Riparian Buffer	0.32	1.32	<b>1.64</b>	0.02	0.03	<b>0.05</b>	0.01	0.02	<b>0.00</b>	0.23	0.13	<b>0.22</b>	0.01	0.02	<b>0.00</b>
Stream System	12.55	7.13	<b>19.68</b>	0.02	0.06	<b>0.08</b>	0.02	0.05	<b>0.07</b>	0.11	0.14	<b>0.25</b>	0.02	0.05	<b>0.07</b>
Salmonid Stream Channel (linear ft)	0.00	0.00	<b>0.00</b>	0.000	0.000	<b>0.00</b>	0.000	0.000	<b>0.00</b>	16.00	36.00	<b>52.00</b>	12.00	40.00	<b>52.00</b>
VP Immediate Watershed Effects	0.067	0.000	<b>0.067</b>	0.000	0.000	<b>0.000</b>									
<b><i>CARP Setbacks</i></b>															
Placer County Watercourse Setback	6.36	7.22	<b>13.58</b>	0.01	0.03	<b>0.04</b>	0.01	0.03	<b>0.04</b>	0.29	0.38	<b>0.68</b>	0.01	0.06	<b>0.07</b>
Riparian Buffer	0.32	1.32	<b>1.64</b>	0.01	0.04	<b>0.05</b>	0.01	0.02	<b>0.00</b>	0.23	0.13	<b>0.22</b>	0.01	0.02	<b>0.00</b>



3. The applicant shall apply for a Section 1600 Lake or Streambed Alteration Agreement from CDFW for the entire Project or by phase as needed. The Lake and Streambed Alteration Agreement program is not fully integrated into the PCCP and must be applied for separate and apart from the PCCP. The information provided will include a description of all of the activities associated with the Project, not just those closely associated with the drainages and/or riparian vegetation. Impacts will be outlined in the application and are expected to be in substantial conformance with the impacts to biological resources outlined in this document. Impacts for each activity will be broken down by temporary and permanent, and a description of the proposed mitigation for biological resource impacts will be outlined per activity and then by temporary and permanent. Information regarding Project-specific drainage and hydrology changes resulting from project implementation will be provided as well as a description of storm water treatment methods. Minimization and avoidance measures will be proposed as appropriate and may include: preconstruction species surveys and reporting, protective fencing around avoided biological resources, worker environmental awareness training, seeding disturbed areas adjacent to open space areas with native seed, and installation of project-specific storm water BMPs. CDFW may determine that evidence of payment of PCCP riparian land cover conversion fees is sufficient mitigation for impacts to riparian habitat. Alternatively, they could request additional mitigation for impacts to riparian habitat, such as restoration or enhancement of resources on- or off-site, purchase of habitat credits from an agency-approved mitigation/conservation bank, working with a local land trust to preserve land, or any other method acceptable to CDFW. Mitigation will result in no net loss of riparian habitat.

### **7.1.2 PCCP Application**

The Permittee shall apply for coverage under the PCCP to mitigate for all impacts to Covered Species, land cover, and sensitive natural communities. Prior to application approval, additional species surveys may be necessary, and prior to construction land cover and special habitat fees shall be paid. The Permittee shall comply with the terms of the PCCP Coverage Certificate, including compliance with all Avoidance and Minimization Measures, which may include pre-construction surveys, construction monitoring, and BMPs. Based on our analysis, it is our understanding that the following PCCP measures will be required:

#### 7.1.2.1 General Condition 1, Watershed Hydrology and Water Quality

Prior to Improvement Plan approval, the project shall obtain coverage under the *General Permit for Discharges of Storm Water Associated with Construction Activity* (Construction General Permit Order 2009-0009-DWQ); including requirements to develop a project-based Storm Water Pollution Prevention Plan (SWPPP); and applicable NPDES program requirements as implemented by the County. Construction activity subject to this permit includes clearing, grading and disturbances to the ground such as stockpiling, or excavation.

The project shall comply with the West Placer Storm Water Quality Design Manual (Design Manual).

The project shall implement the following BMPs. This list shall be included on the Notes page of the improvement/grading plans and shall be shown on the plans:

1. When possible, vehicles and equipment will be parked on pavement, existing roads, and previously disturbed areas. When vehicle parking areas are to be established as a temporary facility, the site will be recovered to pre-project or ecologically improved conditions within 1 year of start of groundbreaking to ensure effects are temporary (refer to Section 6.3.1.4, *General Condition 4, Temporary Effects*, for the process to demonstrate temporary effects).
2. Trash generated by Covered Activities will be promptly and properly removed from the site.
3. Appropriate erosion control measures (e.g., fiber rolls, filter fences, vegetative buffer strips) will be used on site to reduce siltation and runoff of contaminants into avoided wetlands, ponds, streams, or riparian vegetation.
  - a. Erosion control measures will be of material that will not entrap wildlife (i.e., no plastic monofilament). Erosion control blankets will be used as a last resort because of their tendency to biodegrade slowly and trap reptiles and amphibians.
  - b. Erosion control measures will be placed between the area of disturbance and any avoided aquatic feature, within an area identified with highly visible markers (e.g., construction and erosion-control fencing, flagging, silt barriers) prior to commencement of construction activities. Such identification will be properly maintained until construction is completed and the soils have been stabilized.
  - c. Fiber rolls used for erosion control will be certified by the California Department of Food and Agriculture or any agency that is a successor or receives delegated authority during the permit term as weed free.
  - d. Seed mixtures applied for erosion control will not contain California Invasive Plant Council–designated invasive species (<http://www.cal-ipc.org/paf/>) but will be composed of native species appropriate for the site or sterile non-native species. If sterile non-native species are used for temporary erosion control, native seed mixtures must be used in subsequent treatments to provide long-term erosion control and slow colonization by invasive non-natives.
4. If the runoff from the development will flow within 100 feet of a wetland or pond, vegetated storm water filtration features, such as rain gardens, grass swales, tree box filters, infiltration basins, or similar LID features to capture and treat flows, shall be installed consistent with local programs and ordinances.

#### 7.1.2.2 General Condition 2, Conservation Lands: Development Interface Design Requirements

The project shall minimize effects on adjacent conservation lands through implementation of the following design requirements:

1. Signage will be posted to notify of any usage restrictions and to educate the public on the sensitivity of the area and usage restrictions.
2. Fencing will be installed at the boundary between developed areas and reserves to prevent illegal access by people and pets, unless the conditions on the reserve make trespass unlikely (i.e., surrounded by canals that are difficult to cross). Fences will be suitable to the conditions in the adjacent reserve. The type of fence required will be at the discretion of the County or City, as permitted by County and City codes. Fences will have limited gates and be designed with consideration to not allowing movement of

people and their pets. Access will be limited to maintenance and monitoring activities unless a habitat management plan specifies otherwise.

3. Natural or artificial barriers or other access restrictions may be installed around development to protect sensitive land-cover types and Covered Species in the reserves. If used, barriers will be designed so they are appropriate for site conditions and the resources being protected. Some barriers should keep domestic pets outside the reserve, other barriers should keep Covered Species inside the reserve. Before installation of a barrier, consideration shall be given to freedom of movement by Covered Species. If the barrier would prevent movement, or if the barrier would encourage species to use other, less-favorable crossings, alternative solutions shall be considered.
4. Roads constructed adjacent to reserves will be fenced to restrict unauthorized public access. Through the conditional approval process, the Permittee will only approve fencing that is appropriate (e.g., chain link, post and cable, barbwire) to allow movement of wildlife between reserves.
5. Development will be designed to minimize the length of the shared boundary between development and the reserves (i.e., minimize the urban edge, perimeter).
6. Incorporation of high-intensity lighting (e.g., floodlights used for recreational facilities and commercial parking lots) into site improvement standards near reserves will be avoided. Low-glare, no-glare, or shielded lighting will be installed in developed areas adjacent to reserves to minimize artificial lighting of reserve lands at night. The height and intensity of lights shall be kept to a minimum. Resources providing technical support include publications of the Illuminating Engineering Society of North America and its *Lighting Handbook, Reference & Application, Ninth Edition, and Recommended Practices*. The intent of this avoidance and minimization measure is to design a lighting system, where determined necessary, that maintains public safety and security in the project area while curtailing the degradation of the nighttime visual environment on the reserve property by limiting nighttime light radiation and/or light spill.
7. Public facilities, such as ballparks and fields that require high-intensity night lighting (i.e., floodlights), will be sited at least 0.5 mile from the reserve boundary to minimize light pollution. Facilities may be sited closer to the Reserve System if the PCA determines the lighting system will not be intrusive to wildlife within the Reserve System (e.g., hills block the lighting).
8. For any landscaping adjacent to reserve properties, non-invasive plants will be required, and the use of native plants will be highly encouraged, consistent with County landscape design guidelines (Placer County 2013) or similar standards for the City of Lincoln.

Any of the above design requirements, or similar requirements developed over time, that are incorporated into projects will be located within the development footprint. These project features will be maintained by the property owners. Conditions of approval on projects are monitored by County or City staff during the construction and development phase and are enforced over time through the efforts of professional land development staff familiar with the project or a code enforcement division. If projects are found to be out of compliance, standard remedial actions would be applied and may include code enforcement, use of securities, revocation or modification of entitlement. Violations will be reported to the PCA, Wildlife Agencies, and applicable local jurisdiction for potential enforcement.

### 7.1.2.3 General Condition 3, Land Conversion

The project will result in a permanent land cover conversion from a natural condition to urban land covers. The project shall pay a land conversion fee for the permanent conversion of approximately 96.6 acres – 97.3 acres<sup>4</sup> of natural land cover including VPC Low, VPC Intermediate, VPC High, Blue Oak Woodland, Orchard, Riparian, and Rural Residential. The fees to be paid shall be those in effect at the time of ground disturbance authorization for each project phase and shall be the per acre fee based on the amount of land disturbance resulting from the activity.

In addition to land conversion, the project would result in permanent direct effects and temporary effects to PCCP Special Habitats as detailed in **Table 11**. The total special habitat fee obligation including temporary effect fees shall be paid prior to issuance of a land conversion authorization that allows ground disturbance of a special habitat.

### 7.1.2.4 General Condition 4, Temporary Effects

The applicant shall restore all temporarily disturbed area and, one year after project groundbreaking, provide the County with a written assessment of how the performance standards were met. The project will result in 9.14 – 9.68 acres of temporary effects to special habitats. Prior to issuance of land conversion authorization, the project shall pay a fee based on the acres of impact. The fee to be paid shall be that in effect at the time of land conversion authorization issuance. If it is determined by the County or the Program Biologist that the effects remain one year after groundbreaking activities have commenced, the effects shall be considered permanent and the County Project Lead shall reassess fees based on those effects.

### 7.1.2.5 General Condition 5, Conduct Worker Training

Prior to initiation of construction activities, all project construction personnel shall participate in a worker environmental training program that will educate workers regarding the Covered Species and their habitats, the need to avoid impacts, state and federal protection, and the legal implications of violating environmental laws and regulations. At a minimum this training may be accomplished through tailgate presentations at the project site and the distribution of informational brochures, with descriptions of sensitive biological resources and regulatory protections, to construction personnel prior to initiation of construction work.

### 7.1.2.6 Community Condition 1.1, Impacts to Vernal Pool Complex Constituent Habitat

Prior to land conversion authorization approval, the unavoidable effects to 1.338 acres of vernal pool type wetlands or their buffers shall be mitigated through payment of special habitat fees. The fees to be paid shall be that in effect at the time of land conversion authorization issuance.

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<sup>4</sup> The exact acreage will depend on which sewer alternative is selected, and whether one or both trails are constructed.

#### 7.1.2.7 Community Condition 1.4, Salvage of Vernal Pool Constituent Habitat

Prior to ground disturbance, the applicant shall schedule grading and construction in coordination with the PCA to provide the PCA the opportunity to salvage topsoil from the vernal pool wetland if they choose to do so. The applicant shall notify the PCA of their construction schedule within 30 days of the construction start date to allow the PCA the opportunity to salvage soils while the pools are completely dry (generally July through September) and the PCA must make salvage plans sufficiently far in advance so as to not unreasonably impair construction.

#### 7.1.2.8 Community Condition 2.1, Riverine and Riparian Avoidance and Minimization

To the maximum extent possible, the project shall not modify any area within a buffer that extends 50 feet outward from the outermost bounds of the riparian vegetation. The (improvement or grading plans) shall show the location of the riverine/riparian buffer.

#### 7.1.2.9 Community Condition 2.2, Minimize Riverine and Riparian Effects

Prior to land conversion authorization, the applicant shall coordinate with the PCA to determine which In-Stream and Stream System Best Management Practices (BMPs) from Table 7-1 of the User's Guide apply to the proposed project. The applicant shall identify the applicable BMPs on the project's (improvement or grading) plans. The selected BMPs will be incorporated into the project's Land Conversion Authorization letter.

Prior to land conversion authorization approval, the unavoidable effects to 0.67 – 1.12 acres riverine and riparian habitat or their buffers shall be mitigated through payment of special habitat fees. The fees to be paid shall be those in effect at the time of land conversion authorization.

#### 7.1.2.10 Stream System Condition 1, Stream System Avoidance and Minimization

The project shall be designed to minimize development activities within the stream system to the maximum extent possible.

#### 7.1.2.11 Stream System Condition 2, Stream System Mitigation and Restoration

The project's development footprint is directly impacting the Stream System. The area of encroachment (12.57-12.68 acres of permanent impact and 7.19-7.33 acres of temporary impact) is subject to the Stream System Encroachment Special Habitats Fee as described in Chapter 5 of the PCCP User's Guide. Fees must be paid prior to the issuance of any permit or authorization that results in ground disturbance within the Stream System.

#### 7.1.2.12 Species Condition 1: Swainson's Hawk

If construction must occur during the nesting season (approximately February 1 to September 15), planning-level Swainson's hawk surveys are required a year in advance of construction using the survey guidelines developed for the PCCP. Planning-level surveys are intended to identify nest trees to guide avoidance during project tree removal and construction.

Additionally, year of construction (starting in February) and pre-construction (no more than 15 days prior to ground disturbance) surveys shall be conducted within a 1,320-foot radius of the project. Surveys shall be conducted consistent with PCCP guidelines (based on Swainson's Hawk Technical Advisory Committee 2000). In instances where an adjacent parcel is not accessible to survey, the qualified biologist shall scan all potential nest trees from the adjacent property, roadsides, or other safe, publicly accessible viewpoints, without trespassing, using binoculars and/or a spotting scope. Surveys are typically required from February 1 to September 15 (or sooner if it is determined that birds are nesting earlier in the year) so contact the PCA for assistance with survey timing. If a Swainson's hawk nest is located and presence confirmed, only one follow-up visit is required.

During the nesting season (approximately February 1 to September 15 or sooner if it is determined that birds are nesting earlier in the year), ground-disturbing activities within 1,320 feet of occupied nests or nests under construction shall be prohibited to minimize the potential for nest abandonment. While the nest is occupied, activities outside the buffer can take place provided they do not stress the breeding pair.

If the active nest site is shielded from view and noise from the project site by other development, topography, or other features, the project applicant can apply to the PCA for a reduction in the buffer distance or waiver. A qualified biologist shall be required to monitor the nest and determine that the reduced buffer does not cause nest abandonment. If a qualified biologist determines nestlings have fledged, PCCP Covered Activities can proceed normally.

Construction monitoring shall be conducted by a qualified biologist if work is to continue outside of the nest buffer, and shall focus on ensuring that activities do not occur within the buffer zone. The qualified biologist performing the construction monitoring shall ensure that effects on Swainson's hawks are minimized. If monitoring indicates that construction outside of the buffer is affecting nesting, the buffer shall be increased if space allows (e.g., move staging areas farther away). If space does not allow, all construction activities shall cease until the young have fledged from the nest (as confirmed by a qualified biologist).

The frequency of monitoring will be approved by the PCA and based on the frequency and intensity of construction activities and the likelihood of disturbance of the active nest. In most cases, monitoring will occur at least every other day, but in some cases, daily monitoring may be appropriate to ensure that direct effects on Swainson's hawks are minimized. The qualified biologist shall train construction personnel on the avoidance procedures and buffer zones.

### 7.1.2.13 Species Condition 3: Western Burrowing Owl

Two surveys shall be conducted within 15 days prior to ground disturbance to establish the presence or absence of burrowing owls. The surveys shall be conducted at least 7 days apart (if burrowing owls are detected on the first survey, a second survey is not needed) for both breeding and non-breeding season surveys. All burrowing owls observed shall be counted and mapped.

During the breeding season (February 1 to August 31), surveys shall document whether burrowing owls are nesting in or within 250 feet of the project area.

During the non-breeding season (September 1 to January 31), surveys shall document whether burrowing owls are using habitat in or directly adjacent to any area to be disturbed. Survey results will be valid only for the season (breeding or non-breeding) during which the survey was conducted.

The Qualified Biologist shall survey the proposed footprint of disturbance and a 250-foot radius from the perimeter of the proposed footprint to determine the presence or absence of burrowing owls. The site will be surveyed by walking line transects, spaced 20 to 60 feet apart, adjusting for vegetation height and density. At the start of each transect and, at least, every 300 feet, the surveyor, with use of binoculars, shall scan the entire visible project area for burrowing owls. During walking surveys, the surveyor shall record all potential burrows used by burrowing owls, as determined by the presence of one or more burrowing owls, pellets, prey remains, whitewash, or decoration. Some burrowing owls may be detected by their calls; therefore, observers will also listen for burrowing owls while conducting the survey. Adjacent parcels under different land ownership shall be surveyed only if access is granted. If portions of the survey area are on adjacent sites for which access has not been granted, the qualified biologist shall get as close to the non-accessible area as possible, and use binoculars to look for burrowing owls.

The presence of burrowing owl or their sign anywhere on the site or within the 250-foot accessible radius around the site shall be recorded and mapped. Surveys shall map all burrows and occurrence of sign of burrowing owl on the project site. Surveys must begin 1 hour before sunrise and continue until 2 hours after sunrise (3 hours total) or begin 2 hours before sunset and continue until 1 hour after sunset. Additional time may be required for large project sites.

If burrowing owls are found during the breeding season (approximately February 1 to August 31, the project applicant shall avoid all nest sites that could be disturbed by project construction during the remainder of the breeding season or while the nest is occupied by adults or young (occupation includes individuals or family groups foraging on or near the site following fledging). The applicant shall establish a 250-foot non-disturbance buffer zone around nests. The buffer zone shall be flagged or otherwise clearly marked. Should construction activities cause the nesting bird to vocalize, make defensive flights at intruders, or otherwise display agitated behavior, then the exclusionary buffer will be increased such that activities are far enough from the nest so that the bird(s) no longer display this agitated behavior. The exclusionary buffer will remain in place until the chicks have fledged or as otherwise determined by a qualified biologist. Construction may only occur within the 250-foot buffer zone during the breeding season if a qualified raptor biologist

monitors the nest and determines that the activities do not disturb nesting behavior, or the birds have not begun egg-laying and incubation, or that the juveniles from the occupied burrows have fledged and moved off site. Measures such as visual screens may be used to further reduce the buffer with Wildlife Agency approval and provided a biological monitor confirms that such measures do not cause agitated behavior.

If burrowing owls are found during the non-breeding season (approximately September 1 to January 31), the project applicant shall establish a 160-foot buffer zone around active burrows. The buffer zone shall be flagged or otherwise clearly marked. Measures such as visual screens may be used to further reduce the buffer with Wildlife Agency approval and provided a biological monitor confirms that such measures do not cause agitated behavior.

After all alternative avoidance and minimization measures are exhausted as confirmed by the Wildlife Agencies, a qualified biologist may passively exclude birds from those burrows during the non-breeding season. A burrowing owl exclusion plan shall be developed by a qualified biologist consistent with the most recent guidance from the Wildlife Agencies (e.g., California Department of Fish and Game 2012) and submitted to and approved by the PCA and the Wildlife Agencies. Burrow exclusion will be conducted for burrows located in the project footprint and within a 160-foot buffer zone as necessary.

A biological monitor shall be present on site daily to ensure that no Covered Activities occur within the buffer zone. The qualified biologist performing the construction monitoring shall ensure that effects on burrowing owls are minimized. If monitoring indicates that construction outside of the buffer is affecting nesting, the buffer shall be increased if space allows (e.g., move staging areas farther away). If space does not allow, construction shall cease until the young have fledged from all the nests in the colony (as confirmed by a qualified biologist) or until the end of the breeding season, whichever occurs first.

A biological monitor shall conduct training of construction personnel on the avoidance procedures, buffer zones, and protocols in the event a burrowing owl flies into an active construction zone.

#### 7.1.2.14 Species Condition 4: Tricolored Blackbird

Prior to initiation of PCCP Covered Activities, the qualified biologist(s) shall conduct preconstruction surveys to evaluate the presence of tricolored blackbird nesting colonies. In instances where an adjacent parcel is not accessible to survey because the qualified biologist was not granted permission to enter, the qualified biologist shall scan all potential nest colony site(s) from the adjacent property, roadsides, or other safe, publicly accessible viewpoints, without trespassing, using binoculars and/or a spotting scope to look for tricolored blackbird nesting activity.

Surveys shall be conducted at least twice, with at least one month between surveys, during the nesting season one year prior to initial ground disturbance for the Covered Activity (if feasible), and the year of ground disturbance for the Covered Activity (required). If Covered Activities will occur in the project work area during the nesting season, three surveys shall be conducted within 15 days prior to the Covered Activity, with one of the surveys occurring within five days prior to the start of the Covered Activity. The

survey methods will be based on Kelsey (2008) or a similar protocol approved by the PCA and the Wildlife Agencies based on site-specific conditions.

If the first survey indicates that suitable nesting habitat is not present on the project site or within 1,300 feet of the project work area, additional surveys for nest colonies are not required.

If an active colony is known to occur within 3 miles of the project site, a qualified biologist shall conduct two surveys of foraging habitat within the project site and within a 1,300-foot radius around the project site to determine whether foraging habitat is being actively used by foraging tricolored blackbirds. The qualified biologist shall map foraging habitat, as defined by the land cover types listed above, within a 1,300-foot radius around the project site to delineate foraging habitat that will be surveyed. The surveys shall be conducted approximately one week apart, with the second survey occurring no more than five calendar days prior to ground-disturbing activities.

Construction activity or other covered activities that may disturb an occupied nest colony site, as determined by a qualified biologist, will be prohibited during the nesting season (March 15 through July 31) or until the chicks have fledged or the colony has been abandoned on its own) within a 1,300-foot buffer zone around the nest colony, to the extent practicable. The intent of this condition is to prevent disturbance to occupied nest colony sites on or near project sites so they can complete their nesting cycle. This condition is not intended to preserve suitable breeding habitat on project sites but to ensure impacts to active colony sites only take place once the site is no longer occupied by the nesting colony. The buffer will be applied to extend beyond the nest colony site as follows: 1) if the colony is nesting in a wetland, the buffer must be established from the outer edge of all hydric vegetation associated with the colony, or 2) if the colony is nesting in non-wetland vegetation (e.g., Himalayan blackberry), the buffer must be established from the edge of the colony substrate. This buffer may be modified to a minimum of 300 feet, with written approval from the Wildlife Agencies, in areas with dense forest, buildings, or other features between the Covered Activities and the occupied active nest colony; where there is sufficient topographic relief to protect the colony from excessive noise or visual disturbance; where sound curtains have been installed; or other methods developed in consultation with the Wildlife Agencies where conditions warrant reduction of the buffer distance. If tricolored blackbirds colonize habitat adjacent to Covered Activities after the activities have been initiated, the project applicant shall reduce disturbance through establishment of buffers or noise reduction techniques or visual screens, as determined in consultation with the Wildlife Agencies and PCA. The buffer must be clearly marked to prevent project-related activities from occurring within the buffer zone.

Active nesting colonies that occur within the no-disturbance buffer shall be monitored by the qualified biologist(s) to verify the Covered Activity is not disrupting the nesting behavior of the colony. The frequency of monitoring will be approved by the PCA and based on the frequency and intensity of construction activities and the likelihood of disturbance of the active nest. In most cases, monitoring will occur at least every other day, but in some cases, daily monitoring may be appropriate to ensure that direct effects on tricolored blackbird are minimized. The biologist will train construction personnel on the avoidance procedures and buffer zones.

If the qualified biologist(s) determines that the Covered Activity is disrupting nesting and/or foraging behavior, the qualified biologist(s) shall notify the project applicant immediately, and the project applicant shall notify the PCA within 24 hours to determine additional protective measures that can be implemented. The qualified biologist(s) shall have the authority to stop Covered Activities until additional protective measures are implemented. Additional protective measures shall remain in place until the qualified biologist(s) determine(s) tricolored blackbird behavior has normalized. If additional protective measures are ineffective, the qualified biologist(s) shall have the authority to stop Covered Activities as needed until the additional protective measures are modified and nesting behavior of tricolored blackbird returns to normal.

Additional protective measures may include increasing the size of the buffer (within the constraints of the project site), delaying Covered Activities (or the portion of Covered Activities causing the disruption) until the colony is finished breeding and chicks have left the nest site, temporarily relocating staging areas, or temporarily rerouting access to the project work area. The project proponent shall notify the PCA and Wildlife Agencies within 24 hours if nests or nestlings are abandoned. If the nestlings are still alive, the qualified biologist(s) shall work with the Wildlife Agencies to determine appropriate actions for salvaging the eggs or nestlings. Notification to PCA and Wildlife Agencies shall be via telephone or email, followed by a written incident report. Notification shall include the date, time, location, and circumstances of the incident.

Foraging habitat within the buffer shall be monitored by the qualified biologist(s) to verify that the Covered Activity is not disrupting tricolored blackbird foraging behavior. The frequency of monitoring will be approved by the PCA and based on the frequency and intensity of construction activities and the likelihood of disturbance of foraging tricolored blackbirds. In most cases, monitoring will occur at least every other day, but in some cases, daily monitoring may be appropriate to ensure that effects on tricolored blackbird are minimized. The biologist will train construction personnel on the avoidance procedures and buffer zones.

If the qualified biologist(s) determines that the Covered Activity is disrupting foraging behavior, the qualified biologist(s) shall notify project applicant immediately, and the project applicant shall notify the PCA within 24 hours to determine additional protective measures that can be implemented. The qualified biologist(s) shall have the authority to stop Covered Activities until additional protective measures are implemented. Additional protective measures shall remain in place until the qualified biologist(s) determine(s) tricolored blackbird behavior has normalized. If additional protective measures are ineffective, the qualified biologist(s) shall have the authority to stop Covered Activities as needed until the additional protective measures are modified and foraging behavior of tricolored blackbird returns to normal. Additional protective measures may include increasing the size of the buffer (within the constraints of the project site), temporarily relocating staging areas, or temporarily rerouting access to the project work area.

#### 7.1.2.15 Species Condition 10: Vernal Pool Fairy Shrimp and Vernal Pool Tadpole Shrimp

Wet season surveys to determine occupancy of vernal pools by vernal pool fairy shrimp and vernal pool tadpole shrimp are required if the Project is implemented while the PCCP is still in the Initial Survey Phase.

The PCA will inform the applicant if the Plan is in the Initial Survey Phase and surveys are required. Wet season surveys shall be conducted for vernal pool fairy shrimp and vernal pool tadpole shrimp in vernal pools, as determined by wetland delineation. The qualified biologist shall conduct protocol-level wet season surveys, using modified Guidelines, as approved by USFWS. Modifications include requiring that all vernal pools at a site be surveyed, rather than allowing for the survey to be terminated when presence on a project site is confirmed. This modification is necessary to obtain data on presence and absence in all the available vernal pools, to facilitate the determination of the Occupancy Rate Standards. This, and other exceptions and additions to the Guidelines, as follows.

- If presence is confirmed for vernal pool fairy shrimp and vernal pool tadpole shrimp in an individual vernal pool, surveys may be stopped for that vernal pool.
- All vernal pools on the project site must be surveyed. Surveys cannot be suspended prior to completion, as allowed by the Guidelines, if one or more of the six listed large branchiopods, identified in the Guidelines is determined to be present.
- The Guidelines define a complete survey as consisting of one wet-season and one dry-season survey conducted and completed in accordance with the Guidelines within a 3-year period. For the purposes of the Plan, only one wet-season survey is required; dry-season surveys are not required. Applicants must plan ahead to allow sufficient time to complete these surveys.
- Data that will be collected at each vernal pool surveyed during the wet season survey will include the presence or absence of vernal pool fairy shrimp and vernal pool tadpole shrimp, species identity and the estimated abundance (10s, 100s, 1,000s) of immature and mature vernal pool fairy shrimp and vernal pool tadpole shrimp present and estimated maximum surface area of the vernal pool. Other information on the USFWS data sheet is not required to be collected (i.e., air and water temperature, average and estimated maximum depth of the vernal pool, presence of non-target crustaceans, insects, and platyhelminths, and habitat condition). This will allow surveys to be conducted more efficiently, while providing the essential information necessary to calculate the Pool-based Occupancy Rate Standard<sup>9</sup> and the Area-based Occupancy Rate Standard<sup>10</sup>. Because these vernal pools will be affected by Covered Activities, collection of additional information is not necessary.
- Information will be recorded on the PCA-provided data sheet, which will be the USFWS data sheet (included as Appendix A to the Guidelines), modified to include the above information.
- Voucher specimens will not be collected during wet season surveys unless the identity of the mature shrimp is uncertain and cannot be identified in the field. The Guidelines allow for a limited number of voucher specimens to be collected for each vernal pool. For the purpose of the Plan, the modified survey protocol further limits the collection of voucher specimens to instances where identity is uncertain.
- The surveys must be conducted far enough in advance of development that the pools can dry out sufficiently for inoculum to be salvaged.

The biologist conducting a survey for vernal pool fairy shrimp and vernal pool tadpole shrimp should participate in the wetland delineation to map the area of each vernal pool. If the biologist cannot participate in the wetland delineation, and the wetland delineation does not provide area for each vernal pool, the biologist will conduct follow-up surveys to map the perimeter of each vernal pool with a global positioning

system (GPS). Each vernal pool will be given a unique identification number that will be used to track survey data collected during wet- season surveys.

#### 7.1.2.16 CARP Authorization Conditions

All work within the Plan Area that impacts Aquatic Resources of Placer County shall be completed according to the plans and documents included in the CARP application, Water Quality Certification, and, if applicable, WDRs. All changes to those plans shall be reported to Placer County. Minor changes may require an amendment to the CARP Authorization, Water Quality Certification, and, if applicable, WDRs. Substantial changes may render the authorization, Water Quality Certification, and, if applicable, WDRs, void, and a new application may be required.

A copy of the CARP conditions and Water Quality Certification and WDRs shall be given to individuals responsible for activities on the site. Site personnel, (employees, contractors, and subcontractors) shall be adequately informed and trained to implement all permit, Water Quality Certification, and WDR conditions and shall have a copy of all permits available onsite at all times for review by site personnel and agencies.

Any construction within the Stream System shall be implemented in a way to avoid and minimize impacts to vegetation outside the construction area. All preserved wetlands, other Aquatic Resources of Placer County, and the Stream Zone shall be protected with bright construction fencing. Temporary fencing shall be removed immediately upon completion of the project.

Before beginning construction, the project Applicant must have a valid CARP authorization or waiver notice. In order to obtain a permit, the Applicant must pay all mitigation fees or purchase appropriate credits from an agency-approved mitigation bank.

All deviations from plans and documents provided with the Application and approved by Placer County CDRA must be reported to Placer County CDRA immediately.

Erosion control measures shall be specified as part of the CARP application, and the application shall not be complete without them. All erosion control specified in the permit application shall be in place and functional before the beginning of the rainy season and shall remain in place until the end of the season. Site supervisors shall be aware of weather forecasts year-round and shall be prepared to establish erosion control on short notice for unusual rain events. Erosion control features shall be inspected and maintained after each rainfall period. Maintenance includes, but is not limited to, removal of accumulated silt and the replacement of damaged barriers and other features.

All required setbacks shall be implemented according to the HCP/NCCP Condition 4 (HCP/NCCP Section 6.1.2).

All work in aquatic resources within the Stream System shall be restricted to periods of low flow and dry weather between April 15 and October 15, unless otherwise permitted by Placer County CDRA and approved

by the appropriate State and federal regulatory agency. Work within aquatic resources in the Stream System outside of the specified periods may be permitted under some circumstances. The Applicant must provide Placer County CDRA with the following information: a) the extent of work already completed; b) specific details about the work yet to be completed; and c) an estimate of the time needed to complete the work in the Stream System.

Following work in a stream channel, the low flow channel shall be returned to its natural state to the extent possible. The shape and gradient of the streambed shall be restored to the same gradient that existed before the work to the extent possible.

Work shall not disturb active bird nests until young birds have fledged. To avoid impacts to nesting birds, any disturbance shall occur between September 1 and February 1 prior to the nesting season. Tree removal, earthmoving or other disturbance at other times is at Placer County CDRA's discretion and will require surveys by a qualified biologist to determine the absence of nesting birds prior to the activity.

All trees marked for removal within the Stream System must be shown on maps included with the Application. Native trees over five inches diameter at breast height (DBH) shall not be removed without the consent of Placer County CDRA.

Except for site preparation for the installation and removal of dewatering structures, no excavation is allowed in flowing streams unless dredging WDRs are issued by the RWQCB. Detailed plans for dewatering must be part of the Application.

Temporary crossings as described in the Application shall be installed no earlier than April 15 and shall be removed no later than October 15, unless otherwise permitted by Placer County CDRA and approved by the appropriate State and federal regulatory agency. This work window could be modified at the discretion of Placer County and the CDFW.

No vehicles other than necessary earth-moving and construction equipment shall be allowed within the Stream System after the section of stream where work is performed is dewatered. The equipment and vehicles used in the Stream System shall be described in the Application.

Staging areas for equipment, materials, fuels, lubricants, and solvents shall be located outside the stream channel and banks and away from all preserved aquatic resources. All stationary equipment operated within the Stream System must be positioned over drip-pans. Equipment entering the Stream System must be inspected daily for leaks that could introduce deleterious materials into aquatic resources. All discharges, unintentional or otherwise, shall be reported immediately to Placer County CDRA. Placer County CDRA shall then immediately notify the appropriate state and federal agencies.

Cement, concrete, washings, asphalt, paint, coating materials, oil, other petroleum products, and other materials that could be hazardous to aquatic life shall be prevented from reaching streams, lakes, or other water bodies. These materials shall be placed a minimum of 50 feet away from aquatic environments. All

discharges, unintentional or otherwise, shall be reported immediately to Placer County CDRA. Placer County CDRA shall then immediately notify the appropriate state and federal agencies.

During construction, no litter or construction debris shall be dumped into water bodies or other aquatic resources; nor shall it be placed in a location where it might be moved by wind or water into aquatic resources. All construction debris shall be removed from the site upon completion of the project.

Only herbicides registered with the California Department of Pesticide Regulation shall be used in streams, ponds, and lakes, and shall be applied in accordance with label instructions. A list of all pesticides that may be used in the project area shall be submitted to Placer County CDRA before use. The PCCP does not authorize the use of herbicides; herbicide application is not a Covered Activity.

Placer County CDRA shall be notified immediately if threatened or endangered species that are not Covered Species are discovered during construction activities. Placer County CDRA shall suspend work and notify the USFWS, NMFS, and the CDFW for guidance.

Wildlife entering the construction site shall be allowed to leave the area unharmed or shall be flushed or herded humanely in a safe direction away from the site.

All pipe sections shall be capped or inspected for wildlife before being placed in a trench. Pipes within a trench shall be capped at the end of each day to prevent entry by wildlife, except for those pipes that are being used to divert stream flow.

At the end of each workday, all open trenches will be provided with a ramp of dirt or wood to allow trapped animals to escape.

If human remains or cultural artifacts are discovered during construction, the Applicant shall stop work in the area and notify Placer County CDRA immediately. Work will not continue in the area until the County coroner and a qualified archaeologist have evaluated the remains, conducted a survey, prepared an assessment, and required consultations are completed.

### **7.1.3 Special-Status Plant Species**

Special-status plant surveys conducted throughout the Study Area in 2021 were negative within the proposed impact area, but several plant species were not observed at reference locations and may not have emerged in 2021. Therefore, a second survey of the seasonal wetlands and vernal pools throughout the Study Area shall be conducted in 2022. Additionally, given enough time, plants may become established in areas where suitable habitat exists. If construction does not commence prior to the spring of 2024, another round of special-status plant surveys shall be conducted in areas proposed for impact prior to commencement of construction. Surveys shall be conducted area in accordance with the *Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed, and Candidate Plants* (USFWS 2000), the *Botanical Survey Guidelines of the California Native Plant Society* (CNPS 2001), and *Protocols for*

*Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (CDFW 2018). This protocol includes conducting surveys at the appropriate time of year, when plants are in bloom.

If no special-status plant species are found, no further mitigation would be required. If special status plants are found within proposed impact areas, and they are perennials, such as Sanford's arrowhead or big-scale balsamroot, then mitigation could consist of digging up the plants and transplanting them into a suitable avoided area on-site prior to construction. If the plant found is an annual such as dwarf downingia, then mitigation could consist of collecting seed-bearing soil and spreading it into a suitable constructed wetland at a mitigation site. If special-status plants will be impacted, a mitigation plan shall be developed and approved by the County. Mitigation for the transplantation/establishment of rare plants will result in no net loss of individual plants after a five (5) year monitoring period.

#### **7.1.4 Western Spadefoot**

The spring prior to construction, the Applicant shall survey all suitable aquatic habitat within the Project site (including features proposed for avoidance) by sampling the features thoroughly with dipnets during March or early April, when spadefoot tadpoles would be present. In addition, one nocturnal acoustic survey of all areas within 300 feet of vernal pools and seasonal wetlands will be conducted. Acoustic surveys consist of walking through the area and listening for the distinctive snore-like call of this species. Timing and methodology for the aquatic and acoustic surveys shall be based on those described in *Distribution of the Western Spadefoot (Spea hammondi) in the Northern Sacramento Valley of California, with Comments on Status and Survey Methodology* (Shedd 2017). If both the aquatic survey and the nocturnal acoustic survey are negative, no further mitigation is necessary. If western spadefoot are observed within aquatic habitat proposed for impact, the tadpoles shall be captured and relocated to an off-site open space preserve with suitable habitat in the vicinity of the Overall Project Area. If western spadefoot are observed within aquatic habitat proposed for avoidance, then the applicant may either: relocate the tadpoles to an off-site open space preserve with habitat of equivalent or greater value (e.g., vernal pools and seasonal wetlands in a grassland/woodland matrix) in the vicinity of the Overall Project Area, or install silt fence along the edge of the proposed impact area within 300 feet of the occupied aquatic habitat to prevent metamorphosed individuals from dispersing into the construction area.

#### **7.1.5 Nesting Raptors and Other Birds**

The following nest survey requirements apply if construction activities take place during the typical bird breeding/nesting season (typically February 15 through August 31).

##### **7.1.5.1 Nesting Bird Survey**

A pre-construction nesting bird survey shall be conducted by the qualified biologist (Project Biologist) throughout the portion of the Project proposed for construction and all accessible areas within a 500-foot

radius of proposed construction areas, no more than 3 days prior to the initiation of construction. If there is a break in construction activity of more than 3 days, then subsequent surveys shall be conducted.

If an active raptor nest is found, no construction activities shall take place within 500 feet of the nest until the young have fledged. If active songbird nests are found, a 100-foot no disturbance buffer will be established. These no-disturbance buffers may be reduced if a smaller, sufficiently protective buffer is proposed by the Project Biologist and approved by the County after taking into consideration the natural history of the species of bird nesting, the proposed activity level adjacent to the nest, the nest occupants' habituation to existing or ongoing activity, and nest concealment (i.e., whether there are visual or acoustic barriers between the proposed activity and the nest). The Project Biologist can visit the nest as needed to determine when the young have fledged the nest and are independent of the site or the nest can be left undisturbed until the end of the nesting season.

#### 7.1.5.2 Survey Report

A report summarizing the survey(s) shall be provided to the Development Review Committee within 30 days of the completed survey and is valid for one construction season. If no nests are found, no further mitigation is required.

#### 7.1.5.3 Increases to Buffers and Completion of Nesting

When it is determined that the size of the no-disturbance buffer requires the Project Biologist to monitor the nest, that monitoring will include observations about the bird's behaviors relative to the construction activities. Should construction activities cause a nesting bird to do any of the following in a way that would be considered a result of construction activities: vocalize, make defensive flights at intruders, get up from a brooding position, or fly off the nest, then the exclusionary buffer shall be increased such that activities are far enough from the nest to stop this agitated behavior. The revised no-disturbance buffer will remain in place until the chicks have fledged or as otherwise determined by a qualified biologist in consultation with the County.

Construction activities may only resume within the no-disturbance buffer after a follow-up survey by the Project Biologist has been conducted and a report has been prepared indicating that the nest (or nests) are no longer active, and that no new nests have been identified.

### **7.1.6 Roosting Bats**

- A qualified biologist shall conduct a bat habitat assessment of all potential roosting habitat features, including trees and structures within the proposed impact footprint. This habitat assessment shall identify all potentially suitable roosting habitat and may be conducted up to 1 year prior to the start of construction.
- If potential roosting habitat is identified (cavities in trees or potential roosts within structures) within the areas proposed for impact, the biologist shall survey the potential roosting habitat during the active

season (generally April through October or from January through March on days with temperatures in excess of 50 degrees F) to determine presence of roosting bats. These surveys are recommended to be conducted utilizing methods that are considered acceptable by CDFW and bat experts. Methods may include evening emergence surveys, acoustic surveys, inspecting potential roosting habitat with fiberoptic cameras or a combination thereof.

- If roosting bats are identified within any of the trees planned for removal, or if presence is assumed, the trees shall be removed outside of pup season only on days with temperatures in excess of 50 degrees F. Pup season is generally during the months of May through August. Two-step tree removal shall be utilized under the supervision of the qualified biologist. Two-step tree removal involves removal of all branches of the tree that do not provide roosting habitat on the first day, and then the next day cutting down the remaining portion of the tree.
- Additionally, it is recommended that all other tree removal be conducted from January through March on days with temperatures in excess of 50 degrees F to avoid potential impacts to foliage-roosting bat species.
- If roosting bats are identified within any structures planned for removal, a bat exclusion plan shall be prepared by a qualified bat biologist describing the methods to be used to humanely exclude bats prior to disturbance. Each exclusion is specific to the structure and no two are the same. All exclusions involve the installation of one-way doors or flaps during the non-breeding season that allow the bats to leave and not re-enter the structure. This plan shall be approved by the County and by CDFW and shall be implemented prior to the start of construction.

## **7.2 Non-PCCP Areas**

The following are proposed mitigation measures for impacts to sensitive biological resources that may be associated with construction of the portions of the Project, the sewer alternatives, and the potential future trails outside of the PCCP Plan Area. Note that vernal pool branchiopods are absent from the Non-PCCP Area, and as a result, no mitigation measures for these species are provided. VELB are also currently absent from the Non-PCCP Area due to the lack of habitat; however, mitigation measures have been provided in case later surveys locate this somewhat more mobile species.

### **7.2.1 Aquatic Resources**

1. The Project applicant shall apply for a Section 404 permit from the U.S. Army Corps of Engineers. Waters that will be impacted shall be replaced or rehabilitated on a “no-net-loss” basis. Habitat restoration, rehabilitation, and/or replacement shall be at a location and by methods acceptable to the USACE.
2. The applicant shall apply for a Section 401 water quality certification from the RWQCB, and adhere to the certification conditions.
4. The applicant shall apply for a Section 1600 Lake or Streambed Alteration Agreement from CDFW. The information provided will include a description of all of the activities associated with the Project, not just those closely associated with the drainages and/or riparian vegetation. Impacts will be outlined in the application and are expected to be in substantial conformance with the impacts to biological resources outlined in this document. Impacts for each activity will be broken down by temporary and

permanent, and a description of the proposed mitigation for biological resource impacts will be outlined per activity and then by temporary and permanent. Information regarding Project-specific drainage and hydrology changes resulting from Project implementation will be provided as well as a description of storm water treatment methods. Minimization and avoidance measures will be proposed as appropriate and may include: preconstruction species surveys and reporting, protective fencing around avoided biological resources, worker environmental awareness training, seeding disturbed areas adjacent to open space areas with native seed, and installation of project-specific storm water BMPs. Mitigation for impacts to Riparian Woodland may include restoration or enhancement of resources on- or off-site, purchase habitat credits from an agency-approved mitigation/conservation bank, off-site, working with a local land trust to preserve land, or any other method acceptable to CDFW. Mitigation will result in no net loss of Riparian Woodland.

### **7.2.2 Special-Status Plant Species**

Special-status plant surveys conducted throughout the Study Area in 2021 and 2022 were negative within the proposed impact area, but given enough time, plants may become established in areas where suitable habitat exists. If construction does not commence prior to the spring of 2024, another round of special-status plant surveys shall be conducted in areas proposed for impact prior to commencement of construction. Surveys shall be conducted area in accordance with the *Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed, and Candidate Plants* (USFWS 2000), the *Botanical Survey Guidelines of the California Native Plant Society* (CNPS 2001), and *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (CDFW 2018). This protocol includes conducting surveys at the appropriate time of year, when plants are in bloom.

If no special-status plant species are found, no further mitigation would be required. If special status plants are found within the proposed impact area and they are perennials such as Sanford's arrowhead or big-scale balsamroot, then mitigation could consist of digging up the plants and transplanting them into a suitable avoided area on-site prior to construction. If the plant found is an annual such as dwarf downingia, then mitigation could consist of collecting seed-bearing soil and spreading it into a suitable constructed wetland at a mitigation site. If special-status plants will be impacted, a mitigation plan shall be developed and approved by the County. Mitigation for the transplantation/establishment of rare plants will result in no net loss of individual plants after a five (5) year monitoring period.

### **7.2.3 Valley Elderberry Longhorn Beetle (VELB)**

VELB were not present within the on-site elderberry shrubs during the 2022 survey, but given enough time, VELB could occupy the elderberry shrubs, or shrubs may become established in new areas or may die of natural causes. Therefore, we recommend comprehensive VELB surveys be conducted in non-PCCP areas proposed for impact no more than three years prior to commencement of construction. Surveys may be conducted at any time of year, but elderberry shrubs tend to be the most visible in spring. Surveys shall be conducted in accordance with the *Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle* (USFWS 2017), or the most recent USFWS VELB guidance at the time.

If VELB are located prior to construction, then:

1. All occupied elderberry shrubs (which are defined for the purposes of this section as those with stems greater than 1 inch in diameter at ground level) shall be avoided completely during construction with a buffer of at least 20 feet, except as permitted under paragraph 2, below and the following avoidance and minimization measures during construction [as outlined in the *Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle* (USFWS 2017)] shall be implemented for all work within 165 feet of a shrub:
  - All areas to be avoided during construction activities will be fenced and/or flagged as close to construction limits as feasible.
  - Activities that could damage or kill an elderberry shrub (e.g., trenching, paving, etc.) shall receive an avoidance area of at least 20 feet from the drip-line.
  - A qualified biologist will provide training for all contractors, work crews, and any onsite personnel on the status of the VELB, its host plant and habitat, the need to avoid damaging the elderberry shrubs, and the possible penalties for noncompliance.
  - A qualified biologist will monitor the work area at project appropriate intervals to assure that all avoidance and minimization measures are implemented.
  - As much as feasible, all activities within 165 feet of an elderberry shrub will be conducted between August and February.
  - Elderberry shrubs will not be trimmed.
  - Herbicides will not be used within the drip-line of the shrub. Insecticides will not be used within 100 feet of an elderberry shrub.
  - Mechanical weed removal within the drip-line of the shrub will be limited to the season when adults are not active (August – February) and will avoid damaging the elderberry.
2. If an elderberry shrub occupied with VELB must be removed to accommodate construction, then the applicant shall notify the County and consult with USFWS. At a minimum, the removal of elderberry shrubs found to be occupied with VELB shall be mitigated through the purchase of one (1) VELB mitigation credit from an agency-approved mitigation bank for each occupied shrub removed or through the planting of five (5) elderberry seedlings and five (5) native California trees or shrubs at a USFWS-approved location for each shrub removed. If the latter option is selected, then the seedlings and associated natives shall achieve an 80% survival rate measured at the end of a five (5) year monitoring period.

#### **7.2.4 Salmonids**

Work adjacent to Dry Creek associated with the sewer alternatives or the potential future East trail could result in water quality impacts if appropriate runoff, erosion, and sediment control Best Management Practices (BMPs) are not implemented. Therefore, the applicant shall prepare a Stormwater Pollution Prevention Plan (SWPPP) for the Project prior to issuance of the grading permit and implement the SWPPP during construction. Examples of BMPs that may be specified by the Certified Professional in Erosion and Sediment Control (CPESC) that prepares the SWPPP include silt fencing between any areas of ground disturbance and Dry Creek, straw wattles or straw bales around drop inlets, compaction and hydroseeding

of bare soil following construction, and locating concrete washouts, refueling areas, and materials storage, etc., a minimum of 300 feet from Dry Creek.

If Sewer Alternative 1A or 1B is selected, the jack and bore or horizontal directional drilling (HDD) under Dry Creek has a very small potential to result in a “frac-out”. Frac-out, or inadvertent return of drilling lubricant, is a potential concern when the HDD is used under sensitive habitats and waterways. If one of these alternatives is selected, then prior to construction, the contractor will be required to develop a Frac-Out Contingency Plan. The “Frac-out” plan will be prepared to ensure that preventive and responsive measures can be implemented by the contractor. To minimize the potential for a frac-out, the Contingency Plan will include design protocols to be implemented for the protection of sensitive biological resources and design protocols to require a geotechnical engineer or qualified geologist to make recommendations regarding the suitability of the formations to be bored to minimize the potential for frac-out conditions. In addition, the jack and bore may only be conducted between June 15 and October 15 to avoid any impacts to salmonid upstream or downstream migration in the unlikely event that a frac-out should occur.

### **7.2.5 Western Spadefoot**

The spring prior to construction, the Applicant shall survey all suitable aquatic habitat within the non-PCCP portion of the Project site (including features proposed for avoidance) by sampling the features thoroughly with dipnets during March or early April, when spadefoot tadpoles would be present. In addition, one nocturnal acoustic survey of all areas within 300 feet of vernal pools and seasonal wetlands will be conducted. Acoustic surveys consist of walking through the area and listening for the distinctive snore-like call of this species. Timing and methodology for the aquatic and acoustic surveys shall be based on those described in *Distribution of the Western Spadefoot (Spea hammondi) in the Northern Sacramento Valley of California, with Comments on Status and Survey Methodology* (Shedd 2017). If both the aquatic survey and the nocturnal acoustic survey are negative, no further mitigation is necessary. If western spadefoot are observed within aquatic habitat proposed for impact, the tadpoles shall be captured and relocated to an off-site open space preserve with suitable habitat in the vicinity of the Overall Project Area. If western spadefoot are observed within aquatic habitat proposed for avoidance, then the applicant may either: relocate the tadpoles to an off-site open space preserve with habitat of equivalent or greater value (e.g., vernal pools and seasonal wetlands in a grassland/woodland matrix) in the vicinity of the Overall Project Area, or install silt fence along the edge of the proposed impact area within 300 feet of the occupied aquatic habitat to prevent metamorphosed individuals from dispersing into the construction area.

### **7.2.6 Western Pond Turtle**

A western pond turtle survey shall be conducted no more than 48 hours prior to construction in the non-PCCP portion of the Overall Project where construction activities overlap with Dry Creek, intermittent drainages, and woodlands within 150 feet of these aquatic resources. If no western pond turtles or nests are found, no further mitigation is necessary. If a western pond turtle is observed within the proposed impact area, a qualified biologist shall relocate the individual to habitat of equivalent or greater value (e.g., riparian wetlands or Riparian Woodlands adjacent to a perennial creek or intermittent drainage) outside of

the proposed impact area prior to construction. If a western pond turtle nest is observed within the proposed impact area, the nest shall be fenced off and avoided until the eggs hatch. The exclusion fencing shall be placed no less than 25 feet from the nest. A qualified biologist shall monitor the nest daily during construction to ensure that hatchlings do not disperse into the construction area. Relocation of hatchlings will occur as stipulated above, if necessary.

### **7.2.7 Nesting Raptors and Other Birds**

The following nest survey requirements apply if construction activities take place during the typical bird breeding/nesting season (typically February 15 through August 31).

#### 7.2.7.1 Swainson's Hawk

A targeted Swainson's hawk nest survey shall be conducted throughout the non-PCCP portion of the Overall Project Area and all accessible areas within a ¼ mile radius of the proposed construction area no more than 15 days prior to construction activities. If active Swainson's hawk nests are found within ¼ mile of a construction area, construction shall cease within ¼ mile of the nest until the Project Biologist determines that the young have fledged or it is determined that the nesting attempt has failed. The ¼-mile buffer may be reduced if a smaller, sufficiently protective buffer is proposed by the Project Biologist and approved by the County after taking into consideration the natural history of the Swainson's hawk, the proposed activity level adjacent to the nest, the nest occupants' habituation to existing or ongoing activity, nest concealment (i.e., whether there are visual or acoustic barriers between the proposed activity and the nest), and what (if any) nest monitoring is proposed.

#### 7.2.7.2 Burrowing Owls

If construction begins during the nesting season (February 15 – August 31), a targeted burrowing owl nest survey shall be conducted of all accessible areas within 500 feet of the non-PCCP portion of the proposed construction area within 15 days prior to construction activities utilizing 60 foot transects as outlined in the *Staff Report on Burrowing Owl Mitigation* (CDFG 2012) (Staff Report). If an active burrowing owl nest burrow (i.e., occupied by more than one adult owl, and/or juvenile owls are observed) is found within 250 feet of a construction area, construction shall cease within 250 feet of the nest burrow until the Project Biologist determines that the young have fledged or it is determined that the nesting attempt has failed. If the applicant desires to work within 250 feet of the nest burrow, the applicant shall consult with CDFW and the County to determine if the nest buffer can be reduced.

If construction begins during the non-nesting season, (September 1 through the 14 February), the applicant shall conduct a survey for burrows or debris that represent suitable nesting habitat for burrowing owls within areas of proposed ground disturbance. If overwintering owls are located the applicant may exclude any burrowing owls observed and collapse any burrows or remove the debris in accordance with the methodology outlined in the Staff Report.

### 7.2.7.3 Other Birds

A pre-construction nesting bird survey shall be conducted by the Project Biologist throughout the Project Area and all accessible areas within a 500-foot radius of proposed construction areas, no more than 3 days prior to the initiation of construction. If there is a break in construction activity of more than 3 days, then subsequent surveys shall be conducted.

If active raptor, California black rail nest, or a tricolored blackbird nesting colony are found, no construction activities shall take place within 500 feet of the nest/colony until the young have fledged. If active songbird nests are found, a 100-foot no disturbance buffer will be established. These no-disturbance buffers may be reduced if a smaller, sufficiently protective buffer is proposed by the Project Biologist and approved by the County (and CDFW if it is a tricolored blackbird nesting colony) after taking into consideration the natural history of the species of bird nesting, the proposed activity level adjacent to the nest, the nest occupants' habituation to existing or ongoing activity, and nest concealment (i.e., whether there are visual or acoustic barriers between the proposed activity and the nest). The Project Biologist can visit the nest as needed to determine when the young have fledged the nest and are independent of the site or the nest can be left undisturbed until the end of the nesting season.

### 7.2.7.4 Survey Report

A report summarizing the survey(s), including those for Swainson's hawk and burrowing owls, shall be provided to the Development Review Committee and CDFW within 30 days of the completed survey and is valid for one construction season. If no nests are found, no further mitigation is required.

### 7.2.7.5 Increases to Buffers and Completion of Nesting

When it is determined that the size of the no-disturbance buffer requires the Project Biologist to monitor the nest, that monitoring will include observations about the bird's behaviors relative to the construction activities. Should construction activities cause a nesting bird to do any of the following in a way that would be considered a result of construction activities: vocalize, make defensive flights at intruders, get up from a brooding position, or fly off the nest, then the exclusionary buffer shall be increased such that activities are far enough from the nest to stop this agitated behavior. The revised no-disturbance buffer will remain in place until the chicks have fledged or as otherwise determined by a qualified biologist in consultation with the County.

Construction activities may only resume within the no-disturbance buffer after a follow-up survey by the Project Biologist has been conducted and a report has been prepared indicating that the nest (or nests) are no longer active, and that no new nests have been identified.

## **7.2.8 Loss of Foraging Habitat**

### 7.2.8.1 Swainson's Hawk

Approximately 33.57 acres of annual brome grassland that represents suitable foraging habitat for Swainson's hawks will be permanently impacted during construction of the portion of the proposed Project outside of the PCCP area, and an additional 0 – 1.27 acres will be impacted depending on which sewer alternative is selected. There is no Swainson's hawk foraging habitat outside of the PCCP for either of the potential future trails. These impacts shall be mitigated through purchase and conservation of similar habitat as follows:

Two Swainson's hawk nests have been documented approximately 2.5 miles west of the Study Area; one south of PFE Road, and one west of Walerga Road. Prior to Project construction, a qualified biologist shall conduct a review of Swainson's hawk nest data available, including the CNDDDB, unprocessed CNDDDB records, and contacting CDFW to determine if they have any additional nest data. If desired by the Project proponent, the biologist may conduct a survey of these nests to determine if they are still present. The biologist shall provide the County with a summary of his/her findings.

If it is determined that a portion of the Overall Project site is within 10 miles of an active Swainson's hawk nest (an active nest is defined as a nest with documented Swainson's hawk use within the past 5 years), the applicant will mitigate for the loss of suitable Swainson's hawk foraging habitat by implementing the following measures:

- One acre of suitable foraging habitat shall be protected for each acre of suitable foraging habitat that is proposed to be developed that is within 1 mile of an active nest. Protection shall be via purchase of mitigation bank credits or other land protection mechanism acceptable to the County.
- 0.75 acre of suitable foraging habitat shall be protected for each acre of suitable foraging habitat that is proposed to be developed that is between 1 and 5 miles from an active nest. Protection shall be via purchase of mitigation bank credits or other land protection mechanism acceptable to the County.
- 0.5 acre of suitable foraging habitat shall be protected for each acre of suitable foraging habitat that is proposed to be developed that is between 5 and 10 miles from an active nest. Protection shall be via purchase of mitigation bank credits or other land protection mechanism acceptable to the County.

### 7.2.8.2 Burrowing Owl

If any nesting burrowing owls are found during the breeding season pre-construction survey, mitigation for the permanent loss of burrowing owl foraging habitat (defined as all areas of suitable habitat within 250 feet of an active nest burrow) shall be accomplished at a 1:1 ratio. The mitigation provided shall be consistent with recommendations in the CDFW 2012 Staff Report and may be accomplished within the Swainson's Hawk Foraging Habitat mitigation area (as detailed in Section 7.2.8.1 above) if burrowing owls

have been documented utilizing that area, or if the Project Biologist and the County determine that the area is suitable. The Staff Report recommendations for mitigation land for burrowing owls are as follows:

1. Where habitat will be temporarily disturbed, restore the disturbed area to pre-project condition including decompacting soil and revegetating. Permanent habitat protection may be warranted if there is the potential that the temporary impacts may render a nesting site (nesting burrow and satellite burrows) unsustainable or unavailable depending on the time frame, resulting in reduced survival or abandonment. For the latter potential impact, see the permanent impact measures below.
2. Mitigate for permanent impacts to nesting, occupied and satellite burrows and/or burrowing owl habitat such that the habitat acreage, number of burrows and burrowing owls impacted are replaced based on the information provided in Appendix A. Note: A minimum habitat replacement recommendation is not provided here as it has been shown to serve as a default, replacing any site-specific analysis and discounting the wide variation in natal area, home range, foraging area, and other factors influencing burrowing owls and burrowing owl population persistence in a particular area.
3. Mitigate for permanent impacts to nesting, occupied and satellite burrows and burrowing owl habitat with (a) permanent conservation of similar vegetation communities (grassland, scrublands, desert, urban, and agriculture) to provide for burrowing owl nesting, foraging, wintering, and dispersal (i.e., during breeding and non-breeding seasons) comparable to or better than that of the impact area, and (b) sufficiently large acreage, and presence of fossorial mammals. The mitigation lands may require habitat enhancements including enhancement or expansion of burrows for breeding, shelter and dispersal opportunity, and removal or control of population stressors. If the mitigation lands are located adjacent to the impacted burrow site, ensure the nearest neighbor artificial or natural burrow clusters are at least within 210 meters (Fisher et al. 2007).
4. Permanently protect mitigation land through a conservation easement deeded to a nonprofit conservation organization or public agency with a conservation mission, for the purpose of conserving burrowing owl habitat and prohibiting activities incompatible with burrowing owl use. If the project is located within the service area of a Department approved burrowing owl conservation bank, the project proponent may purchase available burrowing owl conservation bank credits.
5. Develop and implement a mitigation land management plan to address long-term ecological sustainability and maintenance of the site for burrowing owls (see Management Plan and Artificial Burrow sections below, if applicable).
6. Fund the maintenance and management of mitigation land through the establishment of a long-term funding mechanism such as an endowment.
7. Habitat should not be altered or destroyed, and burrowing owls should not be excluded from burrows, until mitigation lands have been legally secured, are managed for the benefit of burrowing owls according to Department-approved management, monitoring and reporting plans, and the endowment or other long-term funding mechanism is in place or security is provided until these measures are completed.
8. Mitigation lands should be on, adjacent or proximate to the impact site where possible and where habitat is sufficient to support burrowing owls present. Where there is insufficient habitat on, adjacent to, or near project sites where burrowing owls will be excluded, acquire mitigation lands with burrowing owl habitat away from the project site. The selection of mitigation lands should then focus on consolidating and enlarging conservation areas located outside of urban and planned growth areas,

within foraging distance of other conserved lands. If mitigation lands are not available adjacent to other conserved lands, increase the mitigation land acreage requirement to ensure a selected site is of sufficient size. Offsite mitigation may not adequately offset the biological and habitat values impacted on a one to one basis. Consult with the Department when determining offsite mitigation acreages.

9. Evaluate and select suitable mitigation lands based on a comparison of the habitat attributes of the impacted and conserved lands, including but not limited to: type and structure of habitat being impacted or conserved; density of burrowing owls in impacted and conserved habitat; and significance of impacted or conserved habitat to the species range-wide. Mitigate for the highest quality burrowing owl habitat impacted first and foremost when identifying mitigation lands, even if a mitigation site is located outside of a lead agency's jurisdictional boundary, particularly if the lead agency is a city or special district.
10. Select mitigation lands taking into account the potential human and wildlife conflicts or incompatibility, including but not limited to, human foot and vehicle traffic, and predation by cats, loose dogs and urban-adapted wildlife, and incompatible species management (i.e., snowy plover).
11. Where a burrowing owl population appears to be highly adapted to heavily altered habitats such as golf courses, airports, athletic fields, and business complexes, permanently protecting the land, augmenting the site with artificial burrows, and enhancing and maintaining those areas may enhance sustainability of the burrowing owl population onsite. Maintenance includes keeping lands grazed or mowed with weedeaters or push mowers, free from trees and shrubs, and preventing excessive human and human-related disturbance (e.g., walking, jogging, off-road activity, dog-walking) and loose and feral pets (chasing and, presumably, preying upon owls) that make the environment uninhabitable for burrowing owls (Wesemann and Rowe 1985, Millsap and Bear 2000, Lincer and Bloom 2007). Items 4, 5 and 6 also still apply to this mitigation approach.
12. If there are no other feasible mitigation options available and a lead agency is willing to establish and oversee a Burrowing Owl Mitigation and Conservation Fund that funds on a competitive basis acquisition and permanent habitat conservation, the project proponent may participate in the lead agency's program.

### **7.2.9 Roosting Bats**

- A qualified biologist shall conduct a bat habitat assessment of all potential roosting habitat features, including trees and structures within the proposed impact footprint. This habitat assessment shall identify all potentially suitable roosting habitat and may be conducted up to 1 year prior to the start of construction.
- If potential roosting habitat is identified (cavities in trees or potential roosts within structures) within the areas proposed for impact, the biologist shall survey the potential roosting habitat during the active season (generally April through October or from January through March on days with temperatures in excess of 50 degrees F) to determine presence of roosting bats. These surveys are recommended to be conducted utilizing methods that are considered acceptable by CDFW and bat experts. Methods may include evening emergence surveys, acoustic surveys, inspecting potential roosting habitat with fiberoptic cameras or a combination thereof.

- If roosting bats are identified within any of the trees planned for removal, or if presence is assumed, the trees shall be removed outside of pup season only on days with temperatures in excess of 50 degrees F. Pup season is generally during the months of May through August. Two-step tree removal shall be utilized under the supervision of the qualified biologist. Two-step tree removal involves removal of all branches of the tree that do not provide roosting habitat on the first day, and then the next day cutting down the remaining portion of the tree.
- Additionally, it is recommended that all other tree removal be conducted from January through March on days with temperatures in excess of 50 degrees F to avoid potential impacts to foliage-roosting bat species.
- If roosting bats are identified within any structures planned for removal, a bat exclusion plan shall be prepared by a qualified bat biologist describing the methods to be used to humanely exclude bats prior to disturbance. Each exclusion is specific to the structure and no two are the same. All exclusions involve the installation of one-way doors or flaps during the non-breeding season that allow the bats to leave and not re-enter the structure. This plan shall be approved by the County and by CDFW and shall be implemented prior to the start of construction.

### **7.2.10 Native Trees and Oak Woodland**

All tree impacts associated with the residential development component of the Overall Project that are outside of the PCCP Plan Area are located in Placer County and are therefore subject to mitigation under the County's ordinances. Tree impacts associated with Sewer Alternative 1A occur partially within the PCCP Plan Area, and partially within the City of Roseville. Tree impacts associated with Sewer Alternative 1B occur partially within the PCCP Plan Area, partially within the City of Roseville, and partially within the County. No tree impacts are associated with Sewer Alternative 1C. Tree impacts associated with the West Trail are located entirely within the PCCP Plan Area. Tree impacts associated with the East Trail occur partially within the PCCP Plan Area, and partially within the City of Roseville.

#### 7.2.10.1 City of Roseville

The City of Roseville Tree Ordinance requires a Tree Permit for any activity affecting 20% or more of the Protected Zone of a Protected Tree related to a discretionary project. A number of items must be submitted with the permit application, including an Arborist Report. The Arborist Report must be prepared by an arborist or registered professional forester and include specific information on the tree locations, condition, potential impacts of development, recommended actions and mitigation measures.

##### 7.2.10.1.1 Sewer Alternative 1A

If Sewer Alternative 1A were selected, the Non-PCCP portion of Sewer Alternative 1A would result in impacts to a total of 58 Protected Trees with a combined diameter at breast height (DBH) of 753.6 inches. To mitigate for the loss of Protected Trees, the Project Applicant shall obtain a Tree Permit from the City Planning Department prior to Improvement Plan approval. The Planning Department shall review the Tree

Permit application as well as the final site improvement plans and determine the precise mitigation requirement at that time.

Removal of Protected Trees must be mitigated by planting of new trees (replacement) or by payment of an in-lieu fee of \$118 dollars per inch of DBH. If the applicant chooses replacement, the replacement requirement shall be calculated based upon an inch for an inch replacement of the DBH of the removed tree(s) where a 15-gallon tree will replace one-inch DBH of the removed tree; a 24-inch box tree will replace two inches, and a 36-inch box tree will replace three inches. The replacement trees shall have a combined diameter equivalent to not less than the total diameter of the tree(s) removed. A minimum of 50 percent of the replacement requirement shall be met by native oaks. Up to 50 percent may be met by non-native species.

Efforts should be made to save trees where feasible. This may include the use of retaining walls, planter islands, pavers, or other techniques commonly associated with tree preservation. The Improvement Plans shall include a note and show placement of temporary construction fencing around trees to be saved: The applicant shall install a four foot tall, brightly colored (typically orange), synthetic mesh material fence (or an equivalent approved by the City Planning Department at the following locations prior to any construction equipment being moved on-site or any construction activities taking place: at the limits of construction; outside the Protected Zone of all single-trunk trees six inches DBH or greater, or 10 inches DBH aggregate for multi-trunk trees; within 50 feet of any grading, road improvements, underground utilities, or other development activity; or as otherwise shown on the Tentative Subdivision Map.

No development of the sewer alternative, including grading, shall be allowed until this requirement is satisfied. Any encroachment within these areas, including Protected Zones of trees to be saved, must first be approved by the City Planning Department. Temporary fencing shall not be altered during construction without written approval of the City Planning Department. No grading, clearing, storage of equipment or machinery, etc., may occur until a representative of the City Planning Department has inspected and approved all temporary construction fencing.

#### 7.2.10.1.2 Sewer Alternative 1B

If Sewer Alternative 1B were selected, the Non-PCCP portion of Sewer Alternative 1B within the City of Roseville would result in impacts to a total of 38 Protected Trees with a combined diameter at breast height (DBH) of 343.5 inches. To mitigate for the loss of Protected Trees, the Project Applicant shall obtain a Tree Permit from the City Planning Department prior to Improvement Plan approval. The Planning Department shall review the Tree Permit application as well as the final site improvement plans and determine the precise mitigation requirement at that time.

Removal of Protected Trees must be mitigated by planting of new trees (replacement) or by payment of an in-lieu fee of \$118 dollars per inch of DBH. If the applicant chooses replacement, the replacement requirement shall be calculated based upon an inch for an inch replacement of the DBH of the removed tree(s) where a 15-gallon tree will replace one inch DBH of the removed tree; a 24-inch box tree will replace two inches, and a 36-inch box tree will replace three inches. The replacement trees shall have a combined

diameter equivalent to not less than the total diameter of the tree(s) removed. A minimum of 50 percent of the replacement requirement shall be met by native oaks. Up to 50 percent may be met by non-native species.

Efforts should be made to save trees where feasible. This may include the use of retaining walls, planter islands, pavers, or other techniques commonly associated with tree preservation. The Improvement Plans shall include a note and show placement of temporary construction fencing around trees to be saved: The applicant shall install a four foot tall, brightly colored (typically orange), synthetic mesh material fence (or an equivalent approved by the City Planning Department at the following locations prior to any construction equipment being moved on-site or any construction activities taking place: at the limits of construction; outside the Protected Zone of all single-trunk trees six inches DBH or greater, or 10 inches DBH aggregate for multi-trunk trees; within 50 feet of any grading, road improvements, underground utilities, or other development activity; or as otherwise shown on the Tentative Subdivision Map.

No development of the sewer alternative, including grading, shall be allowed until this requirement is satisfied. Any encroachment within these areas, including Protected Zones of trees to be saved, must first be approved by the City Planning Department. Temporary fencing shall not be altered during construction without written approval of the City Planning Department. No grading, clearing, storage of equipment or machinery, etc., may occur until a representative of the City Planning Department has inspected and approved all temporary construction fencing.

#### 7.2.10.1.3 East Trail

If the East Trail were constructed, the Non-PCCP portion of the potential future East Trail within the City of Roseville would result in impacts to a total of 7 Protected Trees with a combined diameter at breast height (DBH) of 106 inches. To mitigate for the loss of Protected Trees, the Project Applicant shall obtain a Tree Permit from the City Planning Department prior to Improvement Plan approval. The Planning Department shall review the Tree Permit application as well as the final site improvement plans and determine the precise mitigation requirement at that time.

Removal of Protected Trees must be mitigated by planting of new trees (replacement) or by payment of an in-lieu fee of \$118 dollars per inch of DBH. If the applicant chooses replacement, the replacement requirement shall be calculated based upon an inch for an inch replacement of the DBH of the removed tree(s) where a 15-gallon tree will replace one inch DBH of the removed tree; a 24-inch box tree will replace two inches, and a 36-inch box tree will replace three inches. The replacement trees shall have a combined diameter equivalent to not less than the total diameter of the tree(s) removed. A minimum of 50 percent of the replacement requirement shall be met by native oaks. Up to 50 percent may be met by non-native species.

Efforts should be made to save trees where feasible. This may include the use of retaining walls, planter islands, pavers, or other techniques commonly associated with tree preservation. The Improvement Plans shall include a note and show placement of temporary construction fencing around trees to be saved: The applicant shall install a four foot tall, brightly colored (typically orange), synthetic mesh material fence (or an equivalent approved by the City Planning Department at the following locations prior to any construction

equipment being moved on-site or any construction activities taking place: at the limits of construction; outside the Protected Zone of all single-trunk trees six inches DBH or greater, or 10 inches DBH aggregate for multi-trunk trees; within 50 feet of any grading, road improvements, underground utilities, or other development activity; or as otherwise shown on the Tentative Subdivision Map.

No development of the trail, including grading, shall be allowed until this requirement is satisfied. Any encroachment within these areas, including Protected Zones of trees to be saved, must first be approved by the City Planning Department. Temporary fencing shall not be altered during construction without written approval of the City Planning Department. No grading, clearing, storage of equipment or machinery, etc., may occur until a representative of the City Planning Department has inspected and approved all temporary construction fencing.

#### 7.2.10.2 Placer County

Tree impacts to the southern portion of the Project Area and the eastern portion of Sewer Alternative 1B occur within Placer County; mitigation for these impacts is detailed below.

##### 7.2.10.2.1 Project Area

###### *Individual Tree Mitigation*

The Non-PCCP portion of the Project within unincorporated Placer County would result in impacts to a total of 41 Protected Trees with a combined diameter at breast height (DBH) of 803.5 inches. An additional nine "significant" trees in oak woodlands mitigated in accordance with the Interim Guidelines would be impacted with a combined DBH of 298 inches. Cumulatively, this totals 50 individual trees with a combined DBH of 1,101.5 inches.

To mitigate for the loss of Protected Trees, the Project Applicant shall obtain a Tree Permit from Placer County's Planning Services Division prior to Improvement Plan approval. The Planning Services Division shall review the Tree Permit application as well as the final site improvement plans and determine the precise mitigation requirement at that time. The fee shall be paid into the Placer County Tree Preservation Fund at \$125 per DBH removed or impacted (or the applicable fee at that time).

Efforts should be made to save trees where feasible. This may include the use of retaining walls, planter islands, pavers, or other techniques commonly associated with tree preservation. The Improvement Plans shall include a note and show placement of temporary construction fencing around trees to be saved: The applicant shall install a four foot tall, brightly colored (typically orange), synthetic mesh material fence (or an equivalent approved by the Development Review Committee at the following locations prior to any construction equipment being moved on-site or any construction activities taking place: at the limits of construction; outside the Protected Zone of all single-trunk trees six inches DBH or greater, or 10 inches DBH aggregate for multi-trunk trees; within 50 feet of any grading, road improvements, underground utilities, or other development activity; or as otherwise shown on the Tentative Subdivision Map.

No development of the Project, including grading, shall be allowed until this requirement is satisfied. Any encroachment within these areas, including Protected Zones of trees to be saved, must first be approved by the Development Review Committee. Temporary fencing shall not be altered during construction without written approval of the Development Review Committee. No grading, clearing, storage of equipment or machinery, etc., may occur until a representative of the Development Review Committee has inspected and approved all temporary construction fencing.

### *Oak Woodland Mitigation*

The project applicant shall obtain a Tree Permit from Placer County's Planning Services Division prior to improvement plan approval that could impact native oak trees and comply with all requirements of the Tree Permit. The Planning Services Division shall review the Tree Permit application as well as the final site improvement plans and determine the precise mitigation requirement at that time. To support the approval process, an exhibit shall be submitted showing the extent of the proposed activity within oak woodlands (as defined by the Interim Guidelines), and the resulting acreage of impact to oak woodlands. If that impact acreage is one acre or greater, the Project Applicant may choose to mitigate for oak woodlands as follows:

Compensatory mitigation shall occur off-site and may consist of one of the following, based on the acreage of Oak Woodland impacted:

- Submit payment of fees for oak woodland conservation at a 2:1 ratio consistent with Chapter 19.50 of the Placer County Code: Woodland Conservation . These fees shall be calculated based upon the current market value of similar oak woodland acreage preservation and an endowment to maintain the land in perpetuity.
- Purchase off-site conservation easements at a location approved by Placer County to mitigate the loss of oak woodlands at a 2:1 ratio.
- Provide for a combination of payment to the Tree Preservation Fund and creation of an off-site Oak Preservation Easement.

Removal of significant trees (>24 inches DBH or clumps >72 inches in circumference measured at ground level) within oak woodlands requires additional mitigation on a per-inch DBH removed (\$125/DBH inch).

As an example, oak woodland direct and indirect impacts proposed within the large stand of blue oak and Riparian Woodlands south of PFE Road total 1.8 acres. As mitigation for those impacts, the Project Applicant would be required to purchase off-site conservation easements, pay fees for oak woodland conservation, or a combination of the two for 3.6 acres of oak woodland. In addition, nine significant trees occur within this oak woodland area, and must be mitigated on a per-inch DBH removed. These trees have been included in the individual native tree mitigation discussion above.

### 7.2.10.2.2 Sewer Alternative 1B

Implementation of Sewer Alternative 1B would result in impacts to 10 Protected Trees with a combined diameter at breast height (DBH) of 269.6 inches. To mitigate for the loss of Protected Trees, the Project

Applicant shall obtain a Tree Permit from Placer County's Planning Services Division prior to Improvement Plan approval. The Planning Services Division shall review the Tree Permit application as well as the final site improvement plans and determine the precise mitigation requirement at that time. The fee shall be paid into the Placer County Tree Preservation Fund at \$125 per DBH removed or impacted (or the applicable fee at that time).

Efforts should be made to save trees where feasible. This may include the use of retaining walls, planter islands, pavers, or other techniques commonly associated with tree preservation. The Improvement Plans shall include a note and show placement of temporary construction fencing around trees to be saved: The applicant shall install a four foot tall, brightly colored (typically orange), synthetic mesh material fence (or an equivalent approved by the Development Review Committee at the following locations prior to any construction equipment being moved on-site or any construction activities taking place: at the limits of construction; outside the Protected Zone of all single-trunk trees six inches DBH or greater, or 10 inches DBH aggregate for multi-trunk trees; within 50 feet of any grading, road improvements, underground utilities, or other development activity; or as otherwise shown on the Tentative Subdivision Map.

No development of the Project, including grading, shall be allowed until this requirement is satisfied. Any encroachment within these areas, including Protected Zones of trees to be saved, must first be approved by the Development Review Committee. Temporary fencing shall not be altered during construction without written approval of the Development Review Committee. No grading, clearing, storage of equipment or machinery, etc., may occur until a representative of the Development Review Committee has inspected and approved all temporary construction fencing.

### **7.2.11 Sensitive Natural Communities**

Approximately 0.94 acre of Riparian Woodland will be impacted by construction of the Project. An additional 0.17 acre would be impacted if Sewer Alternative Alignment 1A were implemented, 0.12 acre if Sewer Alternative Alignment 1B were implemented, and an additional 0.02 acre if the East Trail were constructed. The Riparian Woodland is considered a sensitive natural community by CDFW and impacts to this community are regulated under Fish and Game Code 1600. The applicant shall apply for a Section 1600 Lake and Streambed Alteration Agreement (LSAA) with CDFW as detailed above in **Section 7.2.1**. The applicant shall comply with all conditions of the LSAA, and mitigation for impacts to Riparian Woodland shall result in no net loss of Riparian Woodland habitat.

### **7.2.12 Worker Environmental Awareness Training**

Prior to any ground-disturbing or vegetation-removal activities, a Worker Environmental Awareness Training (WEAT) shall be prepared and administered to the construction crews. The WEAT will include the following: discussion of the Placer County Conservation Program, state and federal Endangered Species Act, the Clean Water Act, the Project's permits and CEQA documentation, and associated mitigation measures; consequences and penalties for violation or noncompliance with these laws and regulations; identification of special-status wildlife, location of any avoided Waters of the U.S; hazardous substance spill prevention

and containment measures; and the contact person in the event of the discovery of a special-status wildlife species. The WEAT will also discuss the different habitats used by the species' different life stages and the annual timing of these life stages. A handout summarizing the WEAT information shall be provided to workers to keep on-site for future reference. Upon completion of the WEAT training, workers will sign a form stating that they attended the training, understand the information presented and will comply with the regulations discussed. Workers will be shown designated "avoidance areas" during the WEAT training; worker access should be restricted to outside of those areas to minimize the potential for inadvertent environmental impacts. Fencing and signage around the boundary of avoidance areas may be helpful.

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# Figures

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Figure 1. Project Components

Figure 2. Vicinity Map

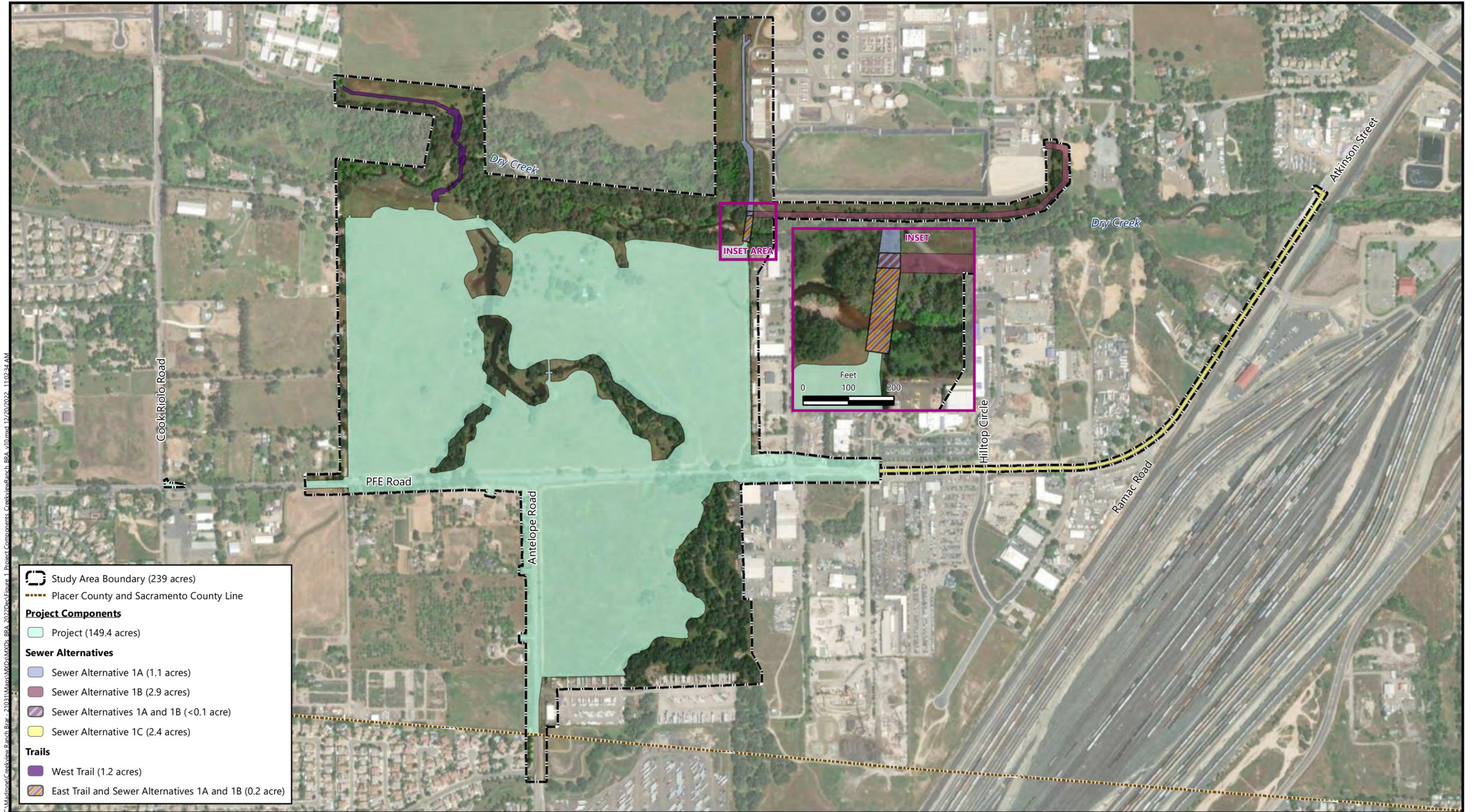
Figure 3. Project Jurisdictions

Figure 4. California Natural Diversity Database Occurrences of Plant Species

Figure 5. California Natural Diversity Database Occurrences of Wildlife Species and Critical  
Habitat

Figure 6. NRCS Soils Map





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- Study Area Boundary (239 acres)
- Placer County and Sacramento County Line
- Project Components**
- Project (149.4 acres)
- Sewer Alternatives**
- Sewer Alternative 1A (1.1 acres)
- Sewer Alternative 1B (2.9 acres)
- Sewer Alternatives 1A and 1B (<0.1 acre)
- Sewer Alternative 1C (2.4 acres)
- Trails**
- West Trail (1.2 acres)
- East Trail and Sewer Alternatives 1A and 1B (0.2 acre)



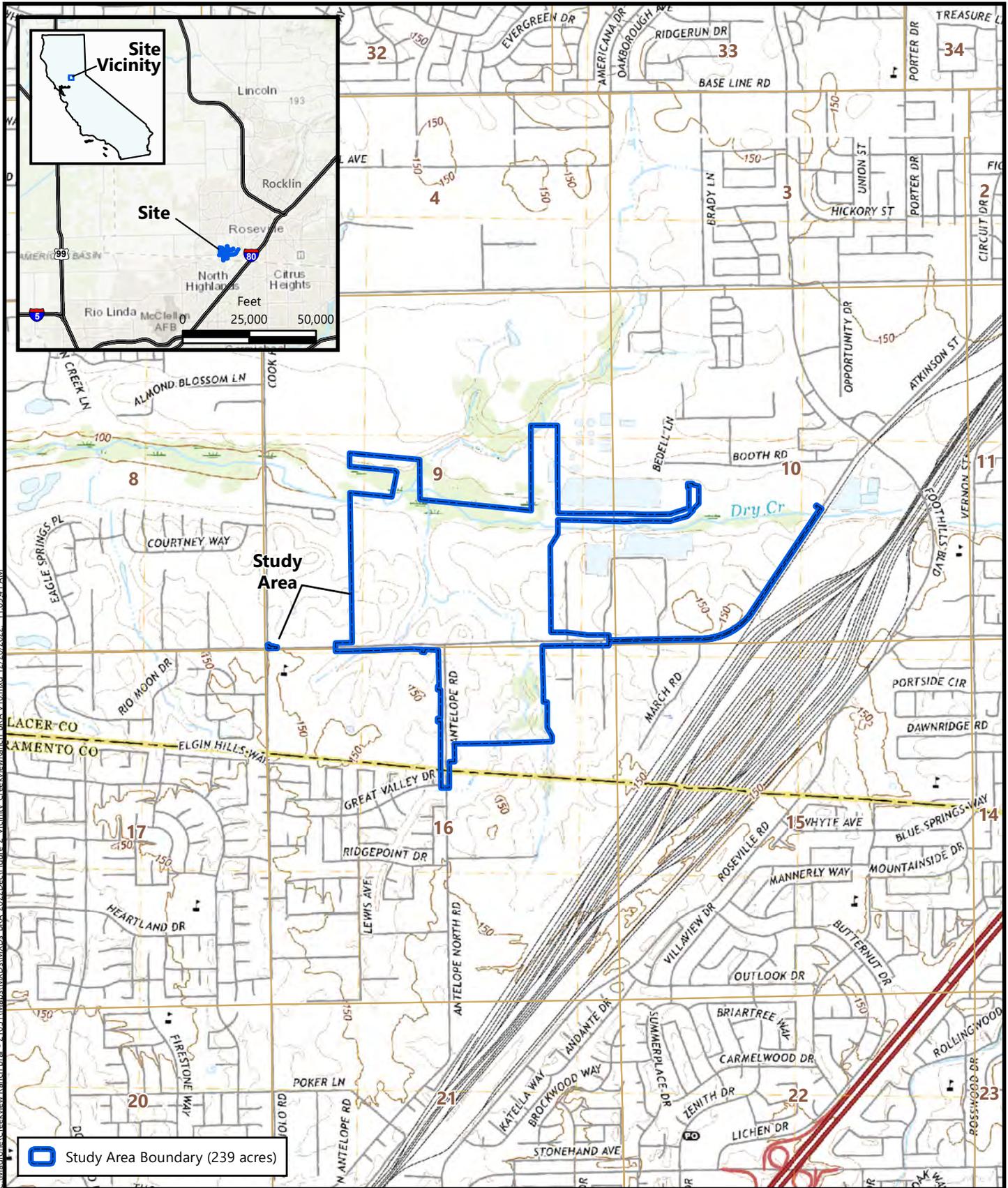
**Figure 1**  
**Project Components**

Aerial Source: Maxar, 26 April 2022.

Creekside Ranch  
Placer County, California







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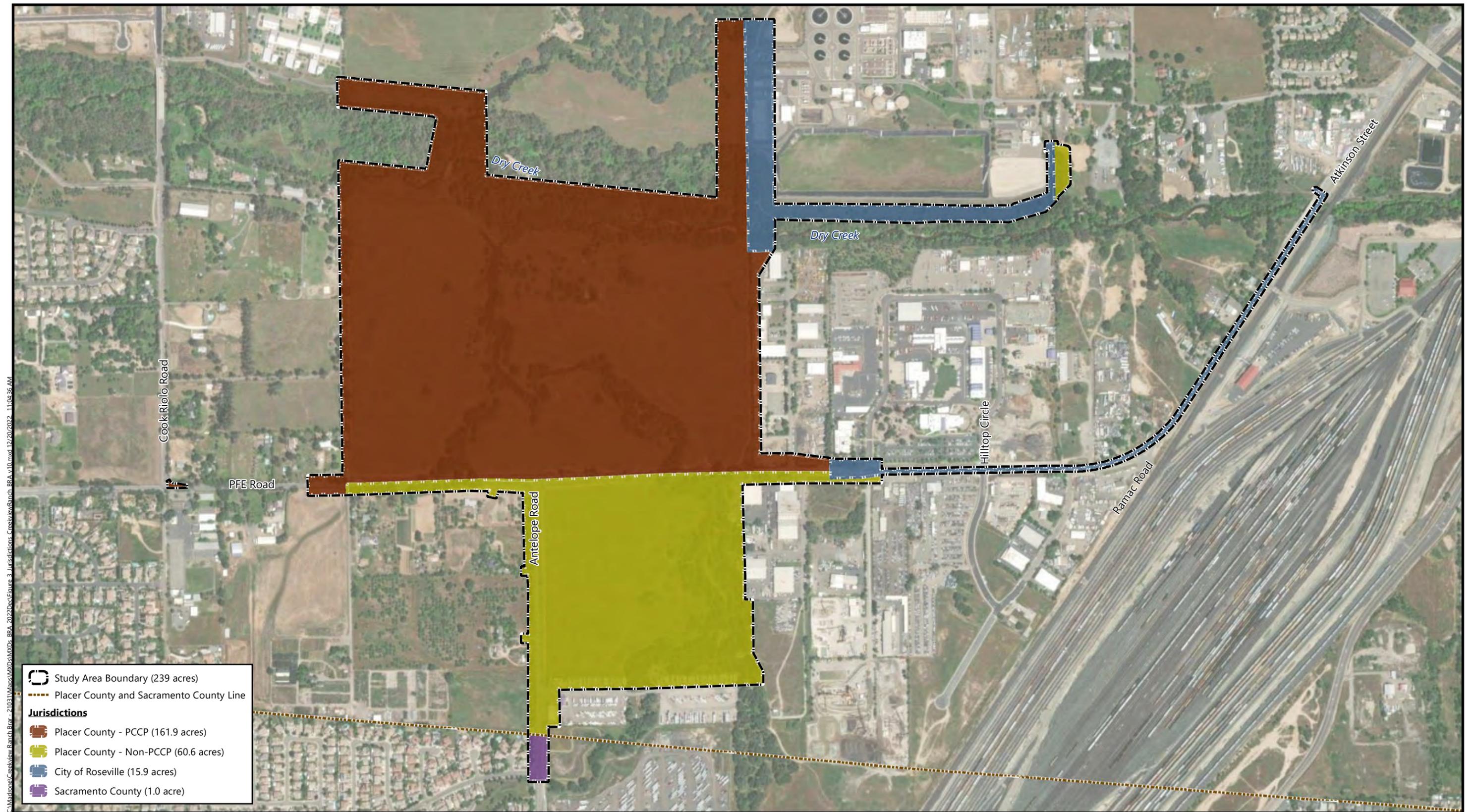
**Figure 2**  
**Vicinity Map**



Source: United States Geologic Survey, 2021  
 "Citrus Heights, California" 7.5-Minute Topographic Quadrangle  
 Sections 9, 10, and 16, Township 10 North, Range 6 East  
 Longitude -121.329962, Latitude 38.730006

Creekview Ranch  
 Placer County, California





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Study Area Boundary (239 acres)

Placer County and Sacramento County Line

**Jurisdictions**

- Placer County - PCCP (161.9 acres)
- Placer County - Non-PCCP (60.6 acres)
- City of Roseville (15.9 acres)
- Sacramento County (1.0 acre)



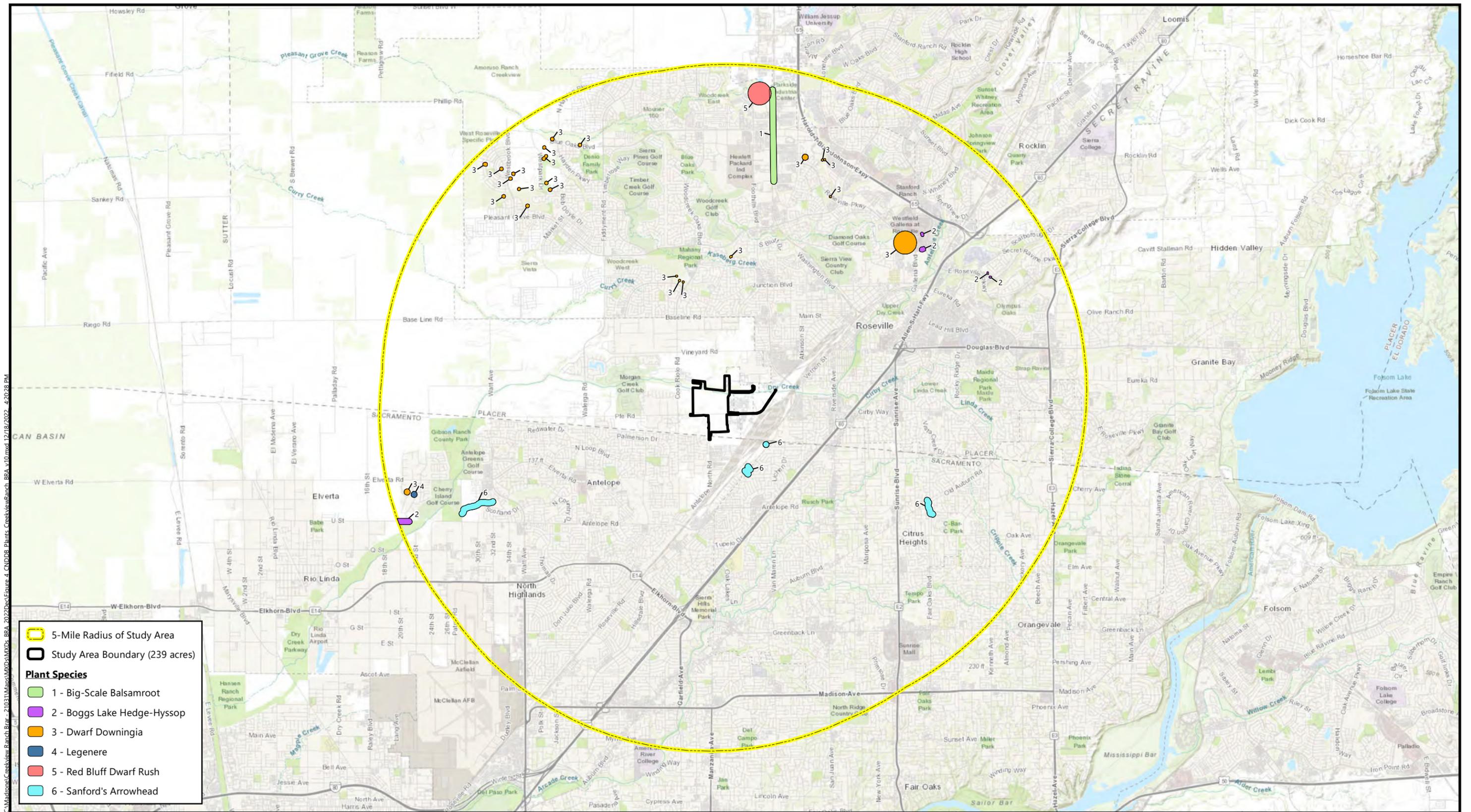
Aerial Source: Maxar, 26 April 2022.

**Figure 3**  
Jurisdictions Within  
the Study Area

Creekview Ranch  
Placer County, California







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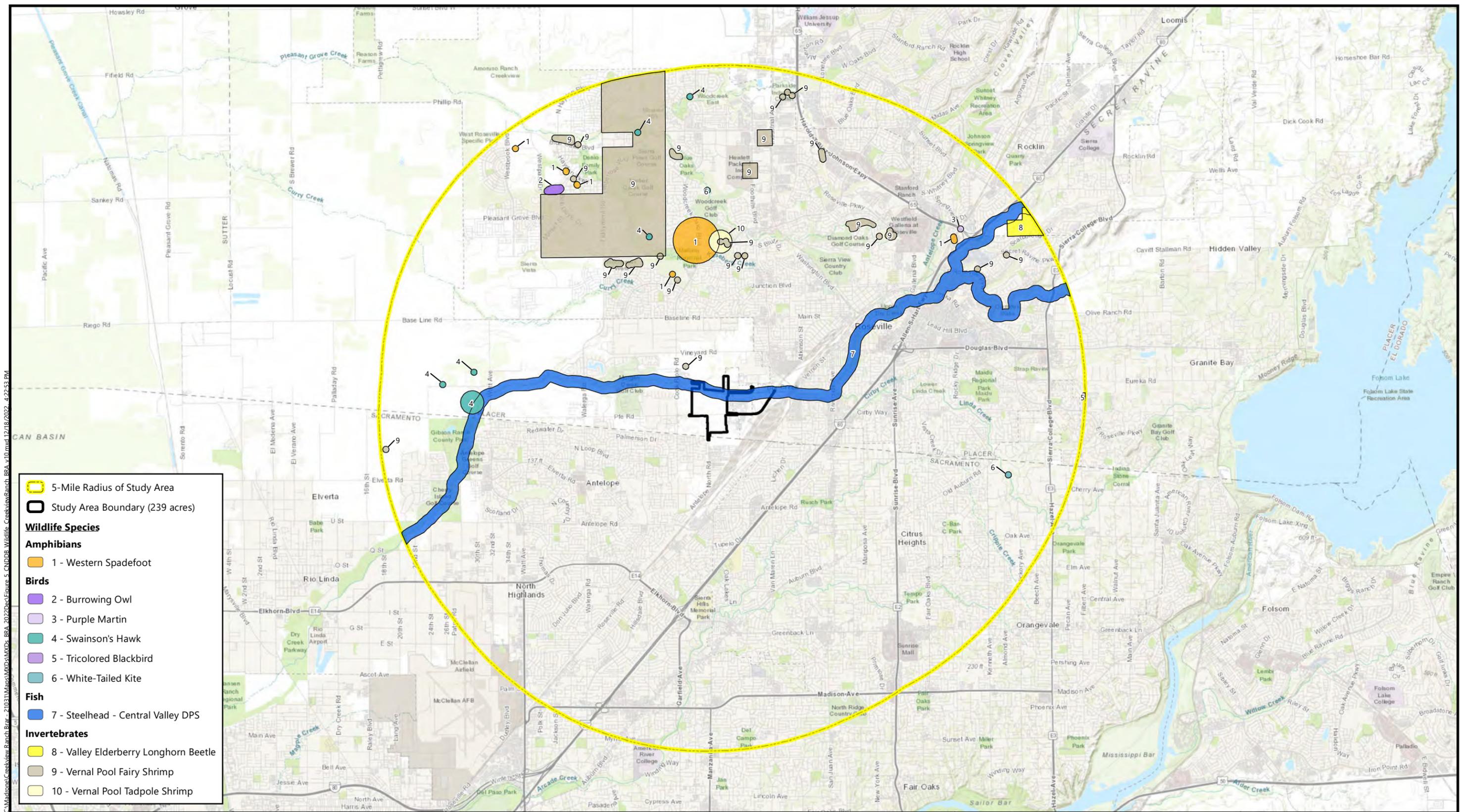
**Figure 4**  
**California Natural Diversity Database**  
**Occurrences of Plant Species**

Source: California Department of Fish and Wildlife, January 2022.  
 Basemap Source: National Geographic and ESRI

Creekview Ranch  
 Placer County, California







C:\Madrone\CreekviewRanch\Barr\_21021\Map\MXD\BARR\_2022\Dec\Figure 5 - CNDDB Wildlife - CreekviewRanch\_BRA\_v10.mxd 12/18/2022 - 4:22:53 PM



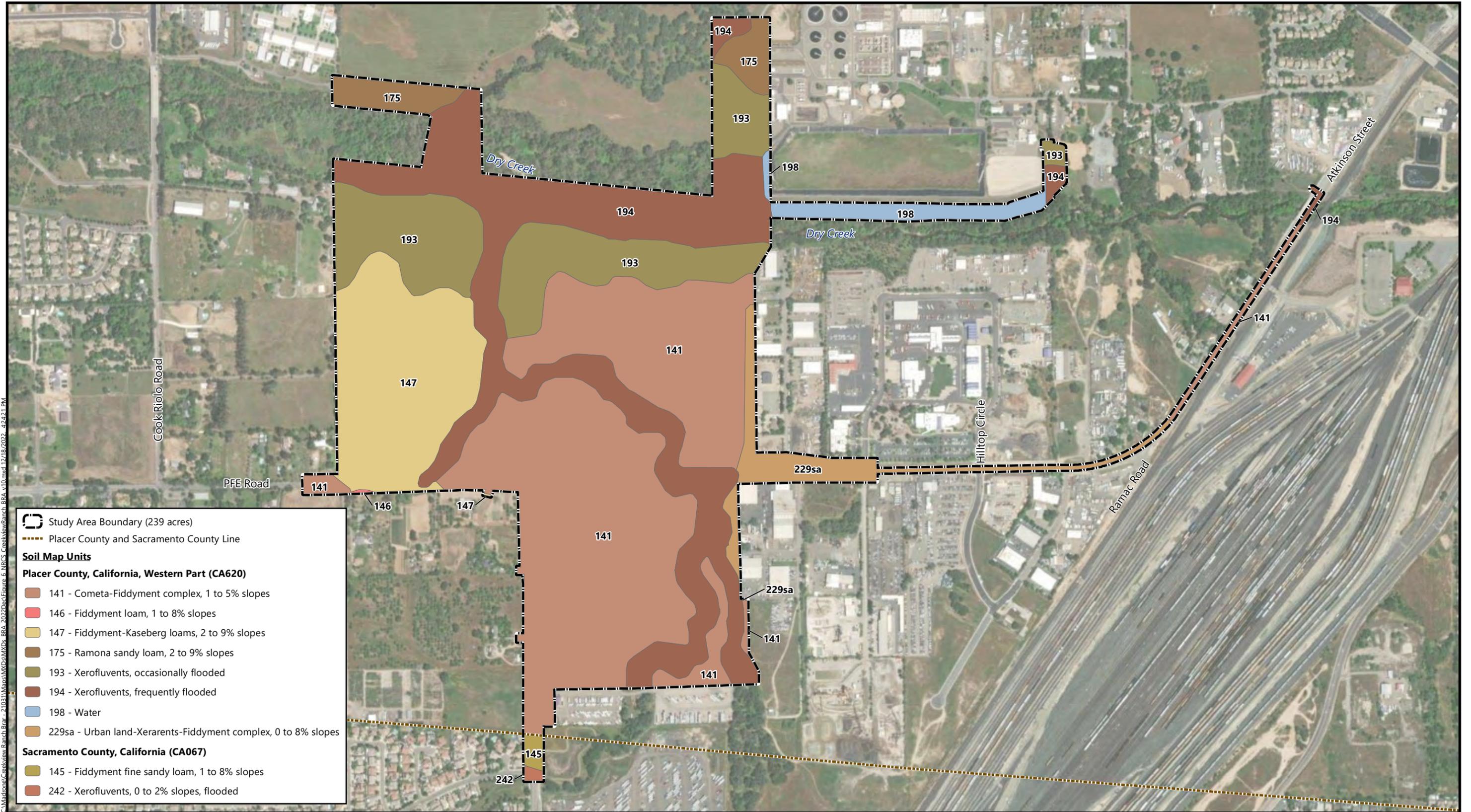
**Figure 5**  
**California Natural Diversity Database**  
**Occurrences of Wildlife Species**

Source: California Department of Fish and Wildlife, January 2022.  
 Basemap Source: National Geographic and ESRI

Creekview Ranch  
 Placer County, California







**Study Area Boundary (239 acres)**

**Placer County and Sacramento County Line**

**Soil Map Units**

**Placer County, California, Western Part (CA620)**

- 141 - Cometa-Fiddymnt complex, 1 to 5% slopes
- 146 - Fiddymnt loam, 1 to 8% slopes
- 147 - Fiddymnt-Kaseberg loams, 2 to 9% slopes
- 175 - Ramona sandy loam, 2 to 9% slopes
- 193 - Xerofluvents, occasionally flooded
- 194 - Xerofluvents, frequently flooded
- 198 - Water
- 229sa - Urban land-Xerarents-Fiddymnt complex, 0 to 8% slopes

**Sacramento County, California (CA067)**

- 145 - Fiddymnt fine sandy loam, 1 to 8% slopes
- 242 - Xerofluvents, 0 to 2% slopes, flooded



Soil Survey Source: USDA, Soil Conservation Service. Soil Survey Geographic (SSURGO) database for Placer County, California, Western Part, and Sacramento County, California  
 Aerial Source: Maxar, 26 April 2022.

**Figure 6**  
**Natural Resources Conservation Service Soils**

Creekview Ranch  
 Placer County, California





# Attachments

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Attachment A. Site Plans

Attachment B. IPaC Trust Resource Report for the Study Area

Attachment C. CNPS Inventory of Rare and Endangered Plants Query for the "Citrus Heights, California" USGS Quadrangle and Eight Surrounding Quadrangles

Attachment D. Aquatic Resources Delineation Report for the Schellhous Property

Attachment E. Wildlife List

Attachment F. Vegetation Communities/Land Covers, Sanford's Arrowhead, and Elderberry Shrubs

Attachment G. PCCP Habitats and PCCP Specific Boundaries

Attachment H. Impacts to Aquatic Resources

Attachment I. Impacts to Vegetation Communities/Land Covers, Sanford's Arrowhead, and Elderberry Shrubs

Attachment J. Impacts to Native Oak Trees within the City of Roseville

Attachment K. Impacts to Oak Woodlands and Individual Native Trees in Unincorporated Placer County Outside of the PCCP Plan Area

Attachment L. Impacts to PCCP Habitats and PCCP Specific Boundaries



# Attachment A

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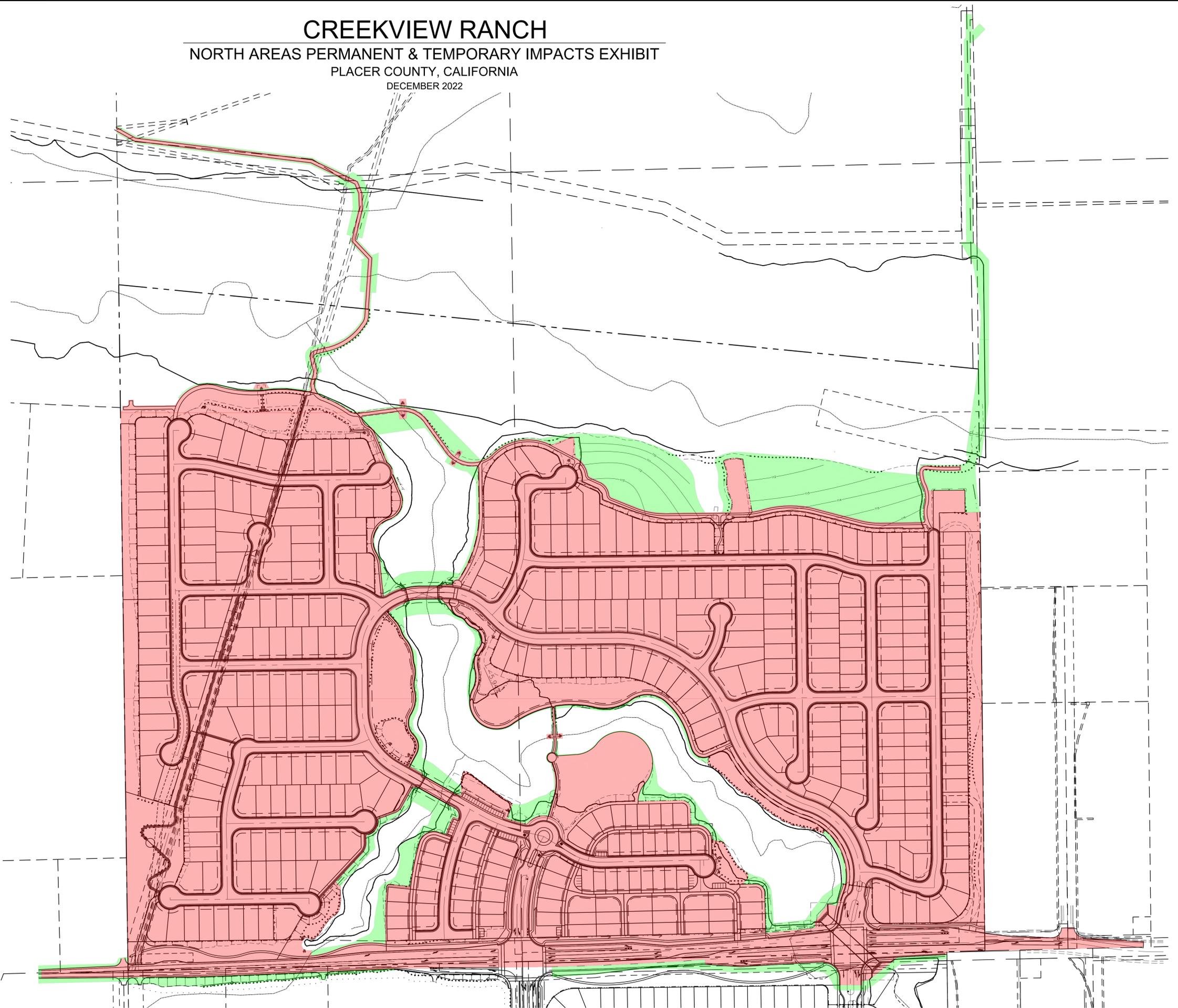
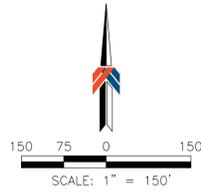
**Site Plans**



CREEKVIEW RANCH  
NORTH AREAS PERMANENT & TEMPORARY IMPACTS EXHIBIT  
PLACER COUNTY, CALIFORNIA  
DECEMBER 2022

LEGEND

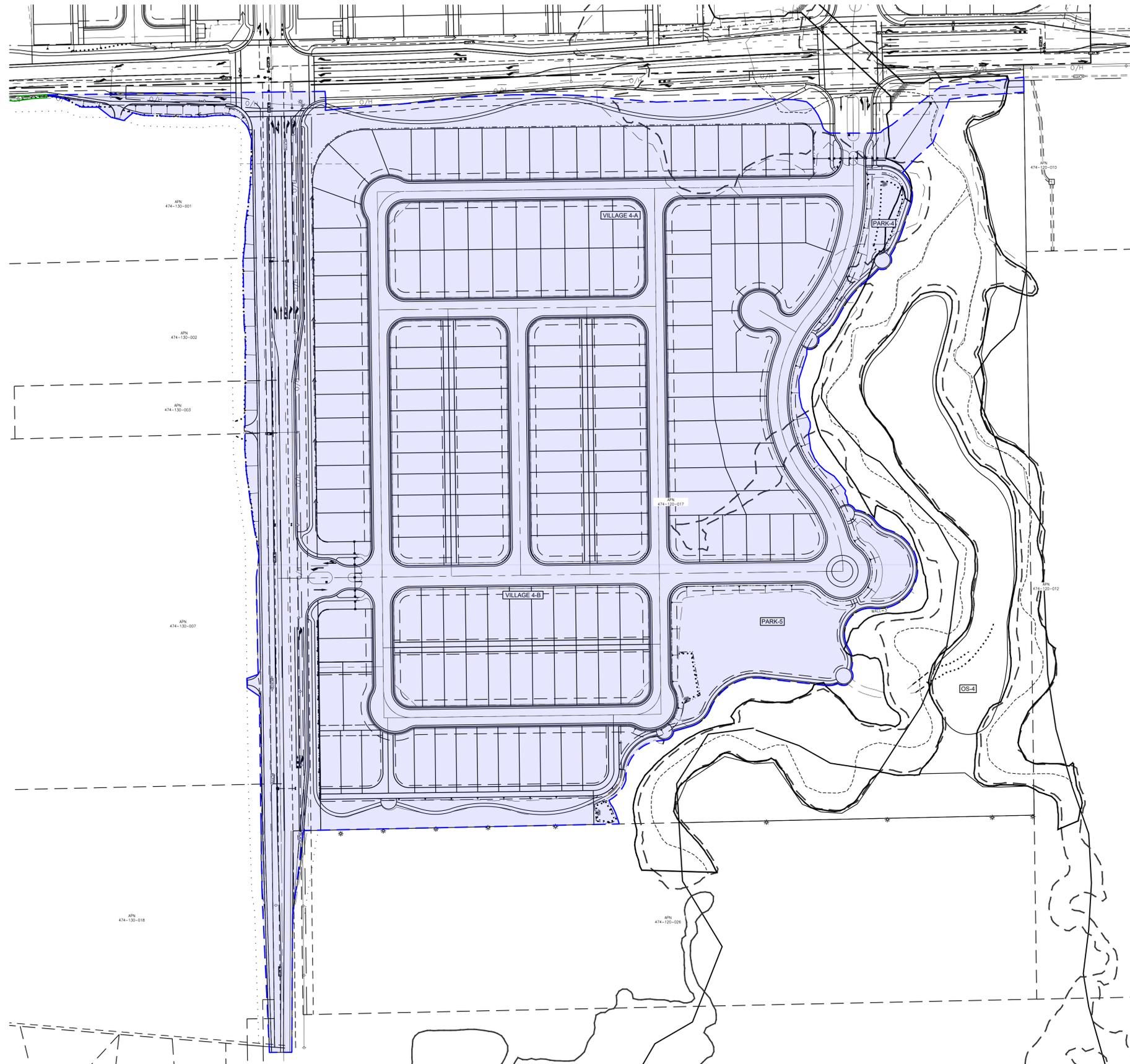
- TEMPORARY IMPACTS
- PERMANENT IMPACTS



200 Auburn Folsom Road, Ste. 201 Auburn, California 95603  
T: (530) 272-8328 E: info@King-Engineering-Inc.com



CREEKVIEW RANCH  
VILLAGE 4 IMPACT AREAS EXHIBIT  
PLACER COUNTY, CALIFORNIA  
DECEMBER 2022





# Attachment B

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## **IPaC Trust Resource Report for the Study Area**



# IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

## Location

Placer County, California



## Local office

Sacramento Fish And Wildlife Office

☎ (916) 414-6600

📅 (916) 414-6713

Federal Building

2800 Cottage Way, Room W-2605

Sacramento, CA 95825-1846

# Endangered species

**This resource list is for informational purposes only and does not constitute an analysis of project level impacts.**

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species<sup>1</sup> and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries<sup>2</sup>).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact [NOAA Fisheries](#) for [species under their jurisdiction](#).

1. Species listed under the [Endangered Species Act](#) are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information. IPaC only shows species that are regulated by USFWS (see FAQ).
2. [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.

The following species are potentially affected by activities in this location:

## Reptiles

NAME

STATUS

<b>Giant Garter Snake</b> <i>Thamnophis gigas</i>	<b>Threatened</b>
Wherever found No critical habitat has been designated for this species. <a href="http://ecos.fws.gov/ecp/species/4482">http://ecos.fws.gov/ecp/species/4482</a>	

## Amphibians

NAME	STATUS
<b>California Red-legged Frog</b> <i>Rana draytonii</i>	<b>Threatened</b>
Wherever found There is <b>final</b> critical habitat for this species. The location of the critical habitat is not available. <a href="http://ecos.fws.gov/ecp/species/2891">http://ecos.fws.gov/ecp/species/2891</a>	
<b>California Tiger Salamander</b> <i>Ambystoma californiense</i>	<b>Threatened</b>
There is <b>final</b> critical habitat for this species. The location of the critical habitat is not available. <a href="http://ecos.fws.gov/ecp/species/2076">http://ecos.fws.gov/ecp/species/2076</a>	

## Fishes

NAME	STATUS
<b>Delta Smelt</b> <i>Hypomesus transpacificus</i>	<b>Threatened</b>
Wherever found There is <b>final</b> critical habitat for this species. The location of the critical habitat is not available. <a href="http://ecos.fws.gov/ecp/species/321">http://ecos.fws.gov/ecp/species/321</a>	

## Insects

NAME	STATUS
<b>Monarch Butterfly</b> <i>Danaus plexippus</i>	<b>Candidate</b>
Wherever found No critical habitat has been designated for this species. <a href="http://ecos.fws.gov/ecp/species/9743">http://ecos.fws.gov/ecp/species/9743</a>	
<b>Valley Elderberry Longhorn Beetle</b> <i>Desmocerus californicus dimorphus</i>	<b>Threatened</b>
Wherever found There is <b>final</b> critical habitat for this species. The location of the critical habitat is not available. <a href="http://ecos.fws.gov/ecp/species/7850">http://ecos.fws.gov/ecp/species/7850</a>	

## Crustaceans

NAME	STATUS
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**Vernal Pool Fairy Shrimp** *Branchinecta lynchi*

Threatened

Wherever found

There is **final** critical habitat for this species. The location of the critical habitat is not available.

<http://ecos.fws.gov/ecp/species/498>

**Vernal Pool Tadpole Shrimp** *Lepidurus packardii*

Endangered

Wherever found

There is **final** critical habitat for this species. The location of the critical habitat is not available.

<http://ecos.fws.gov/ecp/species/2246>

## Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

## Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act<sup>1</sup> and the Bald and Golden Eagle Protection Act<sup>2</sup>.

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern <http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php>
- Measures for avoiding and minimizing impacts to birds <http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php>
- Nationwide conservation measures for birds <http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf>

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern](#) (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ [below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location,

desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME

BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)

**Bald Eagle** *Haliaeetus leucocephalus*

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

<http://ecos.fws.gov/ecp/species/1626>

Breeds Jan 1 to Aug 31

**Common Yellowthroat** *Geothlypis trichas sinuosa*

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

<http://ecos.fws.gov/ecp/species/2084>

Breeds May 20 to Jul 31

**Nuttall's Woodpecker** *Picoides nuttallii*

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

<http://ecos.fws.gov/ecp/species/9410>

Breeds Apr 1 to Jul 20

**Oak Titmouse** *Baeolophus inornatus*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<http://ecos.fws.gov/ecp/species/9656>

Breeds Mar 15 to Jul 15

**Olive-sided Flycatcher** *Contopus cooperi*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<http://ecos.fws.gov/ecp/species/3914>

Breeds May 20 to Aug 31

**Wrentit** *Chamaea fasciata*

Breeds Mar 15 to Aug 10

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

**Yellow-billed Magpie** *Pica nuttalli*

Breeds Apr 1 to Jul 31

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<http://ecos.fws.gov/ecp/species/9726>

## Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

### Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is  $0.25/0.25 = 1$ ; at week 20 it is  $0.05/0.25 = 0.2$ .
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

### Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

### Survey Effort (|)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

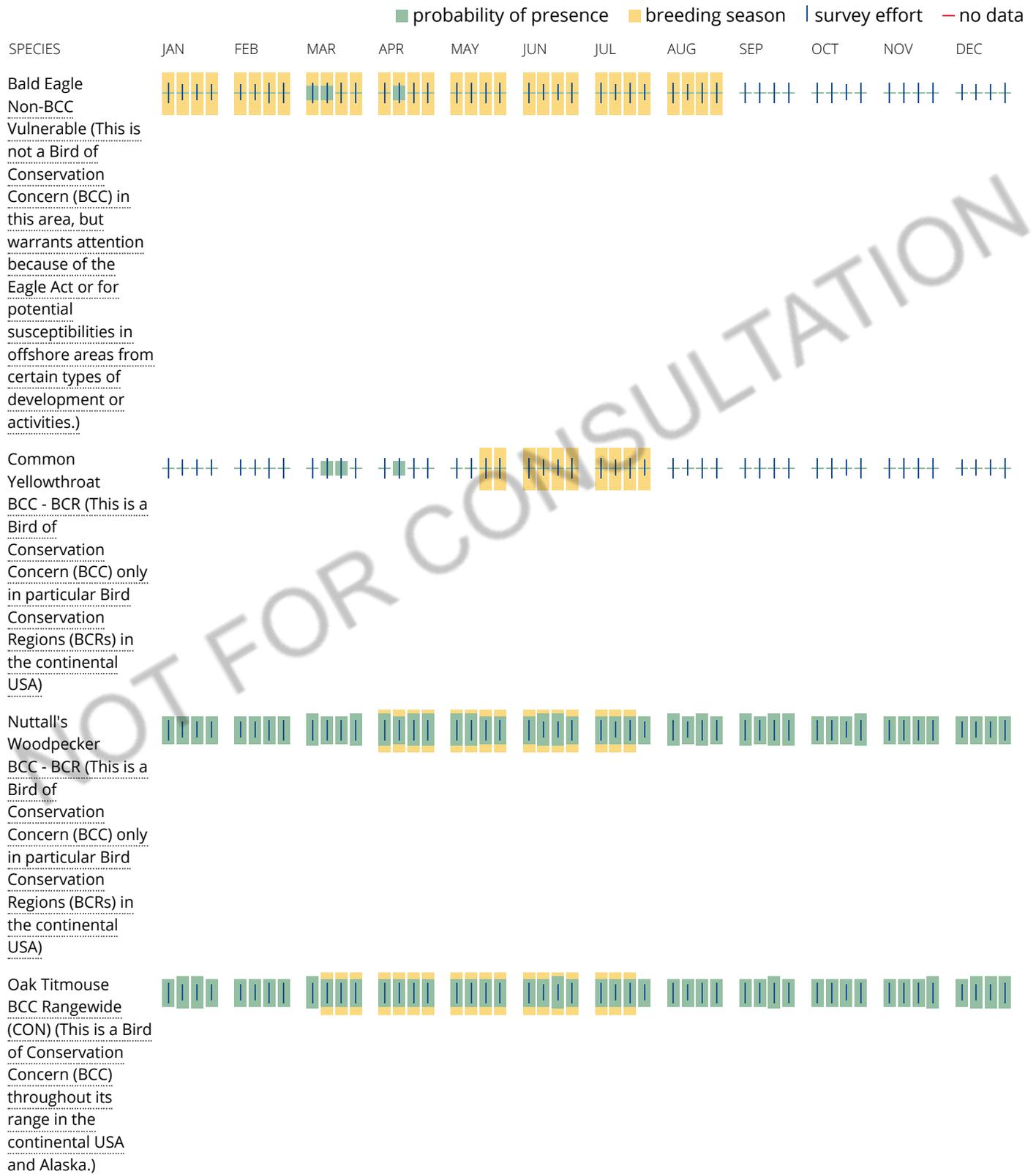
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

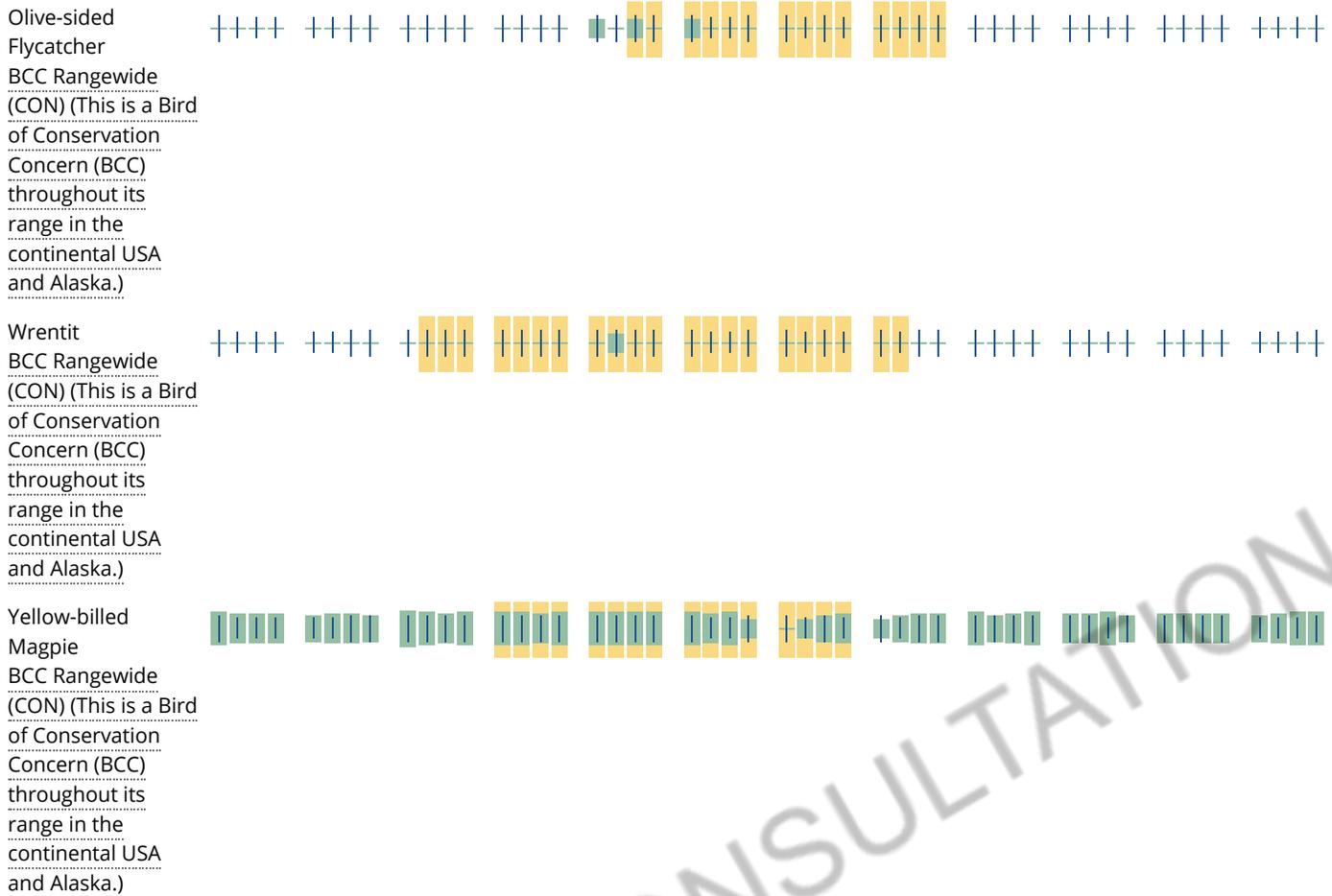
### No Data (-)

A week is marked as having no data if there were no survey events for that week.

### Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.





**Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.**

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

**What does IPaC use to generate the migratory birds potentially occurring in my specified location?**

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [AKN Phenology Tool](#).

**What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?**

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go to the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

### How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: [The Cornell Lab of Ornithology All About Birds Bird Guide](#), or (if you are unsuccessful in locating the bird of interest there), the [Cornell Lab of Ornithology Neotropical Birds guide](#). If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

### What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

### Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review.

Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

### What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

### Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that

overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

## Facilities

### National Wildlife Refuge lands

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

### Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

## Wetlands in the National Wetlands Inventory

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

This location overlaps the following wetlands:

FRESHWATER EMERGENT WETLAND

[PEM1A](#)

FRESHWATER FORESTED/SHRUB WETLAND

[PFOA](#)

## FRESHWATER POND

[PUBFx](#)

## RIVERINE

[R2UBH](#)[R2USA](#)[R4SBC](#)[R4SBA](#)

A full description for each wetland code can be found at the [National Wetlands Inventory website](#)

**Data limitations**

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

**Data exclusions**

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

**Data precautions**

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.



# Attachment C

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**CNPS Inventory of Rare and Endangered Plants Query  
for the "Citrus Heights, California" USGS Quadrangle  
and Eight Surrounding Quadrangles**



## Inventory of Rare and Endangered Plants of California


[HOME](#) [ABOUT](#) [CHANGES](#) [REVIEW](#) [HELP](#)

Search:

Simple

Advanced

Search for species and

Go

## Search Results

Back

Export Results

15 matches found. Click on scientific name for details

Search Criteria: Quad is one of [3812174,3812173,3812172,3812164,3812163,3812162,3812154,3812153,3812152]
[Scientific Name](#) [Common Name](#) [Family](#) [Lifeform](#) [Blooming Period](#) [Fed List](#) [State List](#) [Global Rank](#) [State Rank](#)  
[CA Rare Plant Rank](#) [General Habitats](#) [Micro Habitats](#) [Lowest Elevation](#) [Highest Elevation](#) [CA Endemic](#) [Date Added](#) [Photo](#)

Search:

▲ SCIENTIFIC NAME	COMMON NAME	FAMILY	LIFEFORM	BLOOMING PERIOD	FED LIST	STATE LIST	CA RARE PLANT RANK
<a href="#">Balsamorhiza macrolepis</a>	big-scale balsamroot	Asteraceae	perennial herb	Mar-Jun	None	None	1B.2
<a href="#">Brodiaea rosea ssp. vallicola</a>	valley brodiaea	Themidaceae	perennial bulbiferous herb	Apr-May(Jun)	None	None	4.2
<a href="#">Chloropyron molle ssp. hispidum</a>	hispid salty bird's-beak	Orobanchaceae	annual herb (hemiparasitic)	Jun-Sep	None	None	1B.1
<a href="#">Clarkia biloba ssp. brandegeae</a>	Brandegee's clarkia	Onagraceae	annual herb	May-Jul	None	None	4.2
<a href="#">Downingia pusilla</a>	dwarf downingia	Campanulaceae	annual herb	Mar-May	None	None	2B.2
<a href="#">Fritillaria agrestis</a>	stinkbells	Liliaceae	perennial bulbiferous herb	Mar-Jun	None	None	4.2
<a href="#">Gratiola heterosepala</a>	Boggs Lake hedge-hyssop	Plantaginaceae	annual herb	Apr-Aug	None	CE	1B.2
<a href="#">Hesperervax caulescens</a>	hogwallow starfish	Asteraceae	annual herb	Mar-Jun	None	None	4.2
<a href="#">Juncus leiospermus var. ahartii</a>	Ahart's dwarf rush	Juncaceae	annual herb	Mar-May	None	None	1B.2
<a href="#">Juncus leiospermus var. leiospermus</a>	Red Bluff dwarf rush	Juncaceae	annual herb	Mar-Jun	None	None	1B.1
<a href="#">Legenere limosa</a>	legenere	Campanulaceae	annual herb	Apr-Jun	None	None	1B.1
<a href="#">Navarretia myersii ssp. myersii</a>	pincushion navarretia	Polemoniaceae	annual herb	Apr-May	None	None	1B.1
<a href="#">Orcuttia tenuis</a>	slender Orcutt grass	Poaceae	annual herb	May-Sep(Oct)	FT	CE	1B.1
<a href="#">Orcuttia viscida</a>	Sacramento Orcutt grass	Poaceae	annual herb	Apr-Jul(Sep)	FE	CE	1B.1
<a href="#">Sagittaria sanfordii</a>	Sanford's arrowhead	Alismataceae	perennial rhizomatous herb (emergent)	May-Oct(Nov)	None	None	1B.2

Showing 1 to 15 of 15 entries



# Attachment D

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## **Aquatic Resources Delineation Report for the Schellhous Property**

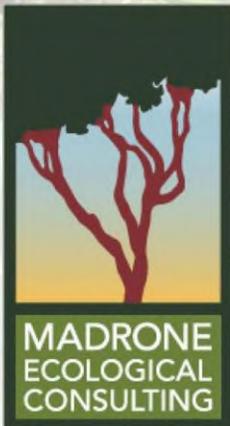




# **Aquatic Resources Delineation Report**

## Schellhous Property

Roseville, Placer County, California  
August 2019





**Prepared for:**

Ms. Alice Pennington  
6014 Equestrian Terrace  
Rocklin, California 95677

**Recommended Citation:**

Madrone Ecological Consulting, LLC (Madrone). 2019. *Aquatic Resources Delineation Report for the Schellhous Property*. Prepared for Ms. Alice Pennington. Published on 30 August 2019.



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- Attachment A. Arid West Wetland Determination Data Forms
- Attachment B. Aquatic Resources Delineation Map
- Attachment C. Plant Species Observed within the Study Area
- Attachment D. Representative Site Photographs
- Attachment E. Access Letter
- Attachment F. GIS Shapefiles and the Aquatic Resources Excel Spreadsheet (on CD)



## 1.0 INTRODUCTION

This report presents the results of a delineation of aquatic resources within the Schellhous Property Project Area (Study Area) conducted by Madrone Ecological Consulting, LLC (Madrone). The approximately 141-acre Study Area is generally located north of the intersection of Antelope Road and PFE Road, in southwestern Roseville, Placer County, California. The Study Area is within Section 9, Township 10 North, Range 6 East (MDB&M) of the "Citrus Heights, California" 7.5-Minute Series USGS Topographic Quadrangle (USGS 2015) (Figure 1).

### 1.1 Contact Information

#### **Property Owner**

Alice Pennington  
6014 Equestrian Terrace  
Rocklin, California 95677

#### **Agent**

Ginger Fodge  
Madrone Ecological Consulting, LLC  
8421 Auburn Blvd., Suite #248  
Citrus Heights, CA 95610

## 2.0 METHODOLOGY

Madrone biologists Bonnie Peterson and Matt Shaffer conducted a delineation of aquatic resources within the Study Area on 17 May and 7 June 2019. Water features and data points were mapped in the field with a GPS unit capable of sub-meter accuracy (Arrow 100). Three-parameter data (vegetation, soils, and hydrology) were collected at each data point, documenting wetland/waters or upland status, as appropriate. The delineation map was prepared in accordance with the *Updated Map and Drawing Standards for the South Pacific Division Regulatory Program* (USACE 2016a). The GPS data was overlaid on an ortho-rectified aerial photograph (NAIP 2018).

The delineation was performed in accordance with the *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987), the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0)* (USACE 2008a), *A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States* (USACE 2008b), and the Sacramento District's *Minimum Standards for Acceptance of Preliminary Wetlands Delineations* (USACE 2016b). U.S. Army Corps of Engineers (USACE) regulations (33 CFR 328) were used to determine the presence of Waters of the United States other than wetlands. The most recent *National Wetland Plant List* (Lichvar et al. 2016) was used to determine the wetland indicator status of plants observed in the Study Area. The *Jepson eFlora* (Jepson Flora Project 2019) was used for plant nomenclature, except where it conflicted with the nomenclature in the *National Wetland Plant List*, which was given priority on the data sheets.

We are requesting a Preliminary Jurisdictional Determination for the Study Area.

### 3.0 EXISTING CONDITIONS

The Study Area is located north of the intersection of Antelope Road and PFE Road. The site is bounded to the south by PFE Road, orchards, and undeveloped pastureland. Commercial development abuts the site to the east, while low-density residential housing is located to the west. The Study Area is bounded to the north by Dry Creek, along with some farmland and undeveloped pastureland. The site is accessible from the southern border via two gated driveways off of PFE Road. The Study Area generally slopes downhill from south to north, and consists of rolling topography interspersed with swales and streams; elevations on-site range from approximately 95 to 150 feet above mean sea level.

The Study Area primarily consists of rolling undeveloped annual grassland, segmented by intermittent and perennial streams which roughly form an upside down "Y" through the center of the site. Vegetation within the grassland is not grazed, and most areas support robust plant cover. Plant species generally consist of upland annual grasses and forbs, including yellow star-thistle (*Centaurea solstitialis*), wild oat (*Avena fatua*), soft chess (*Bromus hordeaceus*), ripgut brome (*Bromus diandrus*), Medusa-head grass (*Elymus caput-medusae*), barbed goatgrass (*Aegilops triuncialis*), black mustard (*Brassica nigra*), chicory (*Cichorium intybus*), common fiddleneck (*Amsinckia menziesii*), slender tarweed (*Holocarpha virgata*), harvest brodiaea (*Brodiaea elegans*), Miniature lupine (*Lupinus bicolor*), filaree (*Erodium botrys*), cut-leaf geranium (*Geranium dissectum*), prickly lettuce (*Lactuca serriola*), hairy hawkbit (*Leontodon saxatilis*), rose clover (*Trifolium hirtum*), and winter vetch (*Vicia villosa*). A few valley oaks (*Quercus lobata*) are also scattered within the annual grassland. More mesic portions of the annual grassland occur along topographical depressions within the rolling terrain, and consist predominantly of perennial ryegrass (*Festuca perennis*) and Mediterranean barley (*Hordeum marinum*). Several vernal pools, seasonal wetlands, and seasonal wetland swales are located within this portion of the annual grassland.

A small homestead and several associated sheds are located within the annual grassland at the northern end of the site. In addition, the remnants of an old orchard are located just to the west of the homestead. The area is somewhat disturbed, and there is evidence that the land here was historically farmed. Several small areas around the homestead were recently disked at the time of the 7 June site visit.

A large band of mature riparian woodland is growing along Dry Creek in the northern portion of the Study Area. Smaller bands of riparian vegetation also occur along the intermittent and perennial streams running through the site. The riparian areas are dominated by valley oak; other common tree and shrub species within the riparian habitat on-site include blue oak (*Quercus douglasii*), interior live oak (*Quercus wislizeni*), box elder (*Acer negundo*), western sycamore (*Platanus racemosa*), Fremont cottonwood (*Populus fremontii*), ash (*Fraxinus sp.*), Goodding's black willow (*Salix gooddingii*), sandbar willow (*Salix exigua*), catalpa (*Catalpa sp.*), common fig (*Ficus carica*), canary island date palm (*Phoenix canariensis*), lotus (*Robinia sp.*), and Chinese tallowtree (*Triadica sebifera*). Common vegetation found within the understory includes western ragweed (*Ambrosia psilostachya*), mugwort (*Artemisia douglasiana*), Italian thistle (*Carduus pycnocephalus*), miner's lettuce (*Claytonia perfoliata*), poison hemlock (*Conium maculatum*), hedgehog grass (*Cynosurus echinatus*), panicled willow-herb (*Epilobium brachycarpum*), fennel (*Foeniculum vulgare*), sticky willy (*Galium aparine*), white horehound (*Marrubium vulgare*), manyflower tobacco (*Nicotiana acuminata*), Dallis grass (*Paspalum*

*dilatatum*), English plantain (*Plantago lanceolata*), California rose (*Rosa californica*), Himalayan blackberry (*Rubus armeniacus*), western poison oak (*Toxicodendron diversilobum*), woolly mullein (*Verbascum thapsus*), cultivated grape (*Vitis vinifera*), and rough cocklebur (*Xanthium strumarium*).

### 3.1 Hydrology

Surface water within the Study Area is driven by rainfall and stormwater runoff from adjacent development; water across the site topographically drains into several large intermittent and perennial streams via a system of swales. The water within these streams then drains into Dry Creek, which is located along the northern boundary of the site. Dry Creek is a tributary to Steelhead Creek, which empties into Bannon Slough, then ultimately into the Sacramento River. The Study Area is located in the *Dry Creek Watershed*, which is part of the larger *Lower American River Watershed* (HUC 18020111) (USGS 1984).

### 3.2 Soils

According to the Natural Resources Conservation Service (NRCS) Soil Survey Database (NRCS 2019), five soil mapping units occur within the Study Area (**Figure 2**). One of these soil units (194) consists of hydric components, and four units (141, 147, 193, 194) contain hydric inclusions (NRCS 2019). The soils within the Study Area fall within the hydrological soil groups A, B, C and D. Soils within the hydrological soil group A generally have a high infiltration rate when thoroughly wet (low runoff potential) and a high rate of water transmission. Group B soils have a moderate infiltration and transmission rate, while group C and D soils have a slow to very slow infiltration and transmission rate (high runoff potential). The soils found within the Study Area are summarized in **Table 1**.

**Table 1. Hydric Rating of Soils within the Study Area**

Soil Unit Name	Map Unit Symbol	Hydric Rating
Cometa-Fiddymment complex, 1-5% slopes	141	No
Fiddymment-Kaseberg loams, 2-9% slopes	147	No
Xerofluvents, occasionally flooded	193	No
Xerofluvents, frequently flooded	194	Yes
Urban land-Xerarents-Fiddymment complex, 0-8% slopes	229sa	No

### 3.3 Driving Directions

The Study Area is located off of PFE Road in Roseville, California, 95747. To access the Study Area from Sacramento, drive east on I-80 towards Roseville. Take exit 100 and turn left onto Antelope Road. Continue on Antelope Road for approximately 1.8 miles, then turn right onto Antelope North Road and drive for approximately 1.7 miles until the road (now named Antelope Road) dead ends at PFE Road; the Study Area is located directly ahead.

## 4.0 RESULTS

A total of approximately 15.195 acres of aquatic resources were delineated within the Study Area, including approximately 1.335 acres of wetlands and 13.860 acres of other waters. A single perennial stream, seven intermittent streams, six ephemeral drainages, four seasonal wetlands, eight seasonal wetland swales, 18 vernal pools, and two segments of Dry Creek were delineated within the Study Area. A summary of the aquatic resources found on-site and their acreages is shown in Table 2 below.

**Table 2. Aquatic Resources Delineated within the Study Area**

Resource Type	Acreage
<i>Wetlands</i>	
Vernal Pool	0.740
Seasonal Wetland	0.018
Seasonal Wetland Swale	0.577
<i>Other Waters</i>	
Dry Creek	5.970
Ephemeral Drainage	0.117
Intermittent Stream	1.988
Perennial Stream	5.785
<b>Total</b>	<b>15.195</b>

Data sheets are included in **Attachment A**. Maps of the aquatic resources within the Study Area are included as **Figure 3** and **Attachment B**, and a list of the plant species observed in the Study Area with their wetland indicator status is included in **Attachment C**. Representative site photographs are included in **Attachment D**. GIS Shapefiles and the *Aquatic Resources Excel Spreadsheets* for the aquatic resources shown on **Figure 3** and **Attachment B** are included on a CD in **Attachment F**. Each of the feature types are described below.

### 4.1 Vernal Pool

Eighteen vernal pools reside within the annual grassland on-site (VP-1 through VP-18); a total of 0.740 acres of vernal pools were mapped within the Study Area. Vernal pools are topographic basins that are underlain with an impermeable or semi-permeable hardpan or duripan layer. They inundate during the wet season, and typically dry by late spring and remain dry through the summer months. Vernal pools are differentiated from depressional seasonal wetlands based upon the predominance of vernal pool endemic plant species. The vernal pools on-site were largely dominated by coyote thistle (*Eryngium castrense*) and creeping spikerush (*Eleocharis macrostachya*). Other common vegetation within the vernal pools includes Great Valley popcornflower (*Plagiobothrys stipitatus*), hyssop loosestrife (*Lythrum hyssopifolia*), white headed navarretia (*Navarretia leucocephala subsp. Leucocephala*), Torrey's willow-herb (*Epilobium torreyi*), rabbitsfoot grass (*Polypogon monspeliensis*), curly dock (*Rumex crispus*), Mediterranean barley, perennial ryegrass, hairy hawkbit, and harvest brodiaea. The vernal pools on-site all appear to drain into Dry Creek via a system of topographic depressions, swales and/or drainages. As previously described, Dry Creek is a

tributary to the navigable Sacramento River, and thus these pools are likely to be jurisdictional waters of the U.S. Several data points were collected within the vernal pools, and contained hydrophytic vegetation, soils, and wetland hydrology. The ponds were mapped at the Ordinary High Water Mark (OHWM), which was identified based on water marks, vegetation, and topographic breaks.

#### **4.2 Seasonal Wetland**

A total of four seasonal wetlands (SW-1 through SW-4) are located along the eastern portion of the Study Area, within the more mesic, depressional parts of the annual grassland. Seasonal wetlands are depressional wetlands that pond water seasonally. These features are often topographically and hydrologically similar to vernal pools, but have a short hydroperiod, and as a result, support a slightly different plant community that is not characterized by a dominance of vernal pool endemics. Approximately 0.018 acre of seasonal wetlands are located within the Study Area. Vegetation within these features is generally sparse and consists of perennial ryegrass and Mediterranean barley, with other ruderal vegetation common, such as curly dock, slender tarweed, hairy hawkbit, soft chess, and Medusa-head grass. Numerous wetland-oriented species are present in low to moderate quantities, including Great Valley popcornflower, coyote thistle, hyssop loosestrife, Carter's buttercup (*Ranunculus bonariensis*), smooth goldfields (*Lasthenia glaberrima*), Oregon woolly marbles (*Psilocarphus oregonus*), and toad rush (*Juncus bufonius*). Water within the seasonal wetlands drains topographically to the north into seasonal wetland swale SWS-4, eventually emptying into Dry Creek. As such, it is likely that these wetlands are jurisdictional waters of the U.S. Data Points DP-17 and DP-21 were collected within seasonal wetlands SW-3 and SW-4, and exhibited hydrophytic vegetation, soils and wetland hydrology. The swales were mapped at the OHWM, which was determined based on vegetation and water marks.

#### **4.3 Seasonal Wetland Swale**

Seasonal wetland swales are sloping, linear seasonal wetlands that convey storm water runoff, and may detain it for short periods of time. Eight seasonal wetland swales (SWS-1 through SWS-8) are located within the depressional portions of the annual grassland on-site, totaling approximately 0.577 acres. Vegetation within the swales varies, but is generally dominated by perennial ryegrass, and includes an array of wetland and ruderal vegetation such as tall flatsedge (*Cyperus eragrostis*), Baltic rush (*Juncus balticus*), Bermuda grass (*Cynodon dactylon*), turkey tangle fogfruit (*Phyla nodiflora*), creeping spikerush, coyote thistle, Carter's buttercup, rabbitsfoot grass, Mediterranean barley, curly dock, English plantain, slender tarweed, hairy hawkbit, rough cocklebur, poison hemlock, Himalayan blackberry, soft chess, and sticky willy. Hydrology within the swales is driven predominantly by storm water runoff within the annual grassland and from adjacent development, along with draining water from several vernal pools and seasonal wetlands. The swales drain on-site into the perennial stream or Dry creek, with the exception of seasonal wetland swale SWS-8, which drains into the perennial stream just to the south of the Study Area. Thus, the swales on-site are likely to be jurisdictional waters of the U.S. Several Data Points were collected within the seasonal wetland swales, and they all contained hydrophytic vegetation, soils, and wetland hydrology. The swales were mapped at the OHWM, which was identified based on vegetation, water marks, and topographic

breaks. In addition, several swales were inundated or partially inundated during the field visits, most likely due to the well above-average rainfall received during the 2018-2019 wet season.

#### **4.4 Dry Creek**

Dry Creek (Dry Creek-1, Dry Creek-2) is a large perennial creek that travels from east to west along the northern margin of the Study Area. Flows within the creek are perennial in nature, and steady-flowing water was observed during both site visits. The creek passes in and out of the Study Area, with two segments totaling 5.970 acres falling within the site boundary. The center of the creek is predominantly devoid of plants, with unvegetated gravel bars bordering steep slopes along the margins of the OHWM. Vegetation along the banks of the creek largely consists of riparian tree and shrub cover, such as box elder, ash, Fremont cottonwood, Western sycamore, Goodding's black willow, sandbar willow, catalpa, and lotus. Understory vegetation along the banks of the creek is similar to that found within the riparian areas. Several emergent wetlands are located adjacent to the creek and within the OHWM, and consist of wetland vegetation including tall flatsedge, redroot flatsedge (*Cyperus erythrorhizos*), water primrose (*Ludwigia peploides*), smartweed (*Persicaria sp.*), barnyard grass (*Echinochloa sp.*), rough cocklebur, panicled willow-herb, and curly dock. Dry Creek is directly connected to the navigable Sacramento River, as previously described, and is therefore a jurisdictional water of the U.S. The creek was mapped at the OHWM, which was determined based on drift deposits, water marks, vegetation, topographic breaks, and aerial imagery.

#### **4.5 Ephemeral Drainage**

Six ephemeral drainages (ED-1 through ED-6) are located within the Study Area. The drainages serve to convey stormwater runoff for short periods of time directly after precipitation events. In addition, some of the features are associated with several seasonal wetland swales on-site. The drainages are generally sparsely vegetated with upland species such as Italian thistle, white horehound, and hedgehog grass. They drain into larger channels within the Study Area, including an intermittent stream, the perennial stream, and Dry Creek. Thus, the ephemeral drainages are likely jurisdictional waters of the U.S. Data Point DP-9 was collected within ephemeral drainage ED-2, and exhibited hydrophytic soil and wetland hydrology, but did not exhibit hydrophytic vegetation. The ephemeral drainages were mapped at the OHWM, which was identified based on water marks, sediment deposits, and topographic breaks.

#### **4.6 Intermittent Stream**

Seven intermittent streams (IS-1 through IS-7) totaling 1.988 acres occur within the Study Area. Intermittent streams flow seasonally, but for a longer duration than ephemeral drainages. They receive hydrologic input from a seasonal perched groundwater table and, as a result, will experience flow for weeks or months after rainfall events. The intermittent streams on-site generally have steep banks with a sandy bed. Vegetation within the streams is sparse and consists of plant species such as rough cocklebur, Himalayan blackberry, curly dock, and Bermuda grass. Intermittent stream IS-6 supports a band of riparian vegetation similar in composition to the riparian woodland across the site. Two intermittent streams (IS-6 and IS-7) drain into the perennial stream, and the other intermittent streams drain from the perennial stream into Dry Creek.

Therefore, it is likely that these features are jurisdictional waters of the U.S. The streams were mapped at the OHWM, which was identified based on water marks, drift deposits, topographic breaks, and aerial imagery.

#### **4.7 Perennial Stream**

A single perennial stream (PS-1), totaling 5.785 acres, runs from south to north through the center of the Study Area. At the time of the surveys, the stream had slow flowing water. The stream is largely unvegetated and consists of shallow banks with patches of emergent wetland within the OHWM. Vegetation within these areas includes tall flatsedge, Baltic rush, paniced willow-herb, perennial ryegrass, smartweed, English plantain, curly dock, rough cocklebur, hood canary grass (*Phalaris paradoxa*), and bird's-foot trefoil (*Lotus corniculatus*). The bank primarily along the southern portion of the stream is steep, and is dominated by Italian thistle and other upland species. Riparian woodland, dominated by valley oak with a sandbar willow understory, occurs along portions of the perennial stream. The perennial stream drains into several intermittent streams, which then empty into Dry Creek. As such, this feature is likely a jurisdictional water of the U.S. The stream was mapped at the OHWM, which was determined based on water marks, drift deposits, vegetation, topographic breaks, and aerial imagery.

#### **5.0 CONCLUSION**

The 15.195 acres of aquatic resources mapped on the site may be jurisdictional, and the applicant is requesting a Preliminary Jurisdictional Determination for the Aquatic Resources Delineation Map of the Study Area (**Attachment B**). A signed statement providing USACE staff accompanied access to the Study Area is included as **Attachment E**.

## 6.0 REFERENCES

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# Figures

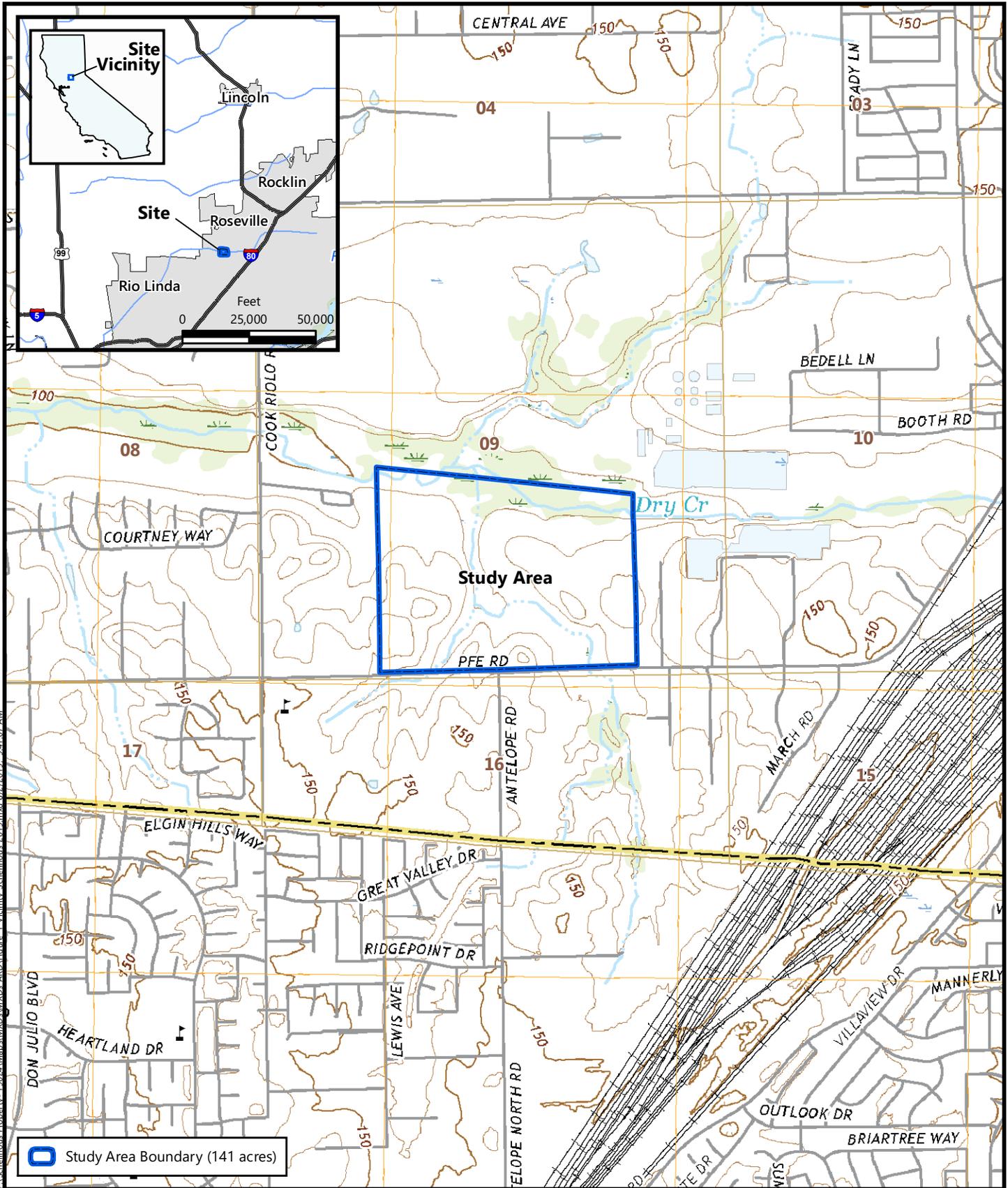
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Figure 1. Vicinity Map

Figure 2. Natural Resources Conservation Service Soils

Figure 3. Aquatic Resources





P:\Schellhous Property - 19024\Maps\MXD\AMXDs - ARD\Figure 1 Vicinity\_Schellhous 2019.mxd 8/27/2019, 9:41:07 AM

 Study Area Boundary (141 acres)



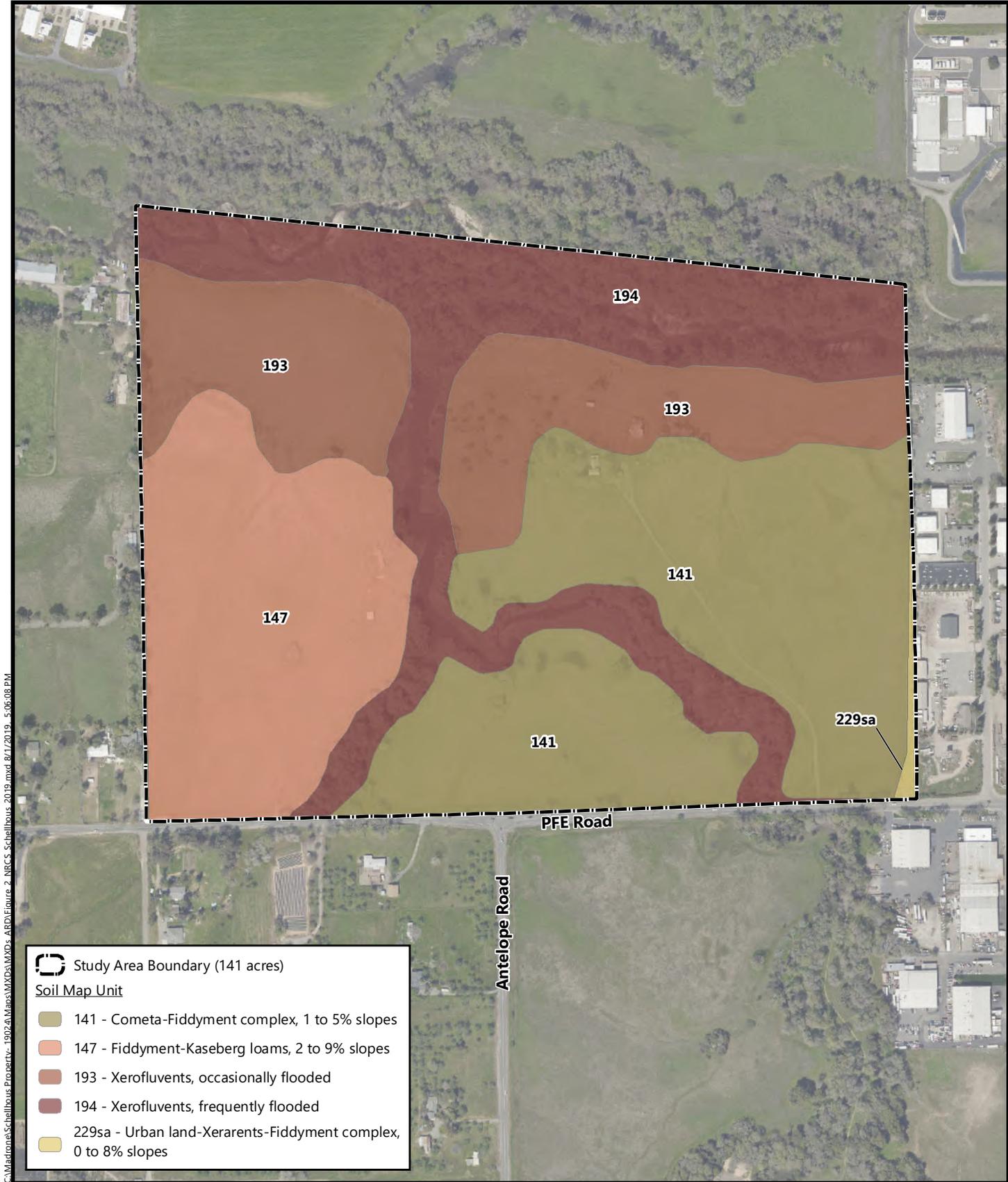
Source: United States Geologic Survey, 2015.  
 "Citrus Heights, California" 7.5-Minute Topographic Quadrangle  
 Longitude -121.32734, Latitude 38.732142  
 Section 9, Township 10 North, Range 6 East

**Figure 1**  
**Vicinity Map**

Schellhous Property  
 Placer County, California







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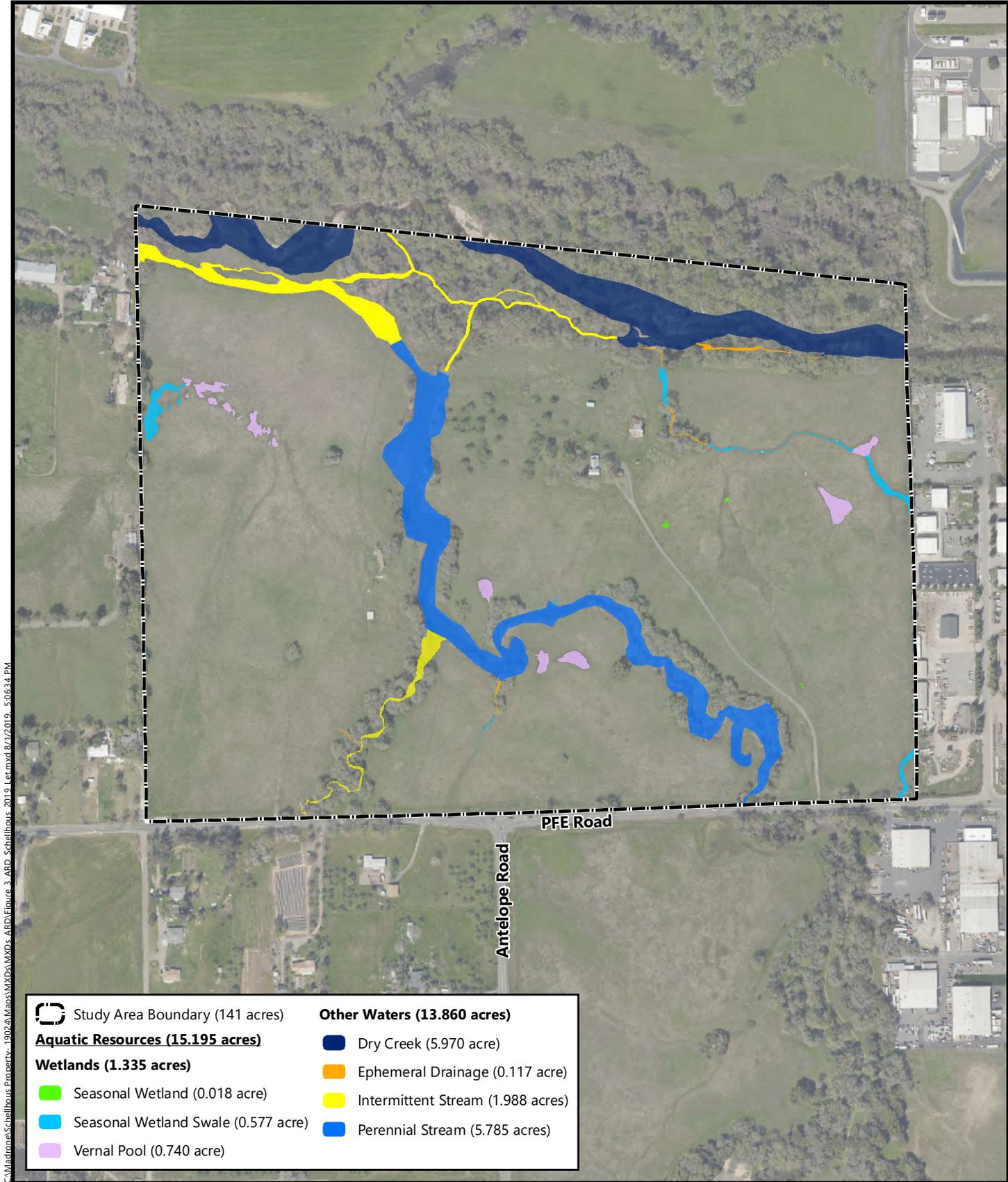
**Figure 2**  
**Natural Resources Conservation**  
**Service Soils**

Soil Survey Source: *USDA, Soil Conservation Service.*  
*Soil Survey Geographic (SSURGO) database for Placer County, California, Western Part*  
 Aerial Source: *Sac Regional GIS Coop, 26 March 2018*

*Schellhous Property*  
*Placer County, California*







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**Figure 3**  
**Aquatic Resources**





# Attachments

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Attachment A. Arid West Wetland Determination Data Forms

Attachment B. Aquatic Resources Delineation Map

Attachment C. Plant Species Observed within the Study Area

Attachment D. Representative Site Photographs

Attachment E. Access Letter

Attachment F. GIS Shapefiles and the Aquatic Resources Excel Spreadsheet (on CD)



# Attachment A

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## **Arid West Wetland Determination Data Forms**



**WETLAND DETERMINATION DATA FORM – Arid West Region**

Project/Site: Schellhous Property City/County: Roseville/Placer Sampling Date: 05/17/19  
 Applicant/Owner: Alice Pennington State: CA Sampling Point: 1  
 Investigator(s): B. Peterson Section, Township, Range: Section 9, Township 10 North, Range 6 East  
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): None Slope (%): <1  
 Subregion (LRR): Mediterranean California (LRR C) Lat: 38.72939917 Long: -121.3321545 Datum: NAD83  
 Soil Map Unit Name: 147 - Fiddymment-Kaseberg loams, 2 to 9% slopes NWI Classification: \_\_\_\_\_  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_ No X\* (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes X No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <u>X</u> No _____ Hydric Soil Present? Yes _____ No <u>X</u> Wetland Hydrology Present? Yes _____ No <u>X</u>	<b>Is the Sampled Area within a Wetland?</b> Yes _____ No <u>X</u>
Remarks: Recent rains, soils throughout study area are damp but not saturated. Pt located in SW corner of the study area, slight shift in vegetation from diverse annual grassland to festuca perennis. *Climactic conditions abnormal, rainfall totals well-above average for the 2018-2019 winter, and rain events occurred late in season.	

**VEGETATION – Use scientific names of plants.**

	Absolute % Cover	Dominant Species?	Indicator Status	
<b>Tree Stratum</b> (Plot size: _____ )				
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)  Total Number of Dominant Species Across All Strata: <u>1</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
	<u>0</u>	=Total Cover		
<b>Sapling/Shrub Stratum</b> (Plot size: _____ )				
1. _____	_____	_____	_____	<b>Prevalence Index Worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x1 = <u>0</u> FACW species <u>0</u> x2 = <u>0</u> FAC species <u>90</u> x3 = <u>270</u> FACU species <u>5</u> x4 = <u>20</u> UPL species <u>0</u> x5 = <u>0</u> Column Totals: <u>95</u> (A) <u>290</u> (B) Prevalence Index = B/A = <u>3.1</u>
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
	<u>0</u>	=Total Cover		
<b>Herb Stratum</b> (Plot size: <u>1 meter<sup>2</sup></u> )				
1. <u>Lactuca serriola</u>	<u>5</u>	NO	FACU	<b>Hydrophytic Vegetation Indicators:</b> <input checked="" type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Morphological Adaptation <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2. <u>Hordeum marinum subsp. gussoneanum</u>	<u>10</u>	NO	FAC	
3. <u>Festuca perennis</u>	<u>80</u>	YES	FAC	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
	<u>95</u>	=Total Cover		
<b>Woody Vine Stratum</b> (Plot size: _____ )				
1. _____	_____	_____	_____	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. _____	_____	_____	_____	
	_____	=Total Cover		
% Bare Ground in Herb Stratum <u>5</u>	% Cover of Biotic Crust <u>0</u>			<b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____

Thatch

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-5	7.5 yr 4/3	95	7.5 yr 4/1	5	C	M	Sandy clay	
0-5	7.5 yr 4/3	95	2.5 y 5/2	t	C	M	Sandy clay	
0-5	7.5 yr 4/3	95	2.5y 2.5/1	t	C	PL	Sandy clay	
5-5.5	2.5y 5/2	85	7.5 yr 3/4	5	C	M	Sandy clay	Layer of malted roots
5-5.5	2.5y 5/2	85	7.5yr 3/2	10	C	M	Sandy clay	
5-16	7.5 yr 4/3	99	7.5 yr 4/1	t	C	M	Clay loam	
5-16	7.5 yr 4/3	99	2.5y 5/2	t	C	M	Clay loam	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

<b>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</b>		<b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b>	
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)	
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Reduced Vertic (F18)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Red Parent Material (TF2)	
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Other (Explain in Remarks)	
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input type="checkbox"/> Redox Dark Surface (F6)		
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)		
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)		
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Vernal Pools (F9)		
<input type="checkbox"/> Sandy Gleyed Matrix (S4)			

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<b>Restrictive Layer (if present):</b>	<b>Hydric Soil Present?</b> Yes _____ No <b>X</b>
Type: <u>none</u> Depth (inches): _____	
Remarks: Top 1/4" of soil is dark.burned (2.5y2.5/1), potential old disking line/vegetation turned over?	

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b>		
<u>Primary Indicators (minimum of one required; check all that apply)</u>		<u>Secondary Indicators (2 or more required)</u>
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Water Marks (B1) (Riverine)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)	<input type="checkbox"/> Sediment Deposits (B2) (Riverine)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Drift Deposits (B3) (Riverine)
<input type="checkbox"/> Water Marks (B1) (Nonriverine)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> FAC-Neutral Test (D5)

<b>Field Observations:</b>	<b>Wetland Hydrology Present?</b> Yes _____ No <b>X</b>
Surface Water Present? Yes _____ No <b>X</b> Depth (inches): _____ Water Table Present? Yes _____ No <b>X</b> Depth (inches): _____ Saturation Present? Yes _____ No <b>X</b> Depth (inches): _____ (includes capillary fringe)	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

**WETLAND DETERMINATION DATA FORM – Arid West Region**

Project/Site: Schellhous Property City/County: Roseville/Placer Sampling Date: 05/17/19  
 Applicant/Owner: Alice Pennington State: CA Sampling Point: 2  
 Investigator(s): B. Peterson Section, Township, Range: Section 9, Township 10 North, Range 6 East  
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): None Slope (%): <1  
 Subregion (LRR): Mediterranean California (LRR C) Lat: 38.72989982 Long: -121.3321052 Datum: NAD83  
 Soil Map Unit Name: 147 - Fiddyment-Kaseberg loams, 2 to 9% slopes NWI Classification: \_\_\_\_\_  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_ No X\* (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes X No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <u>X</u> No _____ Hydric Soil Present? Yes _____ No <u>X</u> Wetland Hydrology Present? Yes _____ No <u>X</u>	<b>Is the Sampled Area within a Wetland?</b> Yes _____ No <u>X</u>
Remarks: Sec not BP-1, selected due to shift in vegetation. *Climactic conditions abnormal, rainfall totals well-above average for the 2018-2019 winter, and rain events occurred late in season.	

**VEGETATION – Use scientific names of plants.**

	Absolute % Cover	Dominant Species?	Indicator Status	
<b>Tree Stratum</b> (Plot size: _____ )				
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
<u>0</u> =Total Cover				
<b>Sapling/Shrub Stratum</b> (Plot size: _____ )				
1. _____	_____	_____	_____	<b>Prevalence Index Worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x1 = <u>0</u> FACW species <u>0</u> x2 = <u>0</u> FAC species <u>99</u> x3 = <u>297</u> FACU species <u>0</u> x4 = <u>0</u> UPL species <u>1</u> x5 = <u>5</u> Column Totals: <u>100</u> (A) <u>302</u> (B) Prevalence Index = B/A = <u>3.0</u>
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>0</u> =Total Cover				
<b>Herb Stratum</b> (Plot size: <u>1 meter<sup>2</sup></u> )				
1. <u>Festuca perennis</u>	<u>99</u>	<u>YES</u>	<u>FAC</u>	<b>Hydrophytic Vegetation Indicators:</b> <u>X</u> Dominance Test is >50% _____ Prevalence Index is ≤3.0 <sup>1</sup> _____ Morphological Adaptation <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Triteleia laxa</u>	<u>1</u>	<u>NO</u>	<u>UPL</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
<u>100</u> =Total Cover				
<b>Woody Vine Stratum</b> (Plot size: _____ )				
1. _____	_____	_____	_____	<b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____
2. _____	_____	_____	_____	
_____ =Total Cover				
% Bare Ground in Herb Stratum <u>0</u>	% Cover of Biotic Crust <u>0</u>			

Remarks:

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-3	10YR 4/2	90	10Y 2.5/1	5	C	M	Clay loam	
0-3	10YR 4/2	90	5Yr 4/4	2	C	M	Clay loam	
0-3	10YR 4/2	90	Black	3	C	M	Clay loam	
3-16	7.5 yr 4/4	98	10yr 2.5/1	1	C	M	Clay loam	
3-16	7.5 yr 4/4	98	5yr 4/4	1	C	M	Clay loam	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

<b>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</b>		<b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b>	
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)	
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Reduced Vertic (F18)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Red Parent Material (TF2)	
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Other (Explain in Remarks)	
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input type="checkbox"/> Redox Dark Surface (F6)		
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)		
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)		
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Vernal Pools (F9)		
<input type="checkbox"/> Sandy Gleyed Matrix (S4)			

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<b>Restrictive Layer (if present):</b> Type: <u>none</u> Depth (inches): _____	<b>Hydric Soil Present?</b> Yes _____ No <u>X</u>
Remarks:	

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b>		
<u>Primary Indicators (minimum of one required; check all that apply)</u>		<u>Secondary Indicators (2 or more required)</u>
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Water Marks (B1) (Riverine)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)	<input type="checkbox"/> Sediment Deposits (B2) (Riverine)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Drift Deposits (B3) (Riverine)
<input type="checkbox"/> Water Marks (B1) (Nonriverine)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> FAC-Neutral Test (D5)

<b>Field Observations:</b> Surface Water Present?    Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present?      Yes _____ No <u>X</u> Depth (inches): _____ Saturation Present?        Yes _____ No <u>X</u> Depth (inches): _____ (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes _____ No <u>X</u>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

**WETLAND DETERMINATION DATA FORM – Arid West Region**

Project/Site: Schellhous Property City/County: Roseville/Placer Sampling Date: 05/17/19  
 Applicant/Owner: Alice Pennington State: CA Sampling Point: 3  
 Investigator(s): B. Peterson Section, Township, Range: Section 9, Township 10 North, Range 6 East  
 Landform (hillslope, terrace, etc.): \_\_\_\_\_ Local relief (concave, convex, none): \_\_\_\_\_ Slope (%): \_\_\_\_\_  
 Subregion (LRR): Mediterranean California (LRR C) Lat: 38.73286645 Long: -121.330753 Datum: NAD83  
 Soil Map Unit Name: 147 - Fiddymment-Kaseberg loams, 2 to 9% slopes NWI Classification: \_\_\_\_\_  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_ No X\* (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes X No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes _____ No <u>X</u>	<b>Is the Sampled Area within a Wetland?</b>	Yes _____ No <u>X</u>
Hydric Soil Present? Yes _____ No <u>X</u>		
Wetland Hydrology Present? Yes _____ No <u>X</u>		

Remarks: Selected due to shifts on aerial. Located on gas pipeline. No dig! \*Climactic conditions abnormal, rainfall totals well-above average for the 2018-2019 winter, and rain events occurred late in season.

**VEGETATION – Use scientific names of plants.**

	Absolute % Cover	Dominant Species?	Indicator Status	
<b>Tree Stratum</b> (Plot size: _____ )				<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0%</u> (A/B)
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
	<u>0</u>	=Total Cover		
<b>Sapling/Shrub Stratum</b> (Plot size: _____ )				<b>Prevalence Index Worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x1 = <u>0</u> FACW species <u>0</u> x2 = <u>0</u> FAC species <u>0</u> x3 = <u>0</u> FACU species <u>5</u> x4 = <u>20</u> UPL species <u>95</u> x5 = <u>475</u> Column Totals: <u>100</u> (A) <u>495</u> (B) Prevalence Index = B/A = <u>5.0</u>
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
	<u>0</u>	=Total Cover		
<b>Herb Stratum</b> (Plot size: <u>1 meter<sup>2</sup></u> )				<b>Hydrophytic Vegetation Indicators:</b> _____ Dominance Test is >50% _____ Prevalence Index is ≤3.0 <sup>1</sup> _____ Morphological Adaptation <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
1. <u>Vicia villosa subsp. villosa</u>	<u>5</u>	<u>NO</u>	<u>UPL</u>	
2. <u>Centaurea solstitialis</u>	<u>85</u>	<u>YES</u>	<u>UPL</u>	
3. <u>Holocarpha virgata subsp. Virgata</u>	<u>5</u>	<u>NO</u>	<u>UPL</u>	
4. <u>Bromus hordeaceus</u>	<u>5</u>	<u>NO</u>	<u>FACU</u>	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
	<u>100</u>	=Total Cover		
<b>Woody Vine Stratum</b> (Plot size: _____ )				<b>Hydrophytic Vegetation Present?</b> Yes _____ No <u>X</u>
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
	_____	=Total Cover		
% Bare Ground in Herb Stratum <u>0</u>	% Cover of Biotic Crust <u>0</u>			

Remarks:



**WETLAND DETERMINATION DATA FORM – Arid West Region**

Project/Site: Schellhous Property City/County: Roseville/Placer Sampling Date: 05/17/19  
 Applicant/Owner: Alice Pennington State: CA Sampling Point: 4  
 Investigator(s): B. Peterson Section, Township, Range: Section 9, Township 10 North, Range 6 East  
 Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): none Slope (%): <1  
 Subregion (LRR): Mediterranean California (LRR C) Lat: 38.73346223 Long: -121.3311816 Datum: NAD83  
 Soil Map Unit Name: 147 - Fiddymment-Kaseberg loams, 2 to 9% slopes NWI Classification: \_\_\_\_\_  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_ No X\* (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes X No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes _____ No <u>X</u>	<b>Is the Sampled Area within a Wetland?</b>	Yes _____ No <u>X</u>
Hydric Soil Present? Yes <u>X</u> No _____		
Wetland Hydrology Present? Yes <u>X</u> No _____		

Remarks: Within swale area, selected at wetland edge were UPL & FACU species become co-dominant. \*Climactic conditions abnormal, rainfall totals well-above average for the 2018-2019 winter, and rain events occurred late in season.

**VEGETATION – Use scientific names of plants.**

<u>Tree Stratum</u> (Plot size: _____ )	Absolute % Cover	Dominant Species?	Indicator Status	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)  Total Number of Dominant Species Across All Strata: <u>2</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50%</u> (A/B)
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
	<u>0</u>	=Total Cover		
<u>Sapling/Shrub Stratum</u> (Plot size: _____ )				<b>Prevalence Index Worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x1 = <u>0</u> FACW species <u>0</u> x2 = <u>0</u> FAC species <u>40</u> x3 = <u>120</u> FACU species <u>10</u> x4 = <u>40</u> UPL species <u>45</u> x5 = <u>225</u> Column Totals: <u>95</u> (A) <u>385</u> (B) Prevalence Index = B/A = <u>4.1</u>
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
	<u>0</u>	=Total Cover		
<u>Herb Stratum</u> (Plot size: <u>1 meter<sup>2</sup></u> )				<b>Hydrophytic Vegetation Indicators:</b> _____ Dominance Test is >50% _____ Prevalence Index is ≤3.0 <sup>1</sup> _____ Morphological Adaptation <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
1. <u>Festuca perennis</u>	<u>40</u>	<u>YES</u>	<u>FAC</u>	
2. <u>Elymus caput-medusae</u>	<u>40</u>	<u>YES</u>	<u>UPL</u>	
3. <u>Centromadia fitchii</u>	<u>10</u>	<u>NO</u>	<u>FACU</u>	
4. <u>Centaurea solstitialis</u>	<u>5</u>	<u>NO</u>	<u>UPL</u>	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
	<u>95</u>	=Total Cover		
<u>Woody Vine Stratum</u> (Plot size: _____ )				<b>Hydrophytic Vegetation Present?</b> Yes _____ No <u>X</u>
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
	_____	=Total Cover		
% Bare Ground in Herb Stratum <u>0</u>	% Cover of Biotic Crust <u>0</u>			

Remarks:

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-8	10yr 4/2	90	5yr 4/6	10	C	M/PL	CL	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

<b>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</b>		<b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b>	
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)	
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Reduced Vertic (F18)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Red Parent Material (TF2)	
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input checked="" type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Other (Explain in Remarks)	
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input type="checkbox"/> Redox Dark Surface (F6)		
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)		
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)		
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Vernal Pools (F9)		
<input type="checkbox"/> Sandy Gleyed Matrix (S4)			

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<b>Restrictive Layer (if present):</b> Type: _____ Depth (inches): _____	<b>Hydric Soil Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks:	

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b>		
<u>Primary Indicators (minimum of one required; check all that apply)</u>		<u>Secondary Indicators (2 or more required)</u>
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Water Marks (B1) (Riverine)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)	<input type="checkbox"/> Sediment Deposits (B2) (Riverine)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Drift Deposits (B3) (Riverine)
<input type="checkbox"/> Water Marks (B1) (Nonriverine)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input checked="" type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> FAC-Neutral Test (D5)

<b>Field Observations:</b> Surface Water Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present?      Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present?        Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

**WETLAND DETERMINATION DATA FORM – Arid West Region**

Project/Site: Schellhous Property City/County: Roseville/Placer Sampling Date: 05/17/19  
 Applicant/Owner: Alice Pennington State: CA Sampling Point: 5  
 Investigator(s): B. Peterson Section, Township, Range: Section 9, Township 10 North, Range 6 East  
 Landform (hillslope, terrace, etc.): swale Local relief (concave, convex, none): \_\_\_\_\_ Slope (%): \_\_\_\_\_  
 Subregion (LRR): Mediterranean California (LRR C) Lat: 38.73343251 Long: -121.3311708 Datum: NAD83  
 Soil Map Unit Name: 147 - Fiddymment-Kaseberg loams, 2 to 9% slopes NWI Classification: \_\_\_\_\_  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_ No X\* (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes X No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <u>X</u> No _____ Hydric Soil Present? Yes <u>X</u> No _____ Wetland Hydrology Present? Yes <u>X</u> No _____	<b>Is the Sampled Area within a Wetland?</b> Yes <u>X</u> No _____
Remarks: Locatd in complex of SWS/UP's. *Climactic conditions abnormal, rainfall totals well-above average for the 2018-2019 winter, and rain events occured late in season.	

**VEGETATION – Use scientific names of plants.**

	Absolute % Cover	Dominant Species?	Indicator Status	
<b>Tree Stratum</b> (Plot size: _____)				
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
	<u>0</u>	=Total Cover		
<b>Sapling/Shrub Stratum</b> (Plot size: _____)				
1. _____	_____	_____	_____	<b>Prevalence Index Worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species <u>45</u> x1 = <u>45</u> FACW species <u>0</u> x2 = <u>0</u> FAC species <u>25</u> x3 = <u>75</u> FACU species _____ x4 = <u>0</u> UPL species _____ x5 = <u>0</u> Column Totals: <u>70</u> (A) <u>120</u> (B) Prevalence Index = B/A = <u>1.7</u>
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
	<u>0</u>	=Total Cover		
<b>Herb Stratum</b> (Plot size: <u>1 meter<sup>2</sup></u> )				
1. <u>Eryngium castrense</u>	<u>20</u>	<u>YES</u>	<u>OBL</u>	<b>Hydrophytic Vegetation Indicators:</b> <u>X</u> Dominance Test is >50% _____ Prevalence Index is ≤3.0 <sup>1</sup> _____ Morphological Adaptation <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2. <u>Navarretia leucocephala subsp. Leucocephala</u>	<u>15</u>	<u>YES</u>	<u>OBL</u>	
3. <u>Festuca perennis</u>	<u>20</u>	<u>YES</u>	<u>FAC</u>	
4. <u>Ranunculus bonariensis var. trisepalus</u>	<u>10</u>	<u>NO</u>	<u>OBL</u>	
5. <u>Hordeum marinum subsp. Gussoneanum</u>	<u>5</u>	<u>NO</u>	<u>FAC</u>	
6. <u>Leontodon saxatilis subsp. Saxatilis</u>	<u>T</u>	<u>NO</u>	<u>FACU</u>	
7. <u>Holocarpha virgata subsp. Virgata</u>	<u>T</u>	<u>NO</u>	<u>UPL</u>	
8. _____	_____	_____	_____	
	<u>70</u>	=Total Cover		
<b>Woody Vine Stratum</b> (Plot size: _____)				
1. _____	_____	_____	_____	<b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____
2. _____	_____	_____	_____	
	_____	=Total Cover		
% Bare Ground in Herb Stratum <u>15</u>		% Cover of Biotic Crust <u>15</u>		

Remarks: rumex pulcher, psilocarphus oregonus rumex crisous

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-5	10yr 5/1	93	7.5 yr 4/6	2	C	M	Clay loam	
0-5	10yr 5/1	93	7.5 yr 4/4	5	C	PL	Clay loam	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

<b>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</b>		<b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b>	
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)	
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Reduced Vertic (F18)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Red Parent Material (TF2)	
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input checked="" type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Other (Explain in Remarks)	
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input type="checkbox"/> Redox Dark Surface (F6)		
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)		
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)		
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Vernal Pools (F9)		
<input type="checkbox"/> Sandy Gleyed Matrix (S4)			

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<b>Restrictive Layer (if present):</b> Type: _____ Depth (inches): _____	<b>Hydric Soil Present?</b> Yes <input checked="" type="checkbox"/> No _____
Remarks:	

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b>		
<u>Primary Indicators (minimum of one required; check all that apply)</u>		<u>Secondary Indicators (2 or more required)</u>
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Water Marks (B1) (Riverine)
<input type="checkbox"/> High Water Table (A2)	<input checked="" type="checkbox"/> Biotic Crust (B12)	<input type="checkbox"/> Sediment Deposits (B2) (Riverine)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Drift Deposits (B3) (Riverine)
<input type="checkbox"/> Water Marks (B1) (Nonriverine)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input checked="" type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> FAC-Neutral Test (D5)

<b>Field Observations:</b> Surface Water Present?    Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present?      Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present?        Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No _____
--	--

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

**WETLAND DETERMINATION DATA FORM – Arid West Region**

Project/Site: Schellhous Property City/County: Roseville/Placer Sampling Date: 06/07/19  
 Applicant/Owner: Alice Pennington State: CA Sampling Point: 6  
 Investigator(s): B. Peterson Section, Township, Range: Section 9, Township 10 North, Range 6 East  
 Landform (hillslope, terrace, etc.): \_\_\_\_\_ Local relief (concave, convex, none): Concave Slope (%): <1  
 Subregion (LRR): Mediterranean California (LRR C) Lat: 38.72958209 Long: -121.3276953 Datum: NAD83  
 Soil Map Unit Name: 141 - Cometa-Fiddymont complex, 1 to 5% slopes NWI Classification: \_\_\_\_\_  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_ No X\* (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes X No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes _____ No <u>X</u> Hydric Soil Present? Yes _____ No <u>X</u> Wetland Hydrology Present? Yes <u>X</u> No _____	<b>Is the Sampled Area within a Wetland?</b> Yes _____ No <u>X</u>
Remarks: sparsely vegetated depression. *Climactic conditions abnormal, rainfall totals well-above average for the 2018-2019 winter, and rain events occurred late in season.	

**VEGETATION – Use scientific names of plants.**

	Absolute % Cover	Dominant Species?	Indicator Status	
<b>Tree Stratum</b> (Plot size: _____ )				<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50%</u> (A/B)
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
<u>0</u> =Total Cover				
<b>Sapling/Shrub Stratum</b> (Plot size: _____ )				<b>Prevalence Index Worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species <u>15</u> x1 = <u>15</u> FACW species <u>0</u> x2 = <u>0</u> FAC species <u>5</u> x3 = <u>15</u> FACU species <u>25</u> x4 = <u>100</u> UPL species <u>5</u> x5 = <u>25</u> Column Totals: <u>50</u> (A) <u>155</u> (B) Prevalence Index = B/A = <u>3.1</u>
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>0</u> =Total Cover				
<b>Herb Stratum</b> (Plot size: <u>1 meter<sup>2</sup></u> )				<b>Hydrophytic Vegetation Indicators:</b> _____ Dominance Test is >50% _____ Prevalence Index is ≤3.0 <sup>1</sup> _____ Morphological Adaptation <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
1. <u>Lythrum hyssopifolia</u>	<u>15</u>	<u>YES</u>	<u>OBL</u>	
2. <u>Leontodon saxatilis subsp. Saxatilis</u>	<u>20</u>	<u>YES</u>	<u>FACU</u>	
3. <u>Centromadia fitchii</u>	<u>5</u>	<u>NO</u>	<u>FACU</u>	
4. <u>Veronica peregrina subsp. Xalapensis</u>	<u>5</u>	<u>NO</u>	<u>FAC</u>	
5. <u>Elymus caput-medusae</u>	<u>5</u>	<u>NO</u>	<u>UPL</u>	
6. <u>Juncus balticus subsp. Ater</u>	<u>T</u>	<u>NO</u>	<u>FACW</u>	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
<u>50</u> =Total Cover				
<b>Woody Vine Stratum</b> (Plot size: _____ )				<b>Hydrophytic Vegetation Present?</b> Yes _____ No <u>X</u>
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
_____ =Total Cover				
% Bare Ground in Herb Stratum <u>10</u>	% Cover of Biotic Crust <u>40</u>			

Remarks:

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-10	10YR 4/3	100					Sandy clay	loam

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

<p><b>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</b></p> <p><input type="checkbox"/> Histosol (A1)</p> <p><input type="checkbox"/> Histic Epipedon (A2)</p> <p><input type="checkbox"/> Black Histic (A3)</p> <p><input type="checkbox"/> Hydrogen Sulfide (A4)</p> <p><input type="checkbox"/> Stratified Layers (A5) (LRR C)</p> <p><input type="checkbox"/> 1 cm Muck (A9) (LRR D)</p> <p><input type="checkbox"/> Depleted Below Dark Surface (A11)</p> <p><input type="checkbox"/> Thick Dark Surface (A12)</p> <p><input type="checkbox"/> Sandy Mucky Mineral (S1)</p> <p><input type="checkbox"/> Sandy Gleyed Matrix (S4)</p>	<p><b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b></p> <p><input type="checkbox"/> Sandy Redox (S5)</p> <p><input type="checkbox"/> Stripped Matrix (S6)</p> <p><input type="checkbox"/> Loamy Mucky Mineral (F1)</p> <p><input type="checkbox"/> Loamy Gleyed Matrix (F2)</p> <p><input type="checkbox"/> Depleted Matrix (F3)</p> <p><input type="checkbox"/> Redox Dark Surface (F6)</p> <p><input type="checkbox"/> Depleted Dark Surface (F7)</p> <p><input type="checkbox"/> Redox Depressions (F8)</p> <p><input type="checkbox"/> Vernal Pools (F9)</p> <p><input type="checkbox"/> 1 cm Muck (A9) (LRR C)</p> <p><input type="checkbox"/> 2 cm Muck (A10) (LRR B)</p> <p><input type="checkbox"/> Reduced Vertic (F18)</p> <p><input type="checkbox"/> Red Parent Material (TF2)</p> <p><input type="checkbox"/> Other (Explain in Remarks)</p>
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<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<p><b>Restrictive Layer (if present):</b></p> <p>Type: _____</p> <p>Depth (inches): _____</p>	<p><b>Hydric Soil Present?</b>      Yes _____ No <u>X</u></p>
<p>Remarks: gravel/rocks in top 2"</p>	

**HYDROLOGY**

<p><b>Wetland Hydrology Indicators:</b></p> <p><u>Primary Indicators (minimum of one required; check all that apply)</u></p> <p><input type="checkbox"/> Surface Water (A1)</p> <p><input type="checkbox"/> High Water Table (A2)</p> <p><input type="checkbox"/> Saturation (A3)</p> <p><input type="checkbox"/> Water Marks (B1) (Nonriverine)</p> <p><input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)</p> <p><input type="checkbox"/> Drift Deposits (B3) (Nonriverine)</p> <p><input type="checkbox"/> Surface Soil Cracks (B6)</p> <p><input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)</p> <p><input type="checkbox"/> Water-Stained Leaves (B9)</p> <p><input type="checkbox"/> Salt Crust (B11)</p> <p><input checked="" type="checkbox"/> Biotic Crust (B12)</p> <p><input type="checkbox"/> Aquatic Invertebrates (B13)</p> <p><input type="checkbox"/> Hydrogen Sulfide Odor (C1)</p> <p><input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)</p> <p><input type="checkbox"/> Presence of Reduced Iron (C4)</p> <p><input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)</p> <p><input type="checkbox"/> Thin Muck Surface (C7)</p> <p><input type="checkbox"/> Other (Explain in Remarks)</p>	<p><u>Secondary Indicators (2 or more required)</u></p> <p><input type="checkbox"/> Water Marks (B1) (Riverine)</p> <p><input type="checkbox"/> Sediment Deposits (B2) (Riverine)</p> <p><input type="checkbox"/> Drift Deposits (B3) (Riverine)</p> <p><input type="checkbox"/> Drainage Patterns (B10)</p> <p><input type="checkbox"/> Dry-Season Water Table (C2)</p> <p><input type="checkbox"/> Crayfish Burrows (C8)</p> <p><input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)</p> <p><input type="checkbox"/> Shallow Aquitard (D3)</p> <p><input type="checkbox"/> FAC-Neutral Test (D5)</p>
<p><b>Field Observations:</b></p> <p>Surface Water Present?    Yes _____ No <u>X</u>    Depth (inches): _____</p> <p>Water Table Present?      Yes _____ No <u>X</u>    Depth (inches): _____</p> <p>Saturation Present?        Yes _____ No <u>X</u>    Depth (inches): _____ (includes capillary fringe)</p>	<p><b>Wetland Hydrology Present?</b>    Yes <u>X</u> No _____</p>
<p>Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:</p>	
<p>Remarks:</p>	

**WETLAND DETERMINATION DATA FORM – Arid West Region**

Project/Site: Schellhous Property City/County: Roseville/Placer Sampling Date: 06/07/19  
 Applicant/Owner: Alice Pennington State: CA Sampling Point: 7  
 Investigator(s): B. Peterson Section, Township, Range: Section 9, Township 10 North, Range 6 East  
 Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Concave Slope (%): 4  
 Subregion (LRR): Mediterranean California (LRR C) Lat: 38.72972457 Long: -121.3279708 Datum: NAD83  
 Soil Map Unit Name: 141 - Cometa-Fiddymont complex, 1 to 5% slopes NWI Classification: \_\_\_\_\_  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_ No X\* (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes X No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes _____ No <u>X</u> Hydric Soil Present? Yes <u>X</u> No _____ Wetland Hydrology Present? Yes <u>X</u> No _____	<b>Is the Sampled Area within a Wetland?</b> Yes _____ No <u>X</u>
Remarks: Located in swale, upslope of seasonal wetland swale. *Climactic conditions abnormal, rainfall totals well-above average for the 2018-2019 winter, and rain events occurred late in season.	

**VEGETATION – Use scientific names of plants.**

	Absolute % Cover	Dominant Species?	Indicator Status	
<b>Tree Stratum</b> (Plot size: _____ )				
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50%</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
	<u>0</u>	=Total Cover		
<b>Sapling/Shrub Stratum</b> (Plot size: _____ )				
1. _____	_____	_____	_____	<b>Prevalence Index Worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x1 = <u>0</u> FACW species <u>0</u> x2 = <u>0</u> FAC species <u>50</u> x3 = <u>150</u> FACU species <u>10</u> x4 = <u>40</u> UPL species <u>40</u> x5 = <u>200</u> Column Totals: <u>100</u> (A) <u>390</u> (B) Prevalence Index = B/A = <u>3.9</u>
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
	<u>0</u>	=Total Cover		
<b>Herb Stratum</b> (Plot size: <u>1 meter<sup>2</sup></u> )				
1. <u>Festuca perennis</u>	<u>50</u>	<u>Y</u>	<u>FAC</u>	<b>Hydrophytic Vegetation Indicators:</b> _____ Dominance Test is >50% _____ Prevalence Index is ≤3.0 <sup>1</sup> _____ Morphological Adaptation <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2. <u>Elymus caput-medusae</u>	<u>40</u>	<u>Y</u>	<u>UPL</u>	
3. <u>Bromus hordeaceus</u>	<u>10</u>	<u>N</u>	<u>FACU</u>	
4. <u>Trifolium campestre</u>	<u>T</u>	<u>N</u>	<u>UPL</u>	
5. <u>Geranium dissectum</u>	<u>T</u>	<u>N</u>	<u>UPL</u>	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
	<u>100</u>	=Total Cover		
<b>Woody Vine Stratum</b> (Plot size: _____ )				
1. _____	_____	_____	_____	<b>Hydrophytic Vegetation Present?</b> Yes _____ No <u>X</u>
2. _____	_____	_____	_____	
	_____	=Total Cover		
% Bare Ground in Herb Stratum <u>0</u>		% Cover of Biotic Crust <u>0</u>		

Remarks:

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-8	10YR4/2	95	5yr 4/6	3	C	PL	Sandy clay loa	
0-8	10YR 4/2	95	Black	2	C	C		

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

<b>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</b>		<b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b>	
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)	
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Reduced Vertic (F18)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Red Parent Material (TF2)	
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input checked="" type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Other (Explain in Remarks)	
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input type="checkbox"/> Redox Dark Surface (F6)		
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)		
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)		
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Vernal Pools (F9)		
<input type="checkbox"/> Sandy Gleyed Matrix (S4)			

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<b>Restrictive Layer (if present):</b> Type: _____ Depth (inches): _____	<b>Hydric Soil Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks:	

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b>		
<u>Primary Indicators (minimum of one required; check all that apply)</u>		<u>Secondary Indicators (2 or more required)</u>
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Water Marks (B1) (Riverine)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)	<input type="checkbox"/> Sediment Deposits (B2) (Riverine)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Drift Deposits (B3) (Riverine)
<input type="checkbox"/> Water Marks (B1) (Nonriverine)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input checked="" type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> FAC-Neutral Test (D5)

<b>Field Observations:</b> Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

**WETLAND DETERMINATION DATA FORM – Arid West Region**

Project/Site: Schellhous Property City/County: Roseville/Placer Sampling Date: 06/07/19  
 Applicant/Owner: Alice Pennington State: CA Sampling Point: BP-08  
 Investigator(s): B. Peterson Section, Township, Range: Section 9, Township 10 North, Range 6 East  
 Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Concave Slope (%): 4%  
 Subregion (LRR): Mediterranean California (LRR C) Lat: 38.72975516 Long: -121.3279407 Datum: NAD83  
 Soil Map Unit Name: 141 - Cometa-Fiddymont complex, 1 to 5% slopes NWI Classification: \_\_\_\_\_  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_ No X\* (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes X No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <u>X</u> No _____	<b>Is the Sampled Area within a Wetland?</b> Yes <u>X</u> No _____
Hydric Soil Present? Yes <u>X</u> No _____	
Wetland Hydrology Present? Yes <u>X</u> No _____	

Remarks: Taken in swale where featuca peremis becomes dominant. 2 meter<sup>2</sup> inclusion just downslope is dominated by more wetland species. Alternates between Festuca perennis swale and wetland pools until riparian tree line/ephemeral drainage with unvegetated and increased banks/destruction of terrestrial vegetation. \*Climactic conditions abnormal, rainfall totals well-above average for the 2018-2019 winter, and rain events occurred late in season.

**VEGETATION – Use scientific names of plants.**

<u>Tree Stratum</u> (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
<u>0</u> =Total Cover				<b>Hydrophytic Vegetation Indicators:</b> <input checked="" type="checkbox"/> Dominance Test is >50% <input checked="" type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup> _____ Morphological Adaptation <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
<u>Sapling/Shrub Stratum</u> (Plot size: _____)	_____	_____	_____	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
<u>0</u> =Total Cover				
<u>Herb Stratum</u> (Plot size: <u>1 meter<sup>2</sup></u> )	_____	_____	_____	<b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____
1. <u>Festuca perennis</u>	<u>100</u>	<u>Y</u>	<u>FAC</u>	
2. _____	_____	_____	_____	_____ =Total Cover
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	_____ =Total Cover
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	_____ =Total Cover
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	_____ =Total Cover
<u>100</u> =Total Cover				
<u>Woody Vine Stratum</u> (Plot size: _____)	_____	_____	_____	_____ =Total Cover
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	_____ =Total Cover
% Bare Ground in Herb Stratum <u>0</u> % Cover of Biotic Crust <u>0</u>				

Remarks: Deeper portion has Eryngium castrense, Leontodon saxatilis subsp. saxatilis, Plagiobothrys stipitatus var. micranthus, Rumex pulcher

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-10	10yr 4/2	88	5yr 4/6	10	C	M/PL	Sandy clay loa	
0-10	10yr 4/2	88	Black	2	C	M	Loam	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	
<input type="checkbox"/> Thick Dark Surface (A12)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	
<input type="checkbox"/> Sandy Redox (S5)	
<input type="checkbox"/> Stripped Matrix (S6)	
<input type="checkbox"/> Loamy Mucky Mineral (F1)	
<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Redox Depressions (F8)	
<input type="checkbox"/> Vernal Pools (F9)	

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if present):**  
 Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

**Hydric Soil Present?** Yes  No

Remarks:

**HYDROLOGY**

Wetland Hydrology Indicators:	Secondary Indicators (2 or more required)
<u>Primary Indicators (minimum of one required; check all that apply)</u>	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water Marks (B1) (Riverine)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Sediment Deposits (B2) (Riverine)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Drift Deposits (B3) (Riverine)
<input type="checkbox"/> Water Marks (B1) (Nonriverine)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Salt Crust (B11)	
<input checked="" type="checkbox"/> Biotic Crust (B12)	
<input type="checkbox"/> Aquatic Invertebrates (B13)	
<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	
<input checked="" type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	
<input type="checkbox"/> Presence of Reduced Iron (C4)	
<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	
<input type="checkbox"/> Thin Muck Surface (C7)	
<input type="checkbox"/> Other (Explain in Remarks)	

**Field Observations:**  
 Surface Water Present? Yes  No  Depth (inches): \_\_\_\_\_  
 Water Table Present? Yes  No  Depth (inches): \_\_\_\_\_  
 Saturation Present? Yes  No  Depth (inches): \_\_\_\_\_  
 (includes capillary fringe)

**Wetland Hydrology Present?** Yes  No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: No biotic crust @ sample point, but evident in deeper portions of the seasonal wetland swale

**WETLAND DETERMINATION DATA FORM – Arid West Region**

Project/Site: Schellhous Property City/County: Roseville/Placer Sampling Date: 06/07/19  
 Applicant/Owner: Alice Pennington State: CA Sampling Point: 9  
 Investigator(s): B. Peterson Section, Township, Range: Section 9, Township 10 North, Range 6 East  
 Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Concave Slope (%): 3%  
 Subregion (LRR): Mediterranean California (LRR C) Lat: 38.73025205 Long: -121.3275997 Datum: NAD83  
 Soil Map Unit Name: 141 - Cometa-Fiddymont complex, 1 to 5% slopes NWI Classification: \_\_\_\_\_  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_ No X\* (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes X No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes _____ No <u>X</u> Hydric Soil Present? Yes <u>X</u> No _____ Wetland Hydrology Present? Yes <u>X</u> No _____	<b>Is the Sampled Area within a Wetland?</b> Yes _____ No <u>X</u>
Remarks: Located in ephemeral drainage downstream of seasonal wetland swale. *Climactic conditions abnormal, rainfall totals well-above average for the 2018-2019 winter, and rain events occurred late in season.	

**VEGETATION – Use scientific names of plants.**

	Absolute % Cover	Dominant Species?	Indicator Status	
<u>Tree Stratum</u> (Plot size: _____ )				<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A) Total Number of Dominant Species Across All Strata: _____ (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>#DIV/0!</u> (A/B)
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
	<u>0</u>	=Total Cover		<b>Prevalence Index Worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species _____ x1 = <u>0</u> FACW species _____ x2 = <u>0</u> FAC species _____ x3 = <u>0</u> FACU species _____ x4 = <u>0</u> UPL species _____ x5 = <u>0</u> Column Totals: <u>0</u> (A) <u>0</u> (B) Prevalence Index = B/A = <u>#DIV/0!</u>
<u>Sapling/Shrub Stratum</u> (Plot size: _____ )				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
	<u>0</u>	=Total Cover		
<u>Herb Stratum</u> (Plot size: <u>1 meter<sup>2</sup></u> )				<b>Hydrophytic Vegetation Indicators:</b> _____ Dominance Test is >50% <u>X</u> Prevalence Index is ≤3.0 <sup>1</sup> _____ Morphological Adaptation <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
	<u>0</u>	=Total Cover		
<u>Woody Vine Stratum</u> (Plot size: _____ )				<b>Hydrophytic Vegetation Present?</b> Yes _____ No <u>X</u>
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
% Bare Ground in Herb Stratum _____	% Cover of Biotic Crust _____			

Remarks: unvegetated feature, Quercus lobata tree cover

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-8	10yr 4/2	95	5yr 4/6	5	C	M	Sandy clay loa	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

<b>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</b>		<b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b>	
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)	
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Reduced Vertic (F18)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Red Parent Material (TF2)	
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input checked="" type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Other (Explain in Remarks)	
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input type="checkbox"/> Redox Dark Surface (F6)		
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)		
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)		
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Vernal Pools (F9)		
<input type="checkbox"/> Sandy Gleyed Matrix (S4)			

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<b>Restrictive Layer (if present):</b> Type: _____ Depth (inches): _____	<b>Hydric Soil Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks:	

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b>		
<u>Primary Indicators (minimum of one required; check all that apply)</u>		<u>Secondary Indicators (2 or more required)</u>
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)	<input checked="" type="checkbox"/> Water Marks (B1) (Riverine)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)	<input checked="" type="checkbox"/> Sediment Deposits (B2) (Riverine)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Drift Deposits (B3) (Riverine)
<input type="checkbox"/> Water Marks (B1) (Nonriverine)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> FAC-Neutral Test (D5)

<b>Field Observations:</b> Surface Water Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present?      Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present?        Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: Ordinary high water mark indicators, destruction of terrestrial vegetation, exposed roots, shelving

**WETLAND DETERMINATION DATA FORM – Arid West Region**

Project/Site: Schellhous Property City/County: Roseville/Placer Sampling Date: 06/07/19  
 Applicant/Owner: Alice Pennington State: CA Sampling Point: 8  
 Investigator(s): B. Peterson Section, Township, Range: Section 9, Township 10 North, Range 6 East  
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): Concave Slope (%): 1  
 Subregion (LRR): Mediterranean California (LRR C) Lat: 38.73076297 Long: -121.3269239 Datum: NAD83  
 Soil Map Unit Name: 141 - Cometa-Fiddymont complex, 1 to 5% slopes NWI Classification: \_\_\_\_\_  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_ No X\* (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes X No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <u>X</u> No _____ Hydric Soil Present? Yes <u>X</u> No _____ Wetland Hydrology Present? Yes <u>X</u> No _____	<b>Is the Sampled Area within a Wetland?</b> Yes <u>X</u> No _____
Remarks: vernal pool on floodplane terrace. *Climactic conditions abnormal, rainfall totals well-above average for the 2018-2019 winter, and rain events occurred late in season.	

**VEGETATION – Use scientific names of plants.**

	Absolute % Cover	Dominant Species?	Indicator Status	
<b>Tree Stratum</b> (Plot size: _____)				
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
	<u>0</u>	=Total Cover		
<b>Sapling/Shrub Stratum</b> (Plot size: _____)				
1. _____	_____	_____	_____	<b>Prevalence Index Worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species <u>100</u> x1 = <u>100</u> FACW species _____ x2 = <u>0</u> FAC species _____ x3 = <u>0</u> FACU species _____ x4 = <u>0</u> UPL species _____ x5 = <u>0</u> Column Totals: <u>100</u> (A) <u>100</u> (B) Prevalence Index = B/A = <u>1.0</u>
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
	<u>0</u>	=Total Cover		
<b>Herb Stratum</b> (Plot size: <u>1 meter<sup>2</sup></u> )				
1. <u>Navarretia leucocephala subsp. Leucocephala</u>	<u>60</u>	<u>Y</u>	<u>OBL</u>	<b>Hydrophytic Vegetation Indicators:</b> <u>X</u> Dominance Test is >50% <u>X</u> Prevalence Index is ≤3.0 <sup>1</sup> _____ Morphological Adaptation <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2. <u>Eryngium castrense</u>	<u>40</u>	<u>Y</u>	<u>OBL</u>	
3. <u>Triteleia laxa</u>	<u>T</u>	<u>N</u>	<u>UPL</u>	
4. <u>Festuca perennis</u>	<u>T</u>	<u>N</u>	<u>FAC</u>	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
	<u>100</u>	=Total Cover		
<b>Woody Vine Stratum</b> (Plot size: _____)				
1. _____	_____	_____	_____	<b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____
2. _____	_____	_____	_____	
	_____	=Total Cover		
% Bare Ground in Herb Stratum <u>0</u>	% Cover of Biotic Crust _____			

Remarks: Pool is mostly Navarretia leucocephala subsp. Leucocephala, Eryngium castrense with a few patches of elo mac, Xanthium strumarium, men pug, Polypogon monspeliensis

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-6	10yr 4/2	85	5yr 4/6	15	C	PL	Loam	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

<b>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</b>		<b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b>	
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)	
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Reduced Vertic (F18)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Red Parent Material (TF2)	
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input checked="" type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Other (Explain in Remarks)	
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input type="checkbox"/> Redox Dark Surface (F6)		
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)		
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)		
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Vernal Pools (F9)		
<input type="checkbox"/> Sandy Gleyed Matrix (S4)			

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if present):**

Type: clay

Depth (inches): 6

**Hydric Soil Present?** Yes  No

Remarks:

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b>		
<u>Primary Indicators (minimum of one required; check all that apply)</u>		<u>Secondary Indicators (2 or more required)</u>
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Water Marks (B1) (Riverine)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)	<input type="checkbox"/> Sediment Deposits (B2) (Riverine)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Drift Deposits (B3) (Riverine)
<input type="checkbox"/> Water Marks (B1) (Nonriverine)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input checked="" type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> FAC-Neutral Test (D5)

**Field Observations:**

Surface Water Present? Yes  No  Depth (inches): \_\_\_\_\_

Water Table Present? Yes  No  Depth (inches): \_\_\_\_\_

Saturation Present? Yes  No  Depth (inches): \_\_\_\_\_ (includes capillary fringe)

**Wetland Hydrology Present?** Yes  No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: Soil is moist

**WETLAND DETERMINATION DATA FORM – Arid West Region**

Project/Site: Schellhous Property City/County: Roseville/Placer Sampling Date: 06/07/19  
 Applicant/Owner: Alice Pennington State: CA Sampling Point: 11  
 Investigator(s): B. Peterson Section, Township, Range: Section 9, Township 10 North, Range 6 East  
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): None Slope (%): 0  
 Subregion (LRR): Mediterranean California (LRR C) Lat: 38.73077436 Long: -121.326848 Datum: NAD83  
 Soil Map Unit Name: 141 - Cometa-Fiddymont complex, 1 to 5% slopes NWI Classification: \_\_\_\_\_  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_ No X\* (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes X No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes _____ No <u>X</u> Hydric Soil Present? Yes <u>X</u> No _____ Wetland Hydrology Present? Yes <u>X</u> No _____	<b>Is the Sampled Area within a Wetland?</b> Yes _____ No <u>X</u>
Remarks: Between two vernal pools, slight rise, typical of floodplane terrace. *Climactic conditions abnormal, rainfall totals well-above average for the 2018-2019 winter, and rain events occurred late in season.	

**VEGETATION – Use scientific names of plants.**

	Absolute % Cover	Dominant Species?	Indicator Status	
<b>Tree Stratum</b> (Plot size: _____ )				
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)  Total Number of Dominant Species Across All Strata: <u>3</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>33%</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
	<u>0</u>	=Total Cover		
<b>Sapling/Shrub Stratum</b> (Plot size: _____ )				
1. _____	_____	_____	_____	<b>Prevalence Index Worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x1 = <u>0</u> FACW species <u>0</u> x2 = <u>0</u> FAC species <u>60</u> x3 = <u>180</u> FACU species <u>40</u> x4 = <u>160</u> UPL species <u>0</u> x5 = <u>0</u> Column Totals: <u>100</u> (A) <u>340</u> (B) Prevalence Index = B/A = <u>3.4</u>
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
	<u>0</u>	=Total Cover		
<b>Herb Stratum</b> (Plot size: <u>1 meter<sup>2</sup></u> )				
1. <u>Festuca perennis</u>	<u>60</u>	<u>YES</u>	<u>FAC</u>	<b>Hydrophytic Vegetation Indicators:</b> _____ Dominance Test is >50% _____ Prevalence Index is ≤3.0 <sup>1</sup> _____ Morphological Adaptation <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2. <u>Bromus hordeaceus</u>	<u>20</u>	<u>YES</u>	<u>FACU</u>	
3. <u>Centromadia fitchii</u>	<u>15</u>	<u>YES</u>	<u>FACU</u>	
4. <u>Leontodon saxatilis subsp. Saxatilis</u>	<u>5</u>	<u>NO</u>	<u>FACU</u>	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
	<u>100</u>	=Total Cover		
<b>Woody Vine Stratum</b> (Plot size: _____ )				
1. _____	_____	_____	_____	<b>Hydrophytic Vegetation Present?</b> Yes _____ No <u>X</u>
2. _____	_____	_____	_____	
	_____	=Total Cover		
% Bare Ground in Herb Stratum <u>0</u>	% Cover of Biotic Crust <u>0</u>			

Remarks:

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-10	10yr 4/2	90	5yr 4/6	10	C	PL	Loam	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

<b>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</b>		<b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b>	
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)	
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Reduced Vertic (F18)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Red Parent Material (TF2)	
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input checked="" type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Other (Explain in Remarks)	
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input type="checkbox"/> Redox Dark Surface (F6)		
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)		
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)		
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Vernal Pools (F9)		
<input type="checkbox"/> Sandy Gleyed Matrix (S4)			

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<b>Restrictive Layer (if present):</b> Type: _____ Depth (inches): _____	<b>Hydric Soil Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks:	

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b>		
<u>Primary Indicators (minimum of one required; check all that apply)</u>		<u>Secondary Indicators (2 or more required)</u>
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Water Marks (B1) (Riverine)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)	<input type="checkbox"/> Sediment Deposits (B2) (Riverine)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Drift Deposits (B3) (Riverine)
<input type="checkbox"/> Water Marks (B1) (Nonriverine)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input checked="" type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> FAC-Neutral Test (D5)

<b>Field Observations:</b> Surface Water Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present?      Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present?        Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

**WETLAND DETERMINATION DATA FORM – Arid West Region**

Project/Site: Schellhous Property City/County: Roseville/Placer Sampling Date: 06/07/19  
 Applicant/Owner: Alice Pennington State: CA Sampling Point: 12  
 Investigator(s): B. Peterson Section, Township, Range: Section 9, Township 10 North, Range 6 East  
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): Concave Slope (%): 1  
 Subregion (LRR): Mediterranean California (LRR C) Lat: 38.730777 Long: -121.3268 Datum: NAD83  
 Soil Map Unit Name: 141 - Cometa-Fiddymont complex, 1 to 5% slopes NWI Classification: \_\_\_\_\_  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_ No X\* (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes X No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <u>X</u> No _____	<b>Is the Sampled Area within a Wetland?</b> Yes <u>X</u> No _____
Hydric Soil Present? Yes <u>X</u> No _____	
Wetland Hydrology Present? Yes <u>X</u> No _____	

Remarks: located in vernal pool adjact to creek/on floodplace terrace. \*Climactic conditions abnormal, rainfall totals well-above average for the 2018-2019 winter, and rain events occured late in season.

**VEGETATION – Use scientific names of plants.**

<u>Tree Stratum</u> (Plot size: _____ )	Absolute % Cover	Dominant Species?	Indicator Status	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
<u>0</u> =Total Cover				
<u>Sapling/Shrub Stratum</u> (Plot size: _____ )	_____	_____	_____	<b>Prevalence Index Worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species <u>60</u> x1 = <u>60</u> FACW species <u>0</u> x2 = <u>0</u> FAC species <u>10</u> x3 = <u>30</u> FACU species <u>0</u> x4 = <u>0</u> UPL species <u>0</u> x5 = <u>0</u> Column Totals: <u>70</u> (A) <u>90</u> (B) Prevalence Index = B/A = <u>1.3</u>
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>0</u> =Total Cover				
<u>Herb Stratum</u> (Plot size: <u>1 meter<sup>2</sup></u> )	_____	_____	_____	<b>Hydrophytic Vegetation Indicators:</b> <u>X</u> Dominance Test is >50% <u>X</u> Prevalence Index is ≤3.0 <sup>1</sup> _____ Morphological Adaptation <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Eryngium castrense</u>	<u>60</u>	<u>YES</u>	<u>OBL</u>	
2. <u>Festuca perennis</u>	<u>10</u>	<u>NO</u>	<u>FAC</u>	
3. <u>Leontodon saxatilis subsp. Saxatilis</u>	<u>T</u>	<u>NO</u>	<u>FACU</u>	
4. <u>Rumex pulcher</u>	<u>T</u>	<u>NO</u>	<u>FAC</u>	
5. <u>Centromadia fitchii</u>	<u>T</u>	<u>NO</u>	<u>FACU</u>	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
<u>70</u> =Total Cover				
<u>Woody Vine Stratum</u> (Plot size: _____ )	_____	_____	_____	<b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	_____ =Total Cover
<u>30</u> % Bare Ground in Herb Stratum % Cover of Biotic Crust _____				

Remarks: Lasthenia glaberrima, Plagiobothrys stipitatus var. micranthus, Ranunculus bonariensis var. trisepalus - dead thatchy. Pool is dominated by Eryngium castrense, Festuca perennis, and Eleocharis macrostachya

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-8	10yr 4/2	85	5yr 4/6	15	C	M/PL	Loam	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

<b>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</b>		<b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b>	
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)	
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Reduced Vertic (F18)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Red Parent Material (TF2)	
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input checked="" type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Other (Explain in Remarks)	
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input type="checkbox"/> Redox Dark Surface (F6)		
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)		
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)		
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Vernal Pools (F9)		
<input type="checkbox"/> Sandy Gleyed Matrix (S4)			

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<b>Restrictive Layer (if present):</b>	<b>Hydric Soil Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Type: <u>Clay</u> Depth (inches): <u>18</u>	
Remarks:	

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b>		
<u>Primary Indicators (minimum of one required; check all that apply)</u>		<u>Secondary Indicators (2 or more required)</u>
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Water Marks (B1) (Riverine)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)	<input type="checkbox"/> Sediment Deposits (B2) (Riverine)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Drift Deposits (B3) (Riverine)
<input type="checkbox"/> Water Marks (B1) (Nonriverine)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)
<input checked="" type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input checked="" type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> FAC-Neutral Test (D5)

<b>Field Observations:</b>	<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Surface Water Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present?      Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present?        Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

**WETLAND DETERMINATION DATA FORM – Arid West Region**

Project/Site: Schellhous Property City/County: Roseville/Placer Sampling Date: 06/07/19  
 Applicant/Owner: Alice Pennington State: CA Sampling Point: 13  
 Investigator(s): B. Peterson Section, Township, Range: Section 9, Township 10 North, Range 6 East  
 Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): None Slope (%): <2  
 Subregion (LRR): Mediterranean California (LRR C) Lat: 38.73343048 Long: -121.3319962 Datum: NAD83  
 Soil Map Unit Name: 141 - Cometa-Fiddymont complex, 1 to 5% slopes NWI Classification: \_\_\_\_\_  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_ No X\* (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes X No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes _____ No <u>X</u>	<b>Is the Sampled Area within a Wetland?</b>	Yes _____ No <u>X</u>
Hydric Soil Present? Yes <u>X</u> No _____		
Wetland Hydrology Present? Yes _____ No <u>X</u>		

Remarks: Upland boundary of seasonal wetland in swale area. \*Climactic conditions abnormal, rainfall totals well-above average for the 2018-2019 winter, and rain events occurred late in season.

**VEGETATION – Use scientific names of plants.**

<u>Tree Stratum</u> (Plot size: _____ )	Absolute % Cover	Dominant Species?	Indicator Status	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50%</u> (A/B)
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
<u>0</u> =Total Cover				
<u>Sapling/Shrub Stratum</u> (Plot size: _____ )				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>0</u> =Total Cover				
<u>Herb Stratum</u> (Plot size: <u>1 meter<sup>2</sup></u> )				
1. <u>Festuca perennis</u>	<u>40</u>	<u>YES</u>	<u>FAC</u>	<b>Hydrophytic Vegetation Indicators:</b> _____ Dominance Test is >50% _____ Prevalence Index is ≤3.0 <sup>1</sup> _____ Morphological Adaptation <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2. <u>Centromadia fitchii</u>	<u>5</u>	<u>NO</u>	<u>FACU</u>	
3. <u>Bromus hordeaceus</u>	<u>10</u>	<u>NO</u>	<u>FACU</u>	
4. <u>Elymus caput-medusae</u>	<u>30</u>	<u>YES</u>	<u>UPL</u>	
5. <u>Leontodon saxatilis subsp. Saxatilis</u>	<u>5</u>	<u>NO</u>	<u>FACU</u>	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
<u>90</u> =Total Cover				
<u>Woody Vine Stratum</u> (Plot size: _____ )				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
_____ =Total Cover				
% Bare Ground in Herb Stratum <u>10</u>	% Cover of Biotic Crust _____			<b>Hydrophytic Vegetation Present?</b> Yes _____ No <u>X</u>

Remarks:

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-8	10yr 4/2	90	5yr 4/6	10	C	M	Clay loam	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

<b>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</b>		<b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b>	
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)	
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Reduced Vertic (F18)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Red Parent Material (TF2)	
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Other (Explain in Remarks)	
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input type="checkbox"/> Redox Dark Surface (F6)		
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input checked="" type="checkbox"/> Depleted Dark Surface (F7)		
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)		
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Vernal Pools (F9)		
<input type="checkbox"/> Sandy Gleyed Matrix (S4)			

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<b>Restrictive Layer (if present):</b>	<b>Hydric Soil Present?</b>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Type: <u>Clay</u>		
Depth (inches): <u>18</u>		
Remarks:		

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b>		
<u>Primary Indicators (minimum of one required; check all that apply)</u>		<u>Secondary Indicators (2 or more required)</u>
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Water Marks (B1) (Riverine)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)	<input type="checkbox"/> Sediment Deposits (B2) (Riverine)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Drift Deposits (B3) (Riverine)
<input type="checkbox"/> Water Marks (B1) (Nonriverine)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> FAC-Neutral Test (D5)
<b>Field Observations:</b>		<b>Wetland Hydrology Present?</b>
Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____	
Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____	
(includes capillary fringe)		

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

**WETLAND DETERMINATION DATA FORM – Arid West Region**

Project/Site: Schellhous Property City/County: Roseville/Placer Sampling Date: 06/07/19  
 Applicant/Owner: Alice Pennington State: CA Sampling Point: 14  
 Investigator(s): B. Peterson Section, Township, Range: Section 9, Township 10 North, Range 6 East  
 Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Concave Slope (%): <2  
 Subregion (LRR): Mediterranean California (LRR C) Lat: 38.73338959 Long: -121.3320076 Datum: NAD83  
 Soil Map Unit Name: 141 - Cometa-Fiddymont complex, 1 to 5% slopes NWI Classification: \_\_\_\_\_  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_ No X\* (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes \_\_\_\_\_ No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <u>X</u> No _____	<b>Is the Sampled Area within a Wetland?</b> Yes <u>X</u> No _____
Hydric Soil Present? Yes <u>X</u> No _____	
Wetland Hydrology Present? Yes <u>X</u> No _____	

Remarks: seasonal wetland swale dominated by *Festuca perennis*. \*Climactic conditions abnormal, rainfall totals well-above average for the 2018-2019 winter, and rain events occurred late in season.

**VEGETATION – Use scientific names of plants.**

<u>Tree Stratum</u> (Plot size: _____ )	Absolute % Cover	Dominant Species?	Indicator Status	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
<u>0</u> =Total Cover				
<u>Sapling/Shrub Stratum</u> (Plot size: _____ )	_____	_____	_____	<b>Prevalence Index Worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species <u>5</u> x1 = <u>5</u> FACW species <u>25</u> x2 = <u>50</u> FAC species <u>20</u> x3 = <u>60</u> FACU species <u>5</u> x4 = <u>20</u> UPL species _____ x5 = <u>0</u> Column Totals: <u>55</u> (A) <u>135</u> (B) Prevalence Index = B/A = <u>2.5</u>
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>0</u> =Total Cover				
<u>Herb Stratum</u> (Plot size: <u>1 meter<sup>2</sup></u> )	_____	_____	_____	<b>Hydrophytic Vegetation Indicators:</b> <u>X</u> Dominance Test is >50% <u>X</u> Prevalence Index is ≤3.0 <sup>1</sup> _____ Morphological Adaptation <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
1. <u>Festuca perennis</u>	<u>20</u>	<u>YES</u>	<u>FAC</u>	
2. <u>Rumex pulcher</u>	<u>25</u>	<u>YES</u>	<u>FACW</u>	
3. <u>Eryngium castrense</u>	<u>5</u>	<u>NO</u>	<u>OBL</u>	
4. <u>Centromadia fitchii</u>	<u>5</u>	<u>NO</u>	<u>FACU</u>	
5. <u>Holocarpha virgata subsp. Virgata</u>	<u>T</u>	<u>NO</u>	<u>UPL</u>	
6. <u>Trichostema lanceolatum</u>	<u>T</u>	<u>NO</u>	<u>UPL</u>	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
<u>55</u> =Total Cover				
<u>Woody Vine Stratum</u> (Plot size: _____ )	_____	_____	_____	<b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
_____ =Total Cover				
% Bare Ground in Herb Stratum <u>45</u>	% Cover of Biotic Crust _____			

Remarks: Thatch

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-5	10ye 4/2	90	5yr 4/6	10	C	PI/M	Clay loam	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

<b>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</b>		<b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b>	
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)	
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Reduced Vertic (F18)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Red Parent Material (TF2)	
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input checked="" type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Other (Explain in Remarks)	
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input type="checkbox"/> Redox Dark Surface (F6)		
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)		
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)		
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Vernal Pools (F9)		
<input type="checkbox"/> Sandy Gleyed Matrix (S4)			

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<b>Restrictive Layer (if present):</b>	<b>Hydric Soil Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Type: <u>clay</u> Depth (inches): _____ 15	
Remarks:	

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b>		
<u>Primary Indicators (minimum of one required; check all that apply)</u>		<u>Secondary Indicators (2 or more required)</u>
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Water Marks (B1) (Riverine)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)	<input type="checkbox"/> Sediment Deposits (B2) (Riverine)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Drift Deposits (B3) (Riverine)
<input type="checkbox"/> Water Marks (B1) (Nonriverine)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input checked="" type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> FAC-Neutral Test (D5)

<b>Field Observations:</b>	<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Surface Water Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present?      Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present?        Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

**WETLAND DETERMINATION DATA FORM – Arid West Region**

Project/Site: Schellhous Property City/County: Roseville/Placer Sampling Date: 05/17/19  
 Applicant/Owner: Alice Pennington State: CA Sampling Point: 15  
 Investigator(s): M. Shaffer Section, Township, Range: Section 9, Township 10 North, Range 6 East  
 Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Concave Slope (%): 2  
 Subregion (LRR): Mediterranean California (LRR C) Lat: 38.72948681 Long: -121.3222535 Datum: NAD83  
 Soil Map Unit Name: 229sa - Urban land-Xerarents-Fiddymment complex, 0 to 8% slopes NWI Classification: N/A  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_ No X\* (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes X No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <u>X</u> No _____	<b>Is the Sampled Area within a Wetland?</b> Yes <u>X</u> No _____
Hydric Soil Present? Yes <u>X</u> No _____	
Wetland Hydrology Present? Yes <u>X</u> No _____	

Remarks: recent rainfall in mid-late May above average. Wetland swale along topographic low point. \*Climactic conditions abnormal, rainfall totals well-above average for the 2018-2019 winter, and rain events occurred late in season.

**VEGETATION – Use scientific names of plants.**

<u>Tree Stratum</u> (Plot size: _____ )	Absolute % Cover	Dominant Species?	Indicator Status	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>0</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0%</u> (A/B)
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
<u>0</u> =Total Cover				<b>Prevalence Index Worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x1 = <u>0</u> FACW species <u>15</u> x2 = <u>30</u> FAC species <u>10</u> x3 = <u>30</u> FACU species <u>15</u> x4 = <u>60</u> UPL species <u>0</u> x5 = <u>0</u> Column Totals: <u>40</u> (A) <u>120</u> (B) Prevalence Index = B/A = <u>3.0</u>
<u>Sapling/Shrub Stratum</u> (Plot size: _____ )	_____	_____	_____	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>0</u> =Total Cover				
<u>Herb Stratum</u> (Plot size: <u>1 meter<sup>2</sup></u> )	_____	_____	_____	<b>Hydrophytic Vegetation Indicators:</b> _____ Dominance Test is >50% <u>X</u> Prevalence Index is ≤3.0 <sup>1</sup> _____ Morphological Adaptation <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
1. <u>Cyperus eragrostis</u>	<u>5</u>	<u>NO</u>	<u>FACW</u>	
2. <u>Juncus balticus subsp. Ater</u>	<u>10</u>	<u>NO</u>	<u>FACW</u>	
3. <u>Cynodon dactylon</u>	<u>15</u>	<u>NO</u>	<u>FACU</u>	
4. <u>Plantago lanceolata</u>	<u>T</u>	<u>NO</u>	<u>FAC</u>	
5. <u>Festuca perennis</u>	<u>5</u>	<u>NO</u>	<u>FAC</u>	
6. <u>Hordeum murinum</u>	<u>T</u>	<u>NO</u>	<u>FAC</u>	
7. <u>Rubus armeniacus</u>	<u>5</u>	<u>NO</u>	<u>FAC</u>	
8. <u>Bromus hordeaceus</u>	<u>T</u>	<u>NO</u>	<u>FACU</u>	
<u>40</u> =Total Cover				
<u>Woody Vine Stratum</u> (Plot size: _____ )	_____	_____	_____	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	<b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____
_____ =Total Cover				
% Bare Ground in Herb Stratum <u>60*</u>	% Cover of Biotic Crust _____			

Remarks: \*Mostly surface water with some mud. Vegetation throughout most of swale dominated by Cynodon and Juncus. Polypogon monspeliensis also present along swale fringes, along with Rumex pulcher. Several Q. wis growing within Rubus armeniacus thicket near south end of swale.



**WETLAND DETERMINATION DATA FORM – Arid West Region**

Project/Site: Schellhous Property City/County: Roseville/Placer Sampling Date: 05/17/19  
 Applicant/Owner: Alice Pennington State: CA Sampling Point: 16  
 Investigator(s): M. Shaffer Section, Township, Range: Section 9, Township 10 North, Range 6 East  
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope (%): 5  
 Subregion (LRR): Mediterranean California (LRR C) Lat: 38.72951101 Long: -121.3223951 Datum: NAD83  
 Soil Map Unit Name: 141 - Cometa-Fiddymont complex, 1 to 5% slopes NWI Classification: N/A  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_ No X\* (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes X No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes _____ No <u>X</u> Hydric Soil Present? Yes <u>X</u> No _____ Wetland Hydrology Present? Yes _____ No <u>X</u>	<b>Is the Sampled Area within a Wetland?</b> Yes _____ No <u>X</u>
Remarks: Paired upland DP with DP 15. *Climactic conditions abnormal, rainfall totals well-above average for the 2018-2019 winter, and rain events occurred late in season.	

**VEGETATION – Use scientific names of plants.**

	Absolute % Cover	Dominant Species?	Indicator Status	
<b>Tree Stratum</b> (Plot size: _____ )				
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50%</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
	<u>0</u>	=Total Cover		
<b>Sapling/Shrub Stratum</b> (Plot size: _____ )				
1. _____	_____	_____	_____	<b>Prevalence Index Worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x1 = <u>0</u> FACW species <u>0</u> x2 = <u>0</u> FAC species <u>50</u> x3 = <u>150</u> FACU species <u>10</u> x4 = <u>40</u> UPL species <u>30</u> x5 = <u>150</u> Column Totals: <u>90</u> (A) <u>340</u> (B) Prevalence Index = B/A = <u>3.8</u>
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
	<u>0</u>	=Total Cover		
<b>Herb Stratum</b> (Plot size: <u>1 meter<sup>2</sup></u> )				
1. <u>Festuca perennis</u>	<u>50</u>	<u>YES</u>	<u>FAC</u>	<b>Hydrophytic Vegetation Indicators:</b> _____ Dominance Test is >50% _____ Prevalence Index is ≤3.0 <sup>1</sup> _____ Morphological Adaptation <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2. <u>Elymus caput-medusae</u>	<u>20</u>	<u>YES</u>	<u>UPL</u>	
3. <u>Brodiaea elegans subsp. Elegans</u>	<u>5</u>	<u>NO</u>	<u>FACU</u>	
4. <u>Amsinckia menziesii</u>	<u>5</u>	<u>NO</u>	<u>UPL</u>	
5. <u>Trifolium hirtum</u>	<u>T</u>	<u>NO</u>	<u>UPL</u>	
6. <u>Holocarpha virgata subsp. Virgata</u>	<u>5</u>	<u>NO</u>	<u>UPL</u>	
7. <u>Erodium botrys</u>	<u>T</u>	<u>NO</u>	<u>FACU</u>	
8. <u>Lactuca serriola</u>	<u>5</u>	<u>NO</u>	<u>FACU</u>	
	<u>90</u>	=Total Cover		
<b>Woody Vine Stratum</b> (Plot size: _____ )				
1. _____	_____	_____	_____	<b>Hydrophytic Vegetation Present?</b> Yes _____ No <u>X</u>
2. _____	_____	_____	_____	
	_____	=Total Cover		
% Bare Ground in Herb Stratum <u>10*</u>		% Cover of Biotic Crust _____		

Remarks: \*thatch cover. Also trace amounts of Bro dia, Bro hor, Bri min.

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-5	10YR 2/1	95	7.5YR 3/4	5	C	M, Pl	Loam	med smoothness, no ribbon
5-8	7.5YR 2.5/3	95	10YR 2/1	5	C	M	Silt loam	soft, no ribbon

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

<b>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</b>		<b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b>	
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)	<sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Reduced Vertic (F18)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Red Parent Material (TF2)	
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Other (Explain in Remarks)	
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input checked="" type="checkbox"/> Redox Dark Surface (F6)		
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)		
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)		
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Vernal Pools (F9)		
<input type="checkbox"/> Sandy Gleyed Matrix (S4)			

<b>Restrictive Layer (if present):</b>		<b>Hydric Soil Present?</b>	
Type: <u>bedrock</u>		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Depth (inches): <u>8</u>			
Remarks: Prominent redox			

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b>		
<u>Primary Indicators (minimum of one required; check all that apply)</u>		<u>Secondary Indicators (2 or more required)</u>
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Water Marks (B1) (Riverine)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)	<input type="checkbox"/> Sediment Deposits (B2) (Riverine)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Drift Deposits (B3) (Riverine)
<input type="checkbox"/> Water Marks (B1) (Nonriverine)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> FAC-Neutral Test (D5)
<b>Field Observations:</b>		<b>Wetland Hydrology Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____	
Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____	
Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____ (includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: No hydrology		

**WETLAND DETERMINATION DATA FORM – Arid West Region**

Project/Site: Schellhous Property City/County: Roseville/Placer Sampling Date: 05/17/19  
 Applicant/Owner: Alice Pennington State: CA Sampling Point: 17  
 Investigator(s): M. Shaffer Section, Township, Range: Section 9, Township 10 North, Range 6 East  
 Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Concave Slope (%): 1%  
 Subregion (LRR): Mediterranean California (LRR C) Lat: 38.73047805 Long: -121.3235635 Datum: NAD 83  
 Soil Map Unit Name: 141 - Cometa-Fiddymont complex, 1 to 5% slopes NWI Classification: N/A  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_ No X\* (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes X No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <u>X</u> No _____ Hydric Soil Present? Yes <u>X</u> No _____ Wetland Hydrology Present? Yes <u>X</u> No _____	<b>Is the Sampled Area within a Wetland?</b> Yes <u>X</u> No _____
Remarks: Deeper, more mesic portions of mesic band of predominantly Festuca perennis and Hordeum marinum. *Climactic conditions abnormal, rainfall totals well-above average for the 2018-2019 winter, and rain events occurred late in season.	

**VEGETATION – Use scientific names of plants.**

	Absolute % Cover	Dominant Species?	Indicator Status	
<b>Tree Stratum</b> (Plot size: _____)				
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)  Total Number of Dominant Species Across All Strata: <u>1</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
	<u>0</u>	=Total Cover		
<b>Sapling/Shrub Stratum</b> (Plot size: _____)				
1. _____	_____	_____	_____	<b>Prevalence Index Worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species <u>17</u> x1 = <u>17</u> FACW species <u>0</u> x2 = <u>0</u> FAC species <u>53</u> x3 = <u>159</u> FACU species <u>0</u> x4 = <u>0</u> UPL species <u>0</u> x5 = <u>0</u> Column Totals: <u>70</u> (A) <u>176</u> (B) Prevalence Index = B/A = <u>2.5</u>
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
	<u>0</u>	=Total Cover		
<b>Herb Stratum</b> (Plot size: <u>1 meter<sup>2</sup></u> )				
1. <u>Eryngium castrense</u>	<u>15</u>	<u>NO</u>	<u>OBL</u>	<b>Hydrophytic Vegetation Indicators:</b> <u>X</u> Dominance Test is >50% <u>X</u> Prevalence Index is ≤3.0 <sup>1</sup> _____ Morphological Adaptation <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2. <u>Ranunculus bonariensis var. trisepalus</u>	<u>2</u>	<u>NO</u>	<u>OBL</u>	
3. <u>Hordeum marinum subsp. Gussoneanum</u>	<u>3</u>	<u>NO</u>	<u>FAC</u>	
4. <u>Festuca perennis</u>	<u>50</u>	<u>YES</u>	<u>FAC</u>	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
	<u>70</u>	=Total Cover		
<b>Woody Vine Stratum</b> (Plot size: _____)				
1. _____	_____	_____	_____	<b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____
2. _____	_____	_____	_____	
	_____	=Total Cover		
% Bare Ground in Herb Stratum <u>30*</u>	% Cover of Biotic Crust <u>0</u>			

Remarks: \*consists of water-stained leaves and thatch. Less deep portions of mesic band don't have Eryngium castrense or Ranunculus bonariensis var. trisepalus, and also have Brodiaea elegans subsp. Elegans, Elymus caput-medusae, Holocarpha virgata, Leontodon saxatilis subsp. saxatilis, Geranium dissectum, and Triteleia hyacinthina.



**WETLAND DETERMINATION DATA FORM – Arid West Region**

Project/Site: Schellhous Property City/County: Roseville/Placer Sampling Date: 05/17/19  
 Applicant/Owner: Alice Pennington State: CA Sampling Point: 18  
 Investigator(s): M. Shaffer Section, Township, Range: Section 9, Township 10 North, Range 6 East  
 Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Concave Slope (%): 1%  
 Subregion (LRR): Mediterranean California (LRR C) Lat: 38.73061944 Long: -121.3236576 Datum: NAD 83  
 Soil Map Unit Name: 141 - Cometa-Fiddymont complex, 1 to 5% slopes NWI Classification: N/A  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_ No X\* (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes X No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <u>X</u> No _____ Hydric Soil Present? Yes <u>X</u> No _____ Wetland Hydrology Present? Yes _____ No <u>X</u>	<b>Is the Sampled Area within a Wetland?</b> Yes _____ No <u>X</u>
Remarks: Mesic area (less mesic than DP17) within large mesic band. Has hydric soils but vegetation is very marginal and does not satisfy hydrology. *Climactic conditions abnormal, rainfall totals well-above average for the 2018-2019 winter, and rain events occurred late in season.	

**VEGETATION – Use scientific names of plants.**

	Absolute % Cover	Dominant Species?	Indicator Status	
<b>Tree Stratum</b> (Plot size: _____)				
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)  Total Number of Dominant Species Across All Strata: <u>1</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
	<u>0</u>	=Total Cover		
<b>Sapling/Shrub Stratum</b> (Plot size: _____)				
1. _____	_____	_____	_____	<b>Prevalence Index Worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x1 = <u>0</u> FACW species <u>0</u> x2 = <u>0</u> FAC species <u>75</u> x3 = <u>225</u> FACU species <u>10</u> x4 = <u>40</u> UPL species <u>15</u> x5 = <u>75</u> Column Totals: <u>100</u> (A) <u>340</u> (B) Prevalence Index = B/A = <u>3.4</u>
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
	<u>0</u>	=Total Cover		
<b>Herb Stratum</b> (Plot size: <u>1 meter<sup>2</sup></u> )				
1. <u>Festuca perennis</u>	<u>70</u>	<u>YES</u>	<u>FAC</u>	<b>Hydrophytic Vegetation Indicators:</b> <u>X</u> Dominance Test is >50% _____ Prevalence Index is ≤3.0 <sup>1</sup> _____ Morphological Adaptation <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2. <u>Hordeum marinum subsp. Gussoneanum</u>	<u>5</u>	<u>NO</u>	<u>FAC</u>	
3. <u>Bromus hordeaceus</u>	<u>2</u>	<u>NO</u>	<u>FACU</u>	
4. <u>Holocarpha virgata subsp. Virgata</u>	<u>12</u>	<u>NO</u>	<u>UPL</u>	
5. <u>Leontodon saxatilis subsp. Saxatilis</u>	<u>3</u>	<u>NO</u>	<u>FACU</u>	
6. <u>Brodiaea elegans subsp. Elegans</u>	<u>5</u>	<u>NO</u>	<u>FACU</u>	
7. <u>Elymus caput-medusae</u>	<u>3</u>	<u>NO</u>	<u>UPL</u>	
8. _____	_____	_____	_____	
	<u>100</u>	=Total Cover		
<b>Woody Vine Stratum</b> (Plot size: _____)				
1. _____	_____	_____	_____	<b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____
2. _____	_____	_____	_____	
	_____	=Total Cover		
% Bare Ground in Herb Stratum <u>0</u>		% Cover of Biotic Crust _____		

Remarks: Dominated by Festuca perennis but most other species are FACU->UPL; only passes hydric vegetation by dominance test.



**WETLAND DETERMINATION DATA FORM – Arid West Region**

Project/Site: Schellhous Property City/County: Roseville/Placer Sampling Date: 05/17/19  
 Applicant/Owner: Alice Pennington State: CA Sampling Point: 19  
 Investigator(s): M. Shaffer Section, Township, Range: Section 9, Township 10 North, Range 6 East  
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope (%): 4  
 Subregion (LRR): Mediterranean California (LRR C) Lat: 38.7306922 Long: -121.3235536 Datum: NAD 83  
 Soil Map Unit Name: 141 - Cometa-Fiddymont complex, 1 to 5% slopes NWI Classification: N/A  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_ No X\* (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes X No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes _____ No <u>X</u>	<b>Is the Sampled Area within a Wetland?</b> Yes _____ No <u>X</u>
Hydric Soil Present? Yes <u>X</u> No _____	
Wetland Hydrology Present? Yes _____ No <u>X</u>	

Remarks: Paired upland point with DP 17 & 18. \*Climactic conditions abnormal, rainfall totals well-above average for the 2018-2019 winter, and rain events occurred late in season.

**VEGETATION – Use scientific names of plants.**

<u>Tree Stratum</u> (Plot size: _____ )	Absolute % Cover	Dominant Species?	Indicator Status	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A)  Total Number of Dominant Species Across All Strata: <u>2</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0%</u> (A/B)
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
	<u>0</u>	=Total Cover		
<u>Sapling/Shrub Stratum</u> (Plot size: _____ )				<b>Prevalence Index Worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x1 = <u>0</u> FACW species <u>0</u> x2 = <u>0</u> FAC species <u>0</u> x3 = <u>0</u> FACU species <u>53</u> x4 = <u>212</u> UPL species <u>47</u> x5 = <u>235</u> Column Totals: <u>100</u> (A) <u>447</u> (B) Prevalence Index = B/A = <u>4.5</u>
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
	<u>0</u>	=Total Cover		
<u>Herb Stratum</u> (Plot size: <u>1 meter<sup>2</sup></u> )				<b>Hydrophytic Vegetation Indicators:</b> _____ Dominance Test is >50% _____ Prevalence Index is ≤3.0 <sup>1</sup> _____ Morphological Adaptation <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
1. <u>Bromus hordeaceus</u>	<u>50</u>	<u>YES</u>	<u>FACU</u>	
2. <u>Bromus diandrus</u>	<u>30</u>	<u>YES</u>	<u>UPL</u>	
3. <u>Vicia villosa</u>	<u>5</u>	<u>NO</u>	<u>UPL</u>	
4. <u>Holocarpha virgata subsp. Virgata</u>	<u>5</u>	<u>NO</u>	<u>UPL</u>	
5. <u>Amsinckia menziesii</u>	<u>5</u>	<u>NO</u>	<u>UPL</u>	
6. <u>Lactuca serriola</u>	<u>3</u>	<u>NO</u>	<u>FACW</u>	
7. <u>Elymus caput-medusae</u>	<u>1</u>	<u>NO</u>	<u>UPL</u>	
8. <u>Trifolium hirtum</u>	<u>1</u>	<u>NO</u>	<u>UPL</u>	
	<u>100</u>	=Total Cover		
<u>Woody Vine Stratum</u> (Plot size: _____ )				<b>Hydrophytic Vegetation Present?</b> Yes _____ No <u>X</u>
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
	_____	=Total Cover		
% Bare Ground in Herb Stratum <u>0</u>	% Cover of Biotic Crust <u>0</u>			

Remarks: Trace Brodiaea elegans subsp. Elegans, Geranium dissectum, Fess per, and Hor mur.



**WETLAND DETERMINATION DATA FORM – Arid West Region**

Project/Site: Schellhous Property City/County: Roseville/Placer Sampling Date: 05/17/19  
 Applicant/Owner: Alice Pennington State: CA Sampling Point: 20  
 Investigator(s): M. Shaffer Section, Township, Range: Section 9, Township 10 North, Range 6 East  
 Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Concave Slope (%): <1%  
 Subregion (LRR): Mediterranean California (LRR C) Lat: 38.73170543 Long: -121.3242802 Datum: NAD83  
 Soil Map Unit Name: 141 - Cometa-Fiddymont complex, 1 to 5% slopes NWI Classification: N/A  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_ No X\* (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes X No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <u>X</u> No _____ Hydric Soil Present? Yes _____ No <u>X</u> Wetland Hydrology Present? Yes _____ No <u>X</u>	<b>Is the Sampled Area within a Wetland?</b> Yes _____ No <u>X</u>
Remarks: within mesic low area, dominated by <i>Festuca perennis</i> with <i>Phalaris paradoxa</i> . *Climactic conditions abnormal, rainfall totals well-above average for the 2018-2019 winter, and rain events occurred late in season.	

**VEGETATION – Use scientific names of plants.**

	Absolute % Cover	Dominant Species?	Indicator Status	
<b>Tree Stratum</b> (Plot size: _____ )				
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
	<u>0</u>	=Total Cover		
<b>Sapling/Shrub Stratum</b> (Plot size: _____ )				
1. _____	_____	_____	_____	<b>Prevalence Index Worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x1 = <u>0</u> FACW species <u>0</u> x2 = <u>0</u> FAC species <u>97</u> x3 = <u>291</u> FACU species <u>2</u> x4 = <u>8</u> UPL species <u>1</u> x5 = <u>5</u> Column Totals: <u>100</u> (A) <u>304</u> (B) Prevalence Index = B/A = <u>3.0</u>
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
	<u>0</u>	=Total Cover		
<b>Herb Stratum</b> (Plot size: <u>1 meter<sup>2</sup></u> )				
1. <i>Festuca perennis</i>	80	YES	FAC	<b>Hydrophytic Vegetation Indicators:</b> <input checked="" type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Morphological Adaptation <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2. <i>Phalaris paradoxa</i>	15	NO	FAC	
3. <i>Leontodon saxatilis</i>	2	NO	FACU	
4. <i>Hordeum marinum</i> subsp. <i>Gussoneanum</i>	2	NO	FAC	
5. <i>Trifolium subterraneum</i>	1	NO	UPL	
6. <i>Holocarpha virgata</i> subsp. <i>Virgata</i>	T	NO	UPL	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
	<u>100</u>	=Total Cover		
<b>Woody Vine Stratum</b> (Plot size: _____ )				
1. _____	_____	_____	_____	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. _____	_____	_____	_____	
	_____	=Total Cover		
% Bare Ground in Herb Stratum <u>0</u>	% Cover of Biotic Crust <u>0</u>			<b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____

Remarks: Marginal hydric vegetation

**SOIL**

Sampling Point: DP 20

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-3	10YR 3/1	90	10YR 4/6	10	C	M	Silty clay loam	smooth, >1" ribbon
3-12	10YR 3/1	100					Silty clay loam	smooth, >1" ribbon

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

<b>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</b>		<b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b>	
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)	
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Reduced Vertic (F18)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Red Parent Material (TF2)	
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Other (Explain in Remarks)	
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input type="checkbox"/> Redox Dark Surface (F6)		
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)		
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)		
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Vernal Pools (F9)		
<input type="checkbox"/> Sandy Gleyed Matrix (S4)			

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<b>Restrictive Layer (if present):</b> Type: _____ Depth (inches): _____	<b>Hydric Soil Present?</b> Yes _____ No <u>X</u>
Remarks: Redox prominent but not >4"thick layer. Not hydric soil	

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b>		
<u>Primary Indicators (minimum of one required; check all that apply)</u>		<u>Secondary Indicators (2 or more required)</u>
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Water Marks (B1) (Riverine)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)	<input type="checkbox"/> Sediment Deposits (B2) (Riverine)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Drift Deposits (B3) (Riverine)
<input type="checkbox"/> Water Marks (B1) (Nonriverine)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> FAC-Neutral Test (D5)
<b>Field Observations:</b>		
Surface Water Present?    Yes _____ No <u>X</u>	Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes _____ No <u>X</u>
Water Table Present?      Yes _____ No <u>X</u>	Depth (inches): _____	
Saturation Present?        Yes _____ No <u>X</u>	Depth (inches): _____ (includes capillary fringe)	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: No hydrology signs other than topographic low point and obviously more mesic area than upland

**WETLAND DETERMINATION DATA FORM – Arid West Region**

Project/Site: Schellhous Property City/County: Roseville/Placer Sampling Date: 05/17/19  
 Applicant/Owner: Alice Pennington State: CA Sampling Point: 21  
 Investigator(s): M. Shaffer Section, Township, Range: Section 9, Township 10 North, Range 6 East  
 Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Concave Slope (%): <1%  
 Subregion (LRR): Mediterranean California (LRR C) Lat: 38.73242033 Long: -121.3245388 Datum: NAD 83  
 Soil Map Unit Name: 141 - Cometa-Fiddymont complex, 1 to 5% slopes NWI Classification: N/A  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_ No X\* (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes X No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <u>X</u> No _____	<b>Is the Sampled Area within a Wetland?</b> Yes <u>X</u> No _____
Hydric Soil Present? Yes <u>X</u> No _____	
Wetland Hydrology Present? Yes <u>X</u> No _____	

Remarks: Wetter are within mesic band, less Festuca perennis present and Plagiobothrys stipitatus var. micranthus present. \*Climactic conditions abnormal, rainfall totals well-above average for the 2018-2019 winter, and rain events occurred late in season.

**VEGETATION – Use scientific names of plants.**

<u>Tree Stratum</u> (Plot size: _____ )	Absolute % Cover	Dominant Species?	Indicator Status	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>0</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0%</u> (A/B)
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
<u>0</u> =Total Cover				
<u>Sapling/Shrub Stratum</u> (Plot size: _____ )				<b>Prevalence Index Worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x1 = <u>0</u> FACW species <u>15</u> x2 = <u>30</u> FAC species <u>20</u> x3 = <u>60</u> FACU species <u>10</u> x4 = <u>40</u> UPL species <u>0</u> x5 = <u>0</u> Column Totals: <u>45</u> (A) <u>130</u> (B) Prevalence Index = B/A = <u>2.9</u>
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>0</u> =Total Cover				
<u>Herb Stratum</u> (Plot size: <u>1 meter<sup>2</sup></u> )				<b>Hydrophytic Vegetation Indicators:</b> _____ Dominance Test is >50% <u>X</u> Prevalence Index is ≤3.0 <sup>1</sup> _____ Morphological Adaptation <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
1. <u>Festuca perennis</u>	<u>15</u>	<u>NO</u>	<u>FAC</u>	
2. <u>Leontodon saxatilis</u>	<u>10</u>	<u>NO</u>	<u>FACU</u>	
3. <u>Hordeum marinum subsp. Gussoneanum</u>	<u>5</u>	<u>NO</u>	<u>FAC</u>	
4. <u>Holocarpha virgata subsp. Virgata</u>	<u>T</u>	<u>NO</u>	<u>UPL</u>	
5. <u>Plagiobothrys stipitatus var. stipitatus</u>	<u>15</u>	<u>NO</u>	<u>FACW</u>	
6. <u>Lasthenia glaberrima</u>	<u>T</u>	<u>NO</u>	<u>OBL</u>	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
<u>45</u> =Total Cover				
<u>Woody Vine Stratum</u> (Plot size: _____ )				<b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
_____ =Total Cover				
% Bare Ground in Herb Stratum <u>55*</u>		% Cover of Biotic Crust _____		

Remarks: Possible old dead Lasthenia glaberrima. Rumex crispus also present. \*Consists of algal matting and thatch



**WETLAND DETERMINATION DATA FORM – Arid West Region**

Project/Site: Schellhous Property City/County: Roseville/Placer Sampling Date: 05/17/19  
 Applicant/Owner: Alice Pennington State: CA Sampling Point: 22  
 Investigator(s): M. Shaffer Section, Township, Range: Section 9, Township 10 North, Range 6 East  
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 2%  
 Subregion (LRR): Mediterranean California (LRR C) Lat: 38.73231079 Long: -121.3253804 Datum: NAD83  
 Soil Map Unit Name: 141 - Cometa-Fiddymont complex, 1 to 5% slopes NWI Classification: N/A  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_ No X\* (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes X No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes _____ No <u>X</u> Hydric Soil Present? Yes _____ No <u>X</u> Wetland Hydrology Present? Yes <u>X</u> No _____	<b>Is the Sampled Area within a Wetland?</b> Yes _____ No <u>X</u>
Remarks: Point in shallow ditch. Ditch consists of mostly upland vegetation. *Climactic conditions abnormal, rainfall totals well-above average for the 2018-2019 winter, and rain events occurred late in season.	

**VEGETATION – Use scientific names of plants.**

	Absolute % Cover	Dominant Species?	Indicator Status	
<u>Tree Stratum</u> (Plot size: _____ )				<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0%</u> (A/B)
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
	<u>0</u>	=Total Cover		<b>Prevalence Index Worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x1 = <u>0</u> FACW species <u>0</u> x2 = <u>0</u> FAC species <u>1</u> x3 = <u>3</u> FACU species <u>23</u> x4 = <u>92</u> UPL species <u>36</u> x5 = <u>180</u> Column Totals: <u>60</u> (A) <u>275</u> (B) Prevalence Index = B/A = <u>4.6</u>
<u>Sapling/Shrub Stratum</u> (Plot size: _____ )				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
	<u>0</u>	=Total Cover		
<u>Herb Stratum</u> (Plot size: <u>1 meter<sup>2</sup></u> )				<b>Hydrophytic Vegetation Indicators:</b> _____ Dominance Test is >50% _____ Prevalence Index is ≤3.0 <sup>1</sup> _____ Morphological Adaptation <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
1. <u><i>Elymus caput-medusae</i></u>	<u>35</u>	<u>YES</u>	<u>UPL</u>	
2. <u><i>Bromus hordeaceus</i></u>	<u>20</u>	<u>YES</u>	<u>FACU</u>	
3. <u><i>Festuca perennis</i></u>	<u>1</u>	<u>NO</u>	<u>FACU</u>	
4. <u><i>Leontodon saxatilis subsp. Saxatilis</i></u>	<u>3</u>	<u>NO</u>	<u>FACU</u>	
5. <u><i>Trifolium dubium</i></u>	<u>1</u>	<u>NO</u>	<u>UPL</u>	
6. <u><i>Holocarpha virgata subsp. Virgata</i></u>	<u>T</u>	<u>NO</u>	<u>UPL</u>	
7. <u><i>Rumex pulcher</i></u>	<u>T</u>	<u>NO</u>	<u>FAC</u>	
8. <u><i>Briza minor</i></u>	<u>T</u>	<u>NO</u>	<u>FAC</u>	
	<u>60</u>	=Total Cover		
<u>Woody Vine Stratum</u> (Plot size: _____ )				<b>Hydrophytic Vegetation Present?</b> Yes _____ No <u>X</u>
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
	_____	=Total Cover		
% Bare Ground in Herb Stratum <u>10*</u>		% Cover of Biotic Crust <u>30</u>		

Remarks: \*Mostly consists of thatch. Old dried up Plantago coronopus also present.

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-3	10YR 4/3	98	10YR 3/1	1	C	M	Silt Loam	smooth no ribbons
			2.5YR 4/2	1	C	M		
			5YR 4/6	T	C	M, PL		

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils <sup>3</sup> :	
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)	
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Reduced Vertic (F18)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Red Parent Material (TF2)	
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Other (Explain in Remarks)	
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input type="checkbox"/> Redox Dark Surface (F6)		
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)		
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)		
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Vernal Pools (F9)		
<input type="checkbox"/> Sandy Gleyed Matrix (S4)			

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<b>Restrictive Layer (if present):</b>			
Type: <u>Bedrock</u>			
Depth (inches): <u>3</u>			
		<b>Hydric Soil Present?</b>	Yes _____ No <u>X</u>
Remarks: Hydric soils not satisfied			

**HYDROLOGY**

Wetland Hydrology Indicators:		Secondary Indicators (2 or more required)	
Primary Indicators (minimum of one required; check all that apply)			
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Water Marks (B1) (Riverine)	
<input type="checkbox"/> High Water Table (A2)	<input checked="" type="checkbox"/> Biotic Crust (B12)	<input type="checkbox"/> Sediment Deposits (B2) (Riverine)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Drift Deposits (B3) (Riverine)	
<input type="checkbox"/> Water Marks (B1) (Nonriverine)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input checked="" type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> FAC-Neutral Test (D5)	

<b>Field Observations:</b>			
Surface Water Present?	Yes _____ No <u>X</u>	Depth (inches):	_____
Water Table Present?	Yes _____ No <u>X</u>	Depth (inches):	_____
Saturation Present?	Yes _____ No <u>X</u>	Depth (inches):	_____
(includes capillary fringe)			
		<b>Wetland Hydrology Present?</b>	Yes <u>X</u> No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: Wetland hydrology present

**WETLAND DETERMINATION DATA FORM – Arid West Region**

Project/Site: Schellhous Property City/County: Roseville/Placer Sampling Date: 05/17/19  
 Applicant/Owner: Alice Pennington State: CA Sampling Point: 23  
 Investigator(s): M. Shaffer Section, Township, Range: Section 9, Township 10 North, Range 6 East  
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): <1%  
 Subregion (LRR): Mediterranean California (LRR C) Lat: 38.73290215 Long: -121.3227907 Datum: NAD83  
 Soil Map Unit Name: 141 - Cometa-Fiddymont complex, 1 to 5% slopes NWI Classification: N/A  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_ No X\* (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes X No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <u>X</u> No _____ Hydric Soil Present? Yes <u>X</u> No _____ Wetland Hydrology Present? Yes <u>X</u> No _____	<b>Is the Sampled Area within a Wetland?</b> Yes <u>X</u> No _____
Remarks: Vernal pool, still inundated. *Climactic conditions abnormal, rainfall totals well-above average for the 2018-2019 winter, and rain events occurred late in season.	

**VEGETATION – Use scientific names of plants.**

	Absolute % Cover	Dominant Species?	Indicator Status	
<b>Tree Stratum</b> (Plot size: _____ )				
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)  Total Number of Dominant Species Across All Strata: <u>2</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
<u>0</u> =Total Cover				
<b>Sapling/Shrub Stratum</b> (Plot size: _____ )				
1. _____	_____	_____	_____	<b>Prevalence Index Worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species <u>40</u> x1 = <u>40</u> FACW species <u>10</u> x2 = <u>20</u> FAC species <u>10</u> x3 = <u>30</u> FACU species <u>0</u> x4 = <u>0</u> UPL species <u>0</u> x5 = <u>0</u> Column Totals: <u>60</u> (A) <u>90</u> (B) Prevalence Index = B/A = <u>1.5</u>
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>0</u> =Total Cover				
<b>Herb Stratum</b> (Plot size: <u>1 meter<sup>2</sup></u> )				
1. <u><i>Eryngium castrense</i></u>	<u>20</u>	<u>YES</u>	<u>OBL</u>	<b>Hydrophytic Vegetation Indicators:</b> <u>X</u> Dominance Test is >50% <u>X</u> Prevalence Index is ≤3.0 <sup>1</sup>  _____ Morphological Adaptation <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2. <u><i>Polypogon monspeliensis</i></u>	<u>10</u>	<u>NO</u>	<u>FACW</u>	
3. <u><i>Festuca perennis</i></u>	<u>10</u>	<u>NO</u>	<u>FACW</u>	
4. <u><i>Eleocharis macrostachya</i></u>	<u>20</u>	<u>YES</u>	<u>OBL</u>	
5. <u><i>Leontodon saxatilis subsp. Saxatilis</i></u>	<u>T</u>	<u>NO</u>	<u>FACU</u>	
6. <u><i>Hordeum marinum subsp. Gussoneanum</i></u>	<u>T</u>	<u>NO</u>	<u>FAC</u>	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
<u>60</u> =Total Cover				
<b>Woody Vine Stratum</b> (Plot size: _____ )				
1. _____	_____	_____	_____	<b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____
2. _____	_____	_____	_____	
_____ =Total Cover				
% Bare Ground in Herb Stratum <u>40*</u> % Cover of Biotic Crust _____				

Remarks: \*Ponded water. Shallow portions dominated by Festuca perennis and Rumex crispus



**WETLAND DETERMINATION DATA FORM – Arid West Region**

Project/Site: Schellhous Property City/County: Roseville/Placer Sampling Date: 05/17/19  
 Applicant/Owner: Alice Pennington State: CA Sampling Point: 24  
 Investigator(s): M. Shaffer Section, Township, Range: Section 9, Township 10 North, Range 6 East  
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope (%): <1%  
 Subregion (LRR): Mediterranean California (LRR C) Lat: 38.73284234 Long: -121.3227925 Datum: NAD83  
 Soil Map Unit Name: 141 - Cometa-Fiddymont complex, 1 to 5% slopes NWI Classification: N/A  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_ No X\* (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes X No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes _____ No <u>X</u> Hydric Soil Present? Yes <u>X</u> No _____ Wetland Hydrology Present? Yes _____ No <u>X</u>	<b>Is the Sampled Area within a Wetland?</b> Yes _____ No <u>X</u>
Remarks: Upland paired point with DP23. *Climactic conditions abnormal, rainfall totals well-above average for the 2018-2019 winter, and rain events occurred late in season.	

**VEGETATION – Use scientific names of plants.**

	Absolute % Cover	Dominant Species?	Indicator Status	
<b>Tree Stratum</b> (Plot size: _____ )				
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50%</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
	<u>0</u>	=Total Cover		
<b>Sapling/Shrub Stratum</b> (Plot size: _____ )				
1. _____	_____	_____	_____	<b>Prevalence Index Worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x1 = <u>0</u> FACW species <u>0</u> x2 = <u>0</u> FAC species <u>40</u> x3 = <u>120</u> FACU species <u>20</u> x4 = <u>80</u> UPL species <u>40</u> x5 = <u>200</u> Column Totals: <u>100</u> (A) <u>400</u> (B) Prevalence Index = B/A = <u>4.0</u>
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
	<u>0</u>	=Total Cover		
<b>Herb Stratum</b> (Plot size: <u>1 meter<sup>2</sup></u> )				
1. <u>Festuca perennis</u>	<u>40</u>	<u>YES</u>	<u>FAC</u>	<b>Hydrophytic Vegetation Indicators:</b> _____ Dominance Test is >50% _____ Prevalence Index is ≤3.0 <sup>1</sup> _____ Morphological Adaptation <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2. <u>Elymus caput-medusae</u>	<u>30</u>	<u>YES</u>	<u>UPL</u>	
3. <u>Brodiaea elegans</u>	<u>5</u>	<u>NO</u>	<u>FACU</u>	
4. <u>Vicia villosa subsp. Villosa</u>	<u>5</u>	<u>NO</u>	<u>UPL</u>	
5. <u>Trifolium hirtum</u>	<u>T</u>	<u>NO</u>	<u>UPL</u>	
6. <u>Holocarpha virgata subsp. Virgata</u>	<u>5</u>	<u>NO</u>	<u>UPL</u>	
7. <u>Bromus hordeaceus</u>	<u>15</u>	<u>NO</u>	<u>FACU</u>	
8. _____	_____	_____	_____	
	<u>100</u>	=Total Cover		
<b>Woody Vine Stratum</b> (Plot size: _____ )				
1. _____	_____	_____	_____	<b>Hydrophytic Vegetation Present?</b> Yes _____ No <u>X</u>
2. _____	_____	_____	_____	
	_____	=Total Cover		
% Bare Ground in Herb Stratum <u>0</u>	% Cover of Biotic Crust <u>0</u>			

Remarks: No hydric vegetation

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-6	10YR 3/2	98	7.5YR 3/4	2	C	M	Loam	Mod smooth, no ribbon
			7.5YR 2/1	T	C	M		

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

<b>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</b>		<b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b>	
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)	
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Reduced Vertic (F18)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Red Parent Material (TF2)	
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Other (Explain in Remarks)	
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input checked="" type="checkbox"/> Redox Dark Surface (F6)		
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)		
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)		
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Vernal Pools (F9)		
<input type="checkbox"/> Sandy Gleyed Matrix (S4)			

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<b>Restrictive Layer (if present):</b> Type: _____ Depth (inches): _____	<b>Hydric Soil Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: Redox distinct	

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b>		
<u>Primary Indicators (minimum of one required; check all that apply)</u>		<u>Secondary Indicators (2 or more required)</u>
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Water Marks (B1) (Riverine)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)	<input type="checkbox"/> Sediment Deposits (B2) (Riverine)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Drift Deposits (B3) (Riverine)
<input type="checkbox"/> Water Marks (B1) (Nonriverine)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> FAC-Neutral Test (D5)
<b>Field Observations:</b>		
Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____	
Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____ (includes capillary fringe)	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: No hydrology

**WETLAND DETERMINATION DATA FORM – Arid West Region**

Project/Site: Schellhous Property City/County: Roseville/Placer Sampling Date: 05/17/19  
 Applicant/Owner: Alice Pennington State: CA Sampling Point: 25  
 Investigator(s): M. Shaffer Section, Township, Range: Section 9, Township 10 North, Range 6 East  
 Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Concave Slope (%): 2%  
 Subregion (LRR): Mediterranean California (LRR C) Lat: 38.73309295 Long: -121.3234094 Datum: NAD83  
 Soil Map Unit Name: 141 - Cometa-Fiddymont complex, 1 to 5% slopes NWI Classification: N/A  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_ No X\* (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes X No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <u>X</u> No _____ Hydric Soil Present? Yes <u>X</u> No _____ Wetland Hydrology Present? Yes <u>X</u> No _____	<b>Is the Sampled Area within a Wetland?</b> Yes <u>X</u> No _____
Remarks: Drainage swale with moderate Festuca perennis and some FACU/FACW vegetation. *Climactic conditions abnormal, rainfall totals well-above average for the 2018-2019 winter, and rain events occurred late in season.	

**VEGETATION – Use scientific names of plants.**

	Absolute % Cover	Dominant Species?	Indicator Status	
<b>Tree Stratum</b> (Plot size: _____)				
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)  Total Number of Dominant Species Across All Strata: <u>1</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
	<u>0</u>	=Total Cover		
<b>Sapling/Shrub Stratum</b> (Plot size: _____)				
1. _____	_____	_____	_____	<b>Prevalence Index Worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x1 = <u>0</u> FACW species <u>5</u> x2 = <u>10</u> FAC species <u>80</u> x3 = <u>240</u> FACU species <u>5</u> x4 = <u>20</u> UPL species <u>0</u> x5 = <u>0</u> Column Totals: <u>90</u> (A) <u>270</u> (B) Prevalence Index = B/A = <u>3.0</u>
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
	<u>0</u>	=Total Cover		
<b>Herb Stratum</b> (Plot size: <u>1 meter<sup>2</sup></u> )				
1. <u>Festuca perennis</u>	<u>80</u>	<u>YES</u>	<u>FAC</u>	<b>Hydrophytic Vegetation Indicators:</b> <u>X</u> Dominance Test is >50% <u>X</u> Prevalence Index is ≤3.0 <sup>1</sup>  _____ Morphological Adaptation <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2. <u>Bromus hordeaceus</u>	<u>T</u>	<u>NO</u>	<u>FACU</u>	
3. <u>Eryngium castrense</u>	<u>5</u>	<u>NO</u>	<u>FACW</u>	
4. <u>Leontodon saxatilis subsp. Saxatilis</u>	<u>5</u>	<u>NO</u>	<u>FACU</u>	
5. <u>Holocarpha virgata subsp. Virgata</u>	<u>T</u>	<u>NO</u>	<u>UPL</u>	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
	<u>90</u>	=Total Cover		
<b>Woody Vine Stratum</b> (Plot size: _____)				
1. _____	_____	_____	_____	<b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____
2. _____	_____	_____	_____	
	_____	=Total Cover		
% Bare Ground in Herb Stratum _____	% Cover of Biotic Crust _____		<u>10</u>	

Remarks: Marginal hydrologic vegetation (except for Eryngium castrense)



**WETLAND DETERMINATION DATA FORM – Arid West Region**

Project/Site: Schellhous Property City/County: Roseville/Placer Sampling Date: 05/17/19  
 Applicant/Owner: Alice Pennington State: CA Sampling Point: 26  
 Investigator(s): M. Shaffer Section, Township, Range: Section 9, Township 10 North, Range 6 East  
 Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Concave Slope (%): <2%  
 Subregion (LRR): Mediterranean California (LRR C) Lat: 38.73356735 Long: -121.3253677 Datum: NAD 83  
 Soil Map Unit Name: 141 - Cometa-Fiddymont complex, 1 to 5% slopes NWI Classification: N/A  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_ No X\* (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes X No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <u>X</u> No _____	<b>Is the Sampled Area within a Wetland?</b> Yes <u>X</u> No _____
Hydric Soil Present? Yes <u>X</u> No _____	
Wetland Hydrology Present? Yes <u>X</u> No _____	

Remarks: clear swale connecting intermittent drainage wit OHWM of Dry Creek. \*Climactic conditions abnormal, rainfall totals well-above average for the 2018-2019 winter, and rain events ocured late in season.

**VEGETATION – Use scientific names of plants.**

<u>Tree Stratum</u> (Plot size: _____ )	Absolute % Cover	Dominant Species?	Indicator Status	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50%</u> (A/B)
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
	<u>0</u>	=Total Cover		
<u>Sapling/Shrub Stratum</u> (Plot size: _____ )				<b>Prevalence Index Worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species <u>40</u> x1 = <u>40</u> FACW species <u>10</u> x2 = <u>20</u> FAC species <u>15</u> x3 = <u>45</u> FACU species <u>30</u> x4 = <u>120</u> UPL species <u>0</u> x5 = <u>0</u> Column Totals: <u>95</u> (A) <u>225</u> (B) Prevalence Index = B/A = <u>2.4</u>
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
	<u>0</u>	=Total Cover		
<u>Herb Stratum</u> (Plot size: <u>1 meter<sup>2</sup></u> )				<b>Hydrophytic Vegetation Indicators:</b> _____ Dominance Test is >50% <u>X</u> Prevalence Index is ≤3.0 <sup>1</sup> _____ Morphological Adaptation <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
1. <u><i>Eleocharis macrostachya</i></u>	<u>40</u>	<u>YES</u>	<u>OBL</u>	
2. <u><i>Festuca perennis</i></u>	<u>15</u>	<u>NO</u>	<u>FAC</u>	
3. <u><i>Rumex crispus</i></u>	<u>T</u>	<u>NO</u>	<u>FAC</u>	
4. <u><i>Xanthium strumarium</i></u>	<u>T</u>	<u>NO</u>	<u>FAC</u>	
5. <u><i>Cynodon dactylon</i></u>	<u>30</u>	<u>YES</u>	<u>FACU</u>	
6. <u><i>Phyla nodiflora</i></u>	<u>10</u>	<u>NO</u>	<u>FACW</u>	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
	<u>95</u>	=Total Cover		
<u>Woody Vine Stratum</u> (Plot size: _____ )				<b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
	_____	=Total Cover		
% Bare Ground in Herb Stratum <u>5*</u>		% Cover of Biotic Crust _____		

Remarks: \*Covered in leaf litter



# Attachment B

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## **Aquatic Resources Delineation Map**

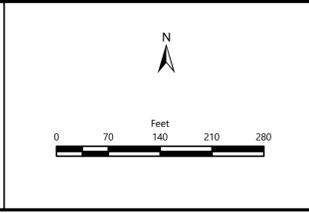




AQUATIC RESOURCE FEATURES		
<b>WETLANDS</b>		
<b>Seasonal Wetland</b>		
Feature ID	Acres	
SW-1	0.010	
SW-2	0.000	
SW-3	0.005	
SW-4	0.003	
<b>Total:</b>	<b>0.018</b>	
<b>Seasonal Wetland Swale</b>		
Feature ID	Acres	
SWS-1	0.231	
SWS-2	0.002	
SWS-3	0.063	
SWS-4	0.062	
SWS-5	0.129	
SWS-6	0.004	
SWS-7	0.010	
SWS-8	0.076	
<b>Total:</b>	<b>0.577</b>	
<b>Vernal Pool</b>		
Feature ID	Acres	
VP-1	0.015	
VP-2	0.003	
VP-3	0.086	
VP-4	0.017	
VP-5	0.023	
VP-6	0.004	
VP-7	0.081	
VP-8	0.002	
VP-9	0.013	
VP-10	0.003	
VP-11	0.073	
VP-12	0.064	
VP-13	0.101	
VP-14	0.001	
VP-15	0.001	
VP-16	0.073	
VP-17	0.002	
VP-18	0.178	
<b>Total:</b>	<b>0.740</b>	
<b>Total Wetlands:</b>	<b>1.335</b>	
<b>OTHER WATERS</b>		
<b>Dry Creek</b>		
Feature ID	Acres	Linear Feet
Dry Creek-1	1.906	910
Dry Creek-2	4.064	1,719
<b>Total:</b>	<b>5.970</b>	<b>2,629</b>
<b>Ephemeral Drainage</b>		
Feature ID	Acres	Linear Feet
ED-1	0.007	116
ED-2	0.012	138
ED-3	0.011	154
ED-4	0.018	266
ED-5	0.066	254
ED-6	0.003	51
<b>Total:</b>	<b>0.117</b>	<b>979</b>
<b>Intermittent Stream</b>		
Feature ID	Acres	Linear Feet
IS-1	0.799	1,073
IS-2	0.489	333
IS-3	0.244	1,060
IS-4	0.019	205
IS-5	0.077	280
IS-6	0.357	1,222
IS-7	0.003	40
<b>Total:</b>	<b>1.988</b>	<b>4,213</b>
<b>Perennial Stream</b>		
Feature ID	Acres	Linear Feet
PS-1	5.785	3,540
<b>Total:</b>	<b>5.785</b>	<b>3,540</b>
<b>Total Other Waters:</b>	<b>13.860</b>	<b>11,361</b>
<b>Aquatic Resources Total:</b>	<b>15.195 acres</b>	

**Notes:**  
**Scale:** 1 inch = 70 feet  
**Coordinate System:** NAD 1983 State Plane California II  
**Datum:** NAD83  
**Projection:** Lambert Conformal Conic  
**Vertical Data:** NAVD88  
**Topographic Contours:** USGS NED 1/3 arc-second Contours for Sacramento, California. 1 October 2018  
**Map Prepared by:** N. Bente  
**Delineation Performed by:** B. Peterson and M. Shaffer

**Aerial Base:** Sac Regional GIS Coop  
**Aerial Base Flown:** 26 March 2018  
**Date Map Prepared:** 2 August 2019  
**Definitions:**  
 ac = acre  
 NAD = North American Datum  
 NAVD = North American Vertical Datum



**Prepared For:**  
**Schellhus Property**  
 c/o Alice Pennington  
 2360 PFE Rd.  
 Roseville, California 95747

- Study Area Boundary (141 acres)
- Reference Point
- Data Point
- Ground Surface Elevation, 10 foot contour

- Aquatic Resources (15.195 acres)**
- Seasonal Wetland (0.018 acre)
  - Seasonal Wetland Swale (0.577 acre)
  - Vernal Pool (0.740 acre)

- Other Waters (13.860 acres)**
- Dry Creek (5.970 acre)
  - Ephemeral Drainage (0.117 acre)
  - Intermittent Stream (1.988 acres)
  - Perennial Stream (5.785 acres)

**Aquatic Resources Delineation**  
**Schellhus Property**  
 Placer County, California

8421 Auburn Boulevard, Suite 248  
 Citrus Heights, California 95610  
 (916) 822-3320 | www.madroneco.com



# Attachment C

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## **Plant Species Observed within the Study Area**



**Plant Species Observed within the  
Schellhous Property Study Area  
17 May; 7 June 2019**

Species Name	Common Name	Wetland Indicator Status
<i>Acer negundo</i>	Box elder	FACW
<i>Achyrachaena mollis</i>	Blow wives	FAC
<i>Aegilops triuncialis</i>	Barbed goatgrass	UPL
<i>Agrostis avenacea</i>	Pacific bentgrass	FACW
<i>Aira caryophyllea</i>	Silver hairgrass	FACU
<i>Allium amplexans</i>	Narrowleaf onion	UPL
<i>Ambrosia psilostachya</i>	Western ragweed	FACU
<i>Amsinckia menziesii</i>	Common fiddleneck	UPL
<i>Artemisia douglasiana</i>	Mugwort	FAC
<i>Avena fatua</i>	Wild oat	UPL
<i>Brassica nigra</i>	Black mustard	UPL
<i>Briza minor</i>	Annual quaking grass	FAC
<i>Brodiaea elegans</i>	Harvest brodiaea	FACU
<i>Bromus diandrus</i>	Ripgut brome	UPL
<i>Bromus hordeaceus</i>	Soft chess	FACU
<i>Carduus pycnocephalus</i>	Italian thistle	UPL
<i>Catalpa sp.</i>	Catalpa	-
<i>Centaurea solstitialis</i>	Yellow star-thistle	UPL
<i>Centromadia fitchii</i>	Fitch's spikeweed	FACU
<i>Cerastium glomeratum</i>	Sticky chickweed	UPL
<i>Cichorium intybus</i>	Chicory	FACU
<i>Cirsium vulgare</i>	Bull thistle	FACU
<i>Claytonia perfoliata</i>	Miner's lettuce	FAC
<i>Conium maculatum</i>	Poison hemlock	FACW
<i>Croton setiger</i>	Turkey mullein	UPL
<i>Cynodon dactylon</i>	Bermuda grass	FACU
<i>Cynosurus echinatus</i>	Hedgehog grass	UPL
<i>Cyperus eragrostis</i>	Tall flatsedge	FACW
<i>Cyperus erythrorhizos</i>	Redroot flatsedge	OBL
<i>Datura sp.</i>	Datura	UPL
<i>Echinochloa sp.</i>	Barnyard grass	-
<i>Eleocharis macrostachya</i>	Creeping spikerush	OBL
<i>Elymus caput-medusae</i>	Medusa-head grass	UPL
<i>Epilobium brachycarpum</i>	Panicled willow-herb	FAC
<i>Epilobium torreyi</i>	Torrey's willow-herb	FACW
<i>Erodium botrys</i>	Filaree	FACU
<i>Eryngium castrense</i>	Coyote thistle	OBL
<i>Euthamia occidentalis</i>	Western goldenrod	FACW
<i>Festuca perennis</i>	Perennial ryegrass	FAC

<i>Ficus carica</i>	Common fig	FACU
<i>Foeniculum vulgare</i>	Fennel	UPL
<i>Fraxinus sp.</i>	Ash	FACW
<i>Galium aparine</i>	Sticky willy	FACU
<i>Geranium dissectum</i>	Cut-leaf geranium	UPL
<i>Holocarpha virgata</i>	Narrow tarplant	UPL
<i>Hordeum marinum</i>	Mediterranean barley	FAC
<i>Hordeum murinum</i>	Wall barley	FACU
<i>Hypericum perforatum</i>	Klamathweed	FACU
<i>Juncus balticus</i>	Baltic rush	FACW
<i>Juncus bufonius</i>	Toad rush	FACW
<i>Lactuca serriola</i>	Prickly lettuce	FACU
<i>Lasthenia glaberrima</i>	Smooth goldfields	OBL
<i>Leontodon saxatilis</i>	Hairy hawkbit	FACU
<i>Lotus corniculatus</i>	Bird's-foot trefoil	FAC
<i>Ludwigia peploides</i>	Water primrose	OBL
<i>Lupinus bicolor</i>	Miniature lupine	UPL
<i>Lythrum hyssopifolia</i>	Hyssop loosestrife	OBL
<i>Marrubium vulgare</i>	White horehound	FACU
<i>Medicago polymorpha</i>	Bur clover	FACU
<i>Navarretia leucocephala subsp. Leucocephala</i>	White headed navarretia	OBL
<i>Nicotiana acuminata</i>	Manyflower tobacco	UPL
<i>Paspalum dilatatum</i>	Dallis grass	FAC
<i>Persicaria sp.</i>	Smartweed	-
<i>Phalaris paradoxa</i>	Hood canary grass	FAC
<i>Phoenix canariensis</i>	Canary island date palm	UPL
<i>Phyla nodiflora</i>	Turkey tangle fogfruit	FACW
<i>Plagiobothrys stipitatus</i>	Great Valley popcornflower	FACW
<i>Plantago coronopus</i>	Cut-leaf plantain	FAC
<i>Plantago lanceolata</i>	English plantain	FAC
<i>Platanus racemosa</i>	Western sycamore	FAC
<i>Polypogon monspeliensis</i>	Rabbitsfoot grass	FACW
<i>Populus fremontii</i>	Fremont cottonwood	FAC
<i>Psilocarphus oregonus</i>	Oregon woolly marbles	OBL
<i>Quercus douglasii</i>	Blue oak	UPL
<i>Quercus lobata</i>	Valley oak	FACU
<i>Quercus wislizenii</i>	Interior live oak	UPL
<i>Ranunculus bonariensis</i>	Carter's buttercup	OBL
<i>Robinia sp.</i>	Lotus	-
<i>Rosa californica</i>	California rose	FAC
<i>Rubus armeniacus</i>	Himalayan blackberry	FAC
<i>Rumex crispus</i>	Curly dock	FAC
<i>Rumex pulcher</i>	Fiddle dock	FAC
<i>Salix exigua</i>	Sandbar willow	FACW
<i>Salix gooddingii</i>	Goodding's black willow	FACW

<i>Sherardia arvensis</i>	Field madder	UPL
<i>Solanum xanti</i>	Purple nightshade	UPL
<i>Spergularia rubra</i>	Red sandspurrey	FAC
<i>Toxicodendron diversilobum</i>	Western poison oak	FACU
<i>Triadica sebifera</i>	Chinese tallowtree	FAC
<i>Trichostema lanceolatum</i>	Vinegar weed	FACU
<i>Trifolium campestre</i>	Hop clover	UPL
<i>Trifolium dubium</i>	Little hop clover	UPL
<i>Trifolium hirtum</i>	Rose clover	UPL
<i>Trifolium subterraneum</i>	Subterranean clover	UPL
<i>Triteleia hyacinthina</i>	White brodiaea	FAC
<i>Triteleia laxa</i>	Ithuriel's spear	UPL
<i>Verbascum blattaria</i>	Moth mullein	UPL
<i>Verbascum thapsus</i>	Woolly mullein	FACU
<i>Veronica peregrina</i>	Purslane speedwell	FAC
<i>Vicia villosa</i>	Winter vetch	UPL
<i>Vitis vinifera</i>	Cultivated grape	UPL
<i>Xanthium strumarium</i>	Rough cocklebur	FAC



# Attachment D

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## **Representative Site Photographs**





**Data Point DP-01 – 17 May 2019**



**Data Point DP-02 – 17 May 2019**





**Data Point DP-03 – 17 May 2019**



**Data Point DP-04 – 17 May 2019**





**Data Point DP-05 – 17 May 2019**



**Data Point DP-06 – 7 June 2019**





**Data Point DP-07 – 7 June 2019**



**Data Point DP-08 – 7 June 2019**





**Data Point DP-09 – 7 June 2019**



**Data Point DP-10 – 7 June 2019**





**Data Point DP-11 – 7 June 2019**



**Data Point DP-12 – 7 June 2019**





**Data Point DP-13 – 7 June 2019**



**Data Point DP-14 – 7 June 2019**





**Data Point DP-15 – 17 May 2019**



**Data Point DP-16 – 17 May 2019**





**Data point DP-17 – 17 May 2019**



**Data point DP-18 – 17 May 2019**





**Data point DP-19 – 17 May 2019**



**Data point DP-20 – 17 May 2019**





**Data point DP-21 – 17 May 2019**



**Data point DP-22 – 17 May 2019**





**Data point DP-23 – 17 May 2019**



**Data point DP-24 – 17 May 2019**





**Data point DP-25 – 7 June 2019**



**Data point DP-26 – 7 June 2019**





**Vernal pool (VP-18), facing southeast – 17 May 2019**



**Seasonal wetland (SW-3), facing north – 17 May 2019**





**Seasonal wetland swale (SWS-8), facing northeast – 17 May 2019**



**Dry Creek (Dry Creek-2), facing northwest – 7 June 2019**





**Ephemeral drainage (ED-4), facing northwest – 7 June 2019**



**Intermittent stream (IS-1), facing southeast – 7 June 2019**





**Perennial stream (PS-1), facing southeast – 7 June 2019**



# Attachment E

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**Access Letter**



Project Manager  
Regulatory Division  
U.S. Army Corps of Engineers  
1325 J Street, Room 1350  
Sacramento, California 95814-2922

**Re: Schellhous Property**

This letter serves as written permission to enter the Schellhous property shown on the attached **Figure 1** when accompanied by Madrone Ecological Consulting, LLC (Madrone) staff. When accompanied by Madrone staff, you may dig soil pits by hand and collect plant materials related to the verification of potential Waters of the U.S. on the Schellhous property. If you have any questions, please contact Ginger Fodge at Madrone (916) 822-3230 or [gfodge@madroneeco.com](mailto:gfodge@madroneeco.com).

Sincerely,

A handwritten signature in cursive script that reads "Alice Pennington".

Alice Pennington

08/28/2019



# Attachment F

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**GIS Shapefiles and the Aquatic Resources Excel Spreadsheet (on CD)**



# Attachment E

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## **Wildlife List**



Wildlife Species Observed within the  
Creekview Ranch Study Area  
During Surveys Conducted in 2015, 2017, 2019, and 2021

Species Name	Common name
<b>Amphibians</b>	
<i>Pseudacris sierrae</i>	Sierran treefrog
<b>Reptiles</b>	
<i>Pituophis catenifer catenifer</i>	Pacific gopher snake
<i>Sceloporus occidentalis</i>	Western fence lizard
<b>Birds</b>	
<i>Branta canadensis</i>	Canada goose
<i>Anas platyrhynchos</i>	Mallard
<i>Phasianus colchicus</i>	Ring-necked pheasant
<i>Patagioenas fasciata</i>	Band-tailed pigeon
<i>Meleagris gallopavo</i>	Turkey
<i>Ardea herodias</i>	Great blue heron
<i>Ardea alba</i>	Great egret
<i>Cathartes aura</i>	Turkey vulture
<i>Elanus leucurus</i>	White-tailed kite
<i>Buteo lineatus</i>	Red-shouldered hawk
<i>Buteo jamaicensis</i>	Red-tailed hawk
<i>Buteo swainsoni</i>	Swainson's hawk
<i>Melanerpes formicivorus</i>	Acorn woodpecker
<i>Dryobates nuttallii</i>	Nuttall's woodpecker
<i>Colaptes auratus</i>	Northern flicker
<i>Falco sparverius</i>	American kestrel
<i>Charadrius vociferus</i>	Killdeer
<i>Zenaida macroura</i>	Mourning dove
<i>Aeronautes saxatalis</i>	White-throated swift
<i>Sayornis nigricans</i>	Black phoebe
<i>Sayornis saya</i>	Say's phoebe
<i>Tyrannus verticalis</i>	Western kingbird
<i>Aphelocoma californica</i>	California scrub jay
<i>Corvus brachyrhynchos</i>	American crow
<i>Baeolophus inornatus</i>	Oak titmouse
<i>Tachycineta bicolor</i>	Tree swallow
<i>Stelgidopteryx serripennis</i>	Northern rough-winged swallow
<i>Hirundo rustica</i>	Barn swallow
<i>Petrochelidon pyrrhonota</i>	Cliff swallow

Wildlife Species Observed within the  
Creekview Ranch Study Area  
During Surveys Conducted in 2015, 2017, 2019, and 2021

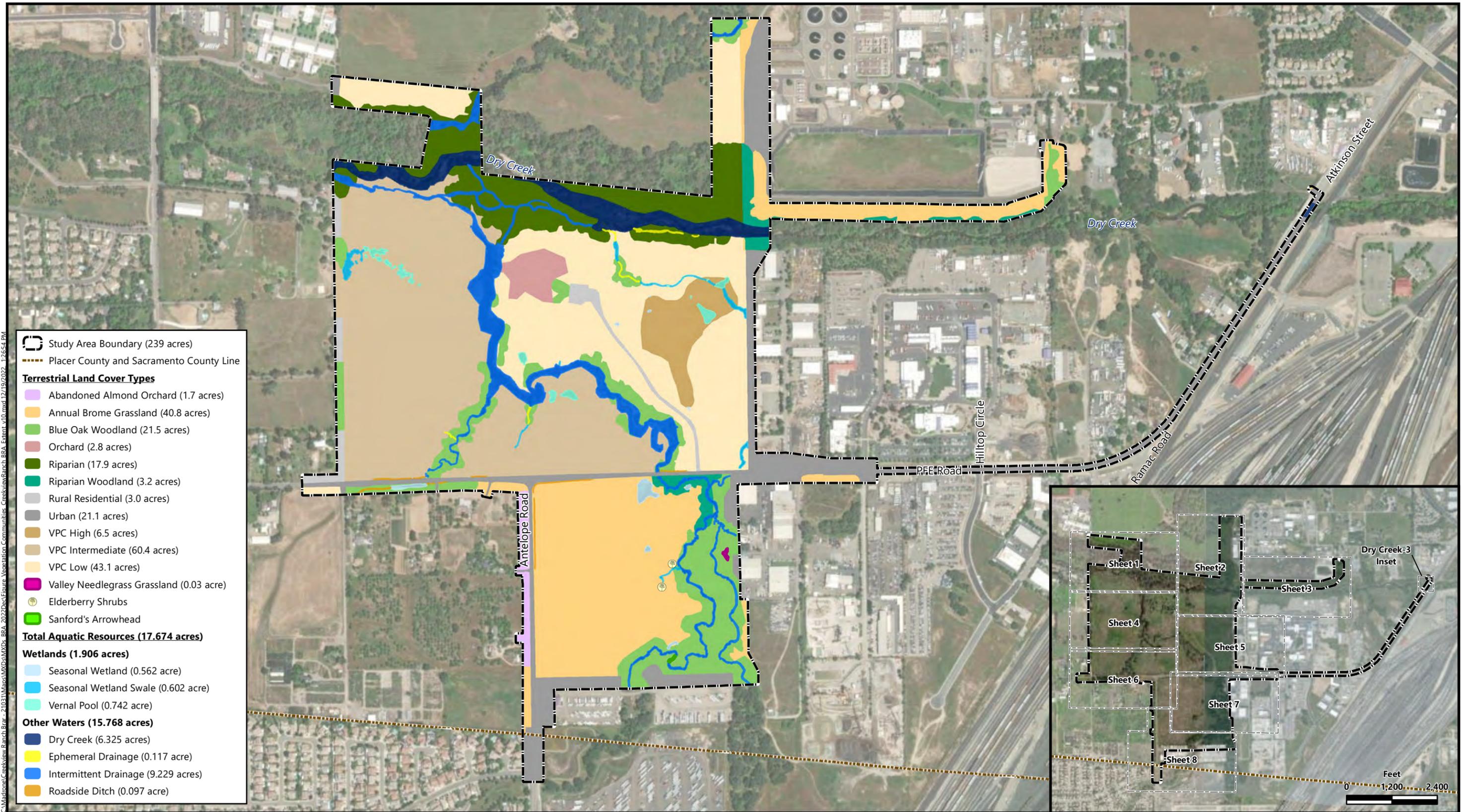
<b>Species Name</b>	<b>Common name</b>
<i>Psaltriparus minimus</i>	Bushtit
<i>Sitta carolinensis</i>	White-breasted nuthatch
<i>Troglodytes aedon</i>	House wren
<i>Cistothorus palustris</i>	Marsh wren
<i>Thryomanes bewickii</i>	Bewick's wren
<i>Sialia mexicana</i>	Western bluebird
<i>Myadestes townsendi</i>	Townsend's solitaire
<i>Turdus migratorius</i>	American robin
<i>Mimus polyglottos</i>	Northern mockingbird
<i>Sturnus vulgaris</i>	European starling
<i>Icterus bullockii</i>	Bullock's oriole
<i>Agelaius phoeniceus</i>	Red-wing blackbird
<i>Carpodacus mexicanus</i>	House finch
<i>Carduelis psaltria</i>	Lesser goldfinch
<i>Carduelis tristis</i>	American goldfinch
<i>Junco hyemalis</i>	Dark-eyed junco
<i>Zonotrichia leucophrys</i>	White-crowned sparrow
<i>Zonotrichia atricapilla</i>	Golden-crowned sparrow
<i>Passerculus sandwichensis</i>	Savannah sparrow
<i>Melospiza melodia</i>	Song sparrow
<i>Melospiza crissalis</i>	California towhee
<i>Pipilo maculatus</i>	Spotted towhee
 <b>Mammals</b>	
<i>Canis latrans</i>	Coyote
<i>Lepus californicus</i>	Black-tailed jackrabbit
<i>Mephitis mephitis</i>	Striped skunk
<i>Odocoileus hemionus</i>	Mule deer
<i>Otospermophilus beecheyi</i>	California ground-squirrel
<i>Procyon lotor</i>	Raccoon
<i>Puma concolor</i>	Mountain lion
<i>Sciurus griseus</i>	Western gray squirrel
<i>Thomomys bottae</i>	Botta's pocket gopher

# Attachment F

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**Vegetation Communities/Land Covers,  
Sanford's Arrowhead, and Elderberry Shrubs**



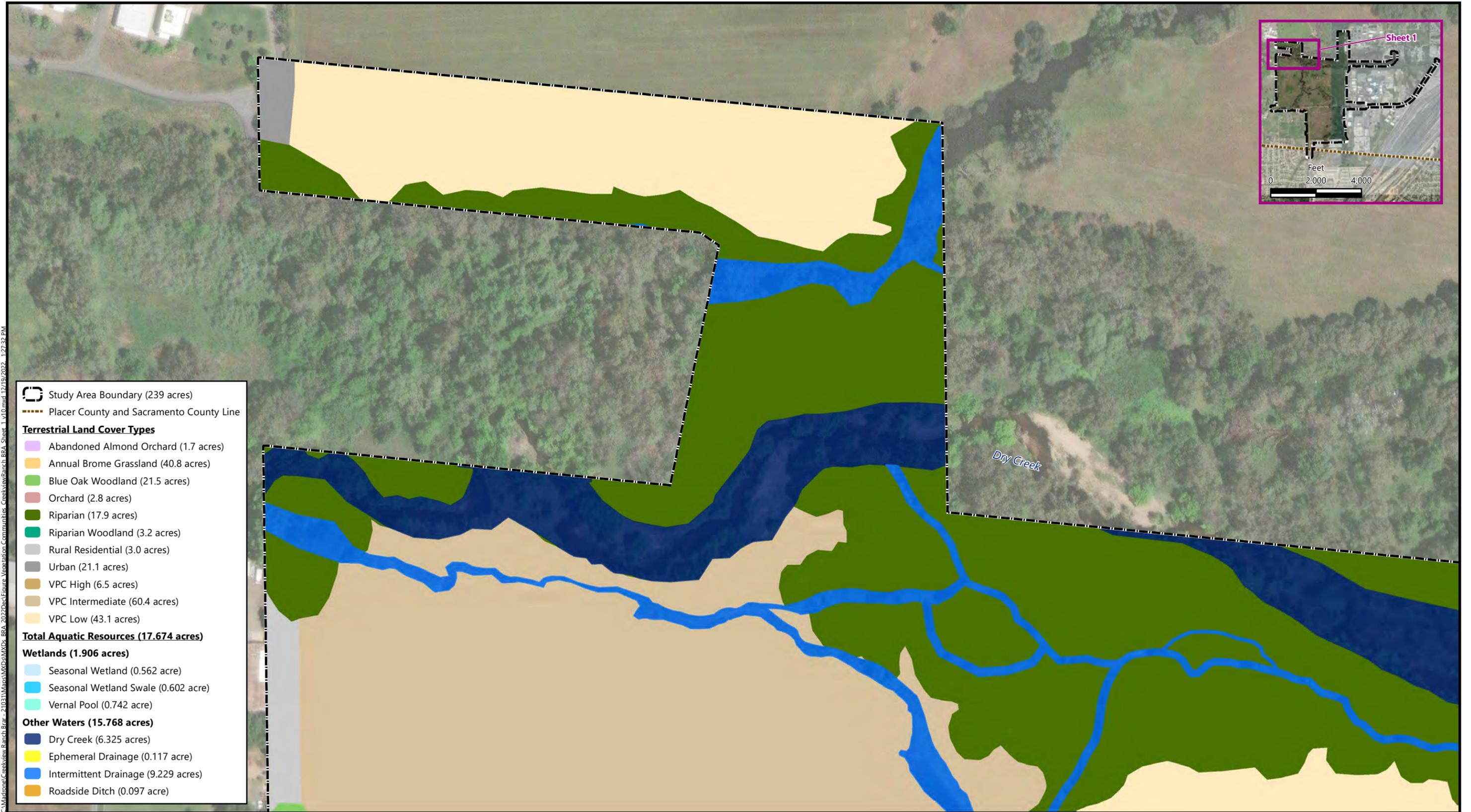


- Study Area Boundary (239 acres)
- Placer County and Sacramento County Line
- Terrestrial Land Cover Types**
- Abandoned Almond Orchard (1.7 acres)
- Annual Brome Grassland (40.8 acres)
- Blue Oak Woodland (21.5 acres)
- Orchard (2.8 acres)
- Riparian (17.9 acres)
- Riparian Woodland (3.2 acres)
- Rural Residential (3.0 acres)
- Urban (21.1 acres)
- VPC High (6.5 acres)
- VPC Intermediate (60.4 acres)
- VPC Low (43.1 acres)
- Valley Needlegrass Grassland (0.03 acre)
- Elderberry Shrubs
- Sanford's Arrowhead
- Total Aquatic Resources (17.674 acres)**
- Wetlands (1.906 acres)**
- Seasonal Wetland (0.562 acre)
- Seasonal Wetland Swale (0.602 acre)
- Vernal Pool (0.742 acre)
- Other Waters (15.768 acres)**
- Dry Creek (6.325 acres)
- Ephemeral Drainage (0.117 acre)
- Intermittent Drainage (9.229 acres)
- Roadside Ditch (0.097 acre)



**Note:** Small summation errors may occur due to rounding.  
Aerial Source: Maxar, 26 April 2022.





- Study Area Boundary (239 acres)
- Placer County and Sacramento County Line
- Terrestrial Land Cover Types**
- Abandoned Almond Orchard (1.7 acres)
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- Intermittent Drainage (9.229 acres)
- Roadside Ditch (0.097 acre)



**Note:** Small summation errors may occur due to rounding.  
Aerial Source: Maxar, 26 April 2022.

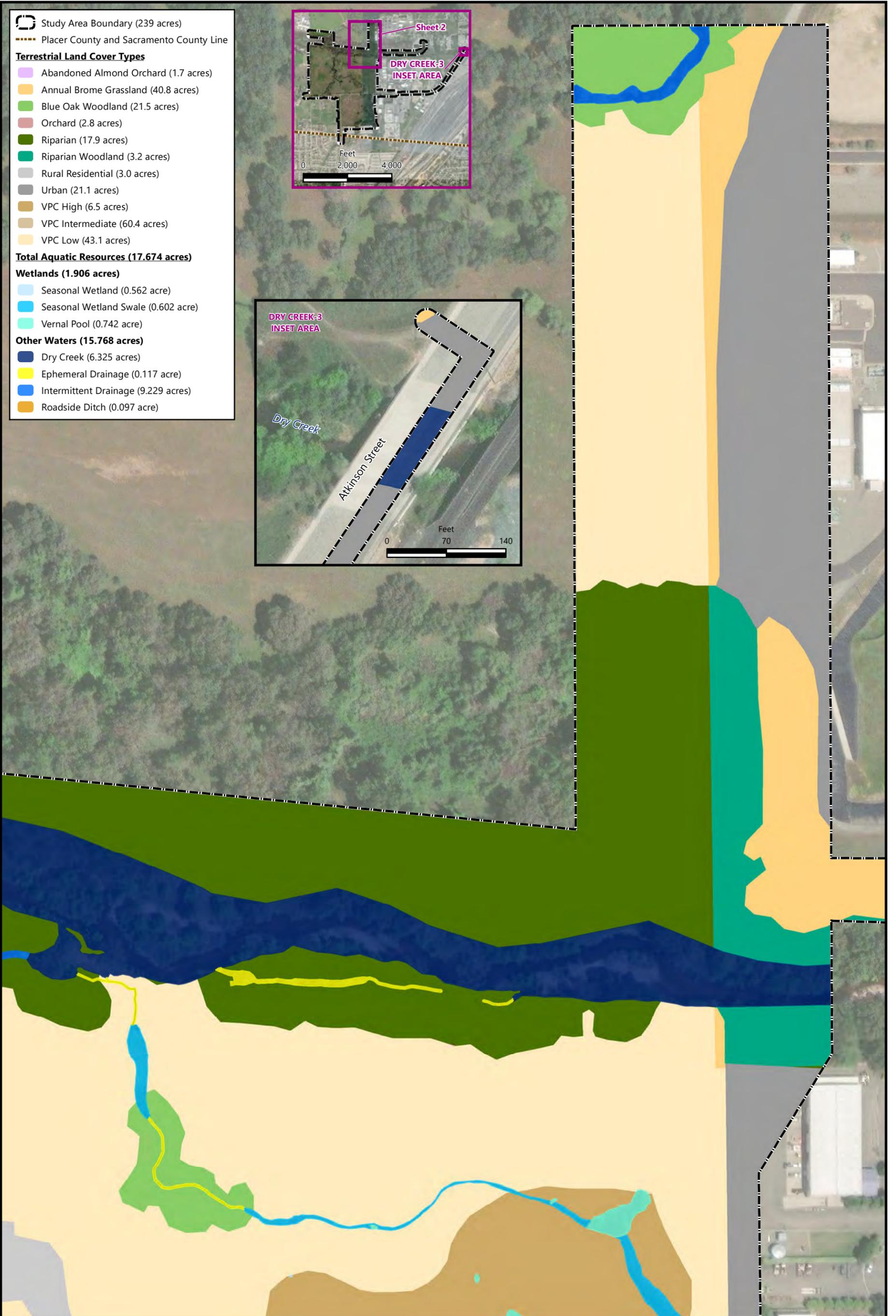
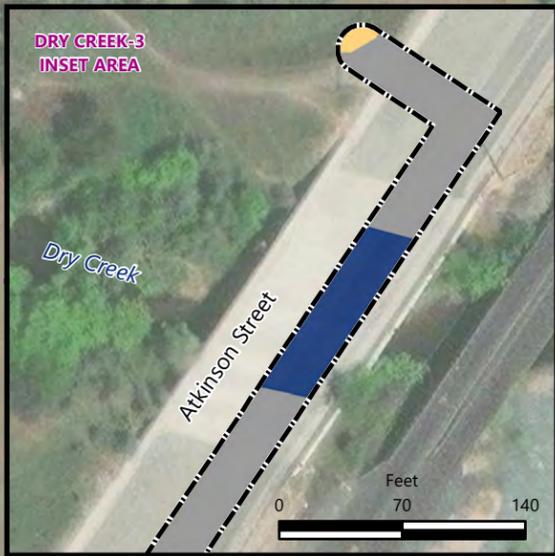
**Vegetation Communities/Land Covers, Sanford's Arrowhead, and Elderberry Shrubs**  
**Sheet 1**

Creekview Ranch  
Placer County, California





-  Study Area Boundary (239 acres)
-  Placer County and Sacramento County Line
- Terrestrial Land Cover Types**
-  Abandoned Almond Orchard (1.7 acres)
-  Annual Brome Grassland (40.8 acres)
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-  Riparian Woodland (3.2 acres)
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-  Ephemeral Drainage (0.117 acre)
-  Intermittent Drainage (9.229 acres)
-  Roadside Ditch (0.097 acre)



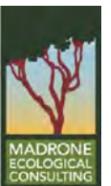
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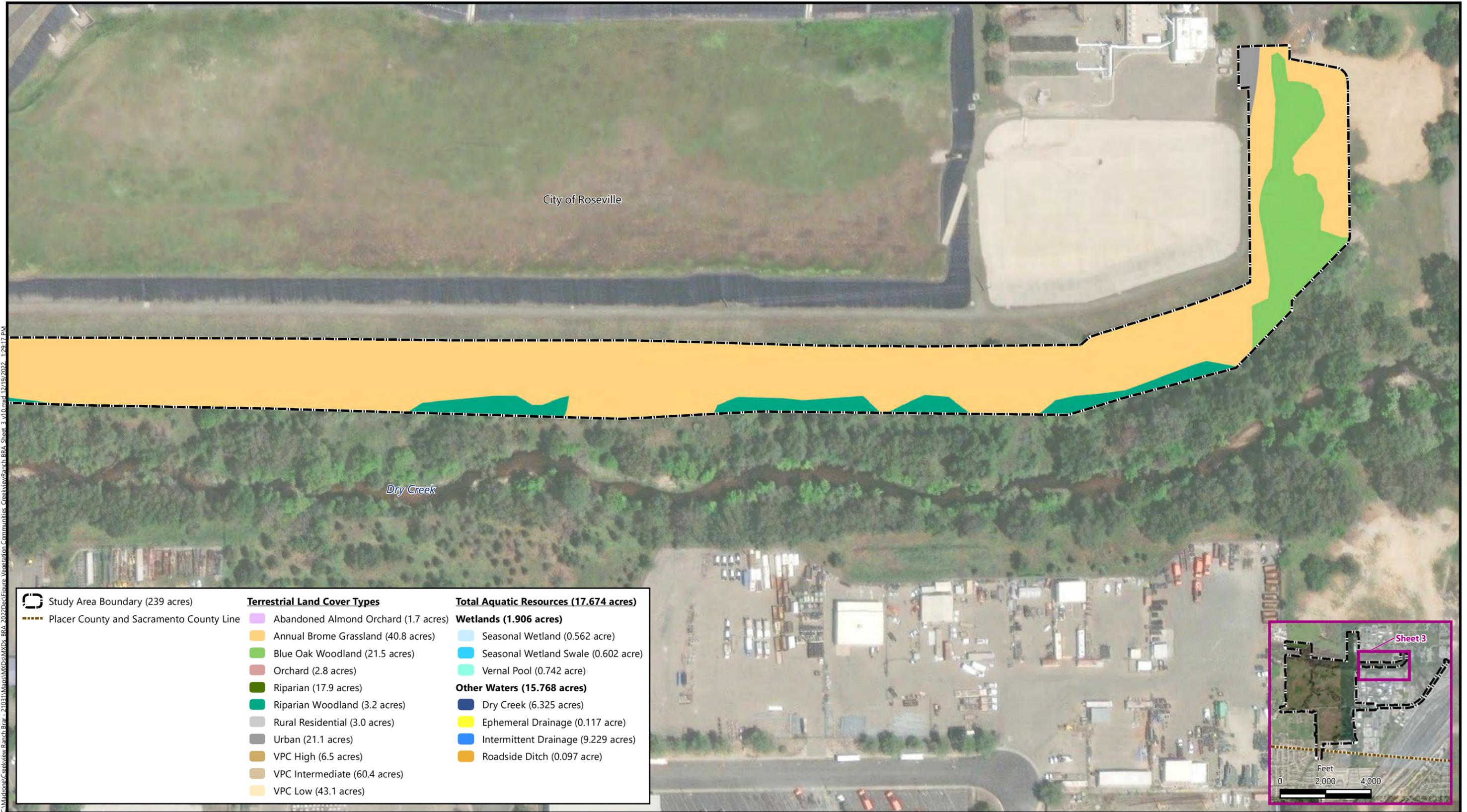
**Note:** Small summation errors may occur due to rounding.  
Aerial Source: Maxar, 26 April 2022.

**Vegetation Communities/Land Covers, Sanford's Arrowhead, and Elderberry Shrubs**  
**Sheet 2**

Creekview Ranch  
Placer County, California







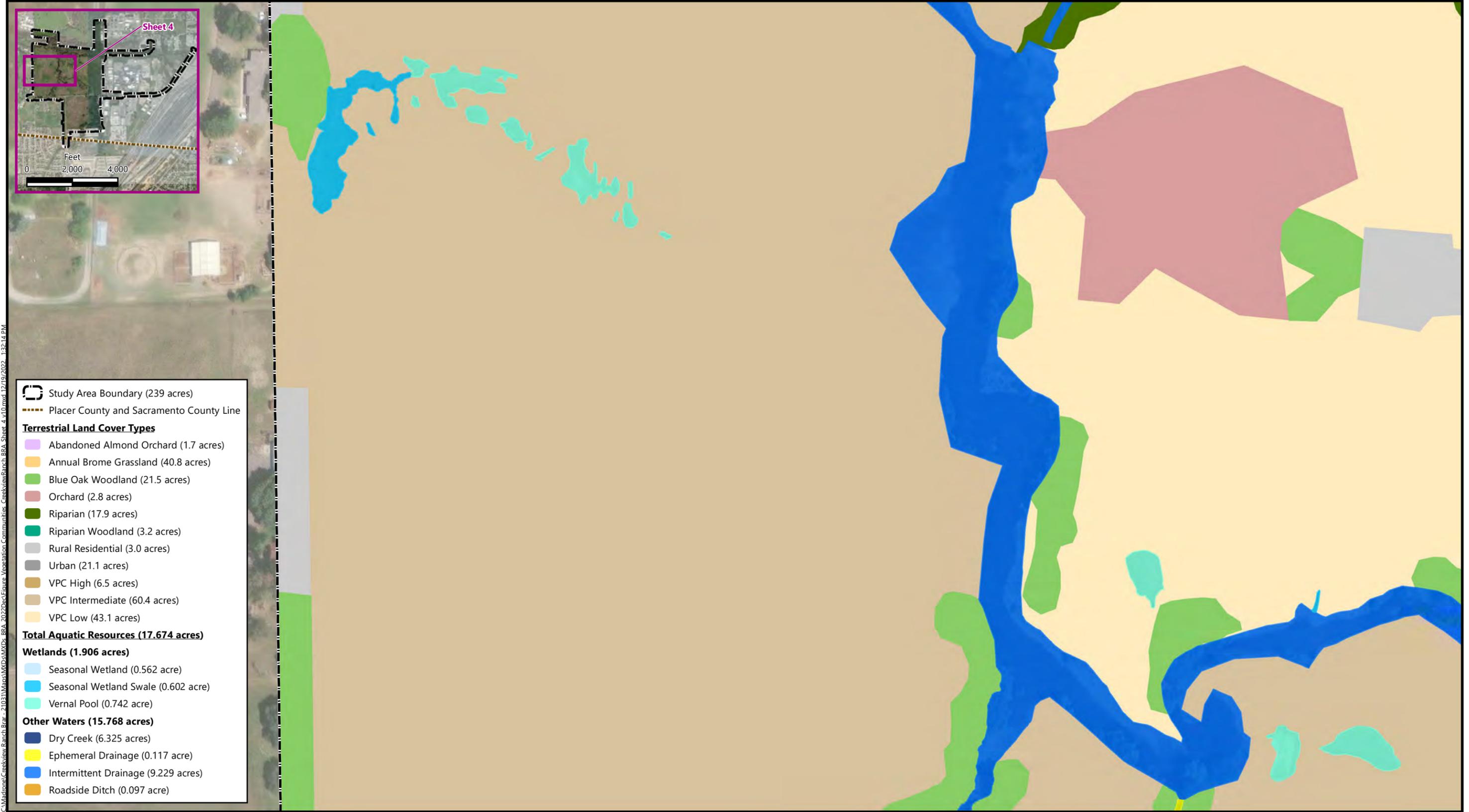
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Study Area Boundary (239 acres)	<b>Terrestrial Land Cover Types</b>	<b>Total Aquatic Resources (17.674 acres)</b>
Placer County and Sacramento County Line	Abandoned Almond Orchard (1.7 acres)	<b>Wetlands (1.906 acres)</b>
	Annual Brome Grassland (40.8 acres)	Seasonal Wetland (0.562 acre)
	Blue Oak Woodland (21.5 acres)	Seasonal Wetland Swale (0.602 acre)
	Orchard (2.8 acres)	Vernal Pool (0.742 acre)
	Riparian (17.9 acres)	<b>Other Waters (15.768 acres)</b>
	Riparian Woodland (3.2 acres)	Dry Creek (6.325 acres)
	Rural Residential (3.0 acres)	Ephemeral Drainage (0.117 acre)
	Urban (21.1 acres)	Intermittent Drainage (9.229 acres)
	VPC High (6.5 acres)	Roadside Ditch (0.097 acre)
	VPC Intermediate (60.4 acres)	
	VPC Low (43.1 acres)	



**Note:** Small summation errors may occur due to rounding.  
Aerial Source: Maxar, 26 April 2022.





- Study Area Boundary (239 acres)
- Placer County and Sacramento County Line
- Terrestrial Land Cover Types**
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- Dry Creek (6.325 acres)
- Ephemeral Drainage (0.117 acre)
- Intermittent Drainage (9.229 acres)
- Roadside Ditch (0.097 acre)



**Note:** Small summation errors may occur due to rounding.  
Aerial Source: Maxar, 26 April 2022.

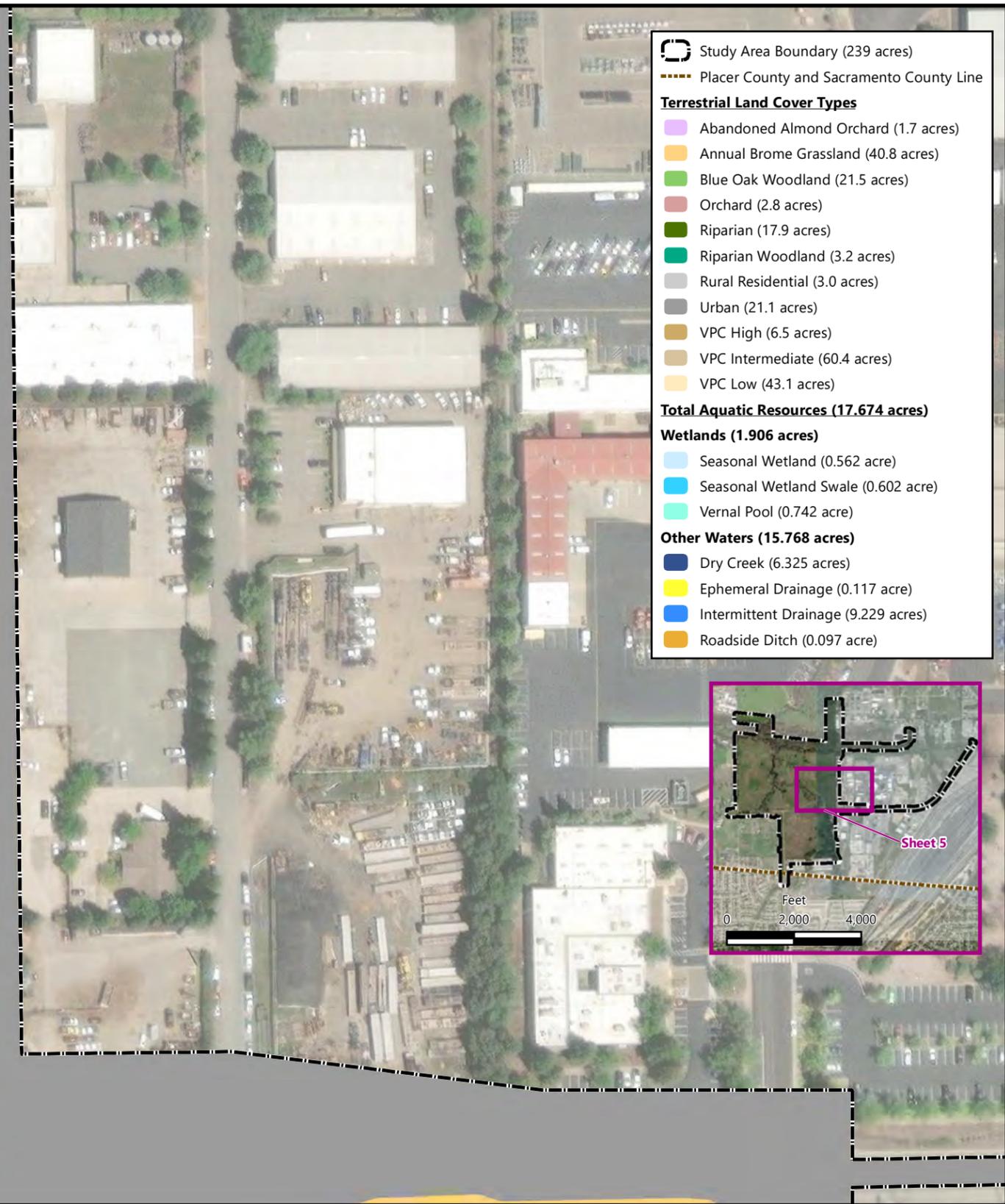
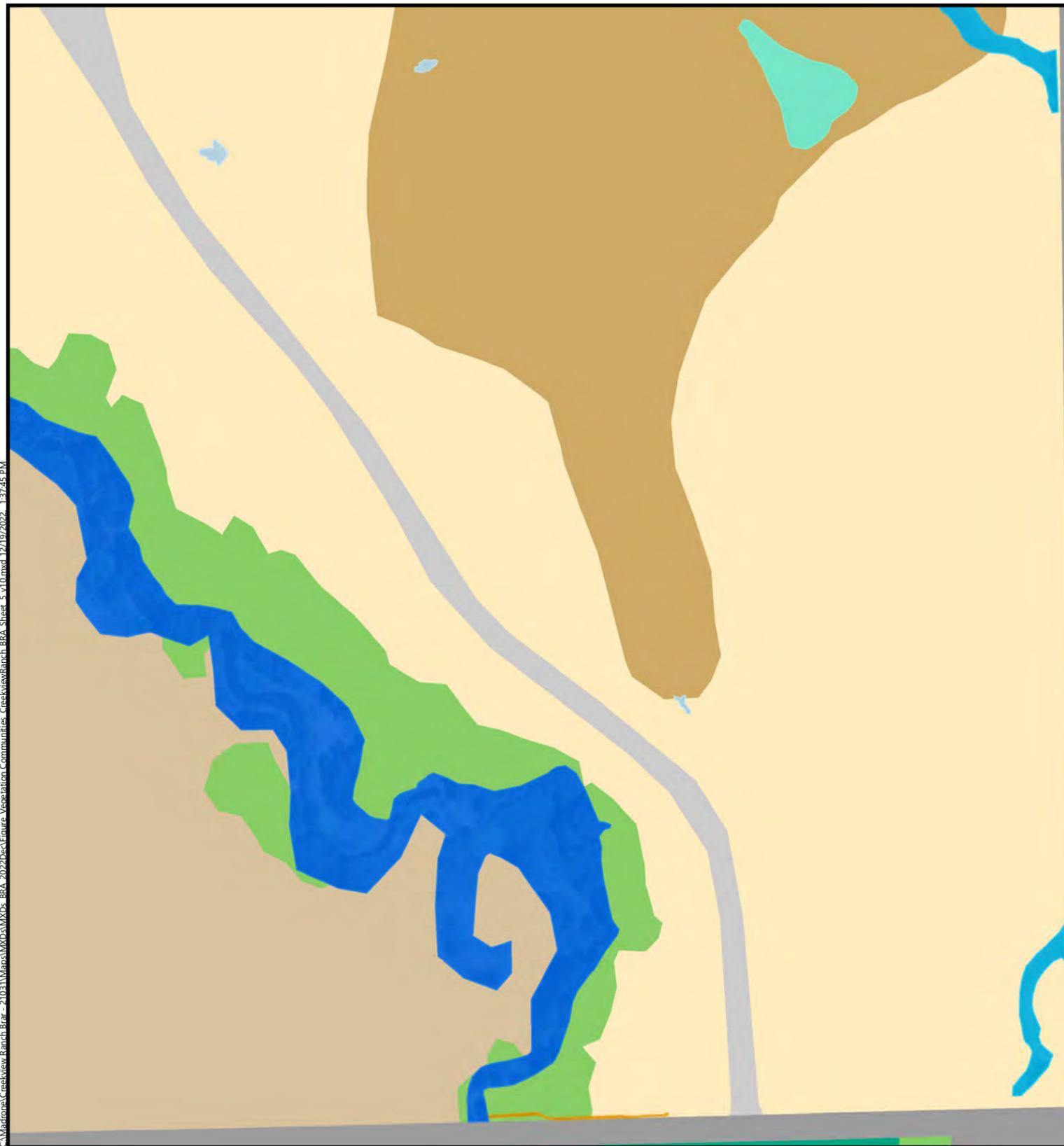
**Vegetation Communities/Land  
Covers, Sanford's Arrowhead,  
and Elderberry Shrubs  
Sheet 4**

Creekview Ranch  
Placer County, California





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- Study Area Boundary (239 acres)
- Placer County and Sacramento County Line
- Terrestrial Land Cover Types**
- Abandoned Almond Orchard (1.7 acres)
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- Dry Creek (6.325 acres)
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- Roadside Ditch (0.097 acre)



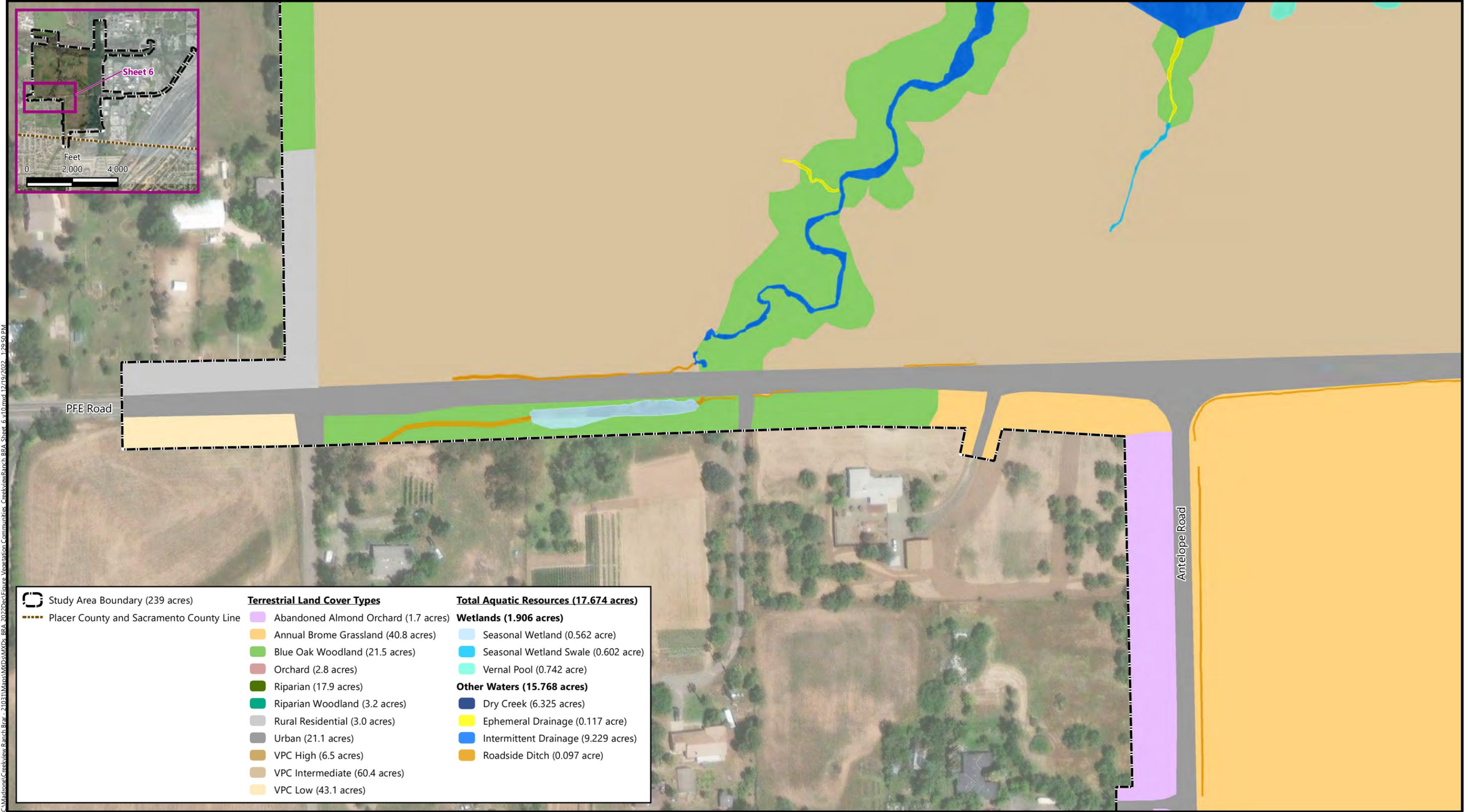
**Note:** Small summation errors may occur due to rounding.  
Aerial Source: Maxar, 26 April 2022.

### Vegetation Communities/Land Covers, Sanford's Arrowhead, and Elderberry Shrubs Sheet 5

Creekview Ranch  
Placer County, California







Study Area Boundary (239 acres)	<b>Terrestrial Land Cover Types</b>	<b>Total Aquatic Resources (17.674 acres)</b>
Placer County and Sacramento County Line	Abandoned Almond Orchard (1.7 acres)	<b>Wetlands (1.906 acres)</b>
	Annual Brome Grassland (40.8 acres)	Seasonal Wetland (0.562 acre)
	Blue Oak Woodland (21.5 acres)	Seasonal Wetland Swale (0.602 acre)
	Orchard (2.8 acres)	Vernal Pool (0.742 acre)
	Riparian (17.9 acres)	<b>Other Waters (15.768 acres)</b>
	Riparian Woodland (3.2 acres)	Dry Creek (6.325 acres)
	Rural Residential (3.0 acres)	Ephemeral Drainage (0.117 acre)
	Urban (21.1 acres)	Intermittent Drainage (9.229 acres)
	VPC High (6.5 acres)	Roadside Ditch (0.097 acre)
	VPC Intermediate (60.4 acres)	
	VPC Low (43.1 acres)	



**Note:** Small summation errors may occur due to rounding.  
Aerial Source: Maxar, 26 April 2022.

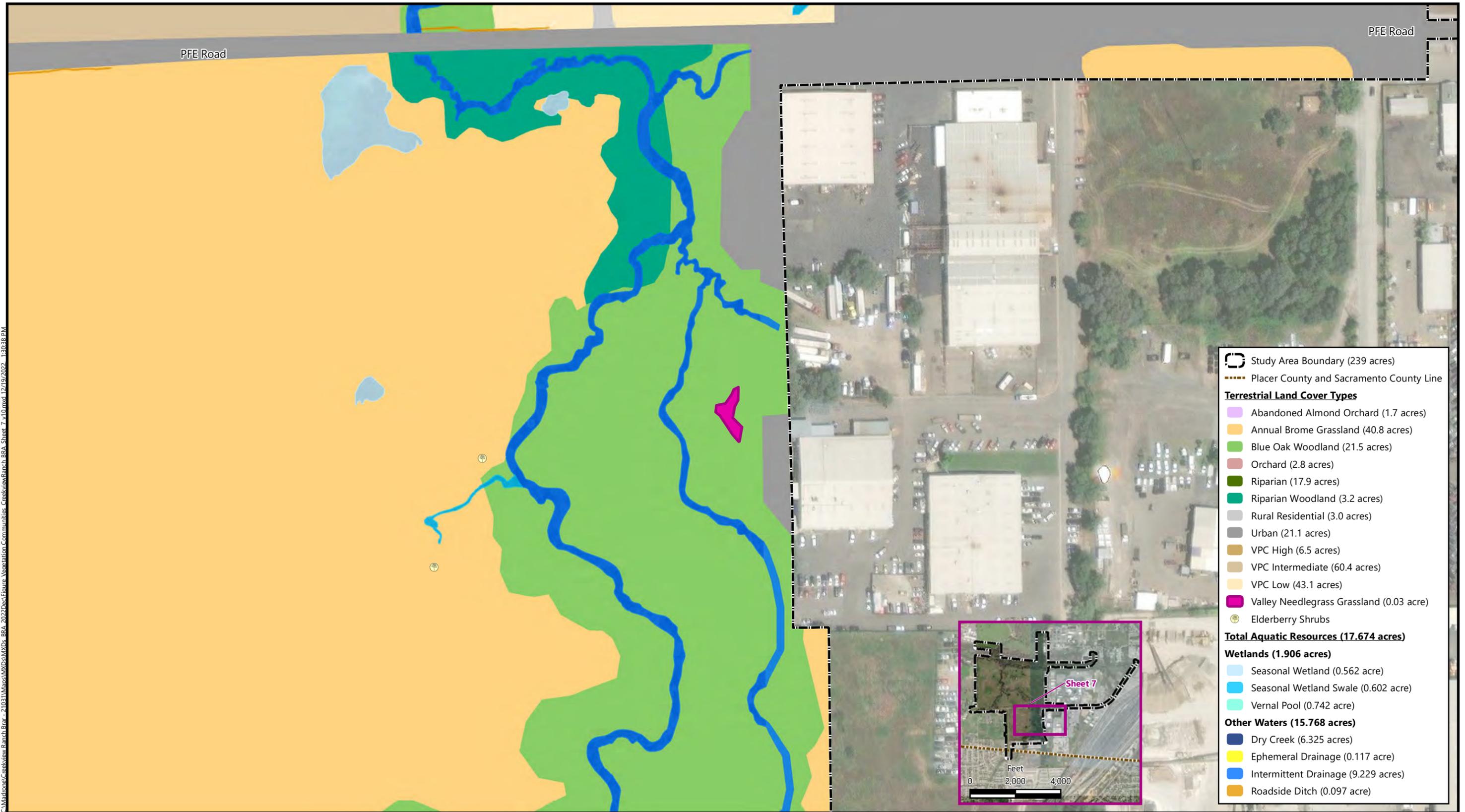
**Vegetation Communities/Land  
Covers, Sanford's Arrowhead,  
and Elderberry Shrubs  
Sheet 6**

Creekview Ranch  
Placer County, California





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- Study Area Boundary (239 acres)
- Placer County and Sacramento County Line
- Terrestrial Land Cover Types**
- Abandoned Almond Orchard (1.7 acres)
- Annual Brome Grassland (40.8 acres)
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- Orchard (2.8 acres)
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- VPC Intermediate (60.4 acres)
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- Elderberry Shrubs
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- Seasonal Wetland Swale (0.602 acre)
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- Other Waters (15.768 acres)**
- Dry Creek (6.325 acres)
- Ephemeral Drainage (0.117 acre)
- Intermittent Drainage (9.229 acres)
- Roadside Ditch (0.097 acre)



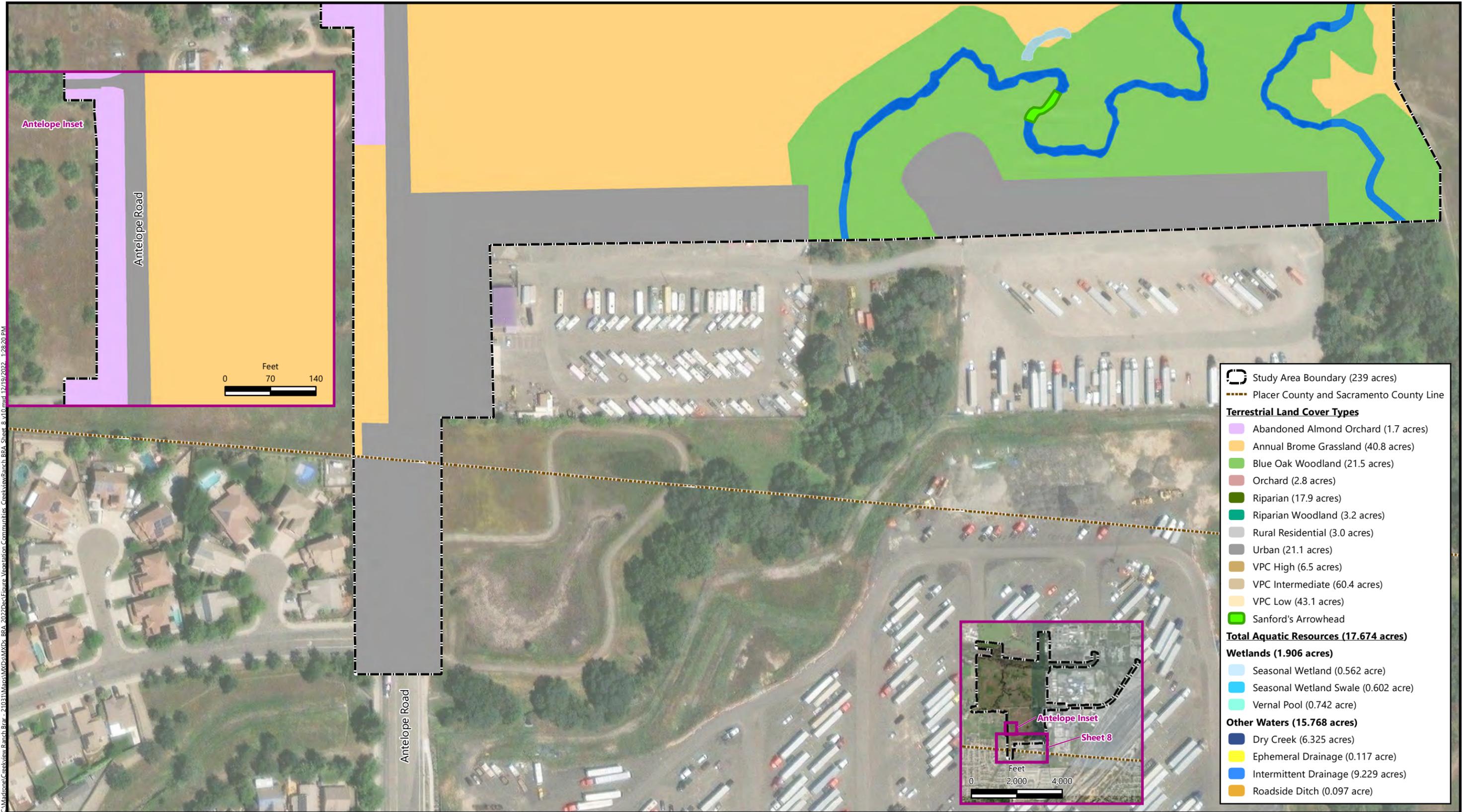
**Note:** Small summation errors may occur due to rounding.  
Aerial Source: Maxar, 26 April 2022.

**Vegetation Communities/Land Covers, Sanford's Arrowhead, and Elderberry Shrubs**  
**Sheet 7**

Creekview Ranch  
Placer County, California







**Note:** Small summation errors may occur due to rounding.  
Aerial Source: Maxar, 26 April 2022.

**Vegetation Communities/Land Covers, Sanford's Arrowhead, and Elderberry Shrubs**  
**Sheet 8**

Creekview Ranch  
Placer County, California





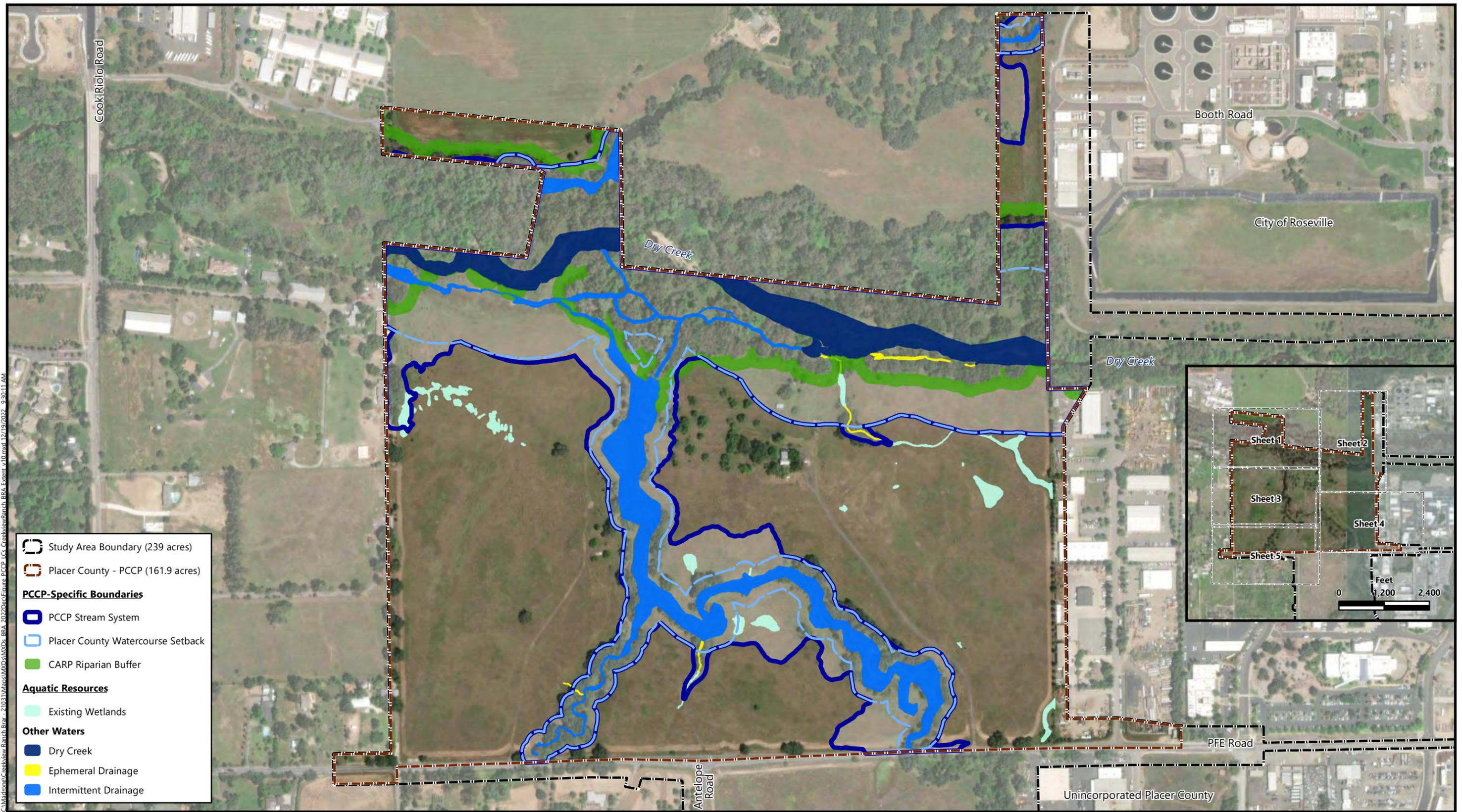
# Attachment G

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## **PCCP Habitats and PCCP Specific Boundaries**



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- Study Area Boundary (239 acres)
- Placer County - PCCP (161.9 acres)
- PCCP-Specific Boundaries**
  - PCCP Stream System
  - Placer County Watercourse Setback
  - CARP Riparian Buffer
- Aquatic Resources**
  - Existing Wetlands
- Other Waters**
  - Dry Creek
  - Ephemeral Drainage
  - Intermittent Drainage



### PCCP Habitats and PCCP-Specific Boundaries Overall Sheet

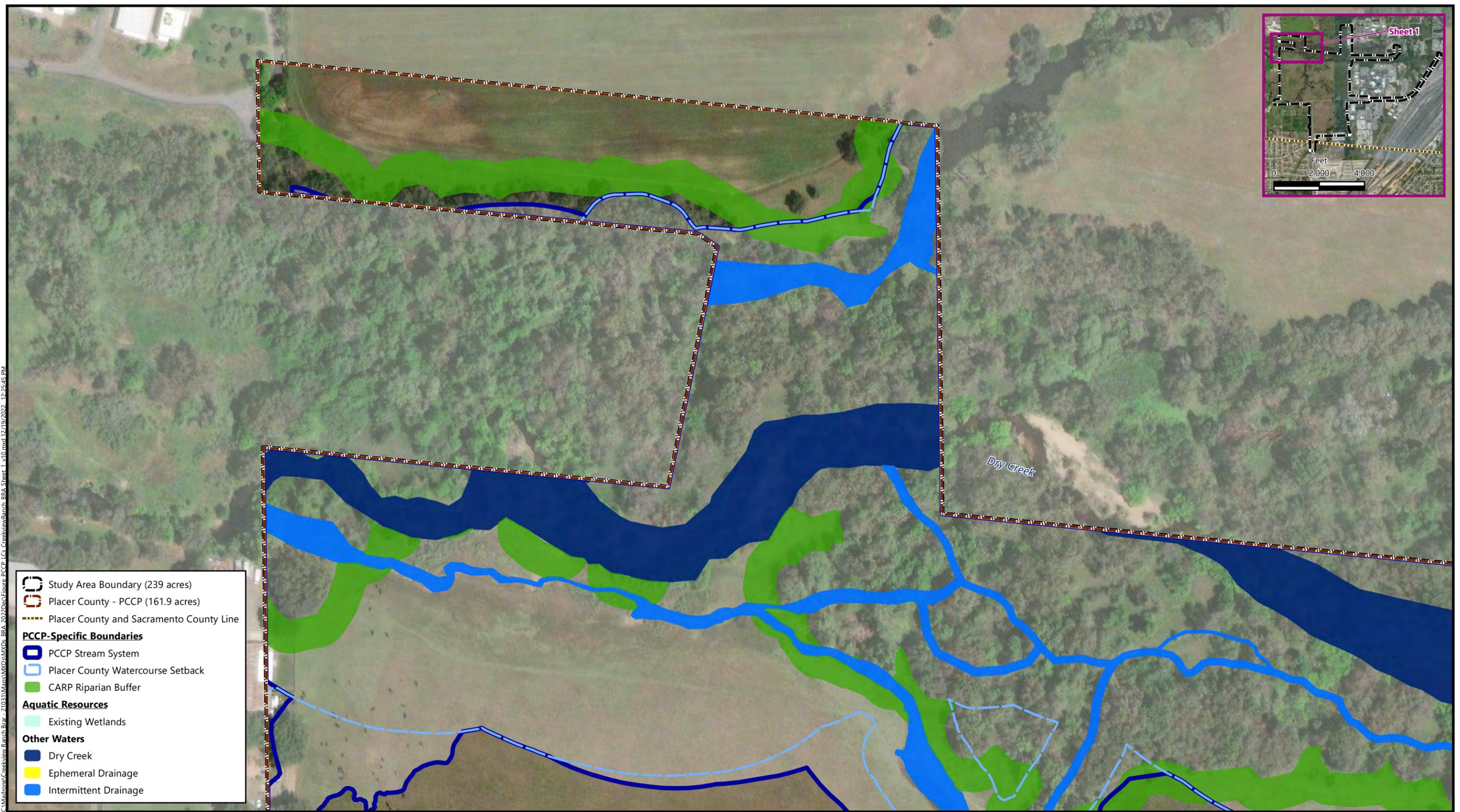
Creekview Ranch  
Placer County, California



**Notes:** Small summation errors may occur due to rounding.  
Only resources and impacts within the PCCP portion of the Study Area are shown on this exhibit.  
Aerial Source: Maxar, 26 April 2022.



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-  Study Area Boundary (239 acres)
-  Placer County - PCCP (161.9 acres)
-  Placer County and Sacramento County Line
- PCCP-Specific Boundaries**
-  PCCP Stream System
-  Placer County Watercourse Setback
-  CARP Riparian Buffer
- Aquatic Resources**
-  Existing Wetlands
- Other Waters**
-  Dry Creek
-  Ephemeral Drainage
-  Intermittent Drainage



**PCCP Habitats and  
PCCP-Specific Boundaries  
Sheet 1**

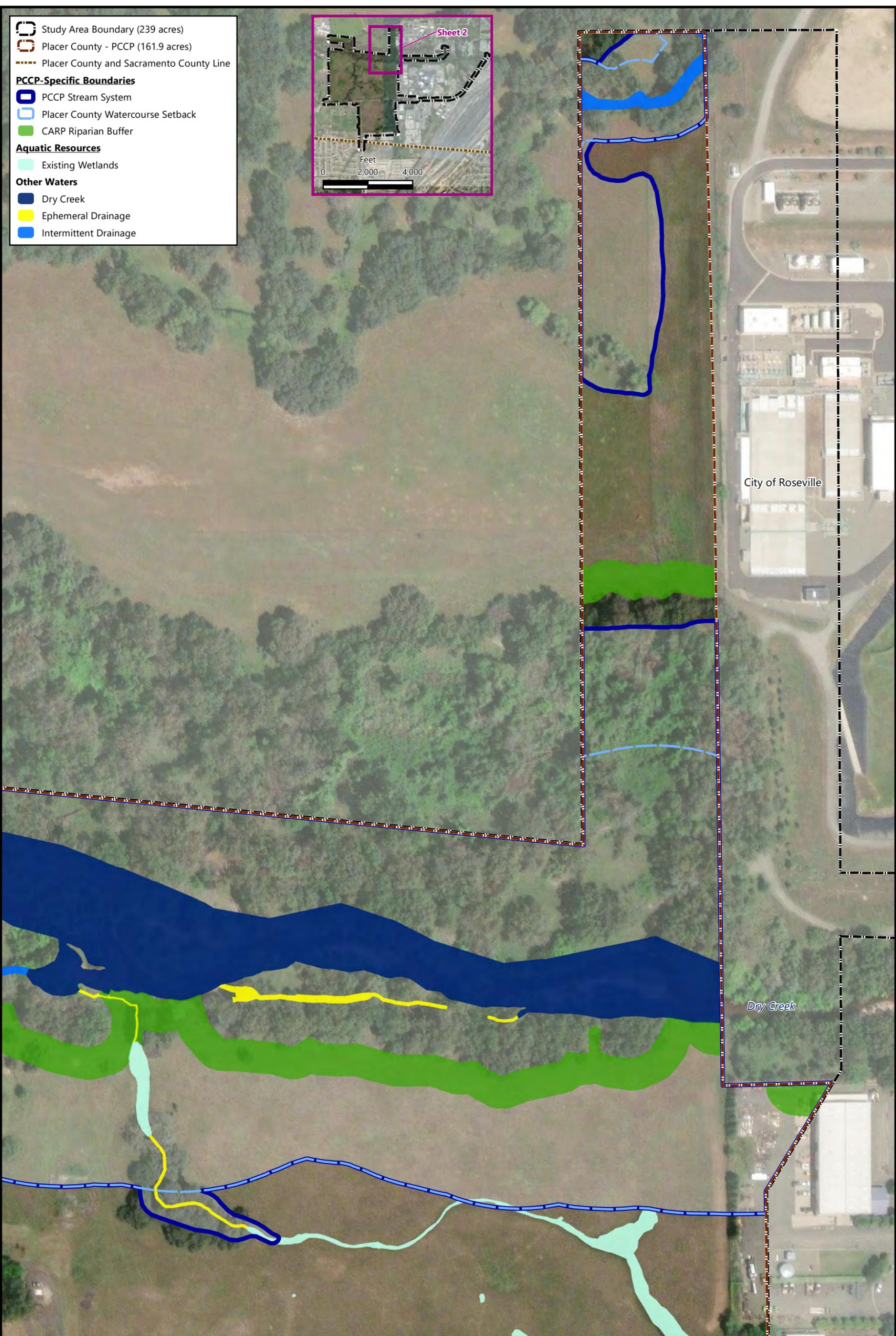
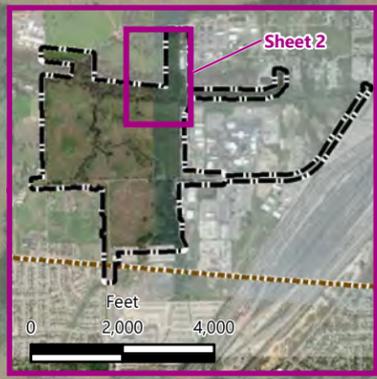


Creekview Ranch  
Placer County, California

**Notes:** Small summation errors may occur due to rounding.  
Only resources and impacts within the PCCP portion of the Study Area are shown on this exhibit.  
Aerial Source: Maxar, 26 April 2022.



-  Study Area Boundary (239 acres)
-  Placer County - PCCP (161.9 acres)
-  Placer County and Sacramento County Line
- PCCP-Specific Boundaries**
-  PCCP Stream System
-  Placer County Watercourse Setback
-  CARP Riparian Buffer
- Aquatic Resources**
-  Existing Wetlands
- Other Waters**
-  Dry Creek
-  Ephemeral Drainage
-  Intermittent Drainage



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**PCCP Habitats and  
PCCP-Specific Boundaries  
Sheet 2**

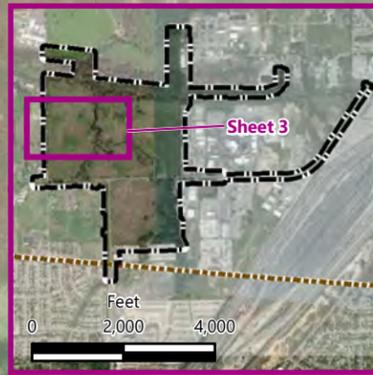
Creekview Ranch  
Placer County, California



**Notes:** Small summation errors may occur due to rounding.  
Only resources and impacts within the PCCP portion of the Study Area are shown on this exhibit.  
Aerial Source: Maxar, 26 April 2022.



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- Study Area Boundary (239 acres)
- Placer County - PCCP (161.9 acres)
- Placer County and Sacramento County Line
- PCCP-Specific Boundaries**
- PCCP Stream System
- Placer County Watercourse Setback
- CARP Riparian Buffer
- Aquatic Resources**
- Existing Wetlands
- Other Waters**
- Dry Creek
- Ephemeral Drainage
- Intermittent Drainage



### PCCP Habitats and PCCP-Specific Boundaries Sheet 3

Creekview Ranch  
Placer County, California



**Notes:** Small summation errors may occur due to rounding.  
Only resources and impacts within the PCCP portion of the Study Area are shown on this exhibit.  
Aerial Source: Maxar, 26 April 2022.





-  Study Area Boundary (239 acres)
-  Placer County - PCCP (161.9 acres)
-  Placer County and Sacramento County Line
- PCCP-Specific Boundaries**
-  PCCP Stream System
-  Placer County Watercourse Setback
-  CARP Riparian Buffer
- Aquatic Resources**
-  Existing Wetlands
- Other Waters**
-  Dry Creek
-  Ephemeral Drainage
-  Intermittent Drainage

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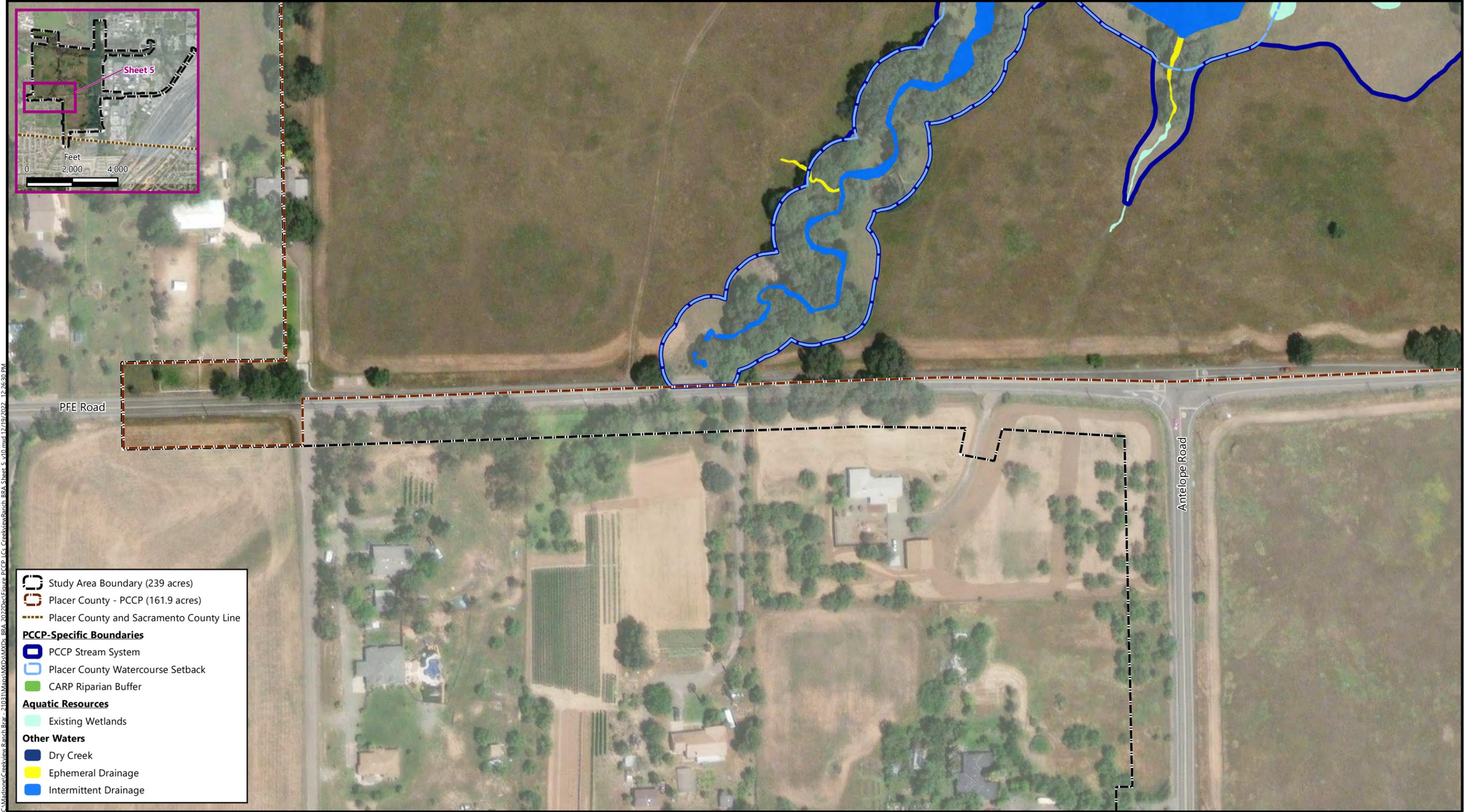
**Notes:** Small summation errors may occur due to rounding.  
 Only resources and impacts within the PCCP portion of the Study Area are shown on this exhibit.  
 Aerial Source: Maxar, 26 April 2022.

**PCCP Habitats and  
 PCCP-Specific Boundaries  
 Sheet 4**

Creekside Ranch  
 Placer County, California







-  Study Area Boundary (239 acres)
-  Placer County - PCCP (161.9 acres)
-  Placer County and Sacramento County Line
- PCCP-Specific Boundaries**
-  PCCP Stream System
-  Placer County Watercourse Setback
-  CARP Riparian Buffer
- Aquatic Resources**
-  Existing Wetlands
- Other Waters**
-  Dry Creek
-  Ephemeral Drainage
-  Intermittent Drainage



**PCCP Habitats and  
PCCP-Specific Boundaries  
Sheet 5**

**Notes:** Small summation errors may occur due to rounding.  
Only resources and impacts within the PCCP portion of the Study Area are shown on this exhibit.  
Aerial Source: Maxar, 26 April 2022.

Creekview Ranch  
Placer County, California



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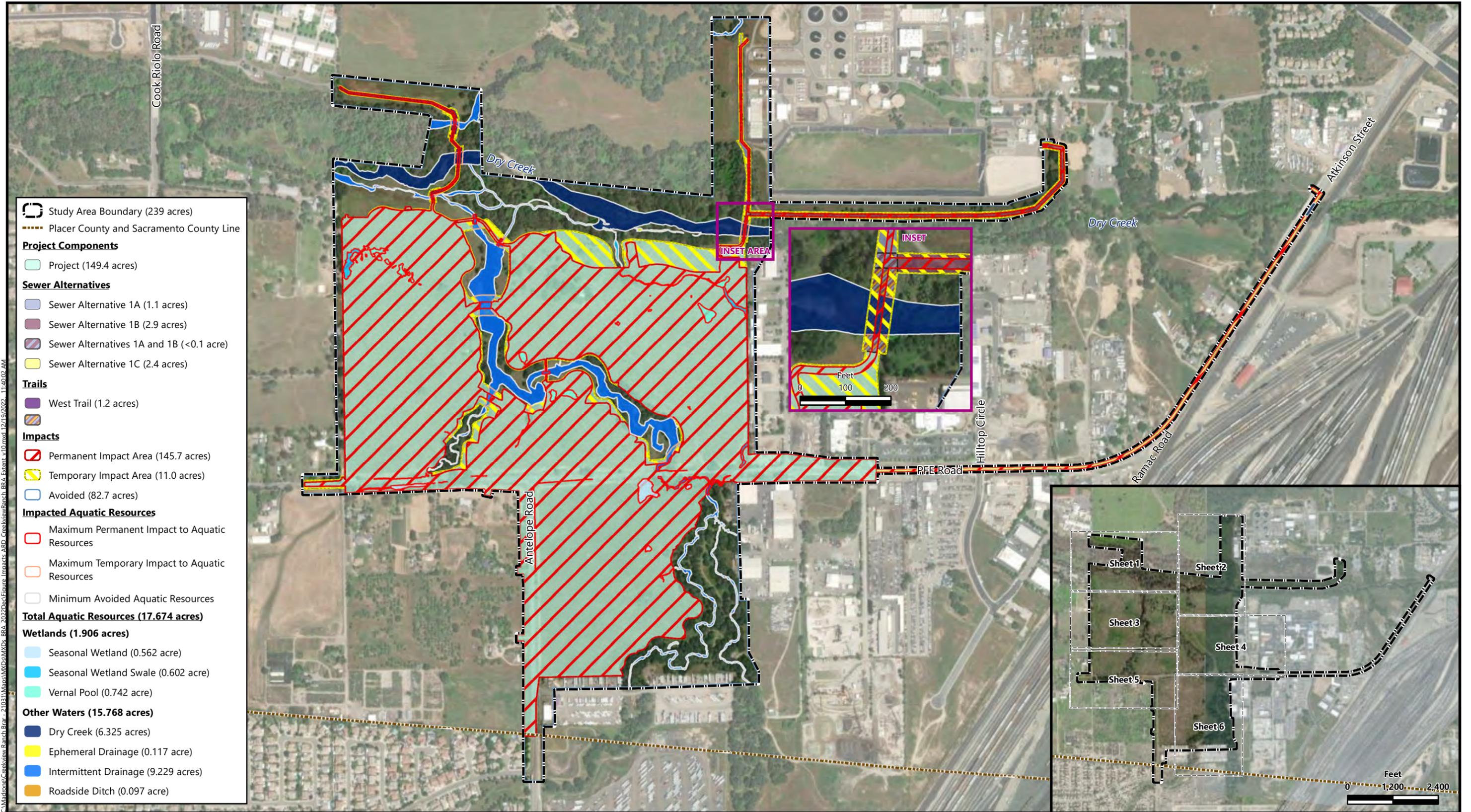


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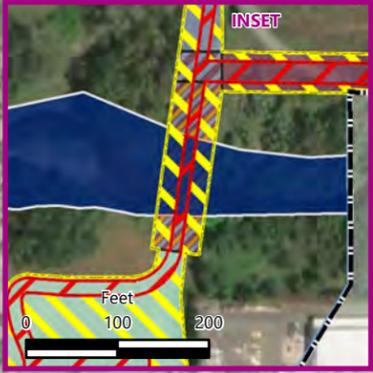
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## **Impacts to Aquatic Resources**





- Study Area Boundary (239 acres)
- Placer County and Sacramento County Line
- Project Components**
- Project (149.4 acres)
- Sewer Alternatives**
- Sewer Alternative 1A (1.1 acres)
- Sewer Alternative 1B (2.9 acres)
- Sewer Alternatives 1A and 1B (<0.1 acre)
- Sewer Alternative 1C (2.4 acres)
- Trails**
- West Trail (1.2 acres)
- 
- Impacts**
- Permanent Impact Area (145.7 acres)
- Temporary Impact Area (11.0 acres)
- Avoided (82.7 acres)
- Impacted Aquatic Resources**
- Maximum Permanent Impact to Aquatic Resources
- Maximum Temporary Impact to Aquatic Resources
- Minimum Avoided Aquatic Resources
- Total Aquatic Resources (17,674 acres)**
- Wetlands (1,906 acres)**
- Seasonal Wetland (0.562 acre)
- Seasonal Wetland Swale (0.602 acre)
- Vernal Pool (0.742 acre)
- Other Waters (15,768 acres)**
- Dry Creek (6.325 acres)
- Ephemeral Drainage (0.117 acre)
- Intermittent Drainage (9.229 acres)
- Roadside Ditch (0.097 acre)



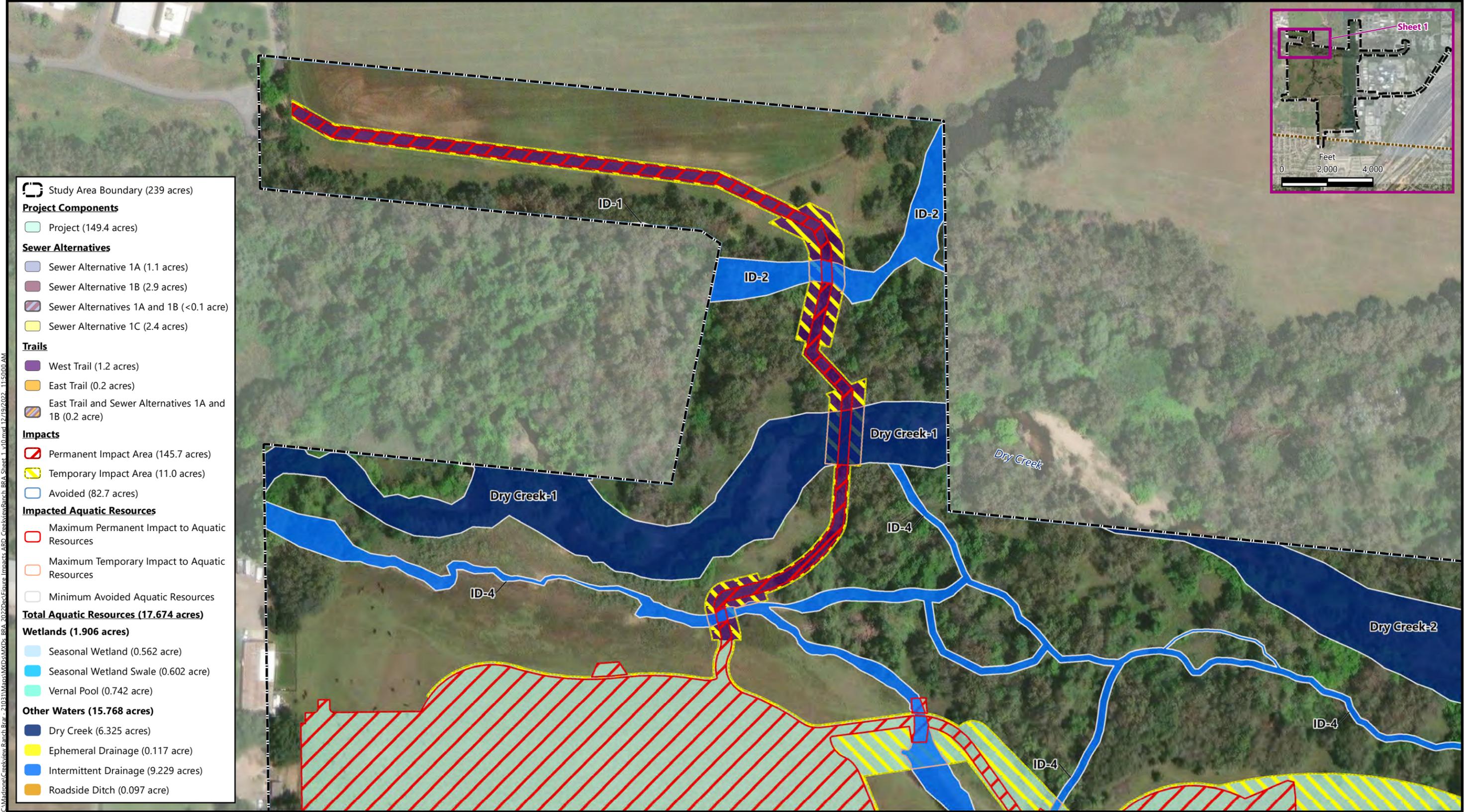
**Impacts to Aquatic Resources  
Overall Sheet**

Aerial Source: Maxar, 26 April 2022.

Creekview Ranch  
Placer County, California







- Study Area Boundary (239 acres)
- Project Components**
- Project (149.4 acres)
- Sewer Alternatives**
- Sewer Alternative 1A (1.1 acres)
- Sewer Alternative 1B (2.9 acres)
- Sewer Alternatives 1A and 1B (<0.1 acre)
- Sewer Alternative 1C (2.4 acres)
- Trails**
- West Trail (1.2 acres)
- East Trail (0.2 acres)
- East Trail and Sewer Alternatives 1A and 1B (0.2 acre)
- Impacts**
- Permanent Impact Area (145.7 acres)
- Temporary Impact Area (11.0 acres)
- Avoided (82.7 acres)
- Impacted Aquatic Resources**
- Maximum Permanent Impact to Aquatic Resources
- Maximum Temporary Impact to Aquatic Resources
- Minimum Avoided Aquatic Resources
- Total Aquatic Resources (17.674 acres)**
- Wetlands (1.906 acres)**
- Seasonal Wetland (0.562 acre)
- Seasonal Wetland Swale (0.602 acre)
- Vernal Pool (0.742 acre)
- Other Waters (15.768 acres)**
- Dry Creek (6.325 acres)
- Ephemeral Drainage (0.117 acre)
- Intermittent Drainage (9.229 acres)
- Roadside Ditch (0.097 acre)



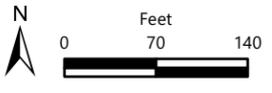
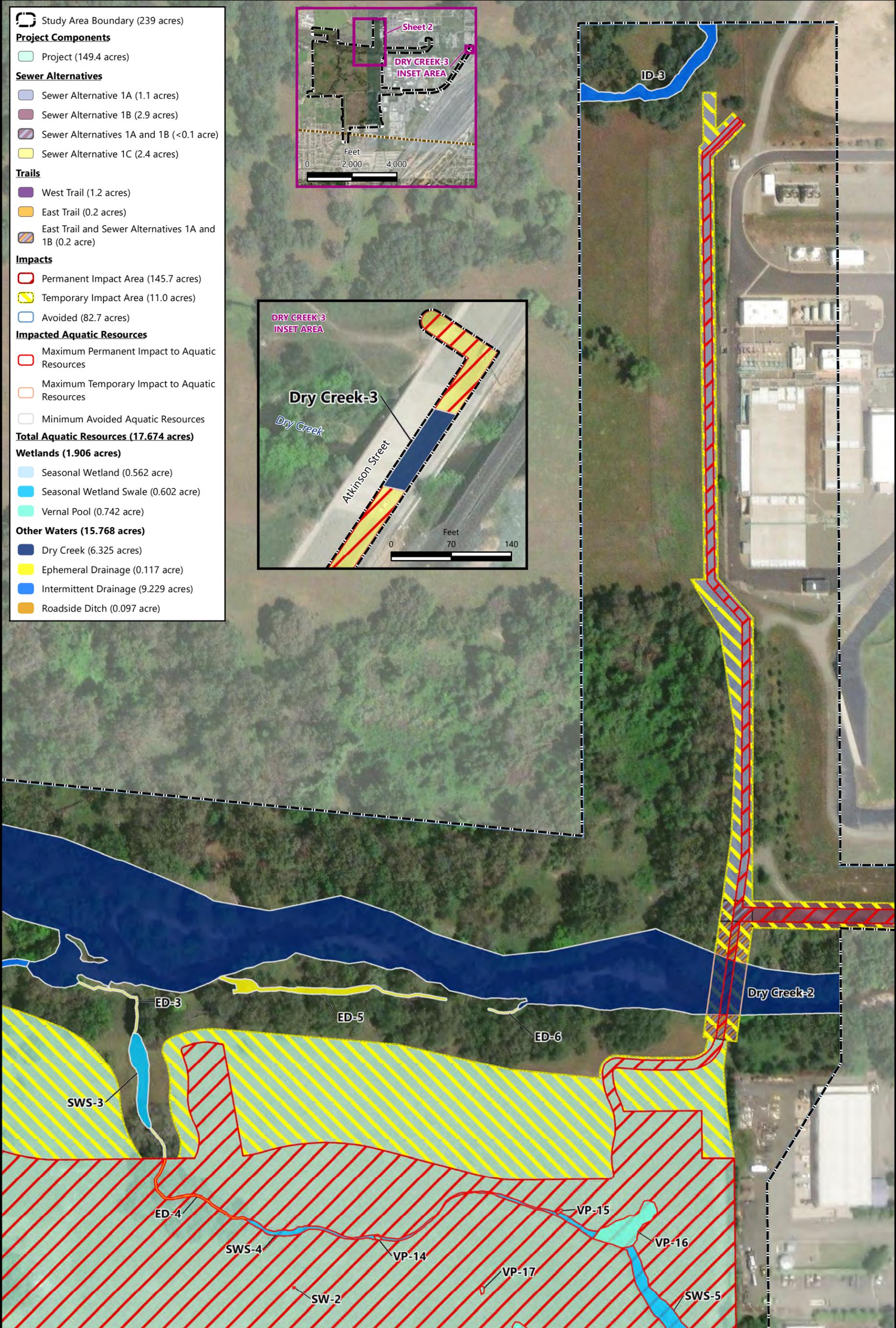
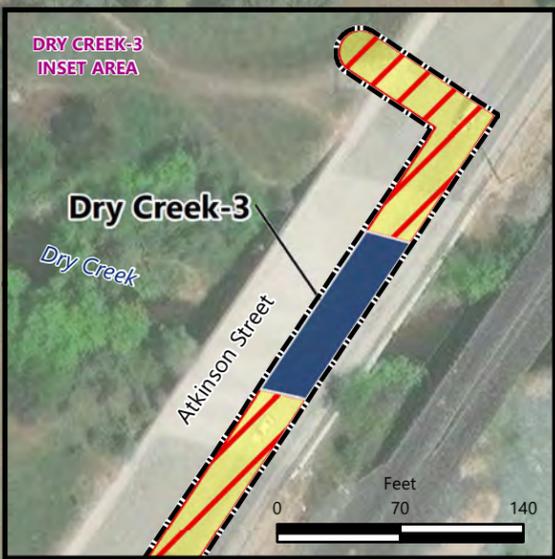
**Impacts to Aquatic Resources  
Sheet 1**

Aerial Source: Maxar, 26 April 2022.





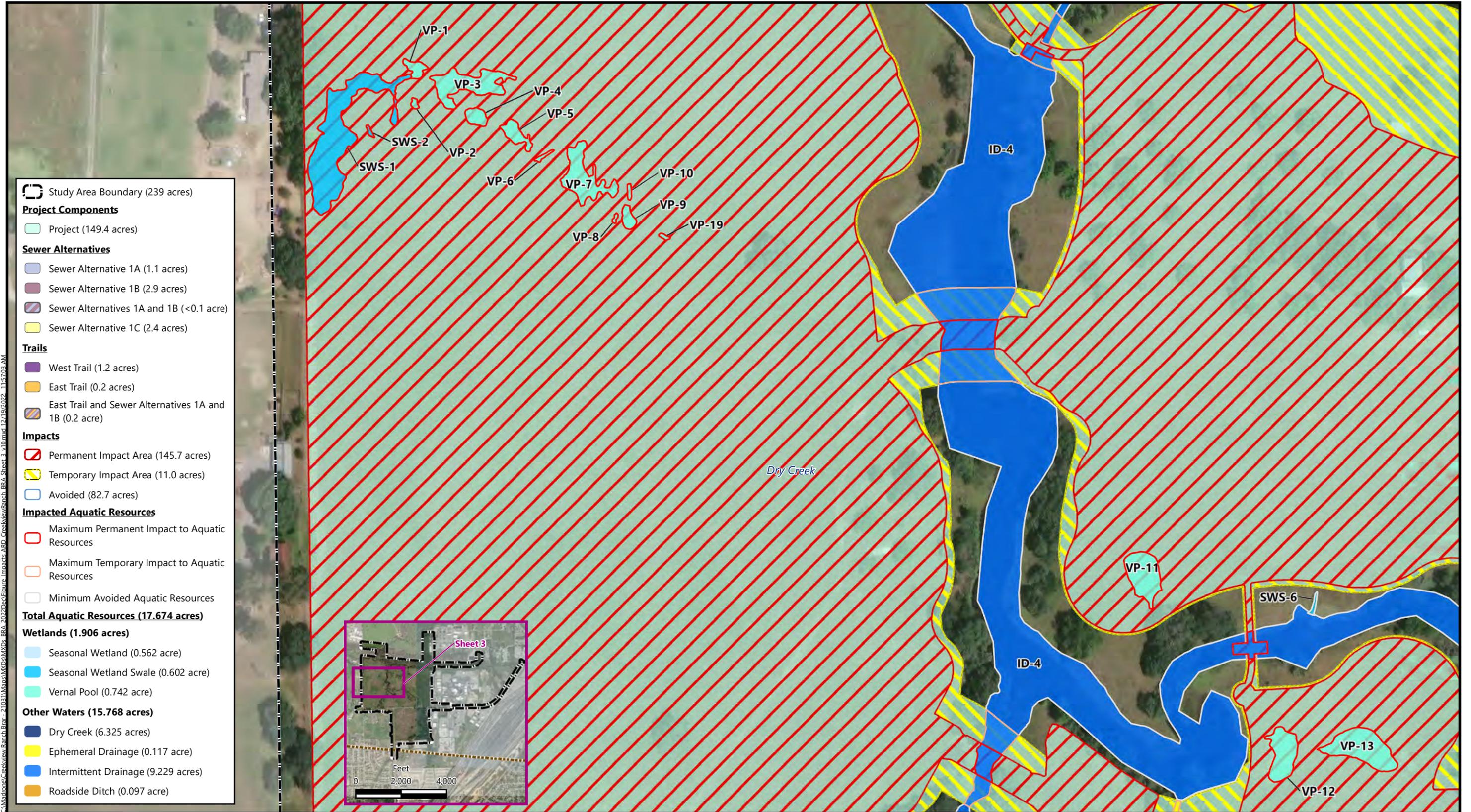
-  Study Area Boundary (239 acres)
- Project Components**
-  Project (149.4 acres)
- Sewer Alternatives**
-  Sewer Alternative 1A (1.1 acres)
-  Sewer Alternative 1B (2.9 acres)
-  Sewer Alternatives 1A and 1B (<0.1 acre)
-  Sewer Alternative 1C (2.4 acres)
- Trails**
-  West Trail (1.2 acres)
-  East Trail (0.2 acres)
-  East Trail and Sewer Alternatives 1A and 1B (0.2 acre)
- Impacts**
-  Permanent Impact Area (145.7 acres)
-  Temporary Impact Area (11.0 acres)
-  Avoided (82.7 acres)
- Impacted Aquatic Resources**
-  Maximum Permanent Impact to Aquatic Resources
-  Maximum Temporary Impact to Aquatic Resources
-  Minimum Avoided Aquatic Resources
- Total Aquatic Resources (17,674 acres)**
- Wetlands (1,906 acres)**
-  Seasonal Wetland (0.562 acre)
-  Seasonal Wetland Swale (0.602 acre)
-  Vernal Pool (0.742 acre)
- Other Waters (15,768 acres)**
-  Dry Creek (6.325 acres)
-  Ephemeral Drainage (0.117 acre)
-  Intermittent Drainage (9.229 acres)
-  Roadside Ditch (0.097 acre)



**Impacts to Aquatic Resources  
Sheet 2**







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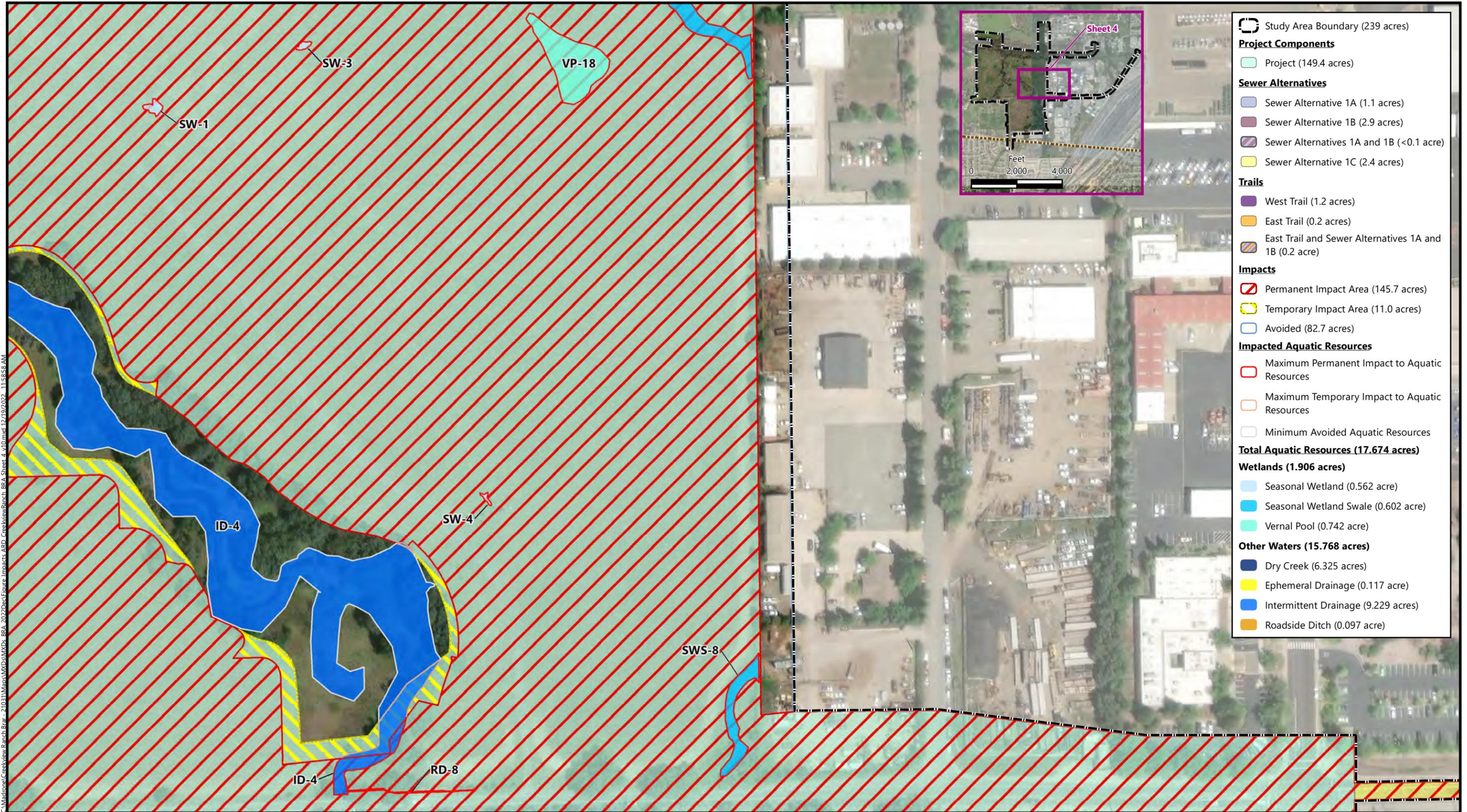
Aerial Source: Maxar, 26 April 2022.

**Impacts to Aquatic Resources  
Sheet 3**

Creekview Ranch  
Placer County, California







- Study Area Boundary (239 acres)
- Project Components**
- Project (149.4 acres)
- Sewer Alternatives**
- Sewer Alternative 1A (1.1 acres)
- Sewer Alternative 1B (2.9 acres)
- Sewer Alternatives 1A and 1B (<0.1 acre)
- Sewer Alternative 1C (2.4 acres)
- Trails**
- West Trail (1.2 acres)
- East Trail (0.2 acres)
- East Trail and Sewer Alternatives 1A and 1B (0.2 acre)
- Impacts**
- Permanent Impact Area (145.7 acres)
- Temporary Impact Area (11.0 acres)
- Avoided (82.7 acres)
- Impacted Aquatic Resources**
- Maximum Permanent Impact to Aquatic Resources
- Maximum Temporary Impact to Aquatic Resources
- Minimum Avoided Aquatic Resources
- Total Aquatic Resources (17.674 acres)**
- Wetlands (1.906 acres)**
- Seasonal Wetland (0.562 acre)
- Seasonal Wetland Swale (0.602 acre)
- Vernal Pool (0.742 acre)
- Other Waters (15.768 acres)**
- Dry Creek (6.325 acres)
- Ephemeral Drainage (0.117 acre)
- Intermittent Drainage (9.229 acres)
- Roadside Ditch (0.097 acre)

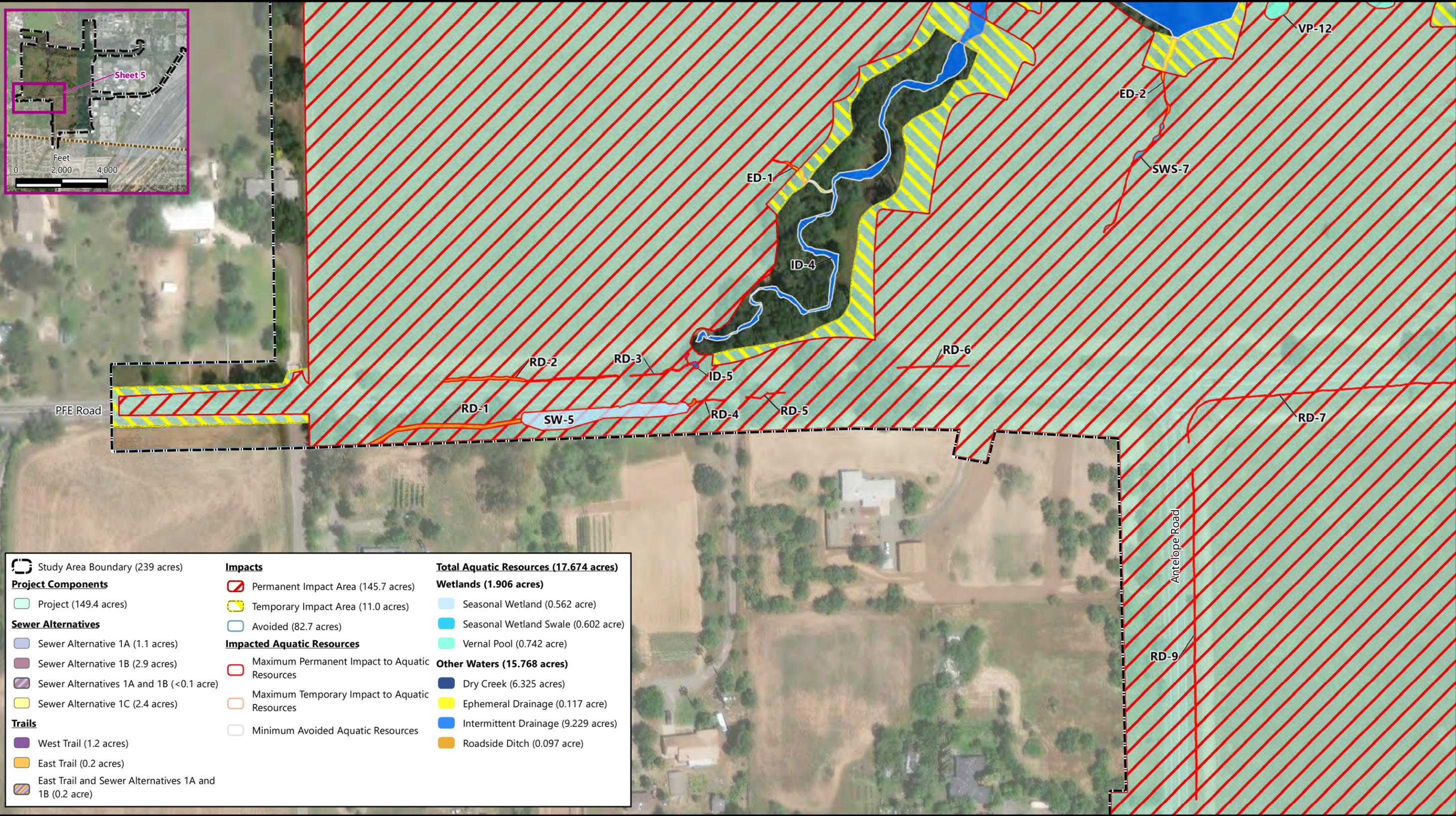


**Impacts to Aquatic Resources  
Sheet 4**



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Study Area Boundary (239 acres)	<b>Impacts</b>	<b>Total Aquatic Resources (17.674 acres)</b>
<b>Project Components</b>	Permanent Impact Area (145.7 acres)	<b>Wetlands (1.906 acres)</b>
Project (149.4 acres)	Temporary Impact Area (11.0 acres)	Seasonal Wetland (0.562 acre)
<b>Sewer Alternatives</b>	Avoided (82.7 acres)	Seasonal Wetland Swale (0.602 acre)
Sewer Alternative 1A (1.1 acres)	<b>Impacted Aquatic Resources</b>	Vernal Pool (0.742 acre)
Sewer Alternative 1B (2.9 acres)	Maximum Permanent Impact to Aquatic Resources	<b>Other Waters (15.768 acres)</b>
Sewer Alternatives 1A and 1B (<0.1 acre)	Maximum Temporary Impact to Aquatic Resources	Dry Creek (6.325 acres)
Sewer Alternative 1C (2.4 acres)	Minimum Avoided Aquatic Resources	Ephemeral Drainage (0.117 acre)
<b>Trails</b>		Intermittent Drainage (9.229 acres)
West Trail (1.2 acres)		Roadside Ditch (0.097 acre)
East Trail (0.2 acres)		
East Trail and Sewer Alternatives 1A and 1B (0.2 acre)		



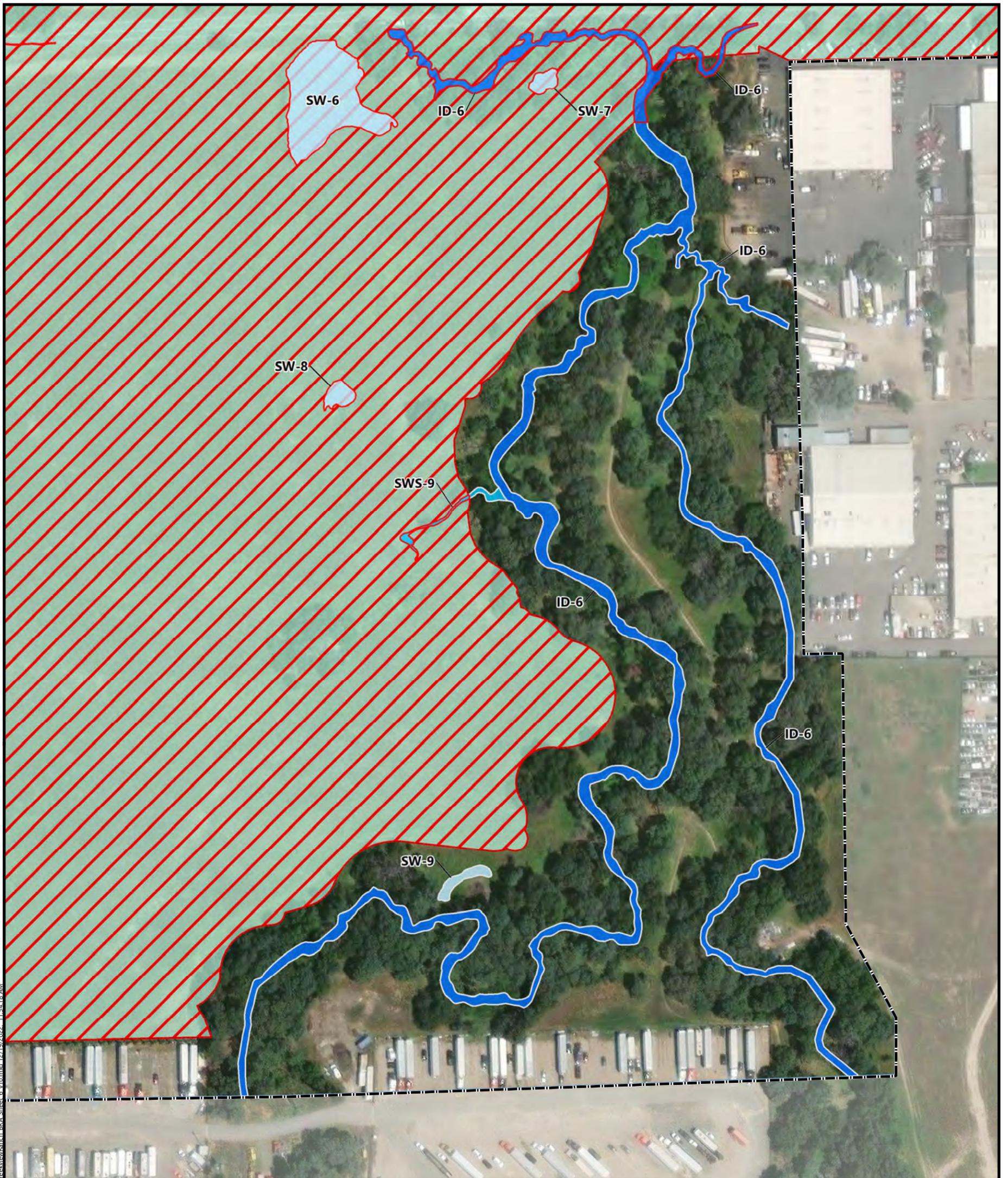
**Impacts to Aquatic Resources  
Sheet 5**

Aerial Source: Maxar, 26 April 2022.

Creekview Ranch  
Placer County, California







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Study Area Boundary (239 acres)	<b>Impacts</b>	<b>Total Aquatic Resources (17,674 acres)</b>
Placer County and Sacramento County Line	Permanent Impact Area (145.7 acres)	<b>Wetlands (1,906 acres)</b>
<b>Project Components</b>	Temporary Impact Area (11.0 acres)	Seasonal Wetland (0.562 acre)
Project (149.4 acres)	Avoided (82.7 acres)	Seasonal Wetland Swale (0.602 acre)
<b>Sewer Alternatives</b>	<b>Impacted Aquatic Resources</b>	Vernal Pool (0.742 acre)
Sewer Alternative 1A (1.1 acres)	Maximum Permanent Impact to Aquatic Resources	<b>Other Waters (15,768 acres)</b>
Sewer Alternative 1B (2.9 acres)	Maximum Temporary Impact to Aquatic Resources	Dry Creek (6.325 acres)
Sewer Alternatives 1A and 1B (<0.1 acre)	Minimum Avoided Aquatic Resources	Ephemeral Drainage (0.117 acre)
Sewer Alternative 1C (2.4 acres)		Intermittent Drainage (9.229 acres)
<b>Trails</b>		Roadside Ditch (0.097 acre)
West Trail (1.2 acres)		
East Trail (0.2 acres)		
East Trail and Sewer Alternatives 1A and 1B (0.2 acre)		



**Impacts to Aquatic Resources  
Sheet 6**



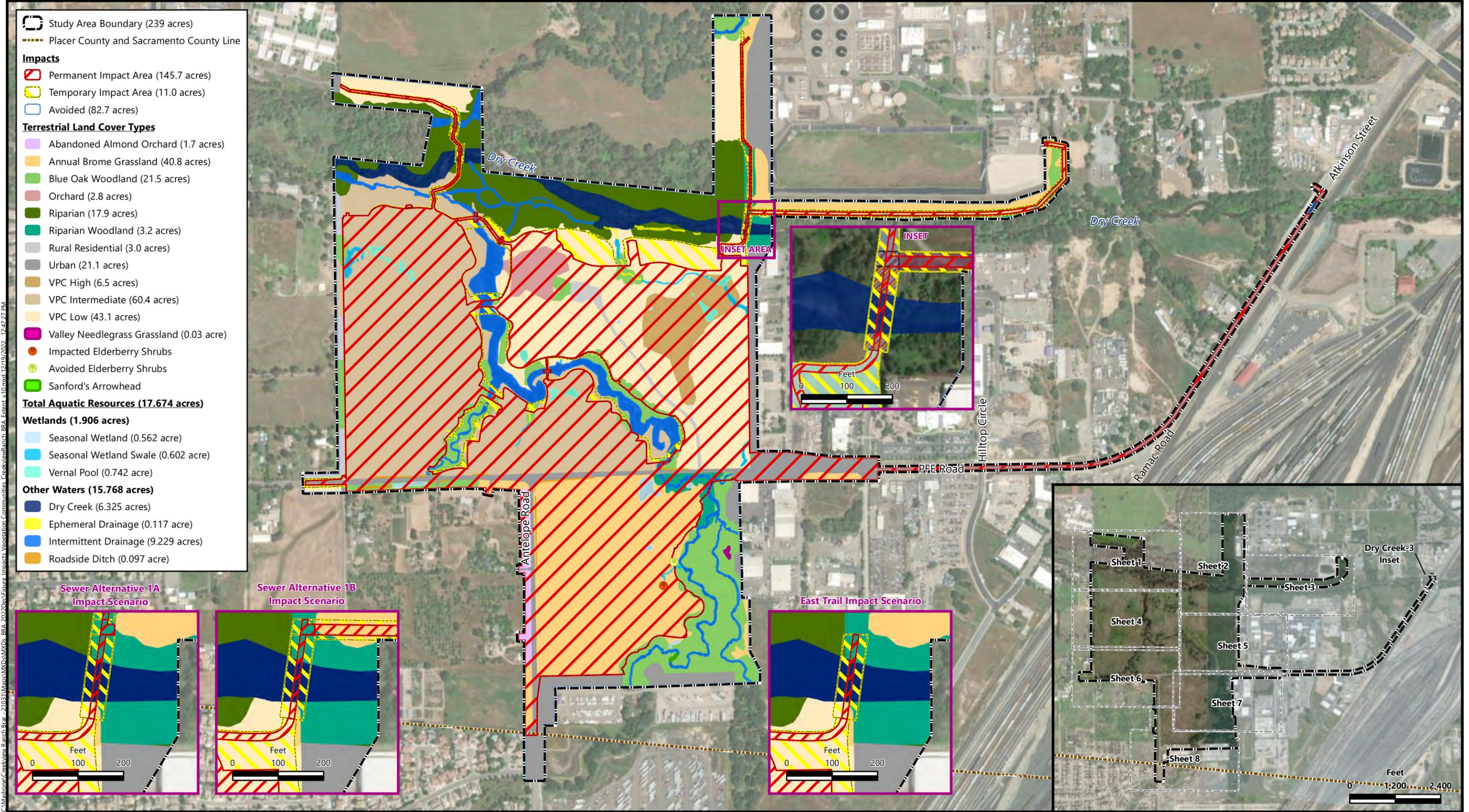


# Attachment I

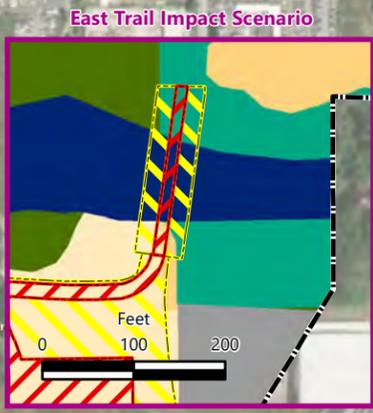
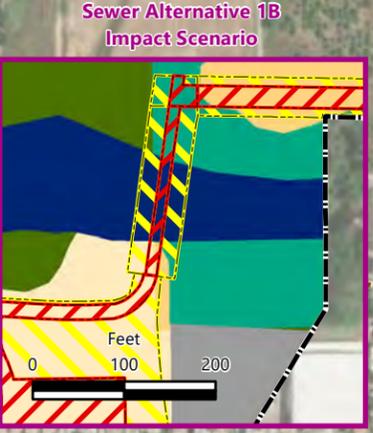
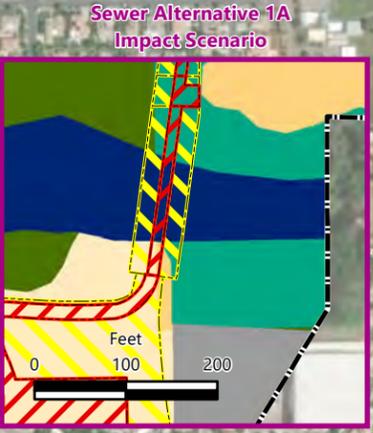
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**Impacts to Vegetation Communities/Land Covers,  
Sanford's Arrowhead, and Elderberry Shrubs**



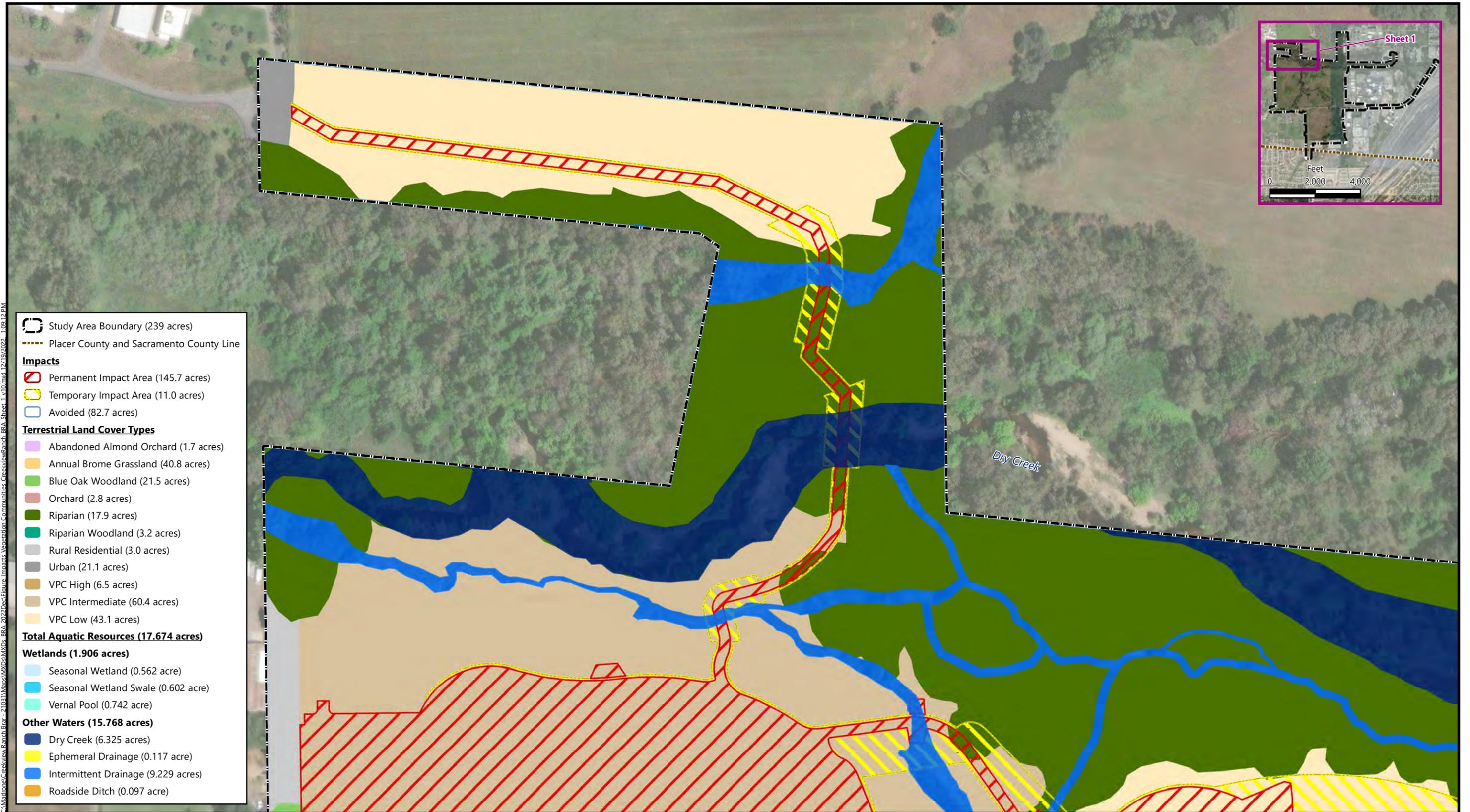


- Study Area Boundary (239 acres)
- Placer County and Sacramento County Line
- Impacts**
- Permanent Impact Area (145.7 acres)
- Temporary Impact Area (11.0 acres)
- Avoided (82.7 acres)
- Terrestrial Land Cover Types**
- Abandoned Almond Orchard (1.7 acres)
- Annual Brome Grassland (40.8 acres)
- Blue Oak Woodland (21.5 acres)
- Orchard (2.8 acres)
- Riparian (17.9 acres)
- Riparian Woodland (3.2 acres)
- Rural Residential (3.0 acres)
- Urban (21.1 acres)
- VPC High (6.5 acres)
- VPC Intermediate (60.4 acres)
- VPC Low (43.1 acres)
- Valley Needlegrass Grassland (0.03 acre)
- Impacted Elderberry Shrubs
- Avoided Elderberry Shrubs
- Sanford's Arrowhead
- Total Aquatic Resources (17,674 acres)**
- Wetlands (1,906 acres)**
- Seasonal Wetland (0.562 acre)
- Seasonal Wetland Swale (0.602 acre)
- Vernal Pool (0.742 acre)
- Other Waters (15,768 acres)**
- Dry Creek (6,325 acres)
- Ephemeral Drainage (0.117 acre)
- Intermittent Drainage (9,229 acres)
- Roadside Ditch (0.097 acre)



**Note:** Small summation errors may occur due to rounding.  
Aerial Source: Maxar, 26 April 2022.





- Study Area Boundary (239 acres)
- Placer County and Sacramento County Line
- Impacts**
- Permanent Impact Area (145.7 acres)
- Temporary Impact Area (11.0 acres)
- Avoided (82.7 acres)
- Terrestrial Land Cover Types**
- Abandoned Almond Orchard (1.7 acres)
- Annual Brome Grassland (40.8 acres)
- Blue Oak Woodland (21.5 acres)
- Orchard (2.8 acres)
- Riparian (17.9 acres)
- Riparian Woodland (3.2 acres)
- Rural Residential (3.0 acres)
- Urban (21.1 acres)
- VPC High (6.5 acres)
- VPC Intermediate (60.4 acres)
- VPC Low (43.1 acres)
- Total Aquatic Resources (17.674 acres)**
- Wetlands (1.906 acres)**
- Seasonal Wetland (0.562 acre)
- Seasonal Wetland Swale (0.602 acre)
- Vernal Pool (0.742 acre)
- Other Waters (15.768 acres)**
- Dry Creek (6.325 acres)
- Ephemeral Drainage (0.117 acre)
- Intermittent Drainage (9.229 acres)
- Roadside Ditch (0.097 acre)



**Note:** Small summation errors may occur due to rounding.  
Aerial Source: Maxar, 26 April 2022.

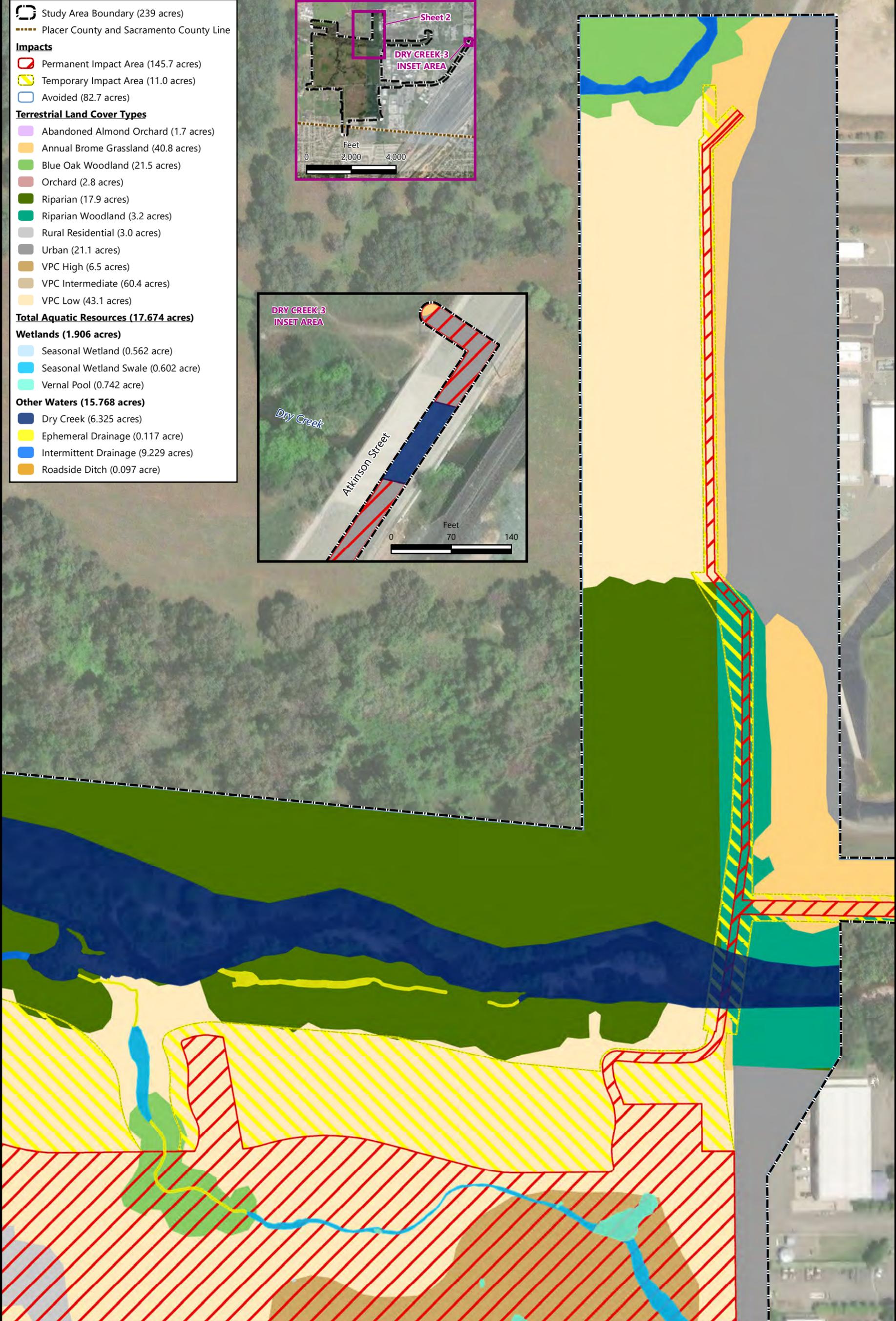
**Impacts to Vegetation  
Communities/Land Covers, Sanford's  
Arrowhead, and Elderberry Shrubs  
Sheet 1**

Creekview Ranch  
Placer County, California

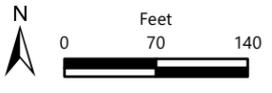




-  Study Area Boundary (239 acres)
-  Placer County and Sacramento County Line
- Impacts**
-  Permanent Impact Area (145.7 acres)
-  Temporary Impact Area (11.0 acres)
-  Avoided (82.7 acres)
- Terrestrial Land Cover Types**
-  Abandoned Almond Orchard (1.7 acres)
-  Annual Brome Grassland (40.8 acres)
-  Blue Oak Woodland (21.5 acres)
-  Orchard (2.8 acres)
-  Riparian (17.9 acres)
-  Riparian Woodland (3.2 acres)
-  Rural Residential (3.0 acres)
-  Urban (21.1 acres)
-  VPC High (6.5 acres)
-  VPC Intermediate (60.4 acres)
-  VPC Low (43.1 acres)
- Total Aquatic Resources (17,674 acres)**
- Wetlands (1,906 acres)**
-  Seasonal Wetland (0.562 acre)
-  Seasonal Wetland Swale (0.602 acre)
-  Vernal Pool (0.742 acre)
- Other Waters (15,768 acres)**
-  Dry Creek (6.325 acres)
-  Ephemeral Drainage (0.117 acre)
-  Intermittent Drainage (9.229 acres)
-  Roadside Ditch (0.097 acre)



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**Impacts to Vegetation  
Communities/Land Covers, Sanford's  
Arrowhead, and Elderberry Shrubs  
Sheet 2**

Creekview Ranch  
Placer County, California



**Note:** Small summation errors may occur due to rounding.  
Aerial Source: Maxar, 26 April 2022.





Study Area Boundary (239 acres)	<b>Terrestrial Land Cover Types</b>	<b>Total Aquatic Resources (17.674 acres)</b>
Placer County and Sacramento County Line	Abandoned Almond Orchard (1.7 acres)	<b>Wetlands (1.906 acres)</b>
<b>Impacts</b>	Annual Brome Grassland (40.8 acres)	Seasonal Wetland (0.562 acre)
Permanent Impact Area (145.7 acres)	Blue Oak Woodland (21.5 acres)	Seasonal Wetland Swale (0.602 acre)
Temporary Impact Area (11.0 acres)	Orchard (2.8 acres)	Vernal Pool (0.742 acre)
Avoided (82.7 acres)	Riparian (17.9 acres)	<b>Other Waters (15.768 acres)</b>
	Riparian Woodland (3.2 acres)	Dry Creek (6.325 acres)
	Rural Residential (3.0 acres)	Ephemeral Drainage (0.117 acre)
	Urban (21.1 acres)	Intermittent Drainage (9.229 acres)
	VPC High (6.5 acres)	Roadside Ditch (0.097 acre)
	VPC Intermediate (60.4 acres)	
	VPC Low (43.1 acres)	



**Note:** Small summation errors may occur due to rounding.  
Aerial Source: Maxar, 26 April 2022.





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Study Area Boundary (239 acres)

Placer County and Sacramento County Line

**Impacts**

- Permanent Impact Area (145.7 acres)
- Temporary Impact Area (11.0 acres)
- Avoided (82.7 acres)

**Terrestrial Land Cover Types**

- Abandoned Almond Orchard (1.7 acres)
- Annual Brome Grassland (40.8 acres)
- Blue Oak Woodland (21.5 acres)
- Orchard (2.8 acres)
- Riparian (17.9 acres)
- Riparian Woodland (3.2 acres)
- Rural Residential (3.0 acres)
- Urban (21.1 acres)
- VPC High (6.5 acres)
- VPC Intermediate (60.4 acres)
- VPC Low (43.1 acres)

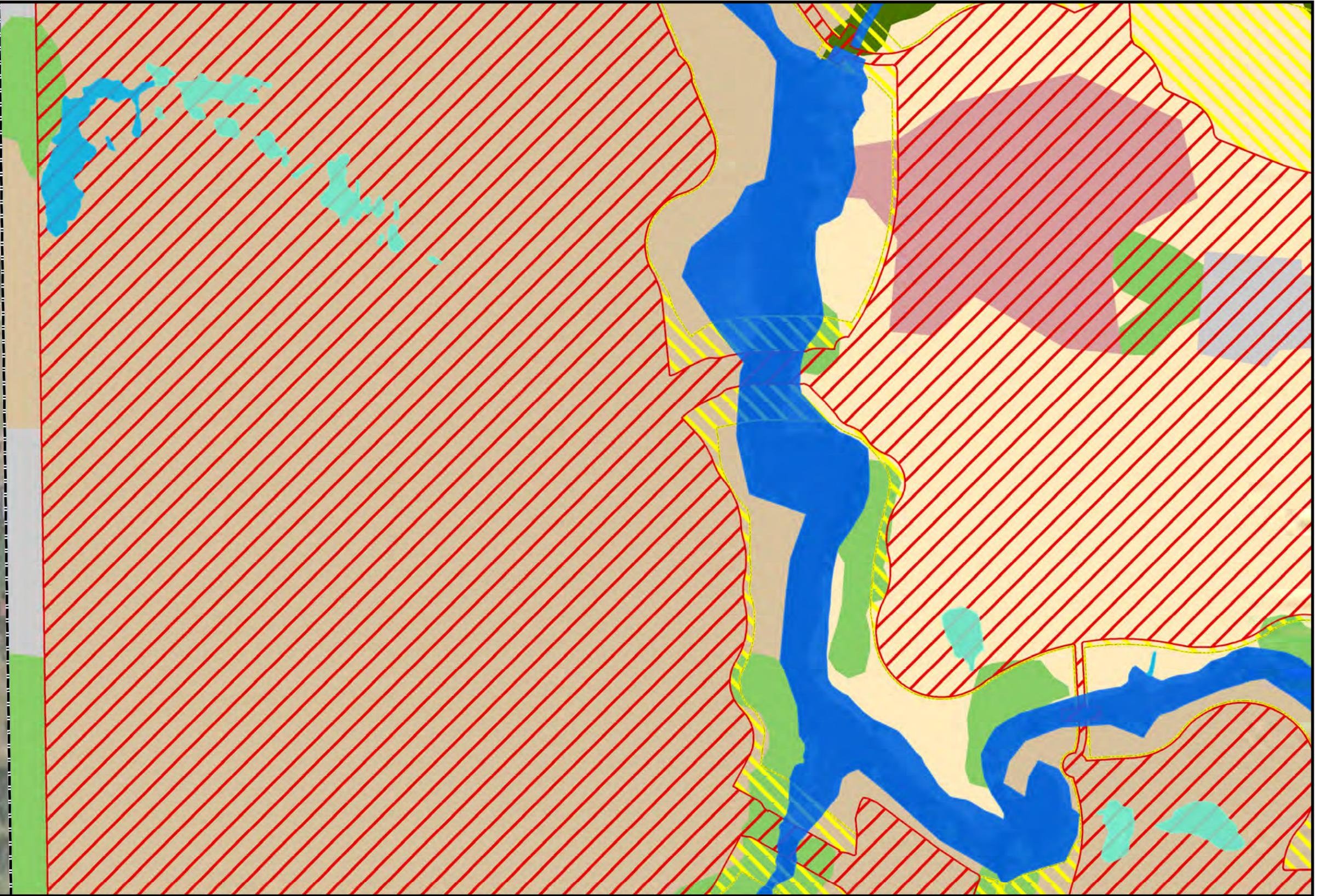
**Total Aquatic Resources (17,674 acres)**

**Wetlands (1,906 acres)**

- Seasonal Wetland (0.562 acre)
- Seasonal Wetland Swale (0.602 acre)
- Vernal Pool (0.742 acre)

**Other Waters (15,768 acres)**

- Dry Creek (6.325 acres)
- Ephemeral Drainage (0.117 acre)
- Intermittent Drainage (9.229 acres)
- Roadside Ditch (0.097 acre)



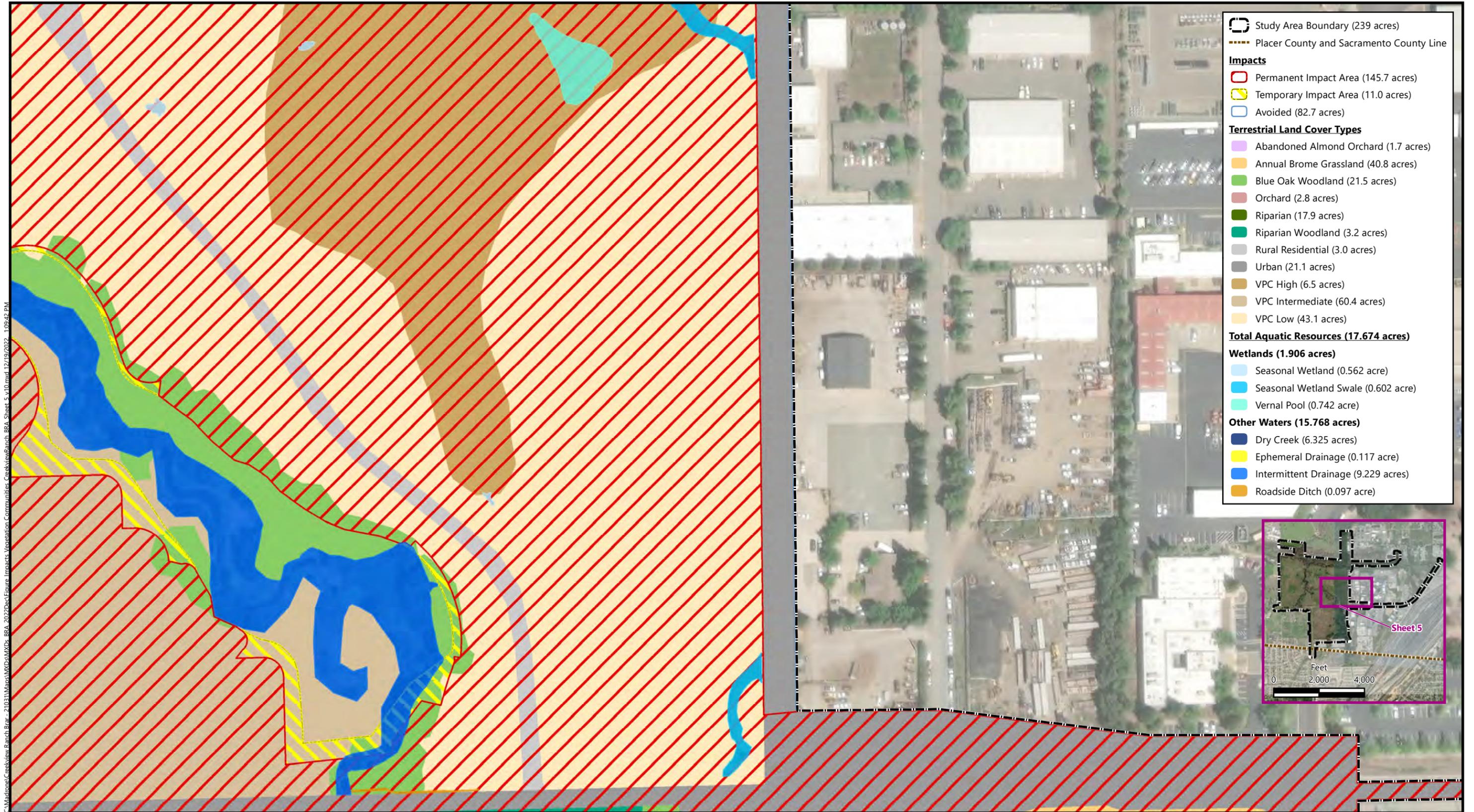
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Aerial Source: Maxar, 26 April 2022.

**Impacts to Vegetation  
Communities/Land Covers, Sanford's  
Arrowhead, and Elderberry Shrubs  
Sheet 4**

Creekview Ranch  
Placer County, California







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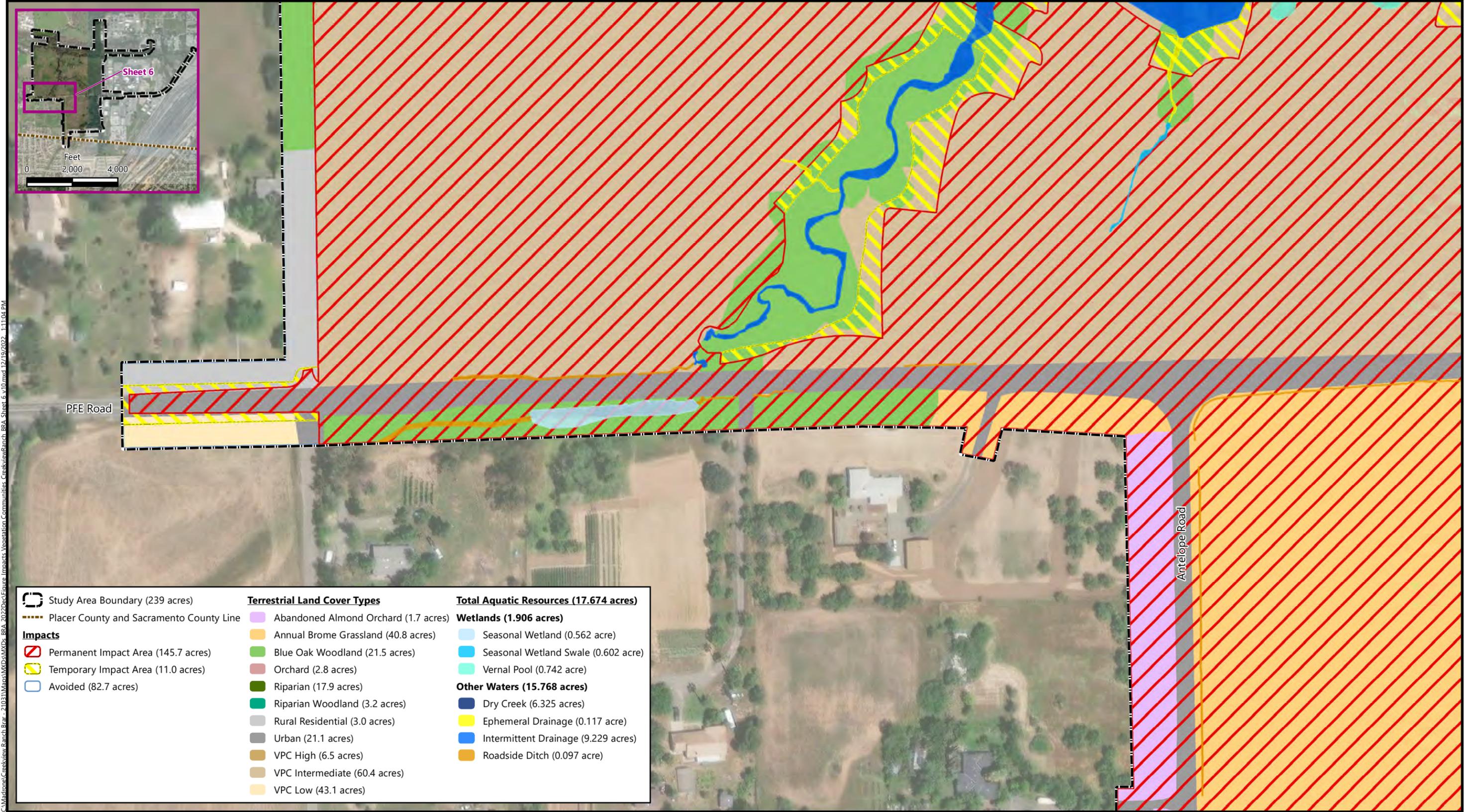
**Note:** Small summation errors may occur due to rounding.  
Aerial Source: Maxar, 26 April 2022.

**Impacts to Vegetation  
Communities/Land Covers, Sanford's  
Arrowhead, and Elderberry Shrubs  
Sheet 5**

Creekview Ranch  
Placer County, California







Study Area Boundary (239 acres)	<b>Terrestrial Land Cover Types</b>	<b>Total Aquatic Resources (17.674 acres)</b>
Placer County and Sacramento County Line	Abandoned Almond Orchard (1.7 acres)	<b>Wetlands (1.906 acres)</b>
<b>Impacts</b>	Annual Brome Grassland (40.8 acres)	Seasonal Wetland (0.562 acre)
Permanent Impact Area (145.7 acres)	Blue Oak Woodland (21.5 acres)	Seasonal Wetland Swale (0.602 acre)
Temporary Impact Area (11.0 acres)	Orchard (2.8 acres)	Vernal Pool (0.742 acre)
Avoided (82.7 acres)	Riparian (17.9 acres)	<b>Other Waters (15.768 acres)</b>
	Riparian Woodland (3.2 acres)	Dry Creek (6.325 acres)
	Rural Residential (3.0 acres)	Ephemeral Drainage (0.117 acre)
	Urban (21.1 acres)	Intermittent Drainage (9.229 acres)
	VPC High (6.5 acres)	Roadside Ditch (0.097 acre)
	VPC Intermediate (60.4 acres)	
	VPC Low (43.1 acres)	



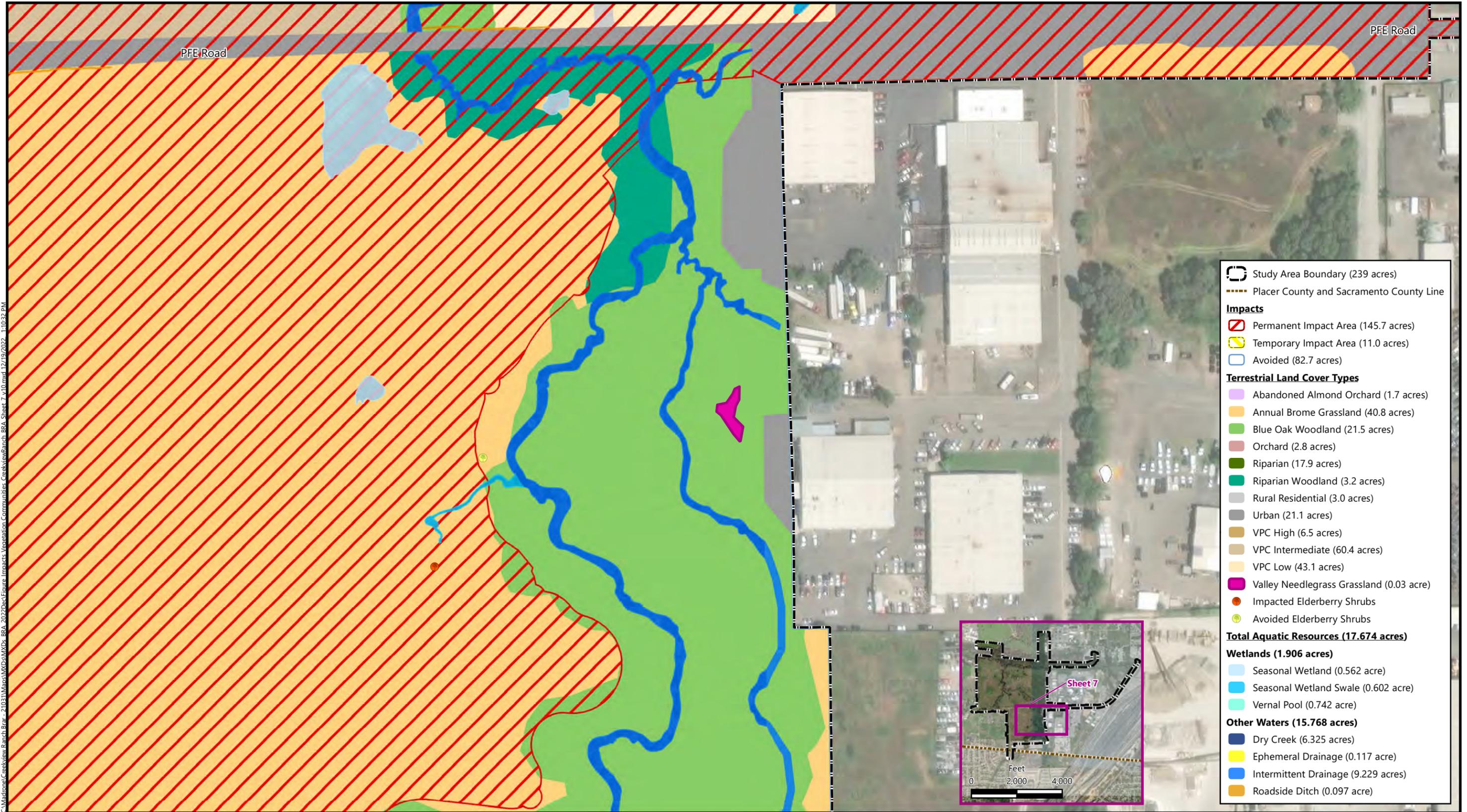
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Aerial Source: Maxar, 26 April 2022.

**Impacts to Vegetation  
Communities/Land Covers, Sanford's  
Arrowhead, and Elderberry Shrubs  
Sheet 6**

Creekview Ranch  
Placer County, California







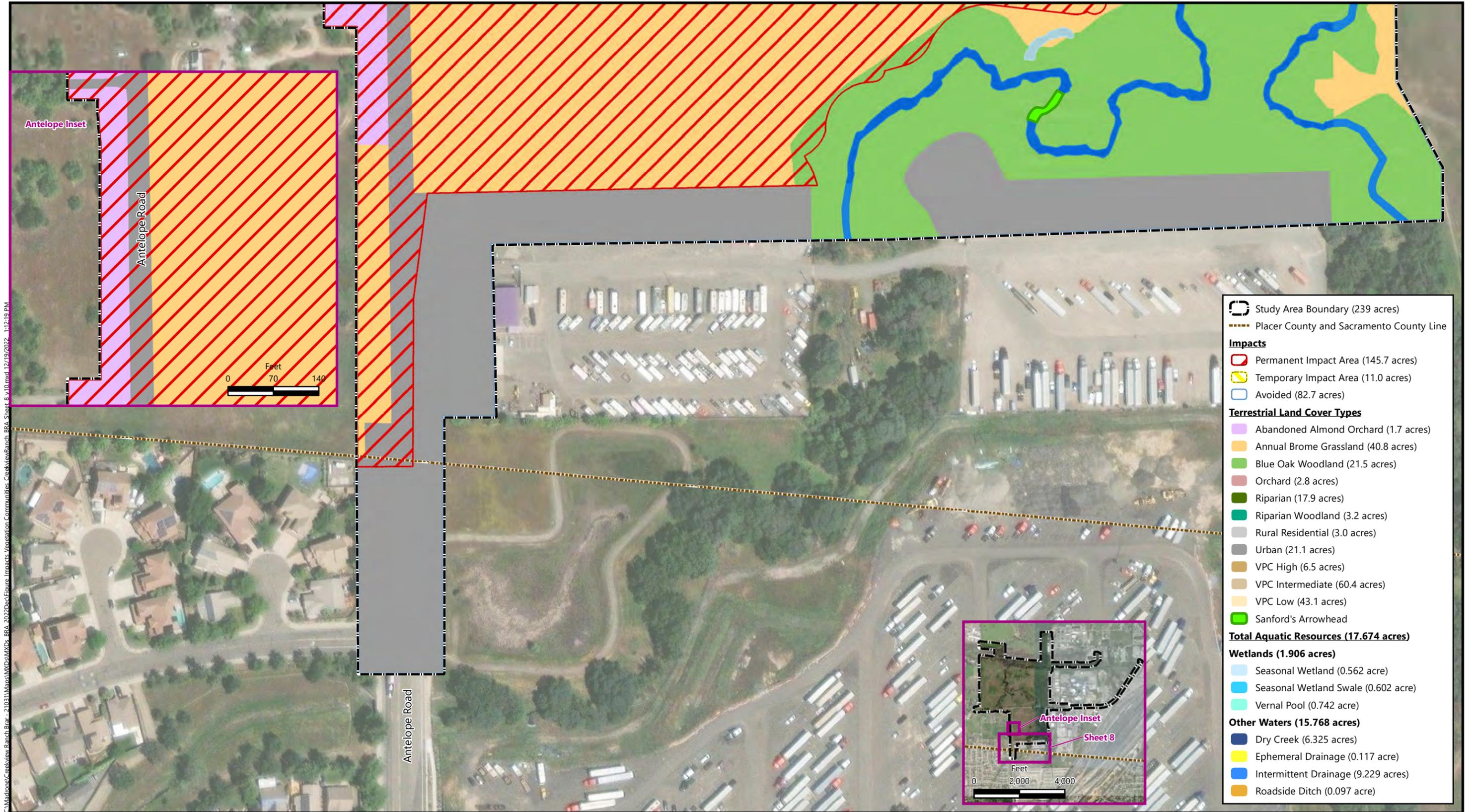
**Note:** Small summation errors may occur due to rounding.  
Aerial Source: Maxar, 26 April 2022.

**Impacts to Vegetation  
Communities/Land Covers, Sanford's  
Arrowhead, and Elderberry Shrubs  
Sheet 7**

Creekview Ranch  
Placer County, California







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**Note:** Small summation errors may occur due to rounding.  
Aerial Source: Maxar, 26 April 2022.

### Impacts to Vegetation Communities/Land Covers, Sanford's Arrowhead, and Elderberry Shrubs

#### Sheet 8

Creekview Ranch  
Placer County, California



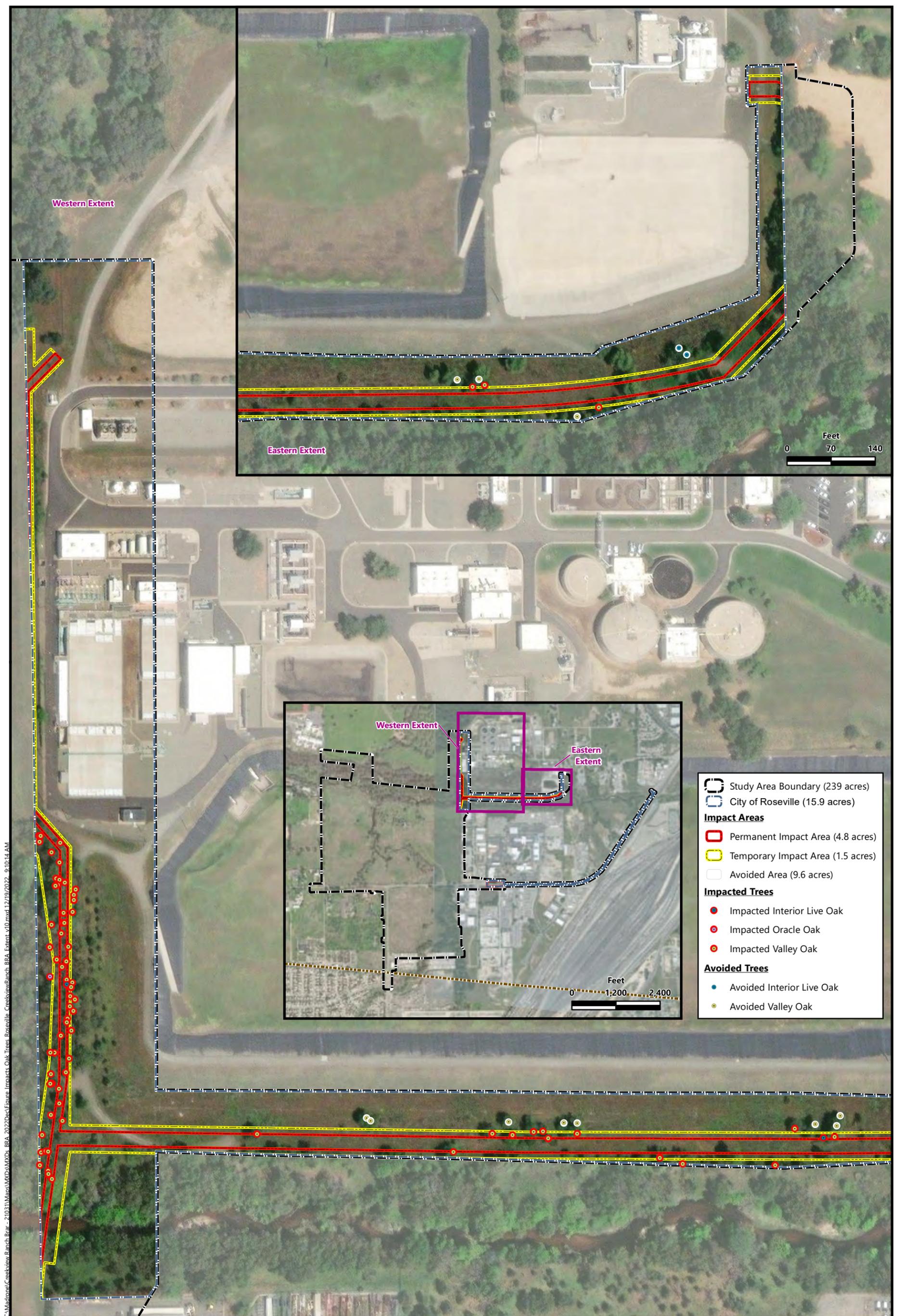


# Attachment J

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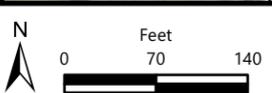
## **Impacts to Native Oak Trees within the City of Roseville**





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	Study Area Boundary (239 acres)
	City of Roseville (15.9 acres)
<b>Impact Areas</b>	
	Permanent Impact Area (4.8 acres)
	Temporary Impact Area (1.5 acres)
	Avoided Area (9.6 acres)
<b>Impacted Trees</b>	
	Impacted Interior Live Oak
	Impacted Oracle Oak
	Impacted Valley Oak
<b>Avoided Trees</b>	
	Avoided Interior Live Oak
	Avoided Valley Oak



### Impacts to Native Oak Trees in the City of Roseville

**Note:** Small summation errors may occur due to rounding.  
Only resources and impacts within the City of Roseville portion of the Study Area are shown on this exhibit.  
**Aerial Sources:** Maxar, 26 April 2022.

Creekview Ranch  
Placer County, California





# Attachment K

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**Impacts to Oak Woodlands and Individual  
Native Trees in Unincorporated Placer County  
Outside of the PCCP Plan Area**





Study Area Boundary (239 acres)	<b>Impacted Trees Mitigated on an Individual Basis</b>
County Line	Impacted Blue Oak
Placer County - Non-PCCP (60.6 acres)	Impacted Fremont Cottonwood
Oak Woodland (15.1 acres)	Impacted Interior Live Oak
<b>Impact Areas</b>	Impacted Red Willow
Permanent Impact Area (18.4 acres)	Impacted Valley Oak
Temporary Impact Area (0.2 acre)	
Avoided Area (18.41 acres)	
<b>Impacts to Oak Woodlands Mitigated under the Interim Guidelines</b>	
Permanent Impact within Oak Woodlands (1.5 acres)	
Oak Woodland Impact Buffer (0.3 acre)	
<b>Significant Trees</b>	
Impacted Blue Oak	
Impacted Interior Live Oak	



**Note:** Small summation errors may occur due to rounding.  
 Only resources and impacts within the Placer County - Non-PCCP portion of the Study Area are shown on this exhibit.  
**Aerial Sources:** Maxar, 26 April 2022.

**Impacts to Oak Woodlands and Individual Native Trees in Unincorporated Placer County Outside of the PCCP Plan Area**  
 Creekview Ranch  
 Placer County, California



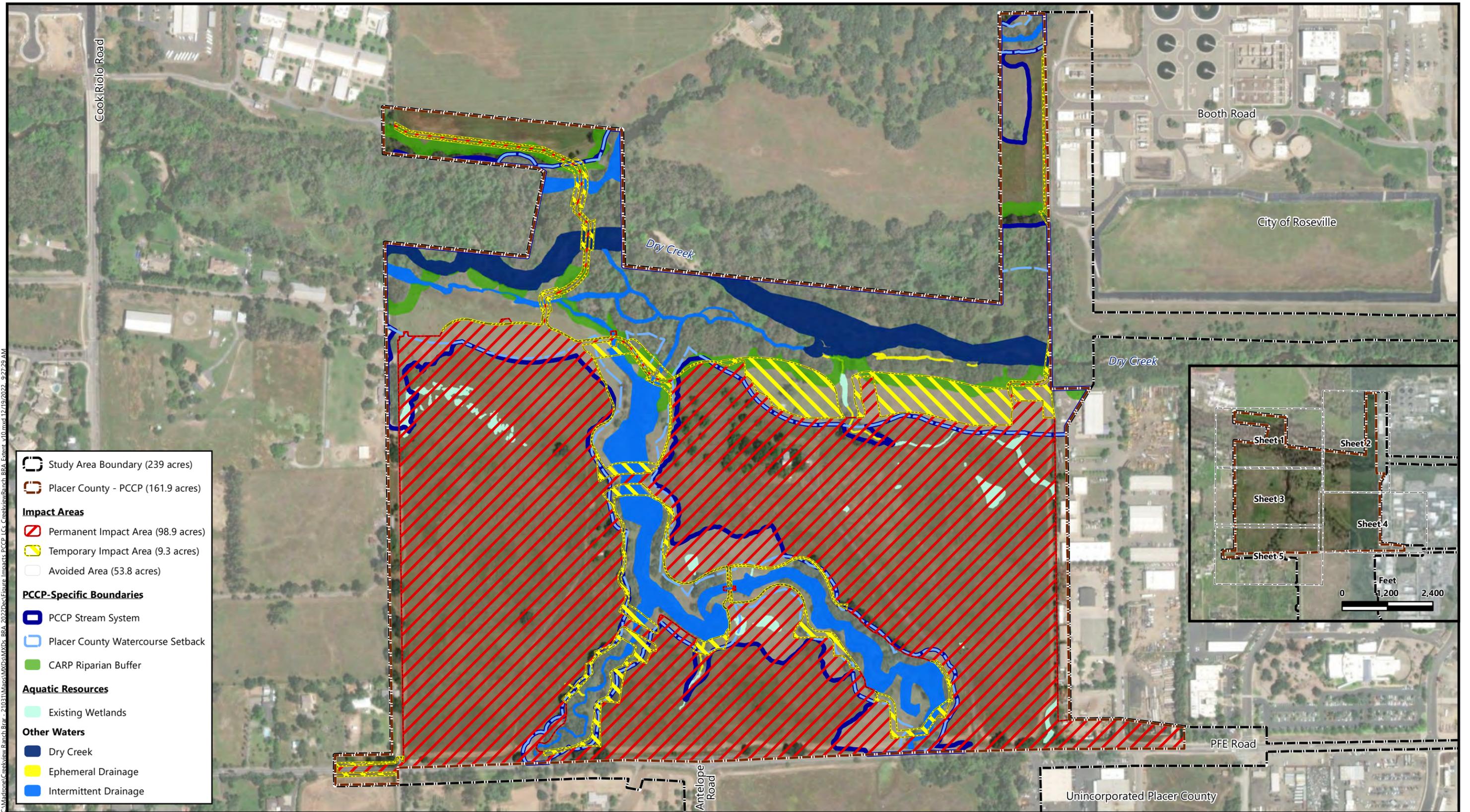


# Attachment L

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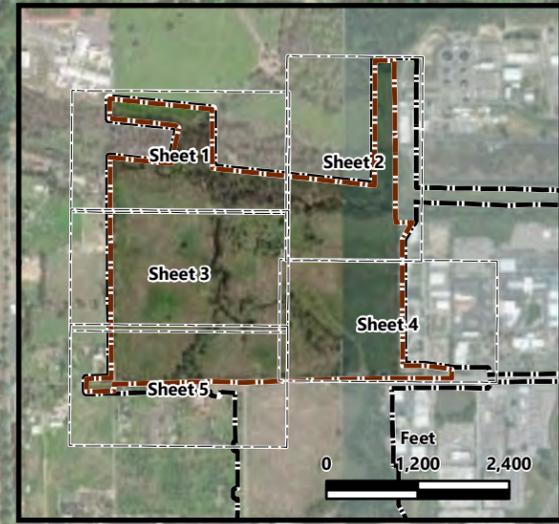
## **Impacts to PCCP Habitats and PCCP Specific Boundaries**





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- Study Area Boundary (239 acres)
- Placer County - PCCP (161.9 acres)
- Impact Areas**
- Permanent Impact Area (98.9 acres)
- Temporary Impact Area (9.3 acres)
- Avoided Area (53.8 acres)
- PCCP-Specific Boundaries**
- PCCP Stream System
- Placer County Watercourse Setback
- CARP Riparian Buffer
- Aquatic Resources**
- Existing Wetlands
- Other Waters**
- Dry Creek
- Ephemeral Drainage
- Intermittent Drainage



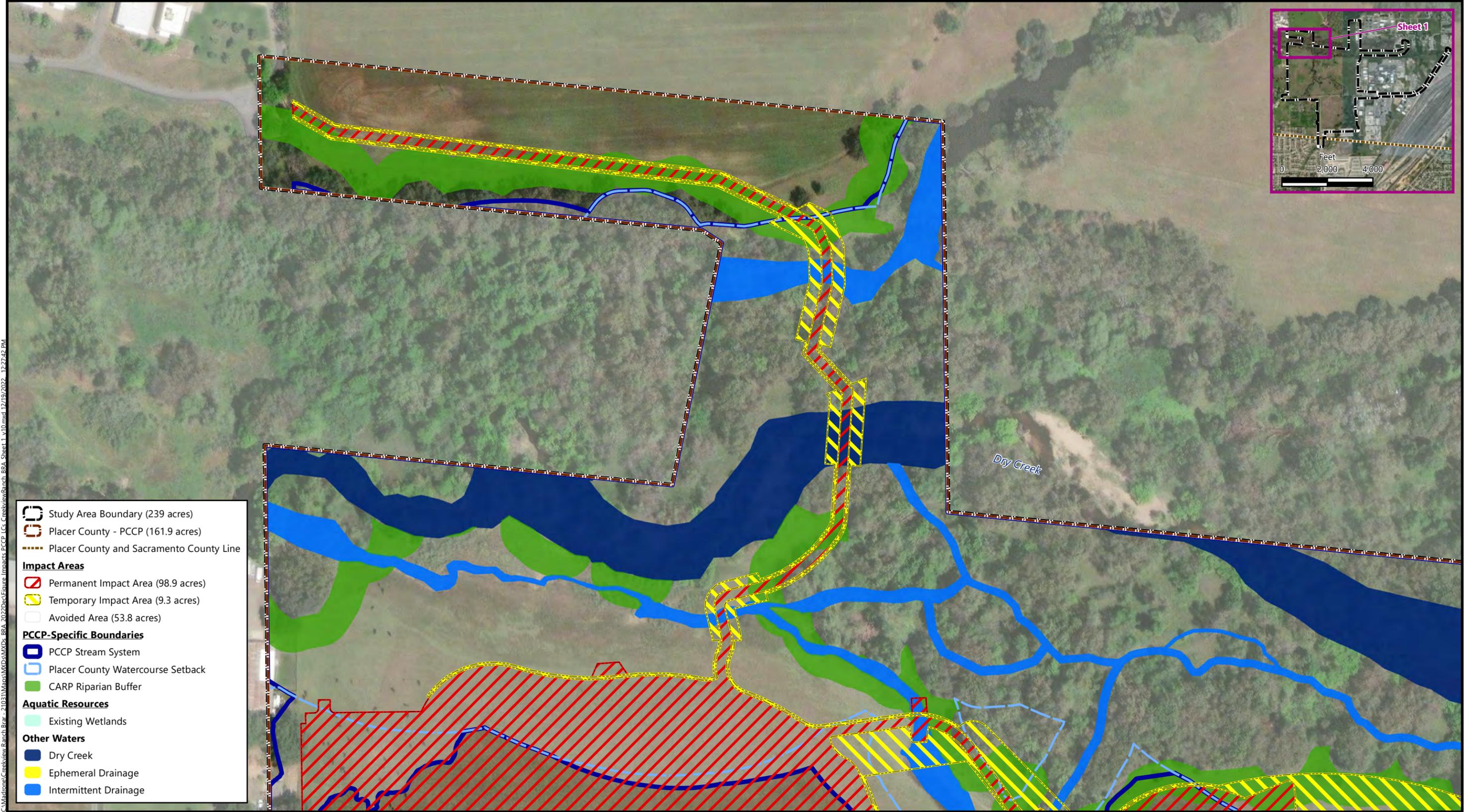
**Notes:** Small summation errors may occur due to rounding.  
 Only resources and impacts within the PCCP portion of the Study Area are shown on this exhibit.  
 Aerial Source: Maxar, 26 April 2022.

**Impacts to PCCP Habitats and  
 PCCP-Specific Boundaries  
 Overall Sheet**

Creeksview Ranch  
 Placer County, California







Study Area Boundary (239 acres)  
 Placer County - PCCP (161.9 acres)  
 Placer County and Sacramento County Line

**Impact Areas**

Permanent Impact Area (98.9 acres)  
 Temporary Impact Area (9.3 acres)  
 Avoided Area (53.8 acres)

**PCCP-Specific Boundaries**

PCCP Stream System  
 Placer County Watercourse Setback  
 CARP Riparian Buffer

**Aquatic Resources**

Existing Wetlands

**Other Waters**

Dry Creek  
 Ephemeral Drainage  
 Intermittent Drainage



**Impacts to PCCP Habitats and PCCP-Specific Boundaries Sheet 1**

**Notes:** Small summation errors may occur due to rounding.  
 Only resources and impacts within the PCCP portion of the Study Area are shown on this exhibit.  
 Aerial Source: Maxar, 26 April 2022.

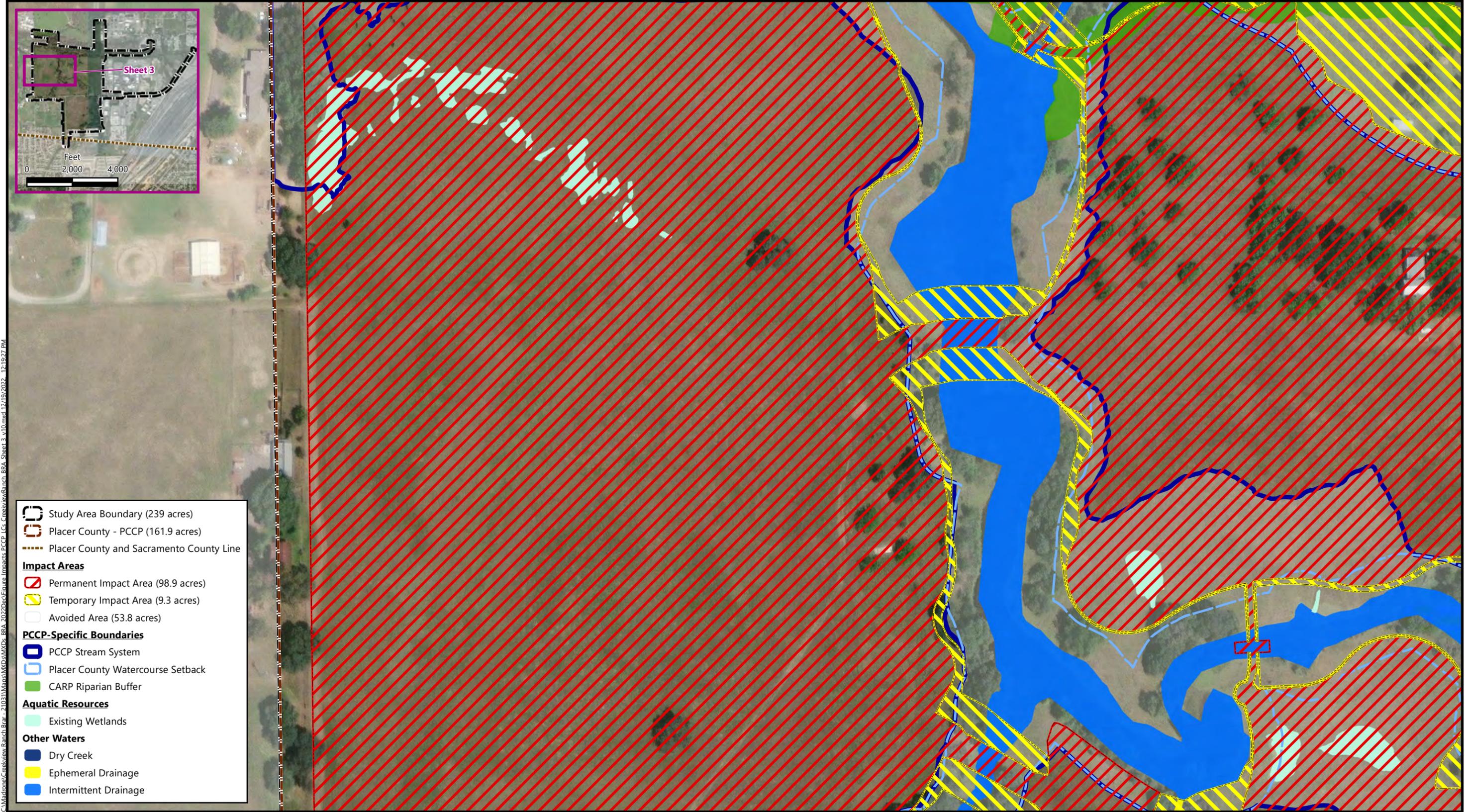


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- Study Area Boundary (239 acres)
- Placer County - PCCP (161.9 acres)
- Placer County and Sacramento County Line
- Impact Areas**
- Permanent Impact Area (98.9 acres)
- Temporary Impact Area (9.3 acres)
- Avoided Area (53.8 acres)
- PCCP-Specific Boundaries**
- PCCP Stream System
- Placer County Watercourse Setback
- CARP Riparian Buffer
- Aquatic Resources**
- Existing Wetlands
- Other Waters**
- Dry Creek
- Ephemeral Drainage
- Intermittent Drainage



**Impacts to PCCP Habitats and  
PCCP-Specific Boundaries  
Sheet 3**

**Notes:** Small summation errors may occur due to rounding.  
Only resources and impacts within the PCCP portion of the Study Area are shown on this exhibit.  
Aerial Source: Maxar, 26 April 2022.

Creekview Ranch  
Placer County, California







Study Area Boundary (239 acres)  
 Placer County - PCCP (161.9 acres)  
 Placer County and Sacramento County Line

**Impact Areas**

Permanent Impact Area (98.9 acres)  
 Temporary Impact Area (9.3 acres)  
 Avoided Area (53.8 acres)

**PCCP-Specific Boundaries**

PCCP Stream System  
 Placer County Watercourse Setback  
 CARP Riparian Buffer

**Aquatic Resources**

Existing Wetlands

**Other Waters**

Dry Creek  
 Ephemeral Drainage  
 Intermittent Drainage

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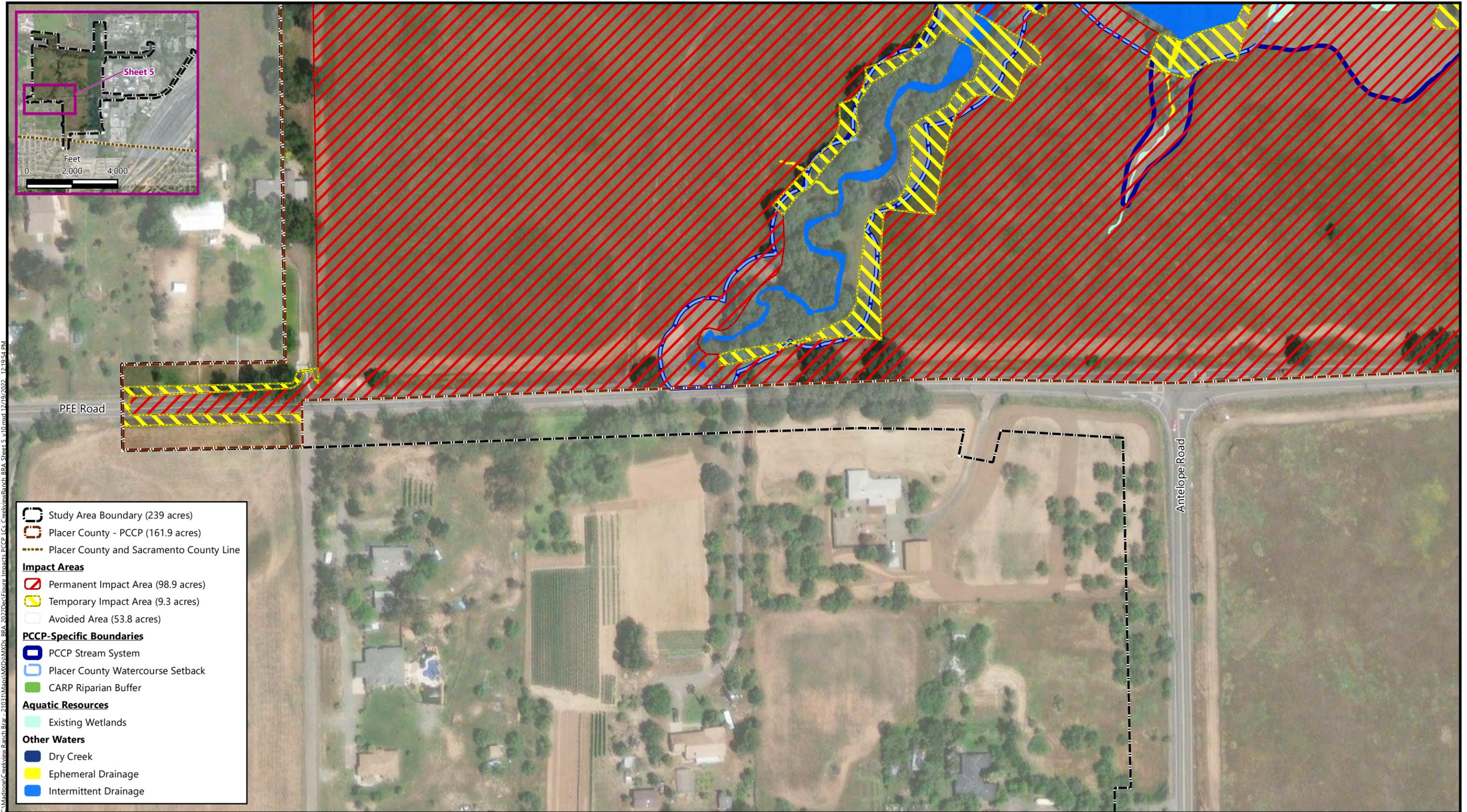
**Notes:** Small summation errors may occur due to rounding.  
 Only resources and impacts within the PCCP portion of the Study Area are shown on this exhibit.  
 Aerial Source: Maxar, 26 April 2022.

**Impacts to PCCP Habitats and  
 PCCP-Specific Boundaries  
 Sheet 4**

Creekview Ranch  
 Placer County, California







Study Area Boundary (239 acres)  
 Placer County - PCCP (161.9 acres)  
 Placer County and Sacramento County Line  
**Impact Areas**  
 Permanent Impact Area (98.9 acres)  
 Temporary Impact Area (9.3 acres)  
 Avoided Area (53.8 acres)  
**PCCP-Specific Boundaries**  
 PCCP Stream System  
 Placer County Watercourse Setback  
 CARP Riparian Buffer  
**Aquatic Resources**  
 Existing Wetlands  
**Other Waters**  
 Dry Creek  
 Ephemeral Drainage  
 Intermittent Drainage



**Notes:** Small summation errors may occur due to rounding.  
 Only resources and impacts within the PCCP portion of the Study Area are shown on this exhibit.  
 Aerial Source: Maxar, 26 April 2022.

**Impacts to PCCP Habitats and  
 PCCP-Specific Boundaries  
 Sheet 5**

Creekevlew Ranch  
 Placer County, California



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