NOTICE OF INTENT TO ADOPT A MITIGATED NEGATIVE DECLARATION

Notice is hereby given that, as Lead Agency, the City of Roseville, Development Services Department, Planning Division has prepared an Initial Study leading to a Mitigated Negative Declaration for the project referenced below. This Mitigated Negative Declaration is available for public review and comment.

Project Title/File#: INFILL PCL 13 – Oakleaf Estates Subdivision; File #PL23-0198

Project Location: 1010 Main Street; 015-080-026-000

Project Owner: Patrick Laughlin & David Lanza, LENDCO LLC

Project Applicant: Sean Minard, MHM Incorporated

Project Planner: Eric Singer, Associate Planner

Project Description:
The applicant requests a Tentative Subdivision Map to subdivide the existing 4.24-acre parcel into 17 single-family residential lots, and a Tree Permit to remove 110 native oak trees and encroach into the protected zone of ten (10) other native oak trees.

The project site is not identified on any list of hazardous materials sites compiled pursuant to California Government Code Section 65962.5

Document Review and Availability: The public review and comment period begins on May 30, 2024 and ends on June 30, 2024. The Mitigated Negative Declaration may be reviewed during normal business hours (8:00 am to 5:00 pm) at the Planning Division offices, located at 311 Vernon Street. It may also be viewed online at http://www.roseville.ca.us/gov/development_services/planning/environmental_documents_n_public_notices.asp. **Written comments on the adequacy of the Mitigated Negative Declaration may be submitted to Eric Singer, Associate Planner at ejsinger@roseville.ca.us, or in person at 311 Vernon Street, Roseville, CA 95678, and must be received no later than 5:00 pm on June 30, 2024**.

This project will be scheduled for a public hearing before the City's Planning Commission. At this hearing, the Planning Commission will consider the Mitigated Negative Declaration and associated project entitlements. The tentative hearing date is August 8, 2024.

Mike Isom
Development Services Director

Dated: May 28, 2024

Publish: May 30, 2024

CITY OF ROSEVILLE CALIFORNIA

DEVELOPMENT SERVICES DEPARTMENT – PLANNING DIVISION
311 Vernon Street, Roseville, CA 95678 (916) 774-5276

MITIGATED NEGATIVE DECLARATION

Project Title/File Number:	INFILL PCL 13 – Oakleaf Estates Subdivision; File # PL23-0198
Project Location:	1010 Main Street, Roseville, Placer County; 015-080-026-000
Project Applicant:	Sean Minard, MHM Incorporated; (530) 682-6497; 1240 E St, PO Box B, Marysville, CA 95901
Property Owner:	Patrick Laughlin & David Lanza, LENDCO LLC; (530) 671-2770; 591 Colusa Hwy, Yuba City, CA 95991
Lead Agency Contact Person:	Eric Singer, Associate Planner - City of Roseville; (916) 774-5536
Date:	May 28, 2024

Project Description:

The applicant requests a Tentative Subdivision Map to subdivide the existing 4.24-acre parcel into 17 single-family residential lots, and a Tree Permit to remove 110 native oak trees and encroach into the protected zone of ten (10) other native oak trees.

The project site is not identified on any list of hazardous materials sites compiled pursuant to California Government Code Section 65962.5.

DECLARATION

The Planning Manager has determined that the above project will not have significant effects on the environment and therefore does not require preparation of an Environmental Impact Report. The determination is based on the attached initial study and the following findings:

A. The project will not have the potential to degrade the quality of the environment, substantially reduce the habitat of fish or wildlife species, cause a fish or wildlife population to drop below self sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of an endangered, rare or threatened species, reduce the number or restrict the range of rare or endangered plants or animals or eliminate important examples of the major periods of California history or prehistory.

B. The project will not have the potential to achieve short-term, to the disadvantage of long-term, environmental goals.

C. The project will not have impacts, which are individually limited, but cumulatively considerable.

D. The project will not have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly.

E. No substantial evidence exists that the project may have a significant effect on the environment.

F. The project incorporates all applicable mitigation measures identified in the attached initial study.

G. This Mitigated Negative Declaration reflects the independent judgment of the lead agency.

CITY OF ROSEVILLE CALIFORNIA

DEVELOPMENT SERVICES DEPARTMENT–PLANNING DIVISION

311 Vernon St, Roseville, CA 95678 (916) 774-5276

INITIAL STUDY & ENVIRONMENTAL CHECKLIST

Project Title/File Number:	INFILL PCL 13 – Oakleaf Estates Subdivision / PL23-0198
Project Location:	The Project site is approximately 4.24 acres in size located at 1010 Main Street. The Project is within the City's Infill area. The site is bordered by single family dwelling units on the north, west, and east. The site has a General Plan land use designation of Low Density Residential (LDR-4) and a zoning designation of Single-Family Residential (R1).
Project Description:	The applicant requests a Tentative Subdivision Map to subdivide the existing 4.24-acre parcel into 17 single-family residential lots, and a Tree Permit to remove 110 native oak trees and encroach into the protected zone of ten (10) other native oak trees. The project site is not identified on any list of hazardous materials sites compiled pursuant to California Government Code Section 65962.5.
Project Applicant:	Sean Minard, MHM Incorporated
Property Owner:	Patrick Laughlin & David Lanza, LENDCO LLC
Lead Agency Contact:	Eric Singer, Associate Planner, (916) 774-5536

This initial study has been prepared to identify and assess the anticipated environmental impacts of the above-described project application. The document relies on previous environmental documents (see Attachments) and site-specific studies prepared to address in detail the effects or impacts associated with the project. Where documents were submitted by consultants working for the applicant, City staff reviewed such documents in order to determine whether, based on their own professional judgment and expertise, staff found such documents to be credible and persuasive. Staff has only relied on documents that reflect their independent judgment and has not accepted at face value representations made by consultants for the applicant.

This document has been prepared to satisfy the California Environmental Quality Act (CEQA), (Public Resources Code, Section 21000 et seq.) and the State CEQA Guidelines (14 CCR 15000 et seq.). CEQA requires that all state and local government agencies consider the environmental consequences of projects over which they have discretionary authority before acting on those projects.

The initial study is a public document used by the decision-making lead agency to determine whether a project may have a significant effect on the environment. If the lead agency finds substantial evidence that any aspect of the project, either individually or cumulatively, may have a significant effect on the environment, regardless of whether the overall effect of the project is adverse or beneficial, the lead agency is required to prepare an EIR. If the agency finds no substantial evidence that the project or any of its aspects may cause a significant effect on the environment, a negative declaration shall be prepared. If in the course of analysis, the agency recognizes that the project may have a significant impact on the environment, but that by incorporating specific mitigation measures to which the applicant agrees, the impact will be reduced to a less than significant effect, a mitigated negative declaration shall be prepared.

Table of Contents

PROJECT DESCRIPTION

Project Location

The Project site is comprised of a single parcel approximately 4.24 acres in size located at 1010 Main Street (see Figure 1). The Project site is located within the City's Infill area. The Infill area constitutes what historically has been the central core of Roseville, as well as the areas that were the focus of growth in the City until the early 1980's. The land use in the Infill area incorporates a mix of residential neighborhoods, commercial and industrial uses and amenities to serve the residents of the community. The Project site is bordered by single family dwelling units to the north, west, and east, and Main Street to the south. The site has a General Plan land use designation of Low Density Residential (LDR-4) and a zoning designation of Single-Family Residential (R1).

Figure 1: Project Location

Background and Environmental Setting

The Project site is a single rectangular lot, measuring approximately 162 feet by 1,113 feet and 4.24 acres. The Project site is occupied by a single-family dwelling unit at the southern end near Main Street, with most of the site undeveloped. A 3-foot-wide sidewalk fronts the property along Main Street. The site is an infill parcel surrounded by single-family dwelling units. The site contains scattered non-native trees (including peach, mulberry, cottonwood, olive, pecan, plum, and walnut) interspersed within a valley oak woodland with an understory of annual grassland, per the arborist report dated April 17, 2023 (Attachment 7). The site is relatively flat with the highest point of the property being the northeast corner, which is approximately 2–3 feet higher than the rest of the property. The site itself is approximately 2-3 feet on average higher than the property to the west, sloping gradually from northeast to southwest. The property to the west is actively under construction with a

single-family subdivision of 10 units. An intermittent drainage channel that runs north to south is present along the western property line, as well as seasonal swales and wetlands.

Location	Zoning	General Plan Land Use	Actual Use of Property
Site	R1	LDR-4	Single-family dwelling unit
North	R1	LDR-4	Single-family dwelling units
South	R1	LDR-5	Single-family dwelling units
East	R1	LDR-4	Vacant / single-family dwelling units
West	R1	LDR-4	Single-family dwelling units (under construction)

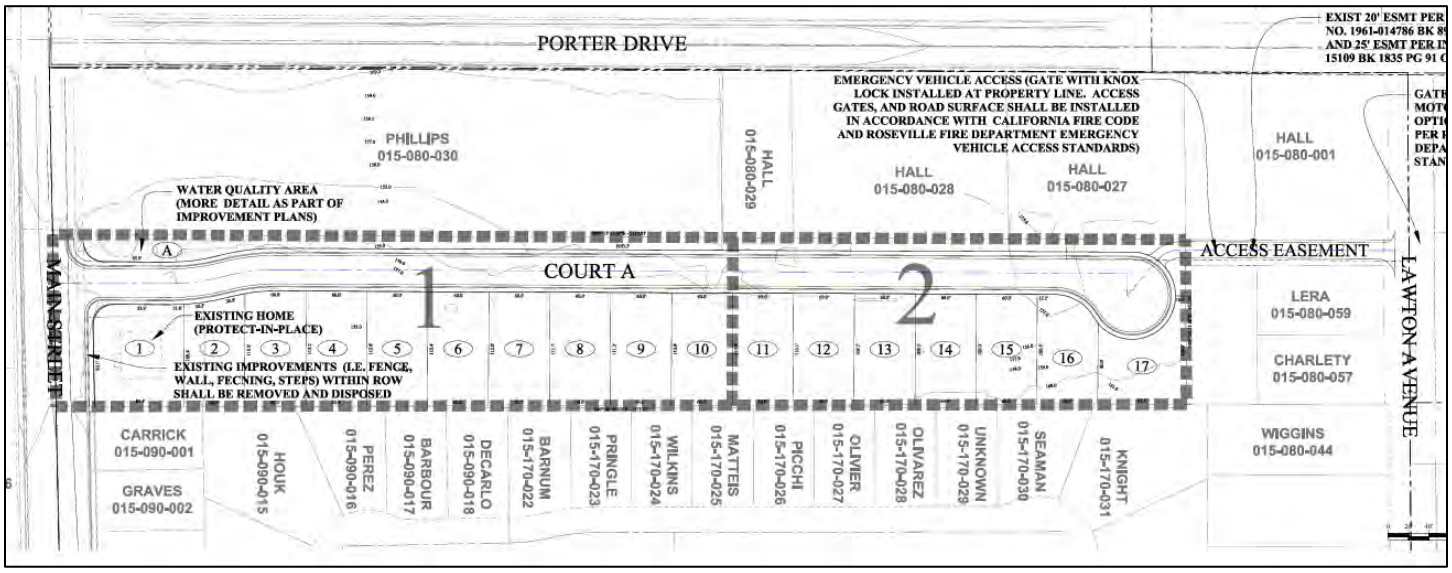
Proposed Project

The project includes the subdivision of an existing parcel into 17 single-family residential lots and the removal of one-hundred ten (110) native oak trees and encroachment into the protected zone of ten (10) native oak trees on-site. The Tentative Map Grading and Site Plan shows the proposed street layout and lot configuration for the 17 parcels (see Figure 2 below), including a 42-foot-wide minor residential street (including 4-foot-wide sidewalks and rolled curb and gutter) that runs the length of the west side of the site, ending in a cul-de-sac. The conceptual building layout shows the single-family dwelling units fronting a private street that is accessed to the south from Main Street, with pad elevations ranging from 156’ to 160’, gradually increasing in height from the south to the north. A new property line fence is proposed along the east and north property lines, including a new access gate along the north to the proposed Emergency Vehicle Access easement as indicated across the property to the north. A stormwater quality basin is proposed at the south end of the site to collect the drainage channel and wetland area that will be enclosed by the creation of the street along the west side of the property. One-hundred ten (110) trees are proposed for removal to create the street, sidewalks, stormwater quality basin, and sixteen (16) new single-family homes, with seventy-six (76) proposed for retention and protection. The existing home fronting mains street is proposed to remain. Frontage improvements along Main Street include widening of the existing sidewalks to five feet wide, new Type 2 barrier curb and gutter, 6-foot-wide bike lane, as well as an extension of the existing 10-foot-wide left-hand turn lane to provide access to the site for eastbound traffic along Main Street.

The list of entitlements is below:

1. Tentative Subdivision Map (TSM)
2. Tree Permit (TP)

Figure 2: Proposed Site Plan



CITY OF ROSEVILLE MITIGATION ORDINANCES, GUIDELINES, AND STANDARDS

For projects that are consistent with the development density established by existing zoning, community plan, or general plan policies for which an EIR was certified, CEQA Guidelines section 15183(f) allows a lead agency to rely on previously adopted development policies or standards as mitigation for the environmental effects, when the standards have been adopted by the City, with findings based on substantial evidence, that the policies or standards will substantially mitigate environmental effects, unless substantial new information shows otherwise (CEQA Guidelines §15183(f)). The City of Roseville adopted CEQA Implementing Procedures (Implementing Procedures) which are consistent with this CEQA Guidelines section. The current version of the Implementing Procedures were adopted in April 2008 (Resolution 08-172), along with Findings of Fact, and were updated in January 2021 (Resolution 21-018). The below regulations and ordinances were found to provide uniform mitigating policies and standards, and are applicable to development projects. The City's Mitigating Policies and Standards are referenced, where applicable, in the Initial Study Checklist.

- Noise Regulation (RMC Ch.9.24)
- Flood Damage Prevention Ordinance (RMC Ch.9.80)
- Traffic Mitigation Fee (RMC Ch.4.44)
- Drainage Fees (Dry Creek [RMC Ch.4.49] and Pleasant Grove Creek [RMC Ch.4.48])
- City of Roseville Improvement Standards (Resolution 02-37 and as further amended)
- City of Roseville Design and Construction Standards (Resolution 01-208 and as further amended)
- Tree Preservation Ordinance (RMC Ch.19.66)
- Internal Guidance for Management of Tribal Cultural Resources and Consultation (Tribal Consultation Policy) (Resolution 20-294)
- Subdivision Ordinance (RMC Title 18)
- Community Design Guidelines
- Specific Plan Design Guidelines:
    - Development Guidelines Del Webb Specific Plan
    - Landscape Design Guidelines for North Central Roseville Specific Plan

  - North Roseville Specific Plan and Design Guidelines
  - Northeast Roseville Specific Plan (Olympus Pointe) Signage Guidelines
  - North Roseville Area Design Guidelines
  - Northeast Roseville Specific Plan Landscape Design Guidelines
  - Southeast Roseville Specific Plan Landscape Design Guidelines
  - Stoneridge Specific Plan and Design Guidelines
  - Highland Reserve North Specific Plan and Design Guidelines
  - West Roseville Specific Plan and Design Guidelines
  - Sierra Vista Specific Plan and Design Guidelines
  - Creekview Specific Plan and Design Guidelines
  - Amoruso Ranch Specific Plan and Design Guidelines
- City of Roseville 2035 General Plan

OTHER ENVIRONMENTAL DOCUMENTS RELIED UPON

- 2035 General Plan Update Final Environmental Impact Report, certified August 5, 2020. The 2035 General Plan EIR is available for review on the City's website at https://www.roseville.ca.us/cms/one.aspx?portalId=7964922&pageId=8774544
- 2021 Housing Element Addendum (HE Addendum). The HE Addendum is available for review on the City's website at https://www.roseville.ca.us/cms/One.aspx?portalId=7964922&pageId=16922203

Pursuant to CEQA Guidelines Section 15183, any project which is consistent with the development densities established by zoning, a Community Plan, or a General Plan for which an EIR was certified shall not require additional environmental review, except as may be necessary to examine whether there are project-specific significant effects which are peculiar to the project or its site. The 2035 General Plan Update EIR (General Plan EIR) updated all Citywide analyses, including for vehicle miles traveled, greenhouse gas emissions, water supply, water treatment, wastewater treatment, and waste disposal. The proposed project is consistent with the adopted land use designations examined within the environmental documents listed above, and thus this Initial Study focuses on effects particular to the specific project site, impacts which were not analyzed within the EIR, and impacts which may require revisiting due to substantial new information. When applicable, the topical sections within the Initial Study summarize the findings within the environmental documents listed above. The analysis, supporting technical materials, and findings of the environmental document are incorporated by reference, and are available for review at the Civic Center, 311 Vernon Street, Roseville, CA.

EXPLANATION OF INITIAL STUDY CHECKLIST

The California Environmental Quality Act (CEQA) Guidelines recommend that lead agencies use an Initial Study Checklist to determine potential impacts of the proposed project on the physical environment. The Initial Study Checklist provides a list of questions concerning a comprehensive array of environmental issue areas potentially affected by this project. This section of the Initial Study incorporates a portion of Appendix G Environmental Checklist Form, contained in the CEQA Guidelines. Within each topical section (e.g. Air Quality) a description of the setting is provided, followed by the checklist responses, thresholds used, and finally a discussion of each checklist answer.

There are four (4) possible answers to the Environmental Impacts Checklist on the following pages. Each possible answer is explained below:

1) A "Potentially Significant Impact" is appropriate if there is enough relevant information and reasonable inferences from the information that a fair argument based on substantial evidence can be made to support a conclusion that a substantial, or potentially substantial, adverse change may occur to any of the physical conditions within the area affected by the project. When one or more "Potentially significant Impact" entries are made, an EIR is required.

2) A "Less Than Significant With Mitigation" answer is appropriate when the lead agency incorporates mitigation measures to reduce an impact from "Potentially Significant" to "Less than Significant." For example, floodwater impacts could be reduced from a potentially-significant level to a less-than-significant level by relocating a building to an area outside of the floodway. The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less-than-significant level. Mitigation measures are identified as MM followed by a number.

3) A "Less Than significant Impact" answer is appropriate if there is evidence that one or more environmental impacts may occur, but the impacts are determined to be less than significant, or the application of development policies and standards to the project will reduce the impact(s) to a less-than-significant level. For instance, the application of the City's Improvement Standards reduces potential erosion impacts to a less-than-significant level.

4) A "No Impact" answer is appropriate where it can be demonstrated that the impact does not have the potential to adversely affect the environment. For instance, a project in the center of an urbanized area with no agricultural lands on or adjacent to the project area clearly would not have an adverse effect on agricultural resources or operations. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources cited in the Initial Study. Where a "No Impact" answer is adequately supported by the information sources cited in the Initial Study, further narrative explanation is not required. A "No Impact" answer is explained when it is based on project-specific factors as well as generous standards.

All answers must take account of the whole action involved, including off- and on-site, indirect, direct, construction, and operation impacts, except as provided for under State CEQA Guidelines.

INITIAL STUDY CHECKLIST

I. Aesthetics

The site is currently occupied with a single-family dwelling at one end, with the majority of the site vacant with several native oak trees scattered throughout the site with an understory of annual grassland. Along the western boundary of the site an existing intermittent drainage runs north to south. The southern half of the site is slightly sloped from Main St. towards the northeast corner. The site is located in an infill area of the City and existing single-family dwelling units surround the Project site.

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?			X	

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?			X	
c) In 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 a publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?			X	
d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?			X	

Thresholds of Significance and Regulatory Setting:

The significance of an environmental impact cannot always be determined through the use of a specific, quantifiable threshold. CEQA Guidelines Section 15064(b) affirms this by the statement "an ironclad definition of significant effect is not always possible because the significance of an activity may vary with the setting." This is particularly true of aesthetic impacts. As an example, a proposed parking lot in a dense urban center would have markedly different visual effects than a parking lot in an open space area. For the purpose of this study, the significance thresholds are as stated in CEQA Guidelines Appendix G, as shown in a–d of the checklist below. The Findings of the Implementing Procedures indicate that compliance with the Zoning Ordinance (e.g. building height, setbacks, etc), Subdivision Ordinance (RMC Ch. 18), Community Design Guidelines (Resolution 95-347), and applicable Specific Plan Policies and/or Specific Plan Design Guidelines will prevent significant impacts in urban settings as it relates to items a, b, and c, below.

Discussion of Checklist Answers:

a–b) There are no designated or eligible scenic vistas or scenic highways within or adjacent to the City of Roseville.

c) The project site is in an urban setting, and as a result lacks any prominent or high-quality natural features which could be negatively impacted by development. The City of Roseville has adopted Community Design Guidelines (CDG) for the purpose of creating building and community designs which are a visual asset to the

community. The CDG includes guidelines for building design, site design and landscape design, which will result in a project that enhances the existing urban visual environment. The project does not conflict with applicable zoning and other regulations governing scenic quality. Accordingly, the aesthetic impacts of the project are less than significant.

d) The project involves nighttime lighting to provide for the security and safety of project users. However, the project is already located within an urbanized setting with many existing lighting sources. Lighting is conditioned to comply with City standards (i.e. CDG) to limit the height of light standards and to require cut-off lenses and glare shields to minimize light and glare impacts. The project will not create a new source of substantial light. None of the project elements are highly reflective, and thus the project will not contribute to an increased source of glare.

II. Agricultural & Forestry Resources

The State Department of Conservation oversees the Farmland Mapping and Monitoring Program, which was established to document the location, quality, and quantity of agricultural lands, and the conversion of those lands over time. The primary land use classifications on the maps generated through this program are: Urban and Built Up Land, Grazing Land, Farmland of Local Importance, Unique Farmland, Farmland of Statewide Importance, and Prime Farmland. According to the current California Department of Conservation Placer County Important Farmland Map (2012), the majority of the City of Roseville is designated as Urban and Built Up Land and most of the open space areas of the City are designated as Grazing Land. There are a few areas designated as Farmland of Local Importance and two small areas designated as Unique Farmland located on the western side of the City along Baseline Road. The current Williamson Act Contract map (2013/2014) produced by the Department of Conservation shows that there are no Williamson Act contracts within the City, and only one (on PFE Road) that is adjacent to the City. None of the land within the City is considered forest land by the Board of Forestry and Fire Protection.

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				X
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				X
d) Result in the loss of forest land or conversion of forest land to non-forest use?				X
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				X

Thresholds of Significance and Regulatory Setting:

Unique Farmland, Farmland of Statewide Importance, and Prime Farmland are called out as protected farmland categories within CEQA Guidelines Appendix G. Neither the City nor the State has adopted quantified significance thresholds related to impacts to protected farmland categories or to agricultural and forestry resources. For the purpose of this study, the significance thresholds are as stated in CEQA Guidelines Appendix G, as shown in a–e of the checklist above.

Discussion of Checklist Answers:

a–e) The project site is not used for agricultural purposes, does not include agricultural zoning, is not within or adjacent to one of the areas of the City designated as a protected farmland category on the Placer County Important Farmland map, is not within or adjacent to land within a Williamson Act Contract, and is not considered forest land. Given the foregoing, the proposed project will have no impact on agricultural resources.

III. Air Quality

The City of Roseville, along with the south Placer County area, is located in the Sacramento Valley Air Basin (SVAB). The SVAB is within the Sacramento Federal Ozone Non-Attainment Area. Under the Clean Air Act, Placer County has been designated a "serious non-attainment" area for the federal 8-hour ozone standard, “non-attainment” for the state ozone standard, and a "non-attainment" area for the federal and state PM_{10} standard (particulate matter less than 10 microns in diameter). Within Placer County, the Placer County Air Pollution Control District (PCAPCD) is responsible for ensuring that emission standards are not violated. Would the project:

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

Thresholds of Significance and Regulatory Setting:

In responding to checklist items a–c, project-related air emissions would have a significant effect if they would result in concentrations that either violate an ambient air quality standard or contribute to an existing air quality violation. To assist in making this determination, the PCAPCD adopted thresholds of significance, which were developed by considering both the health-based ambient air quality standards and the attainment strategies outlined in the State Implementation Plan. The PCAPCD-recommended significance threshold for reactive organic gases (ROG) and nitrogen oxides (NO_x) is 82 pounds daily during construction and 55 pounds daily during operation, and for particulate matter (PM) is 82 pounds per day during both construction and operation. For all other constituents, significance is determined based on the concentration-based limits in the Federal and State Ambient Air Quality Standards. Toxic Air Contaminants (TAC) are also of public health concern, but no thresholds or standards are provided because they are considered to have no safe level of exposure. Analysis of TAC is based on the *Air Quality and Land Use Handbook – A Community Health Perspective (*April 2005, California Air Resources Board), which lists TAC sources and recommended buffer distances from sensitive uses. For checklist item c, the PCAPCD's *CEQA Air Quality Handbook* (*Handbook*) recommends that the same thresholds used for the project analysis be used for the cumulative impact analysis.

With regard to checklist item d, there are no quantified significance thresholds for exposure to objectionable odors or other emissions. Significance is determined after taking into account multiple factors, including screening distances from odor sources (as found in the PCAPCD CEQA Handbook), the direction and frequency of prevailing winds, the time of day when emissions are detectable/present, and the nature and intensity of the emission source.

Discussion of Checklist Answers:

a–c) Analyses are not included for sulfur dioxide, lead, and other constituents because there are no mass emission thresholds; these are concentration-based limits in the Federal and State Ambient Air Quality Standards which require substantial, point-source emissions (e.g. refineries, concrete plants, etc) before exceedance will occur, and the SVAB is in attainment for these constituents. Likewise, carbon monoxide is not

analyzed because the SVAB is in attainment for this constituent, and it requires high localized concentrations (called carbon monoxide "hot spots") before the ambient air quality standard would be exceeded. "Hot spots" are typically associated with heavy traffic congestion occurring at high-volume roadway intersections. The General Plan EIR analysis of Citywide traffic indicated that more than 70% of signalized intersections would operate at level of service C or better—that is, they will not experience heavy traffic congestion. It further indicated that analyses of existing CO concentrations at the most congested intersections in Roseville show that CO levels are well below federal and state ambient air quality standards. The discussions below focus on emissions of ROG**,** NO_x, or PM**.** A project-level analysis has been prepared to determine whether the project will, on a singular level, exceed the established thresholds.

The Project involves subdividing an existing parcel into 17 lots for the future construction of 16 single-family dwelling units on a 4.24-acre project area. The California Emissions Estimator Model (CalEEMod) Version 2022.1 was used to model the construction emissions of the Project (see Attachment 4). According to the model results, the project will result in maximum daily emissions of 13.09 lb/day of ROG and 31.68 lb/day of NOx during construction; these emissions fall well below the 82-lb/day thresholds for these constituents. Therefore, construction air quality impacts are less than significant.

The PCAPCD maintains screening thresholds to determine when modeling is required to evaluate impacts resulting from project operation. The screening thresholds indicates a single-family project must involve more than 617 units before the PCAPCD significance thresholds for criteria pollutants are likely to be exceed. The proposed Project includes 17 units, which is well below the screening thresholds; therefore, the project will not result in operational emissions which exceed established thresholds.

The proposed project would not exceed the applicable thresholds of significance for air pollutant emissions during construction or operation. As such, the project would not conflict with or obstruct implementation of the *Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan* (which is the SIP) or contribute substantially to the PCAPCD's nonattainment status for ozone. In addition, because the proposed project would not produce substantial emissions of criteria air pollutants, CO, or TACs, adjacent residents would not be exposed to significant levels of pollutant concentrations during construction or operation. Therefore, implementation of the proposed project would result in less than significant impacts, and consistent with the analysis methodology outlined in the Significance Thresholds and Regulatory Setting section, cumulative impacts are less than significant.

With regard to TAC, there are hundreds of constituents which are considered toxic, but they are typically generated by stationary sources like gas stations, facilities using solvents, and heavy industrial operations. The proposed project is not a TAC-generating use, nor is it within the specified buffer area of a TAC-generating use, as established in the *Air Quality and Land Use Handbook – A Community Health Perspective*. Impacts due to substantial pollutant concentrations are less than significant.

e) Diesel fumes from construction equipment and delivery trucks are often found to be objectionable; however, construction is temporary and diesel emissions are minimal and regulated. Typical urban projects such as residences and retail businesses generally do not result in substantial objectionable odors when operated in compliance with City Ordinances (e.g. proper trash disposal and storage). The Project is a typical urban development that lacks any characteristics that would cause the generation of substantial unpleasant odors. Thus, construction and operation of the proposed project would not result in the creation of objectionable odors affecting a substantial number of people. A review of the project surroundings indicates that there are no substantial odor-generating uses near the project site; the project location meets the recommended screening distances from odor-generators provided by the PCAPCD. Impacts related to odors are less than significant.

IV. Biological Resources

As described in the Project description, the site is occupied by a single-family dwelling with the majority of the site vacant. There are 186 oak trees and an intermittent drainage channel that runs along the western property line. Based on the Aquatic Resources Delineation report (Attachment 5), there are wetland features within the Project site. Further, according to the Biological Resources Assessment (Attachment 6), the site is surrounded by annual grassland vegetation, including rip-gut brome (*Bromus diandrus*), wild oats (*Avena fatua*), winter vetch (*Vicia villosa*), and soft chess (*Bromus hordeaceus*) as well as perennial ryegrass (*Festuca perennis*), lesser

quaking grass (*Briza minor*), fool's onion (*Triteleia hyacinthina*), and curly dock (*Rumex crispus*) within the intermittent drainage channel.

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?		X		
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies or regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?		X		
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?		X		
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				X

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?			X	
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				X

Thresholds of Significance and Regulatory Setting:

There is no ironclad definition of significance as it relates to biological resources. Thus, the significance of impacts to biological resources is defined by the use of expert judgment supported by facts, and relies on the policies, codes, and regulations adopted by the City and by regulatory agencies which relate to biological resources (as cited and described in the Discussion of Checklist Answers section). Thresholds for assessing the significance of environmental impacts are based on the CEQA Guidelines checklist items a–f, above. Consistent with CEQA Guidelines Section 15065, a project may have a significant effect on the environment if:

> The project has the potential to substantially degrade the quality of the environment*;* substantially reduce the habitat of a fish or wildlife species*;* cause a fish or wildlife population to drop below self-sustaining levels*;* threaten to eliminate a plant or animal community; [or] substantially reduce the number or restrict the range of an endangered, rare or threatened species . . .

Various agencies regulate impacts to the habitats and animals addressed by the CEQA Guidelines checklist. These include the United States Fish and Wildlife Service, National Oceanic and Atmospheric Administration–Fisheries, United States Army Corps of Engineers, Central Valley Regional Water Quality Control Board, and California Department of Fish and Wildlife. The primary regulations affecting biological resources are described in the sections below.

Checklist item a addresses impacts to special status species. A “special status” species is one which has been identified as having relative scarcity and/or declining populations. Special status species include those formally listed as threatened or endangered, those proposed for formal listing, candidates for federal listing, and those classified as species of special concern. Also included are those species considered to be “fully protected” by the California Department of Fish and Wildlife (California Fish and Wildlife), those granted “special animal” status for tracking and monitoring purposes, and those plant species considered to be rare, threatened, or endangered in California by the California Native Plant Society (CNPS). The primary regulatory protections for special status species are within the Federal Endangered Species Act, California Endangered Species Act, California Fish and Game Code, and the Federal Migratory Bird Treaty Act.

Checklist item b addresses all “sensitive natural communities” and riparian (creekside) habitat that may be affected by local, state, or federal regulations/policies while checklist item c focuses specifically on one type of such a community: protected wetlands. Focusing first on wetlands, the 1987 Army Corps Wetlands Delineation Manual is used to determine whether an area meets the technical criteria for a wetland. A delineation verification by the Army Corps verifies the size and condition of the wetlands and other waters in question, and determines

the extent of government jurisdiction as it relates to Section 404 of the Federal Clean Water Act and Section 401 of the State Clean Water Act.

The Clean Water Act protects all "navigable waters", which are defined as traditional navigable waters that are or were used for commerce, or may be used for interstate commerce; tributaries of covered waters; and wetlands adjacent to covered waters, including tributaries. Non-navigable waters are called isolated wetlands, and are not subject to either the Federal or State Clean Water Act. Thus, isolated wetlands are not subject to federal wetland protection regulations. However, in addition to the Clean Water Act, the State also has jurisdiction over impacts to surface waters through the Porter-Cologne Water Quality Control Act (Porter-Cologne), which does not require that waters be "navigable". For this reason, isolated wetlands are regulated by the State of California pursuant to Porter-Cologne. The City of Roseville General Plan also provides protection for wetlands, including isolated wetlands, pursuant to the General Plan Open Space and Conservation Element. Federal, State and City regulations/policies all seek to achieve no net loss of wetland acreage, values, or function.

Aside from wetlands, checklist item b also addresses other "sensitive natural communities" and riparian habitat, which includes any habitats protected by local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service. The City of Roseville General Plan Open Space and Conservation Element includes policies for the protection of riparian areas and floodplain areas; these are Vegetation and Wildlife section Policies 2 and 3. Policy 4 also directs preservation of additional area around stream corridors and floodplain if there is sensitive woodland, grassland, or other habitat which could be made part of a contiguous open space area. Other than wetlands, which were already discussed, US Fish and Wildlife and California Department of Fish and Wildlife habitat protections generally result from species protections, and are thus addressed via checklist item a.

For checklist item d, there are no regulations specific to the protection of migratory corridors. This item is addressed by an analysis of the habitats present in the vicinity and analyzing the probable effects on access to those habitats which will result from a project.

The City of Roseville Tree Preservation ordinance (RMC Ch.19.66) requires protection of native oak trees, and compensation for oak tree removal. The Findings of the Implementing Procedures indicate that compliance with the City of Roseville Tree Preservation ordinance (RMC Ch.19.66) will prevent significant impacts related to loss of native oak trees, referenced by item e, above.

Regarding checklist item f, there are no adopted Habitat Conservation Plans within the City of Roseville.

Discussion of Checklist Answers:

a) The project will require the removal of several oak trees, which could potentially provide habitat for nesting birds. Construction activities could also have the potential to disrupt offsite nesting species. A pre-construction nesting survey, **Mitigation Measure BIO-1**, is required in order to ensure that nesting birds are not harmed during construction. Ground disturbing activities shall not occur during the active nesting season or if it is necessary to conduct such activities during the nesting season, pre-construction surveys and mitigation as described in **Mitigation Measure BIO-1**, would be required. Compliance with **Mitigation Measure BIO-1** will ensure that potential impacts to nesting birds are less than significant.

b-c) In accordance with U.S. Army Corps of Engineers protocol, an Aquatic Resources Delineation report, provided by Gallaway Enterprises, dated July 2022 (Attachment 5) was completed for the Project. Additionally, a Biological Resources Assessment (Attachment 6) completed by the same firm on the same date was completed for the Project. In short, the reports found five total wetland features on the site, including three seasonal swales and two seasonal wetlands (totaling 0.037 acres in size), and one 0.075 acre "other waters of the United States" (OW), for a total of 0.112 acres of aquatic resources on the site. Of the five wetlands identified within the Project site, only two meet the criteria to be considered jurisdictional features (see WF04 and WF05,

Figure 4 of Attachment 5). The remaining three wetlands, seasonal wetland WF03 and seasonal swales WF01 and WF02 (Figure 4 of Attachment 5) lack any surface hydrologic connection to the intermittent drainage or any other jurisdictional feature, and therefore do not meet the definition of a jurisdictional WOTUS.

Precipitation and localized surface runoff from the surrounding development provide the main hydrological inputs for the aquatic resources within the Project site. The seasonal swale WF04 holds surface runoff that enters the Project site from the northwest before becoming channelized and forming the intermittent drainage OW01. The intermittent drainage OW01 flows south through the Project site and continues offsite to the southwest. The offsite portion of this drainage continues south, running parallel to the Project boundary where it then drains into a culvert that flows under Main Street. This culvert feeds into the municipal storm drainage system, which is presumed to eventually outfall into Dry Creek. Dry Creek is a direct tributary of the Sacramento River. The seasonal wetland WF05 is a shallow depression adjacent to OW01. The seasonal wetland WF05 may contribute overflow to the drainage during heavy precipitation.

To confirm the jurisdictional status of WOTUS within the Project site, a significant nexus determination will need to be conducted by the Corps.

Lastly, as discussed in the Environmental Setting, the project site is located in an infill area of the City. The site is adjacent to paved roadways and is adjacent to an existing single-family dwelling unit. The wetland features are considered a Water of the United States and therefore subject to the Clean Water Act. Pursuant to Section 404 of the Clean Water Act, construction activities are subject to approval of the Corps. Pursuant to Section 401 of the Clean Water Act, the Corps permit will need to be certified by the Central Valley Regional Water Quality Control Board (CVRWQCB). Proper permitting as required by Mitigation **Measure BIO-2** will ensure that the potential impacts to the wetland features are less than significant.

d) The City includes an interconnected network of open space corridors and preserves located throughout the City, to ensure that the movement of wildlife is not substantially impeded as the City develops. The development of the project site will not negatively impact these existing and planned open space corridors, nor is the project site located in an area that has been designated by the City, United States Fish and Wildlife, or California Department of Fish and Wildlife as vital or important for the movement of wildlife or the use of native wildlife nursery sites.

e) As defined by the City of Roseville Zoning Ordinance (Chapter 19.66, Tree Preservation), native oak trees greater than six (6") diameter at breast height are defined as protected. A Tree Permit is required for the removal of any protected tree, and for any regulated activity within the protected zone of a protected tree where the encroachment exceeds 20 percent. An arborist report including a tree inventory summary was provided by Gallaway Enterprises, dated April 17, 2023 (Attachment 7). A total of 186 protected oak trees were identified on the property. Of the one-hundred eighty-six (186) trees, one-hundred ten (110) trees with a total aggregate diameter of approximately 1,348 inches are proposed for removal to facilitate development of the site, while seventy-six (76) trees are proposed to be retained (see Attachment 7). Seventy-two (72) of the trees proposed for removal were identified as being in critical or poor health. The arborist's recommendations include removal of those trees in the final stages of decline and/or trimming and preserving as many healthy trees with a health rating of three or greater as possible. The Tree Permit would contain conditions of approval to follow the recommendations of the Arborist Report, including tree protection measures such as construction fencing and staging guidelines, and mitigation measures that include payment of in-lieu mitigation fees to compensate for oak tree removal. Any deviation from the approved permit would require a Tree Permit Modification, which would require approval by the City.

The 2035 General Plan EIR (General Plan EIR) anticipated that during the buildout of the General Plan would involve conversion of habitat to developed use that will require oak tree removal, which would be subject to the City's ordinances and policies regarding oak tree preservation and mitigation. The City of Roseville Tree Preservation Ordinance requires a permit and mitigation for all oak trees removed. The General Plan EIR found

that implementation of the City's Tree Preservation Ordinance would result in less than significant impacts. The proposed project will comply with the City of Roseville Zoning Ordinance, and thus does not result in new or previously undisclosed impacts to native oak tree resources. The General Plan EIR required future projects comply with the City's Tree Ordinance; this project includes a Tree Permit, consistent with the City's Tree Ordinance. Consistency with the requirements of the Tree Permit for this project will ensure that impacts are less than significant.

f) There are no Habitat Conservation Plans; Natural Community Conservation Plans; or other approved local, regional, or state habitat conservation plans that apply to the project site.

V. Cultural Resources

As described within the Open Space and Conservation Element of the City of Roseville General Plan, the Roseville region was within the territory of the Nisenan (also Southern Maidu or Valley Maidu). Two large permanent Nisenan habitation sites have been identified and protected within the City's open space (in Maidu Park). Numerous smaller cultural resources, such as midden deposits and bedrock mortars, have also been recorded in the City. The gold rush which began in 1848 marked another settlement period, and evidence of Roseville's ranching and mining past are still found today. Historic features include rock walls, ditches, low terraces, and other remnants of settlement and activity. A majority of documented sites within the City are located in areas designated for open space uses.

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of an historic resource pursuant to in Section 15064.5?			X	
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?			X	
c) Disturb any human remains, including those interred outside of dedicated cemeteries?			X	

Thresholds of Significance and Regulatory Setting:

The significance of impacts to cultural resources is based directly on the CEQA Guidelines checklist items a–e listed above. The Archaeological, Historic, and Cultural Resources section of the City of Roseville General Plan also directs the proper evaluation of and, when feasible, protection of significant resources (Policies 1 and 2). There are also various federal and State regulations regarding the treatment and protection of cultural resources, including the National Historic Preservation Act and the Antiquities Act (which regulate items of significance in history), Section 7050.5 of the California Health and Safety Code, Section 5097.9 of the California Public Resources Code (which regulates the treatment of human remains) and Section 21073 et seq. of the California

Public Resources Code (regarding Tribal Cultural Resources). The CEQA Guidelines also contains specific sections, other than the checklist items, related to the treatment of effects on historic resources.

Pursuant to the CEQA Guidelines, if it can be demonstrated that a project will cause damage to a unique archaeological resource, the lead agency may require reasonable efforts to be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that they cannot be left undisturbed, mitigation measures are required (Section 21083.2 (a), (b), and (c)). A *historical resource* is a resource listed, or determined to be eligible for listing, in the California Register of Historical Resources (CRHR) (Section 21084.1); a resource included in a local register of historical resources (Section 15064.5(a)(2)); or any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant (Section 15064.5 (a)(3)). Public Resources Code Section 5024.1 requires evaluation of historical resources to determine their eligibility for listing on the CRHR.

Discussion of Checklist Answers:

a–b and d) No cultural resources are known to exist on the project site per the General Plan EIR; however, standard mitigation measures apply which are designed to reduce impacts to cultural resources, should any be found on-site. The measure requires an immediate cessation of work, and contact with the appropriate agencies to address the resource before work can resume. The project will not result in any new impacts beyond those already discussed and disclosed in the General Plan EIR; project-specific impacts are less than significant.

c) No paleontological resources are known to exist on the project site per the General Plan EIR; however, standard mitigation measures apply which are designed to reduce impacts to such resources, should any be found on-site. The measure requires an immediate cessation of work, and contact with the appropriate agencies to address the resource before work can resume. The project will not result in any new impacts beyond those already discussed and disclosed in the General Plan EIR; project-specific impacts are less than significant.

VI. Energy

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?			X	
b) Conflict with or obstruct a state or local plan for renewable energy or energy inefficiency?			X	

Thresholds of Significance and Regulatory Setting:

Established in 2002, California's Renewable Portfolio Standard (RPS) currently requires that 33 percent of electricity retail sales by served by renewable energy resources by 2020, and 50 percent by 2030. The City published a Renewables Portfolio Standard Procurement Plan in June 2018, and continues to comply with the RPS reporting and requirements and standards. There are no numeric significance thresholds to define "wasteful, inefficient, or unnecessary" energy consumption, and therefore significance is based on CEQA

Guidelines checklist items a and b, above, and by the use of expert judgment supported by facts, relying on the policies, codes, and regulations adopted by the City and by regulatory agencies which relate to energy. The analysis considers compliance with regulations and standards, project design as it relates to energy use (including transportation energy), whether the project will result in a substantial unplanned demand on the City's energy resources, and whether the project will impede the ability of the City to meet the RPS standards.

Discussion of Checklist Answers:

a & b) According to the CalEEMod results, the total kilowatt hour (kWh) use for the site is approximately 50,082.07 kWh. The project would consume energy both during project construction and during project operation.

During construction, fossil fuels, electricity, and natural gas would be used by construction vehicles and equipment. However, the energy consumed during construction would be temporary, and would not represent a significant demand on available resources. There are no unusual project characteristics that would necessitate the use of construction equipment or methods that would be less energy-efficient or which would be wasteful.

The completed project would consume energy related to building operation, exterior lighting, landscape irrigation and maintenance, and vehicle trips to and from the use. In accordance with California Energy Code Title 24, the project would be required to meet the Building Energy Efficiency Standards. This includes standards for water and space heating and cooling equipment; insulation for doors, pipes, walls, and ceilings; and appliances, to name a few. The project would also be eligible for rebates and other financial incentives from both the electric and gas providers for the purchase of energy-efficient appliances and systems, which would further reduce the operational energy demand of the project. The project was distributed to both PG&E and Roseville Electric for comments, and was found to conform to the standards of both providers; energy supplies are available to serve the project.

The project is consistent with the existing land use designation in the General Plan EIR. The General Plan EIR included an assessment of energy impacts for the entire plan area. The analysis included consideration of transportation energy, and evaluated walkability, alternative transportation modes, and the degree to which the mix and location of uses would reduce vehicle miles traveled in the plan area. The EIR also included a citywide assessment of energy demand based on the existing and proposed land uses within the City and Specific Plan. Impacts related to energy consumption were found to be less than significant. The project is consistent with the existing land use designation, and therefore is consistent with the current citywide assessment of energy demand, and will not result in substantial unplanned, inefficient, wasteful, or unnecessary consumption of energy; impacts are less than significant.

VII. Geology and Soils

As described in the Safety Element of the City of Roseville General Plan, there are three inactive faults (Volcano Hill, Linda Creek, and an unnamed fault) in the vicinity, but there are no known active seismic faults within Placer County. The last seismic event recorded in the South Placer area occurred in 1908, and is estimated to have been at least a 4.0 on the Richter Scale. Due to the geographic location and soil characteristics within the City, the General Plan indicates that soil liquefaction, landslides, and subsidence are not a significant risk in the area.

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:			X	
i) Ruptures of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to Division of Mines and Geology Special Publication 42.)			X	
ii) Strong seismic ground shaking?			X	
iii) Seismic-related ground failure, including liquefaction?			X	
iv) Landslides?			X	
b) Result in substantial soil erosion or the loss of topsoil?			X	
c) Be located in 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 or collapse?				X
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?				X

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				X
f) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?			X	

Thresholds of Significance and Regulatory Setting:

The significance of impacts related to geology and soils is based directly on the CEQA Guidelines checklist items a–f listed above. Regulations applicable to this topic include the Alquist-Priolo Act, which addresses earthquake safety in building permits, and the Seismic Hazards Mapping Act, which requires the state to gather and publish data on the location and risk of seismic faults. The Archaeological, Historic, and Cultural Resources section of the City of Roseville General Plan also directs the proper evaluation of and, when feasible, protection of significant archeological resources, which for this evaluation will include paleontological resources (Policies 1 and 2). Section 50987.5 of the California Public Code Section is only applicable to public land; this section prohibits the excavation, removal, destruction, or defacement/injury to any vertebrate paleontological site, including fossilized footprints or other paleontological feature.

The Findings of the Implementing Procedures indicate that compliance with the Flood Damage Prevention Ordinance (RMC Ch.9.80) and Design/Construction Standards (Resolution 07-107) will prevent significant impacts related to checklist item b. The Ordinance and standards include permit requirements for construction and development in erosion-prone areas and ensure that grading activities will not result in significant soil erosion or loss of topsoil. The use of septic tanks or alternative waste systems is not permitted in the City of Roseville, and therefore no analysis of criterion e is necessary.

Discussion of Checklist Answers:

a) The project will not expose people or structures to potential substantial adverse effects involving seismic shaking, ground failure or landslides.

i–iii) According to United States Geological Service mapping and literature, active faults are largely considered to be those which have had movement within the last 10,000 years (within the Holocene or Historic time periods)[1] and there are no major active faults in Placer County. The California Geological Survey has prepared a map of the state which shows the earthquake shaking potential of areas throughout California based primarily on an area's distance from known active faults. The map shows that the City lies in a relatively low-intensity ground-shaking zone. Commercial, institutional, and residential buildings as well as all related infrastructure are required, in conformance with Chapter 16, *Structural Design Requirements*, Division IV, *Earthquake Design* of the California Building Code, to lessen the exposure to potentially damaging vibrations

[1] United States Geological Survey, http://earthquake.usgs.gov/learn/glossary/?term=active%20fault, Accessed January 2016

through seismic-resistant design. In compliance with the Code, all structures in the Project area would be well-built to withstand ground shaking from possible earthquakes in the region; impacts are less than significant.

iv) Landslides typically occur where soils on steep slopes become saturated or where natural or manmade conditions have taken away supporting structures and vegetation. The existing and proposed slopes of the project site are not steep enough to present a hazard during development or upon completion of the project. In addition, measures would be incorporated during construction to shore minor slopes and prevent potential earth movement. Therefore, impacts associated with landslides are less than significant.

b) Grading activities will result in the disruption, displacement, compaction and over-covering of soils associated with site preparation (grading and trenching for utilities). Grading activities for the project will be limited to the project site. Grading activities require a grading permit from the Engineering Division. The grading permit is reviewed for compliance with the City's Improvement Standards, including the provision of proper drainage, appropriate dust control, and erosion control measures. Grading and erosion control measures will be incorporated into the required grading plans and improvement plans. Therefore, the impacts associated with disruption, displacement, and compaction of soils associated with the project are less than significant.

c, d) A review of the Natural Resources Conservation Service Soil Survey for Placer County, accessed via the Web Soil Survey (http://websoilsurvey.nrcs.usda.gov/app/), indicates that the soils on the site are Cometa-Fiddyment complex, which are not listed as geologically unstable or sensitive.

f) No paleontological resources are known to exist on the project site per the General Plan EIR; however, standard mitigation measures apply which are designed to reduce impacts to such resources, should any be found on-site. The measure requires an immediate cessation of work, and contact with the appropriate agencies to address the resource before work can resume. The project will not result in any new impacts beyond those already discussed and disclosed in the General Plan EIR; project-specific impacts are less than significant.

VIII. Greenhouse Gases

Greenhouse gases trap heat in the earth's atmosphere. The principal greenhouse gases (GHGs) that enter the atmosphere because of human activities are carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and fluorinated gases. As explained by the United States Environmental Protection Agency[2], global average temperature has increased by more than 1.5 degrees Fahrenheit since the late 1800s, and most of the warming of the past half century has been caused by human emissions. The City has taken proactive steps to reduce greenhouse gas emissions, which include the introduction of General Plan policies to reduce emissions, changes to City operations, and climate action initiatives.

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X	

[2] http://www3.epa.gov/climatechange/science/overview.html, Accessed January 2016

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			X	

Thresholds of Significance and Regulatory Setting:

In Assembly Bill 32 (the California Global Warming Solutions Act), signed by Governor Schwarzenegger of California in September 2006, the legislature found that climate change resulting from global warming was a threat to California, and directed that "the State Air Resources Board design emissions reduction measures to meet the statewide emissions limits for greenhouse gases . . .". The target established in AB 32 was to reduce emissions to 1990 levels by the year 2020. CARB subsequently prepared the *Climate Change Scoping Plan* (Scoping Plan) for California, which was approved in 2008. The Scoping Plan provides the outline for actions to reduce California's GHG emissions, and has been updated twice.

The current 2017 Scoping Plan updated the target year from 2020 to 2030, based on the targets established in Senate Bill 32 (SB 32). SB 32 was signed by the Governor on September 8, 2016, to establish a reduction target of 40 percent below 1990 levels by 2030. Critically, the 2017 Scoping Plan also sets the path toward compliance with the 2050 target embodied within Executive Order S-3-05 as well. According to the 2017 Scoping Plan the statewide 2030 target is 260 million metric tons. The Scoping Plan recommends an efficiency target approach for local governments for 2030 and 2050 target years.

The Placer County Air Pollution Control District (PCAPCD) recommends that thresholds of significance for GHG be related to statewide reduction goals and has adopted thresholds of significance which take into account the 2030 reduction target. The thresholds include a de minimis and a bright-line maximum threshold, as well as residential and non-residential efficiency thresholds. However, the City developed its own thresholds as part of the 2035 General Plan Update project approved in July 2020. The justification for the City's thresholds is contained within the General Plan EIR. The thresholds were developed based on statewide emissions data adjusted for relevant local conditions and land uses. The significance thresholds are shown in Table 1 below.

Table 1: GHG Significance Thresholds

	2020	2030	2035	2050
Per Capita Emissions Efficiency Targets (MT CO_2e/capita/yr)	**7.21**	**4.00**	**3.22**	**1.19**
Per Service Population Emissions Efficiency Targets (MT CO_2e/SP/yr)	**5.07**	**2.79**	**2.25**	**0.83**
Projects which use these thresholds for environmental analysis should include a brief justification of the type of efficiency target and the target year selected. Per capita is most applicable to projects which only include residential uses, or in cases where reliable data to generate a service population estimate is unavailable. Projects should generally use the 2035 target year. Note that future projects consistent with the General Plan will not require further analysis, per the tiering provisions of CEQA.				
Note: MMT CO_2e = million metric tons of carbon dioxide equivalent; Service Population (SP) = population + employment				

Discussion of Checklist Answers:

a–b) Greenhouse gases are primarily emitted as a result of vehicle operation associated with trips to and from a project, and energy consumption from operation of the buildings. Greenhouse gases from vehicles is assessed based on the vehicle miles traveled (VMT) resulting from the project, on a Citywide basis. Residential projects, destination centers (such as a regional mall), and major employers tend to increase VMT in a study area, either by adding new residents traveling in an area, or by encouraging longer trip lengths and drawing in trips from a broader regional area. However, non-residential projects and neighborhood-serving uses (e.g. neighborhood parks) tend to lower VMT in a study area because they do not generate new trips within the study area, they divert existing trips. These trips are diverted because the new use location is closer to home, on their way to another destination (e.g. work), or is otherwise more convenient.

The General Plan EIR used CalEEMod to estimate GHG emissions which would result from construction and operation of completed land uses consistent with General Plan buildout. The construction emissions were summed and then amortized over a 30-year operational lifetime and added to the operational emissions associated with buildout. Thresholds of significance were developed for the General Plan EIR based on statewide demographics and data adjusted for land uses relevant in the City of Roseville. The General Plan EIR evaluation found existing conditions emissions of 5.13 MT CO2e per service population (a combination of residents and employees) and that this would be reduced slightly to 5.12 MT CO2e per service population in cumulative buildout conditions. This value exceeds the significance thresholds for the years 2020, 2035, and 2050 (5.07, 2.25, and 0.83 MT CO2e per service population, respectively). The evaluation further found that mobile emissions from transportation sources account for approximately 67% of citywide emissions and that emissions resulting from the operation of buildings (energy) were the next-largest sector, at approximately 19% of citywide emissions.

The HE Addendum evaluated the impact of changing the location and density of uses, which can have an effect on operational emissions related to transportation. An updated analysis of vehicle miles traveled (VMT) was prepared for the Housing Element; the details and findings of this VMT analysis are discussed in greater detail in the Transportation section of this Initial Study. However, to summarize, the updated analysis found the Housing Element has a beneficial effect on VMT generation. The updated analysis found existing conditions (2020) have an average citywide VMT of 15.7 VMT/resident and cumulative conditions (2035) have an average citywide VMT of 14.7 VMT/resident. This is an increase of baseline (existing conditions) VMT, which the General Plan EIR found to be 15.1 VMT/resident, but is a decrease of cumulative conditions VMT, which the General Plan EIR found to be 15.5 VMT/resident (with transportation facilities constrained) or 14.9 VMT/resident (with transportation facilities unconstrained). Given that the Housing Element was found to reduce cumulative citywide VMT, it was also found to reduce transportation sector GHG emissions. The Project is located within the area of the City found to have low per-person VMT rate, where growth in the City would have the least impacts due to transportation-related GHG. In addition, the Project would meet Title 24 energy efficiency requirements, including providing solar.

As detailed in Attachment 4, CalEEMod was used to model the project's construction related and operations related GHG emissions (CO2e). Construction-related GHG emissions occur at one point in time and are therefore not typically expected to significantly contribute to climate change. Climate change is a cumulative effect that occurs over time, as emissions increase on a year-to-year basis due to increases in developed area and other factors; construction emissions are a one-time emission source, which end once the project is built. The CalEEMod results indicate the project would result in annual construction emissions of 216 CO2e in the most active construction year, which is well below the PCAPCD de minimis threshold of 1,100 MT CO2e/yr. Thus, the construction-generated GHG emissions would not conflict with, and are consistent with, the State goals listed in AB32 and other policies and regulations adopted by the California Air Resources Board pursuant to AB32. This impact is considered less than significant.

The PCAPCD's CEQA Air Quality Handbook contains a screening table used to determine if a residential project will exceed the long-term operational GHG emissions significance threshold (Table 2-6: Corresponding Size of a Project for De Minimis Level of 1,100 MT CO2e/yr). According to the screening table, projects that consist of 71 single-family homes or less are considered to have a less-than-significant impact related to long-term operational GHG emissions. The project proposes 17 single-family lots, and would result in the construction of 16 new homes, which is well below the published threshold of significance. Thus, project generated GHG emissions would not conflict with, and are consistent with, the State goals listed in AB32 and policies and regulation adopted by the California Air Resources Board pursuant to AB32. This impact is considered less than significant.

IX. Hazards and Hazardous Materials

No hazardous sites or potential for hazardous materials have been identified within 1000 feet of the project site, as indicated by a search of the State of California's Envirostor database (http://www.envirostor.dtsc.ca.gov/public/) and California State Water Resources Control Board Geotracker website (http://geotracker.waterboards.ca.gov/) on March 5, 2024.

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			X	
b) Create a significant hazard to the public or the environment though reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			X	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				X
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				X

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?				X
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			X	
g) Expose people or structures either directly or indirectly to a significant risk of loss, injury or death involving wildland fires?			X	

Thresholds of Significance and Regulatory Setting:

The significance of impacts related to hazardous materials is based directly on the CEQA Guidelines checklist items a–g listed above. A material is defined as hazardous if it appears on a list of hazardous materials prepared by a federal, state or local regulatory agency, or if it has characteristics defined as hazardous by such an agency. The determination of significance based on the above criteria depends on the probable frequency and severity of consequences to people who might be exposed to the health hazard, and the degree to which Project design or existing regulations would reduce the frequency of or severity of exposure. As an example, products commonly used for household cleaning are classified as hazardous when transported in large quantities, but one would not conclude that the presence of small quantities of household cleaners at a home would pose a risk to a school located within ¼-mile.

Many federal and State agencies regulate hazards and hazardous substances, including the United States Environmental Protection Agency (US EPA), California Department of Toxic Substances Control (DTSC), Central Valley Regional Water Quality Control Board (Regional Water Board), and the California Occupational Safety and Health Administration (CalOSHA). The state has been granted primacy (primary responsibility for oversight) by the US EPA to administer and enforce hazardous waste management programs. State regulations also have detailed planning and management requirements to ensure that hazardous materials are handled, stored, and disposed of properly to reduce human health risks. California regulations pertaining to hazardous waste management are published in the California Code of Regulations (see 8 CCR, 22 CCR, and 23 CCR).

The project is not within an airport land use plan or within two miles of a public or private use airport. Therefore, no further discussion is provided for item e.

Discussion of Checklist Answers:

a, b) Standard construction activities would require the use of hazardous materials such as fuels, oils, lubricants, glues, paints and paint thinners, soaps, bleach, and solvents. These are common household and commercial materials routinely used by both businesses and average members of the public. The materials only pose a hazard if they are improperly used, stored, or transported either through upset conditions (e.g. a vehicle accident) or mishandling. In addition to construction use, the operational project would result in the use of common hazardous materials as well, including bleach, solvents, and herbicides. Regulations pertaining to the transport of materials are codified in 49 Code of Federal Regulations 171–180, and transport regulations are enforced and monitored by the California Department of Transportation and by the California Highway Patrol. Specifications for storage on a construction site are contained in various regulations and codes, including the California Code of Regulations, the Uniform Fire Code, and the California Health and Safety Code. These same codes require that all hazardous materials be used and stored in the manner specified on the material packaging. Existing regulations and programs are sufficient to ensure that potential impacts as a result of the use or storage of hazardous materials are reduced to less than significant levels.

c) See response to Items (a) and (b) above. While development of the site will result in the use, handling, and transport of materials deemed to be hazardous, the materials in question are commonly used in both residential and commercial applications, and include materials such as bleach and herbicides. The project will not result in the use of any acutely hazardous materials, substances, or waste.

d) The project is not located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5[3]; therefore, no impact will occur.

e) This project is located within an area currently receiving City emergency services and development of the site has been anticipated and incorporated into emergency response plans. As such, the project will cause a less than significant impact to the City's Emergency Response or Management Plans. Furthermore, the project will be required to comply with all local, State and federal requirements for the handling of hazardous materials, which will ensure less-than-significant impacts. These will require the following programs:

- A Risk Management and Prevention Program (RMPP) is required of uses that handle toxic and/or hazardous materials in quantities regulated by the California Health and Safety Code and/or the City.

- Businesses that handle toxic or hazardous materials are required to complete a Hazardous Materials Management Program (HMMP) pursuant to local, State, or federal requirements.

g) The California Department of Forestry and Fire Protection (CAL FIRE) is the state agency responsible for wildland fire protection and management. As part of that task, CAL FIRE maintains maps designating Wildland Fire Hazard Severity zones. The City is not located within a Very High Fire Hazard Severity Zone, and is not in a CAL FIRE responsibility area; fire suppression is entirely within local responsibility. The project site is in an urban area, and therefore would not expose people to any risk from wildland fire. There would be no impact with regard to this criterion.

X. Hydrology and Water Quality

As described in the Open Space and Conservation Element of the City of Roseville General Plan, the City is located within the Pleasant Grove Creek Basin and the Dry Creek Basin. Pleasant Grove Creek and its tributaries drain most of the western and central areas of the City and Dry Creek and its tributaries drain the remainder of the City. Most major stream areas in the City are located within designated open space.

[3] http://www.calepa.ca.gov/SiteCleanup/CorteseList/SectionA.htm

Would the project:

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

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
e) In flood hazard, tsunami, or seiches zones, risk release of pollutants due to project innundation?				X

Thresholds of Significance and Regulatory Setting:

The significance of impacts related to hydrology and water quality is based directly on the CEQA Guidelines checklist items a–e listed above. For checklist item a, c (i), d, and e, the Findings of the Implementing Procedures indicate that compliance with the City of Roseville Design/Construction Standards (Resolution 07-107), Urban Stormwater Quality Management and Discharge Control Ordinance (RMC Ch. 14.20), and Stormwater Quality Design Manual (Resolution 16-152) will prevent significant impacts related to water quality or erosion. The standards require preparation of an erosion and sediment control plan for construction activities and includes designs to control pollutants within post-construction urban water runoff. Likewise, it is indicated that the Drainage Fees for the Dry Creek and Pleasant Grove Watersheds (RMC Ch.4.48) and City of Roseville Design/Construction Standards (Resolution 07-107) will prevent significant impacts related to checklist items c (ii) and c (iii). The ordinance and standards require the collection of drainage fees to fund improvements that mitigate potential flooding impacts, and require the design of a water drainage system that will adequately convey anticipated stormwater flows without increasing the rate or amount of surface runoff. These same ordinances and standards prevent impacts related to groundwater (items a and d), because developers are required to treat and detain all stormwater onsite using stormwater swales and other methods which slow flows and preserve infiltration. Finally, it is indicated that compliance with the Flood Damage Prevention Ordinance (RMC Ch. 9.80) will prevent significant impacts related to items c (iv) and e. The Ordinance includes standard requirements for all new construction, including regulation of development with the potential to impede or redirect flood flows, and prohibits development within flood hazard areas. Impacts from tsunamis and seiches were screened out of the analysis (item e) because the project is not located near a water body or other feature that would pose a risk of such an event.

Discussion of Checklist Answers:

a,c (i),d, e) The project will involve the disturbance of on-site soils and the construction of impervious surfaces, such as asphalt paving and buildings. Disturbing the soil can allow sediment to be mobilized by rain or wind, and cause displacement into waterways. To address this and other issues, the developer is required to receive approval of a grading permit and/or improvement plants prior to the start of construction. The permit or plans are required to incorporate mitigation measures for dust and erosion control. In addition, the City has a National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit issued by the Central Valley Regional Water Quality Control Board which requires the City to reduce pollutants in stormwater to the maximum extent practicable. The City does this, in part, by means of the City's 2016 Design/Construction Standards, which require preparation and implementation of a Stormwater Pollution Prevention Plan. All permanent stormwater quality control measures must be designed to comply with the City's Manual for Stormwater Quality Control Standards for New Development, the City's 2016 Design/Construction Standards, Urban Stormwater Quality Management and Discharge Control Ordinance, and Stormwater Quality Design Manual. For these reasons, impacts related to water quality are less than significant.

b, d) The project does not involve the installation of groundwater wells. The City maintains wells to supplement surface water supplies during multiple dry years, but the effect of groundwater extraction on the aquifer was addressed in the City's Urban Water Master Plan and evaluated in the General Plan EIR. The proposed project is consistent with the General Plan land use designation, and is thus consistent with the citywide evaluation of water supply. Project impacts related to groundwater extraction are less than significant. Furthermore, all

permanent stormwater quality control measures must be designed to comply with the Stormwater Quality Design Manual, which requires the use of bioswales and other onsite detention and infiltration methods. These standards ensure that stormwater will continue to infiltrate into the groundwater aquifer.

c (ii and iii)) The project has been reviewed by City Engineering staff for conformance with City ordinances and standards. The project includes adequate and appropriate facilities to ensure no net increase in the amount or rate of stormwater runoff from the site, and which will adequately convey stormwater flows.

c (iv) and e) The project has been reviewed by City Engineering staff for conformance with City ordinances and standards. The project is not located within either the Federal Emergency Management Agency floodplain or the City's Regulatory Floodplain (defined as the floodplain which will result from full buildout of the City). Therefore, the project will not impede or redirect flood flows, nor will it be inundated. The proposed project is located within an area of flat topography and is not near a waterbody or other feature which could cause a seiche or tsunami. There would be no impact with regard to these criterion.

XI. Land Use and Planning

The Project site is located within the City's Infill area. The site has a General Plan land use designation of Low Density Residential 4 units per acre (LDR-4) and a zoning designation of Single-Family Residential (R-1). Based on the land use designation, a total of 17 units can be accommodated at the site. The Project site is bordered by single family dwelling units on the north, west, and east, and Main Street on the south.

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Physically divide an established community?				X
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation of an agency adopted for the purpose of avoiding or mitigating an environmental effect?				X

Thresholds of Significance and Regulatory Setting:

The significance of impacts related to land use is based directly on the CEQA Guidelines checklist items a and b listed above. Consistency with applicable City General Plan policies, Improvement Standards, and design standards is already required and part of the City's processing of permits and plans, so these requirements do not appear as mitigation measures.

Discussion of Checklist Answers:

a) The project area has been master planned for development, including adequate roads, pedestrian paths, and bicycle paths to provide connections within the community. The project will not physically divide an established community.

b) Consistent with the General Plan designation, the proposed project will create 17 new single-family lots. The Project site is consistent with the land use designation and therefore, no further environmental analysis is required.

XII. Mineral Resources

The Surface Mining and Reclamation Act (SMARA) of 1975 requires the State Geologist to classify land into Mineral Resource Zones (MRZ's) based on the known or inferred mineral resource potential of that land. The California Division of Mines and Geology (CDMG) was historically responsible for the classification and designation of areas containing—or potentially containing—significant mineral resources, though that responsibility now lies with the California Geological Survey (CGS). CDMG published Open File Report 95-10, which provides the mineral classification map for Placer County. A detailed evaluation of mineral resources has not been conducted within the City limits, but MRZ's have been identified. There are four broad MRZ categories (MRZ-1 through MRZ-4), and only MRZ-2 represents an area of known significant mineral resources. The City of Roseville General Plan EIR included Exhibit 4.1-3, depicting the location of MRZ's in the City limits. There is only one small MRZ-2 designation area, located at the far eastern edge of the City.

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				X
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				X

Thresholds of Significance and Regulatory Setting:

The significance of impacts related to mineral resources is based directly on the CEQA Guidelines checklist items a and b listed above.

Discussion of Checklist Answers:

a–b) The project site is not in the area of the City known to include any mineral resources that would be of local, regional, or statewide importance; therefore, the project has no impacts on mineral resources.

XIII. Noise

The Project is bounded by single-family dwelling unit on the north, west and east, and Main Street on the south. Surrounding uses include single-family homes and an elementary school.

Would the project result in:

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

Thresholds of Significance and Regulatory Setting:

Standards for transportation noise and non-transportation noise affecting existing or proposed land uses are established within the City of Roseville General Plan Noise Element, and these standards are used as the thresholds to determine the significance of impacts related to items a and c. The significance of other noise impacts is based directly on the CEQA Guidelines checklist items b and c listed above. The Findings of the Implementing Procedures indicate that compliance with the City Noise Regulation (RMC Ch. 9.24) will prevent significant non-transportation noise as it relates to items a and b. The Ordinance establishes noise exposure standards that protect noise-sensitive receptors from a variety of noise sources, including non-transportation/fixed noise, amplified sound, industrial noise, and events on public property. The project is not within an airport land use plan, within two miles of a public or public use airport and there are also no private airstrips in the vicinity of the project area. Therefore, item c has been ruled out from further analysis.

Discussion of Checklist Answers:

a) A slight increase in project related traffic will cause a slight increase in traffic related noise. However, the project will not create an excessive amount of traffic beyond that anticipated with the existing LDR-4 land use designation. No permanent noise increase from a different mix of uses will occur as the project will retain the LDR-4 land use designation and will be developed with single-family dwelling units.

b) Surrounding uses may experience short-term increases in groundborne vibration, groundborne noise, and airborne noise levels during construction. However, these increases would only occur for a short period of

time. When conducted during daytime hours, construction activities are exempt from Noise Ordinance standards, but the standards do apply to construction occurring during nighttime hours. While the noise generated may be a minor nuisance, the City Noise Regulation standards are designed to ensure that impacts are not unduly intrusive. Based on this, the impact is less than significant.

XIV. Population and Housing

The project site is located within the Infill area of the City and has a land use designation of Low Density Residential 4 units per acre (LDR-4). The City of Roseville General Plan Table II-4 identifies the total number of residential units and population anticipated as a result of buildout of the City, and the Specific Plan likewise includes unit allocations and population projections for the Plan Area. Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, though extension of roads or other infrastructure)?			X	
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				X

Thresholds of Significance and Regulatory Setting:

The significance of impacts related to population and housing is based directly on the CEQA Guidelines checklist items a and b listed above.

Discussion of Checklist Answers:

a) The CEQA Guidelines identify several ways in which a project could have growth-inducing impacts (Public Resources Code Section 15126.2), either directly or indirectly. Growth-inducement may be the result of fostering economic growth, fostering population growth, providing new housing, or removing barriers to growth. Growth inducement may be detrimental, beneficial, or of no impact or significance under CEQA. An impact is only deemed to occur when it directly or indirectly affects the ability of agencies to provide needed public services, or if it can be shown that the growth will significantly affect the environment in some other way. The project is consistent with the land use designation of the site. Therefore, while the project in question will induce some level of growth, this growth was already identified and its effects disclosed and mitigated within the General Plan EIR. Therefore, the impact of the project is less than significant.

b) The project site contains one existing single-family home. This single-family home is proposed to remain, thus there would be no impact with respect to these criteria.

XV. Public Services

Fire protection, police protection, park services, and library services are provided by the City. The project is located within the Roseville Elementary School District. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Fire protection?			X	
b) Police protection?			X	
c) Schools?			X	
d) Parks?			X	
e) Other public facilities?			X	

Thresholds of Significance and Regulatory Setting:

The significance of impacts related to public services is based directly on the CEQA Guidelines checklist items a–e listed above. The EIR for the Specific Plan addressed the level of public services which would need to be provided in order to serve planned growth in the community. Development Agreements and other conditions have been adopted in all proposed growth areas of the City which identify the physical facilities needed to serve growth, and the funding needed to provide for the construction and operation of those facilities and services; the project is consistent with the Specific Plan. In addition, the project has been routed to the various public service agencies, both internal and external, to ensure that the project meets the agencies' design standards (where applicable) and to provide an opportunity to recommend appropriate conditions of approval.

Discussion of Checklist Answers:

a) Existing City codes and regulations require adequate water pressure in the water lines, and construction must comply with the Uniform Fire and Building Codes used by the City of Roseville. Additionally, the applicant is required to pay a fire service construction tax, which is used for purchasing capital facilities for the Fire Department. Existing codes, regulations, funding agreements, and facilities plans are sufficient to ensure less than significant impacts.

b) Pursuant to the Development Agreement for the project area, the developer is required to pay fees into a Community Facilities District, which provides funding for police services. Sales taxes and property taxes resulting from the development will add revenue to the General Fund, which also serves to fund police services. Existing codes, regulations, funding agreements, and facilities plans are sufficient to ensure less than significant impacts.

c) The applicant for this project is required to pay school impact fees at a rate determined by the local school districts. School fees will be collected prior to the issuance of building permits, consistent with City requirements. School sites have already been designated as part of the Specific Plan process. Existing codes, regulations, funding agreements, and facilities plans are sufficient to ensure less than significant impacts.

d) Pursuant to the Development Agreement for the project area, the developer will be required to pay fees into a Community Facilities District, which provides funding for park services. Future park and recreation sites

and facilities have already been identified as part of the Specific Plan process. Existing codes, regulations, funding agreements, and facilities plans are sufficient to ensure less than significant impacts.

e) Pursuant to the Development Agreement for the project area, the developer will be required to pay fees into a Community Facilities District, which provides funding for the library system and other such facilities and services. In addition, the City charges fees to end-users for other services, such as garbage and greenwaste collection, in order to fund those services. Existing codes, regulations, funding agreements, and facilities plans are sufficient to ensure less than significant impacts.

XVI. Recreation

The Project proposes no on-site recreational areas with the subdivision; however, Kaseberg Park is located less than half a mile of the Project site.

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that physical deterioration of the facility would occur or be accelerated?			X	
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?			X	

Thresholds of Significance and Regulatory Setting:

The significance of impacts related to recreation services is based directly on the CEQA Guidelines checklist items a–b listed above.

Discussion of Checklist Answers:

a) The EIR for the Specific Plan addressed the level of park services—including new construction, maintenance, and operations—which would need to be provided in order to serve planned growth in the community. Given that the project is consistent with the General Plan and Specific Plan, the project would not cause any unforeseen or new impacts related to the use of existing or proposed parks and recreational facilities. Existing codes, regulations, funding agreements, and facilities plans are sufficient to ensure less than significant impacts.

b) Park sites and other recreational facilities were identified within the Specific Plan, and the plan-level impacts of developing those facilities were addressed within the Final EIR for the Specific Plan. The project will not cause any unforeseen or new impacts related to the construction or expansion of recreational facilities.

XVII. Transportation

The Project has 163 linear feet of frontage on Main Street, which is a two-lane collector roadway. Primary access will be provided a new public street that is accessed via Main Street. Parking for each of the residential lots will include a minimum two car garage and 18-foot long driveway.

Would the project:

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

Thresholds of Significance and Regulatory Setting:

The City has adopted the following plans, ordinances, or policies applicable to checklist item a: Pedestrian Master Plan, Bicycle Master Plan, Short-Range Transit Plan, and General Plan Circulation Element. The project is evaluated for consistency with these plans and the policies contained within them. For checklist item b, the CEQA Guidelines Section 15064.3 establishes a detailed process for evaluating the significance of transportation impacts. In accordance with this section, the analysis must focus on the generation of vehicle miles traveled (VMT); effects on automobile delay cannot be considered a significant impact. The City developed analysis guidance and thresholds as part of the 2035 General Plan Update project approved in July 2020. The detailed evaluation and justification is contained within the General Plan EIR.

Future projects consistent with the General Plan will not require further VMT analysis, pursuant to the tiering provisions of CEQA. For projects which are inconsistent, CEQA Guidelines Section 15064.3(b) allows lead agencies discretion to determine, in the context of a particular project, whether to rely on a qualitative analysis or performance-based standards. CEQA Guidelines Section 15064.7(b) allows lead agencies the discretion to select their own thresholds and allow for differences in thresholds based on context.

Quantitative analysis would not be required if it can be demonstrated that the project would generate VMT which is equivalent to or less than what was assumed in the General Plan EIR. Examples of such projects include:

- Local-serving retail and other local-serving development, which generally reduces existing trip distances by providing services in closer proximity to residential areas, and therefore reduce VMT.

- Multi-family residences, which generally have fewer trips per household than single-family residences, and therefore also produce less VMT per unit.

- Infill projects in developed areas generally have shorter trips, reduced vehicle trips, and therefore less VMT.

- Pedestrian, bicycle, transit, and electric vehicle transportation projects.

- Residential projects in low per-capita household VMT areas and office projects in low per-worker VMT areas (85 percent or less than the regional average) as shown on maps maintained by SACOG or within low VMT areas as shown within Table 4.3-8 of the General Plan EIR.

When quantitative analysis is required, the threshold of 12.8 VMT/capita may be used for projects not within the scope of the General Plan EIR, provided the cumulative context of the 2035 General Plan has not changed substantially. Since approval of the 2035 General Plan, the City has not annexed new land, substantially changed roadway network assumptions, or made any other changes to the 2035 assumptions which would require an update to the City's VMT thresholds contained within the General Plan EIR. Therefore, the threshold of 12.8 VMT/capita remains appropriate.

The development is both consistent with the General Plan land use designation and is an infill project in a developed area, and therefore as previously described, does not require any further analysis.

Impacts with regard to items c and d are assessed based on the expert judgment of the City Engineer and City Fire Department, as based upon facts and consistency with the City's Design and Construction Standards.

Discussion of Checklist Answers:

a) The City of Roseville has adopted a Pedestrian Master Plan, Bicycle Master Plan, and Short-Range Transit Plan. The project was reviewed for consistency with these documents. The project was reviewed for consistency with these documents.

b) No quantitative VMT analysis was completed for the proposed Project because it is consistent with the existing land use designation and therefore does not contribute more traffic to the roadway system than was anticipated in citywide analyses. Therefore, impacts are considered less than significant.

c, d) The project has been reviewed by the City Engineering and City Fire Department staff, and has been found to be consistent with the City's Design Standards. Furthermore, standard conditions of approval added to all City project require compliance with Fire Codes and other design standards. Compliance with existing regulations ensure that impacts are less than significant.

XVIII. Tribal Cultural Resources

As described within the Open Space and Conservation Element of the City of Roseville General Plan, the Roseville region was within the territory of the Nisenan (also Southern Maidu or Valley Maidu). Two large permanent Nisenan habitation sites have been identified and protected within the City's open space (in Maidu Park). Numerous smaller tribal cultural resources, such as midden deposits and bedrock mortars, have also been recorded in the City. A majority of documented sites within the City are located in areas designated for open space uses. The United Auburn Indian Community (UAIC) is a federally recognized Tribe comprised of both Miwok and Maidu (Nisenan) Tribal members who are traditionally and culturally affiliated with the project

area. The UAIC has indicated that "the Tribe has deep spiritual, cultural, and physical ties to their ancestral land and are contemporary stewards of their culture and landscapes. The Tribal community represents a continuity and endurance of their ancestors by maintaining their connection to their history and culture. It is the Tribe's goal to ensure the preservation and continuance of their cultural heritage for current and future generations."

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

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?			X	
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1 the lead agency shall consider the significance of the resource to a California Native American tribe.			X	

Thresholds of Significance and Regulatory Setting:

Tribal cultural resources are defined in Public Resources Code Section 21074, as either 1) a site, feature, place, geographically-defined cultural landscape, sacred place, or object with cultural value to a California Native American Tribe, that is listed or eligible for listing on the California Register of Historical Resources, or on a local register of historical resources or as 2) a resource determined by the lead agency, supported by substantial evidence, to be significant according to the historical register criteria in Public Resources Code section 5024.1(c), and considering the significance of the resource to a California Native American Tribe.

Discussion of Checklist Answers:

a) The General Plan EIR included historic and cultural resources study, which included research on whether any listed or eligible sites had been documented in the project area. No such sites were found. However, standard mitigation measures apply which are designed to reduce impacts to any previously undiscovered resources, should any be found on-site. The measure requires an immediate cessation of work, and contact

with the appropriate agencies to address the resource before work can resume. The project will not result in any new impacts beyond those already discussed and disclosed in the General Plan EIR; project-specific impacts are less than significant.

b) Notice of the proposed project was mailed to tribes which had requested such notice pursuant to AB 52. A request for consultation was not received. As discussed in item a, above, no resources are known to occur in the area. However, standard mitigation measures apply which are designed to reduce impacts to resources, should any be found on-site. The measure requires an immediate cessation of work, and contact with the appropriate agencies to address the resource before work can resume. The project will not result in any new impacts beyond those already discussed and disclosed in the General Plan EIR; project-specific impacts are less than significant.

XIX. Utilities and Service Systems

Water and sewer services are provided by the City of Roseville. Solid waste will be collected by the City of Roseville's Waste Services Division. The City of Roseville will provide electric service to the site, while natural gas will be provided by PG&E. The project has been reviewed by the City's Engineering Division, Environmental Utilities, Roseville Electric, and PG&E, who have determined that adequate services are available for the project.

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?			X	
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?			X	
c) Result in a determination by the wastewater treatment provider which serves the project that it has adequate capacity to serve the project's projected demand in addition of the provider's existing commitments?			X	

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?			X	
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?			X	

Thresholds of Significance and Regulatory Setting:

The significance of impacts related to utilities and service systems is based directly on the CEQA Guidelines checklist items a–e listed above.

Discussion of Checklist Answers:

a) The project is consistent with the Specific Plan, and will be required to construct any utilities infrastructure necessary to serve the project, as well as pay fees which fund the operation of the facilities and the construction of major infrastructure. The construction impacts related to building the major infrastructure were disclosed in the EIR for the Specific Plan, and appropriate mitigation was adopted. Minor additional infrastructure will be constructed within the project site to tie the project into the major systems, but these facilities will be constructed in locations where site development is already occurring as part of the overall project; there are no additional substantial impacts specific or particular to the minor infrastructure improvements.

b) The City of Roseville 2020 Urban Water Management Plan (UWMP), adopted June 2021, estimates water demand and supply for the City through the year 2045, based on existing land use designations and population projections. In addition, the General Plan EIR estimates water demand and supply for ultimate General Plan buildout. The project is consistent with existing land use designations, and is therefore consistent with the assumptions of the UWMP and General Plan EIR. The UWMP indicates that existing water supply sources are sufficient to meet all normal years, and during single-dry and in certain multiple-dry years, water supply deficit may occur. The UWMP estimates a near-term (2025) demand of 51,585 acre-feet per year (AFY), and a long-term, buildout (2045) demand of 62,547 AFY. In normal years, supply exceeds demand by approximately 13,000 AFY in the near-term and by approximately 8,000 AFY at buildout. The UWMP establishes some water supply deficit during dry year scenarios, ranging from approximately 1,500 AFY to 5,000 AFY depending on the scenario, but establishes that mandatory water conservation measures and the use of groundwater to offset reductions in surface water supplies are sufficient to offset the deficit. The project, which is consistent with existing land use designations, would not require new or expanded water supply entitlements.

c) The proposed project would be served by the Dry Creek Wastewater Treatment Plant (DCWWTP). The Central Valley Regional Water Quality Control Board (RWQCB) regulates water quality and quantity of effluent discharged from the City's wastewater treatment facilities. The DCWWTP has the capacity to treat 18 million gallons per day (mgd) and is currently treating 8.9 mgd. The project is consistent with existing land use designations, which is how infrastructure capacity is planned. Therefore, the volume of wastewater generated

by the proposed project could be accommodated by the facility; the proposed project will not contribute to an exceedance of applicable wastewater treatment requirements. The impact would be less than significant.

d, e) The Western Placer Waste Management Authority is the regional agency handling recycling and waste disposal for Roseville and surrounding areas. The regional waste facilities include a Material Recovery Facility (MRF) and the Western Regional Sanitary Landfill (WRSL). Currently, the WRSL is permitted to accept up to 1,900 tons of municipal solid waste per day. According to the solid waste analysis of the General Plan EIR, under current projected development conditions the WRSL has a projected lifespan extending through 2058. There is sufficient existing capacity to serve the proposed project. Though the project will contribute incrementally to an eventual need to find other means of waste disposal, this impact of City buildout has already been disclosed and mitigation applied as part of each Specific Plan the City has approved. All residences and business in the City pay fees for solid waste collection, a portion of which is collected to fund eventual solid waste disposal expansion. The project will not result in any new impacts associated with major infrastructure. Environmental Utilities staff has reviewed the project for consistency with policies, codes, and regulations related to waste disposal and waste reduction regulations and policies and has found that the project design is in compliance.

XX. Wildfire

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?				X
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?				X
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?				X

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?				X

Thresholds of Significance and Regulatory Setting:

The significance of impacts related to wildfire is based directly on the CEQA Guidelines checklist items a–d listed above. The California Department of Forestry and Fire Protection (CAL FIRE) is the state agency responsible for wildland fire protection and management. As part of that task, CAL FIRE maintains maps designating Wildland Fire Hazard Severity zones. The City is not located within a Very High Fire Hazard Severity Zone, and is not in a CAL FIRE responsibility area; fire suppression is entirely within local responsibility.

Discussion of Checklist Answers:

a–d) Checklist questions a–d above do not apply, because the project site is not within a Very High Fire Hazard Severity Zone and is not in a CAL FIRE responsibility area.

XXI. Mandatory Findings of Significance

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of an endangered, threatened or rare species, or eliminate important examples of the major periods of California history or prehistory?			X	
b) Does the project have impacts which are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that			X	

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)				
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			X	

Significance Criteria and Regulatory Setting:

The significance of impacts related to mandatory findings of significance is based directly on the CEQA Guidelines checklist items a–c listed above.

Discussion of Checklist Answers:

a–c) Long term environmental goals are not impacted by the proposed project. The cumulative impacts do not deviate beyond what was contemplated in the Specific Plan EIR, and mitigation measures have already been incorporated via the Specific Plan EIR. With implementation of the City's Mitigating Ordinances, Guidelines, and Standards and best management practices, mitigation measures described in this chapter, and permit conditions, the proposed project will not have a significant impact on the habitat of any plant or animal species. Based on the foregoing, the proposed project does not have the potential to degrade the quality of the environment, substantially reduce the habitat of any wildlife species, or create adverse effects on human beings.

ENVIRONMENTAL DETERMINATION:

In reviewing the site specific information provided for this project and acting as Lead Agency, the City of Roseville, Development Services Department, Planning Division has analyzed the potential environmental impacts created by this project and determined that with mitigation the impacts are less than significant. As demonstrated in the initial study checklist, there are no "project specific significant effects which are peculiar to the project or site" that cannot be reduced to less than significant effects through mitigation (CEQA Section 15183) and therefore an EIR ***is not*** *required. Therefore,* ***on the basis of the foregoing initial study:***

[**X**] I find that the proposed project COULD, but with mitigation agreed to by the applicant, clearly will not have a significant effect on the environment and a *MITIGATED NEGATIVE DECLARATION* has been prepared.

Initial Study Prepared by:

Eric Singer, Associate Planner
City of Roseville, Development Services – Planning Division

Attachments:

1. The 2035 General Plan Update Final Environmental Impact Report, certified August 5, 2020, is available for review on the City's website at https://www.roseville.ca.us/cms/one.aspx?portalId=7964922&pageId=8774544
2. The 2021 Housing Element Addendum is available for review on the City's website at https://www.roseville.ca.us/cms/One.aspx?portalId=7964922&pageId=16922203
3. Mitigation Monitoring & Reporting Program
4. CalEEMod Results
5. Aquatic Resources Delineation Report
6. Biological Resources Assessment
7. Arborist Report & Tree Inventory

CITY OF ROSEVILLE CALIFORNIA

DEVELOPMENT SERVICES DEPARTMENT – PLANNING DIVISION
311 Vernon Street, Roseville, CA 95678 (916) 774-5276

MITIGATION MONITORING AND REPORTING PROGRAM

Project Title/File Number:	INFILL PCL 13 – Oakleaf Estates Subdivision / PL23-0198
Project Location:	1010 Main Street
Project Description:	The applicant requests a Tentative Subdivision Map to subdivide the existing 4.24-acre parcel into 17 single-family residential lots, and a Tree Permit to remove 110 native oak trees and encroach into the protected zone of ten (10) other native oak trees.
Environmental Document	Mitigated Negative Declaration
Project Applicant:	Sean Minard, MHM Incorporated
Property Owner:	Patrick Laughlin & David Lanza, LENDCO LLC
Lead Agency Contact Person:	Eric Singer, Associate Planner, (916) 774-5536

Section 21081.6 of the California Public Resources Code requires public agencies to "adopt a reporting and monitoring program for the changes to the project which it has adopted or made a condition of project approval in order to mitigate or avoid significant effects on the environment." This Mitigation Monitoring and Reporting Program has been adopted for the purpose of avoiding environmental impacts

MONITORING PROCESS: Existing monitoring mechanisms are in place that assist the City of Roseville in meeting the intent of CEQA. These existing monitoring mechanisms eliminate the need to develop new monitoring processes for each mitigation measure. These mechanisms include grading plan review and approval, improvement/building plan review and approval and on-site inspections by City Departments. Given that these monitoring processes are requirements of the project, they are not included in the mitigation monitoring program.

It shall be the responsibility of the project applicant/owner to provide written notification to the City using the Mitigation Verification Cover Sheet and Forms, in a timely manner, of the completion of each Mitigation Measure as identified on the following pages. The City will verify that the project is in compliance with the adopted Mitigation Monitoring and Reporting Program. Any non-compliance will be reported by the City to the applicant/owner, and it shall be the project applicant's/owner's responsibility to rectify the situation by bringing the project into compliance. The purpose of this program is to ensure diligent and good faith compliance with the Mitigation Measures which have been adopted as part of the project.

TABLE OF MITIGATION MEASURES

Mitigation Measure	Implementation	Timing	Reviewing Party	Documents to be Submitted to City	Staff Use Only
BIO-1: Avoid nesting sites To ensure that fully protected bird and raptor species are not injured or disturbed by construction in the vicinity of nesting habitat, the project applicant shall implement the following measures: (a) When feasible, all tree removal shall occur between August 30 and February 15 to avoid the breeding season of any raptor species that could be using the area, and to discourage hawks from nesting in the vicinity of an upcoming construction area. This period may be modified with the authorization of the DFG; or (b) Prior to the beginning of mass grading, including grading for major infrastructure improvements, during the period between February 15 and August 30, all trees and potential burrowing owl habitat within 350 feet of any grading or earthmoving activity shall be surveyed for active raptor nests or burrows by a qualified biologist no more than 30 days prior to disturbance. If active raptor nests or burrows are found, and the site is within 350 feet of potential construction activity, a fence shall be erected around the tree or burrow(s) at a distance of up to 350 feet, depending on the species, from the edge of the canopy to prevent construction disturbance and intrusions on the nest area. The appropriate buffer shall be determined by the City in consultation with CDFG. (c) No construction vehicles shall be permitted within restricted areas (i.e., raptor protection zones), unless directly related to the management or protection of the legally protected species. (d) In the event that a nest is abandoned, despite efforts to minimize disturbance, and if the nestlings are still alive, the developer shall contact CDFG and, subject to CDFG approval, fund the recovery and hacking (controlled release of captive reared young) of the nestling(s). (e) If a legally protected species nest is located in a tree designated for removal, the removal shall be deferred until after August 30th, or until the adults and young of the year are no longer dependent on the nest site as determined by a qualified biologist. (f) The project applicant, in consultation with the CDFG, shall conduct a pre-construction survey within the phases of the project site that are scheduled for construction activities. The survey shall be conducted by a qualified biologist to determine if burrowing owls are occupying the project site. The survey shall be conducted no more than three weeks prior to grading of the project site. If the above survey does not identify burrowing owls on the project site, then no further mitigation would be required. However, should burrowing owls be found on the project site, the following measures shall be required: (g) The applicant shall avoid all potential burrowing owl burrows that may be disturbed by project construction during the breeding season between February 15 and August 30 (the period when nest burrows are typically occupied by adults with eggs or young). Avoidance shall include the establishment of a 350-foot diameter non-disturbance buffer zone around any occupied burrows. The buffer zone shall be delineated by highly visible temporary construction fencing. Disturbance of any occupied burrows shall only occur outside of the breeding season (August 30 through February 15). Based on approval by the CDFG, preconstruction and nonbreeding season exclusion measures may be implemented to preclude burrowing owl occupation of the project site prior to project-related disturbance (such as grading). Burrowing owls may be passively excluded from burrows in the construction area by placing one-way doors in the burrows according to current CDFG protocol. The one-way doors must be in place for a minimum of three days. All burrows that may be occupied by burrowing owls, regardless of whether they exhibit signs of occupation, must be cleared. Burrows that have been cleared through the use of the one-way doors shall then be closed or backfilled to prevent owls from entering the burrow. The oneway doors shall not be used more than two weeks before construction to ensure that owls do not recolonize the area of construction.	Results of preconstruction surveys shall be submitted prior to the issuance of a grading permit or Improvement Plans. Applicable construction restrictions shall be reflected within plans. The applicants shall prepare annual reports on the status and success of mitigation and shall submit these reports to U.S. Fish and Wildlife Service (USFWS) and CDFG. The applicants shall coordinate with USFWS and CDFG to modify as necessary any mitigation plans in an effort to attain mitigation success.	Pre-Construction and Construction: Surveys required prior to construction. If surveys are positive for birds, then remainder of mitigation steps are required prior to construction. Add as note on Improvement Plans.	Engineering	Nesting bird surveys	

Mitigation Measure	Implementation	Timing	Reviewing Party	Documents to be Submitted to City	Staff Use Only
BIO-2: Ensure No Net Loss of Wetlands Consistent with the Clean Water Act and the City of Roseville General Plan, the project shall achieve no net loss of wetlands. As used here, "no net loss of wetlands" means no net loss of wetlands acreage, values and function, and shall account for all wetlands impacted by the project, both directly (e.g., filled or drained) and indirectly (e.g., from polluted and accelerated runoff, damage caused by human or domestic animal access, or alteration of associated uplands in a manner that adversely affects wetland values and functions). No net loss may be achieved through onsite avoidance where practicable and desirable, onsite wetland construction where practicable and desirable, and/or off-site wetland construction, off-site wetland restoration, and off-site acquisition and preservation where approved by the permitting agencies. Restoration of wetland habitats is preferred to wetland creation. To the extent that restored wetlands require surrounding uplands to function properly, restored wetlands shall be located amidst sufficient amounts of surrounding uplands to allow the wetlands to function properly. The Clean Water Act Section 404 permit process (including Section 7 Consultation under FESA) is the standard method for developing mitigation for projects that affect wetlands and vernal pool species such as special-status plants, vernal pool crustaceans, and western spadefoots. Through this process, project applicants will be required to acquire the necessary permits and approvals to implement their proposed project while remaining in compliance with the Clean Water Act and FESA. If a 404 permit is not obtained, the project will not be issued a grading permit. The obligation to obtain this permit will ensure no net loss to federally protected wetlands. Even after obtaining such a permit, however, the applicants must demonstrate to the City's Planning Director that they have also achieved no net loss of wetlands. Mitigation shall consist of a combination of the preservation of onsite vernal pool habitat and the acquisition of off-site property with existing vernal pool habitat for preservation. Additionally, mitigation shall include off-site creation and/or restoration of vernal pool habitat, and/or participation in a mitigation credit program from a wetlands mitigation bank approved by the Corps and USFWS. These banks charge fees in exchange for credits that are based upon the mitigation obligation of the applicant. The fee is used for wetlands that have been restored, created, enhanced, and/or preserved at an established mitigation bank. The credits shall be in direct proportion to the wetland impacts resulting from the project. All wetland restoration and creation shall be conducted in a manner consistent with applicable Corps of Engineers and USFWS mitigation guidelines and policies.	The applicants shall obtain appropriate permits from the Corps and USFWS to ensure that there is no net loss of wetlands. The Applicants shall prepare annual reports on the status and success of mitigation and shall submit these responses to USFWS. The Applicants shall coordinate with USFWS to modify as necessary any mitigation plans in an effort to attain mitigation success.	Prior to issuance of grading permit. Add as note on Improvement Plans.	Engineering		

CITY OF ROSEVILLE CALIFORNIA

DEVELOPMENT SERVICES DEPARTMENT
311 Vernon Street, Roseville, CA 95678 (916) 774-5276

MITIGATION VERIFICATION SUBMITTAL COVER SHEET

Project Title/Planning File # _____

Project Address _____

Property Owner _____

Planning Division Contact _____

SUMMARY OF VERIFICATION MATERIALS INCLUDED IN THIS SUBMITTAL

Mitigation Measure	Supporting Attachments Included	Date Complete

I HAVE ATTACHED THE FOLLOWING REQUIRED ITEMS:

☐ Table of Applicable Mitigation Measures

☐ Mitigation Verification Form(s)

☐ Specific supporting documentation required by measure(s), if applicable (e.g. biologist's report)

I hereby certify under penalty of perjury under the laws of the State of California that I am the property owner or an agent of the property owner and am authorized to submit this Mitigation Verification Form. I also certify that the above-listed mitigation measures have been completed in the manner required, and that all of the information in this submittal is true and correct, to the best of my knowledge:

_____ _____ _____

Signature and Date | Print Name | Contact Number

MITIGATION VERIFICATION FORM

Mitigation Measure

Description of Monitoring and Verification Work Performed. The following information is a required part of the description: dates, personnel names or titles, and the stage/phase of construction work. Additional notes sheets may be attached, if necessary, or the below may simply reference a separate attachment that provides the required information.

INSTRUCTIONS

COVER SHEET:

A Cover Sheet for the project/development is prepared by City staff, with the top portion filled out. Each time Mitigation Verification Forms(s) are being submitted, a Cover Sheet completed by the Developer, Contractor, or Designee is required. An example of a completed summary table is provided below. The signature on the Cover Sheet must be *original wet ink*.

EXAMPLE MITIGATION VERIFICATION SUBMITTAL COVER SHEET

Project Title/Planning File #	New Coffee Shop, PL15-0000
Project Address	10 Justashort Street
Property Owner	Jane Owner
Planning Division Contact	Joe Planner, Associate Planner, (916) 774-####

SUMMARY OF VERIFICATION MATERIALS INCLUDED IN THIS SUBMITTAL

Mitigation Measure	Supporting Attachments Included	Date Complete
MM-3	Copy of survey report signed by biologist	5/10/2016
MM-4	All information included in Mitigation Verification Form	5/12/2016
MM-5	E-mail from Air District approving Dust Control Plan	5/05/2016

MITIGATION VERIFICATION FORM:

A Mitigation Verification Form is provided by City staff, along with the Cover Sheet and Table of Applicable Mitigation Measures. A form is filled in and submitted for each mitigation measure by the Developer, Contractor, or Designee. The form needs only the mitigation number to be filled in, along with the Description of Monitoring and Verification Work Performed. Multiple forms may be submitted simultaneously, under one cover sheet. It is also permissible to submit a form for each part of a measure, on separate dates. For instance, in the example measure MM-4 in the table above, the actual mitigation requires informing construction workers *and* retaining a qualified archeologist if resources are uncovered. Thus, a developer may submit a form in May certifying that construction workers have been informed, and also submit a second copy of the form in July because resources were discovered and additional actions had to be undertaken.

Each mitigation measure specifies the type of supporting documentation required; this must be submitted in order for the City to accept the mitigation as complete. An example of a completed Mitigation Verification Form is provided below.

EXAMPLE
MITIGATION VERIFICATION FORM

Mitigation Measure MM3

Description of Monitoring and Verification Work Performed. The following information is a required part of the description: dates, personnel names or titles, and the stage/phase of construction work. Additional notes sheets may be attached, if necessary, or the below may simply reference a separate attachment that provides the required information.

The mitigation measure text is included on the Improvement Plans General Notes page (Improvement Plan EN15-0001). On May 4, 2016, prior to any ground-disturbing activities (the pre-construction phase), a site meeting was held. At this meeting, workers on the site were informed of the potential to unearth remains, and were instructed to cease work and notify their supervisor immediately if any resources were observed.

Oakleaf Estates Summary Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Oakleaf Estates
Construction Start Date	8/3/2025
Operational Year	2026
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.50
Precipitation (days)	0.60
Location	1010 Main St, Roseville, CA 95678, USA
County	Placer-Sacramento
City	Roseville
Air District	Placer County APCD
Air Basin	Sacramento Valley
TAZ	443
EDFZ	15
Electric Utility	Roseville Electric
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.22

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description

Single Family Housing	17.0	Dwelling Unit	5.52	33,150	199,119	—	44.0	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

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

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.01	3.37	31.7	31.1	0.05	1.37	19.8	21.2	1.26	10.1	11.4	—	5,491	5,491	0.22	0.05	0.70	5,511
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.13	13.1	16.3	18.5	0.03	0.72	7.23	7.96	0.66	3.46	4.12	—	3,107	3,107	0.12	0.03	0.02	3,119
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.68	1.28	5.20	6.97	0.01	0.20	0.96	1.15	0.18	0.47	0.65	—	1,302	1,302	0.05	0.02	0.08	1,308
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.12	0.23	0.95	1.27	< 0.005	0.04	0.18	0.21	0.03	0.09	0.12	—	216	216	0.01	< 0.005	0.01	216

2.4. Operations Emissions Compared Against Thresholds

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	14.0	13.8	1.05	26.5	0.05	2.71	1.10	3.81	2.67	0.28	2.95	308	1,858	2,166	1.61	0.08	4.75	2,233
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	13.8	13.7	1.15	24.6	0.05	2.71	1.10	3.81	2.67	0.28	2.95	308	1,739	2,047	1.62	0.08	0.35	2,112
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.69	4.21	0.81	9.73	0.02	0.62	1.07	1.69	0.61	0.27	0.89	74.0	1,597	1,671	0.91	0.07	2.14	1,716
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.67	0.77	0.15	1.77	< 0.005	0.11	0.20	0.31	0.11	0.05	0.16	12.3	264	277	0.15	0.01	0.35	284

6. Climate Risk Detailed Report

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	4	0	0	N/A
Extreme Precipitation	2	0	0	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

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

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	4	1	1	4
Extreme Precipitation	2	1	1	3
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

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

7. Health and Equity Details

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	39.0
Healthy Places Index Score for Project Location (b)	60.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

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

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

gallaway ENTERPRISES

DRAFT DELINEATION OF AQUATIC RESOURCES

1010 Main Street Development Project

Placer County, California

July 2022

Prepared for:
Pat Laughlin
591 Colusa Avenue
Yuba City, CA 95991

Prepared by:
Gallaway Enterprises
117 Meyers Street, Suite 120
Chico CA 95928
530-332-9909
www.gallawayenterprises.com

Contents

List of Tables

List of Figures

List of Appendices

DRAFT DELINEATION OF AQUATIC RESOURCES,

1010 Main Street Development Project, Placer County, California

Introduction and Property Location

Gallaway Enterprises conducted a delineation of aquatic resources including waters of the United States (WOTUS) and waters of the State (WOTS) for the 1010 Main Street Development Project (Project) site consisting of an approximately 4-acre survey area (APN 015-080-026). The Project site is located at 1010 Main Street, west of Porter Drive, within the city of Roseville, CA (**Figure 1 and 2**). The Project is within the "Roseville" United States Geological Survey (USGS) Quadrangle within Sections 34, Township 11N, Range 06E (38.75343, -121.30204).

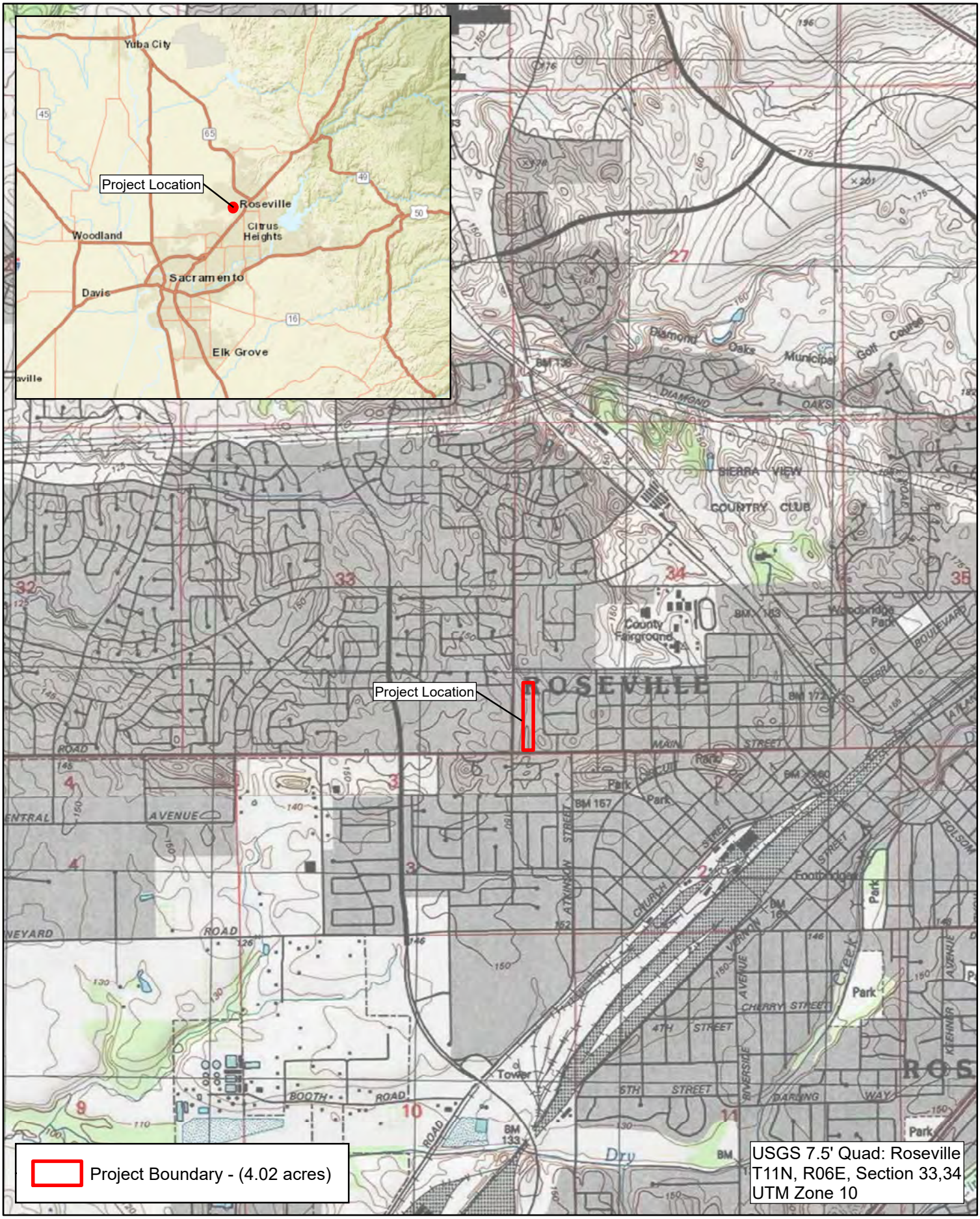
The Project site is accessible via Main Street in Roseville, CA. To access the site from Highway 80 heading east, take exit 102 to merge onto Riverside Avenue heading north. Make a left onto Cirby Way, and then make a right onto Foothills Boulevard. In approximately 1.7 miles take a right onto Main Street. The Project site will be on the left-hand side of the road, just past the intersection of Main Street and Porter Drive.

A survey of WOTUS was conducted on April 13 and July 07, 2022 by Senior Botanist Elena Gregg and Botanist Christopher Belko. Data regarding the location and extent of waters of the United States and other aquatic resources were collected using a Trimble Geo Explorer 6000 Series GPS Receiver. The survey involved an examination of botanical resources, soils, hydrological features, and determination of wetland characteristics based on the *United States Army Corps of Engineers Wetlands Delineation Manual* (1987) (1987 Delineation Manual); the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (2008) (Arid West Manual); the *U.S. Army Corps of Engineers Jurisdictional Determination Form Instructional Guidebook* (2007); the *Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States* (2008), and the *2020 Arid West Regional Wetland Plant List* and the *2020 National Wetland Plant List.* Gallaway Enterprises have prepared this report in compliance with the Minimum Standards for Acceptance of Aquatic Resources Delineation Reports (January 2016).

Environmental Setting and Site Conditions

The Project site is generally characterized as a disturbed urban environment surrounded by development including dense residential subdivisions and a school. The Project site contains scattered almond trees (*Prunus dulcis*) interspersed within a historically disturbed valley oak (*Quercus lobata*) woodland with an understory of non-native annual grassland. An existing residential building with a yard is present in the southeastern corner of the Project site. The Project site is primarily flat to slightly sloped with a series of pronounced man-made mounds/spoils piles in the northern half of the Project site. A few wetlands occur within the northern of the Project site, many of which are associated with the spoils piles. An intermittent drainage runs south along the northwestern boundary of the site before exiting the site to the southwest.

The average annual precipitation for the area is 16.17 inches and the average temperature is 61.6° F (NCEI 2022) in the region where the survey area is located. The Project site is at an elevation of 146 to 151 feet above sea level and is sloped between 1 to 5 percent. Soils within the survey area are primarily loams and sandy loams with a restrictive layer ranging from 20 to more than 80 inches in depth.



1:24,000

0 0.25 0.5 Miles

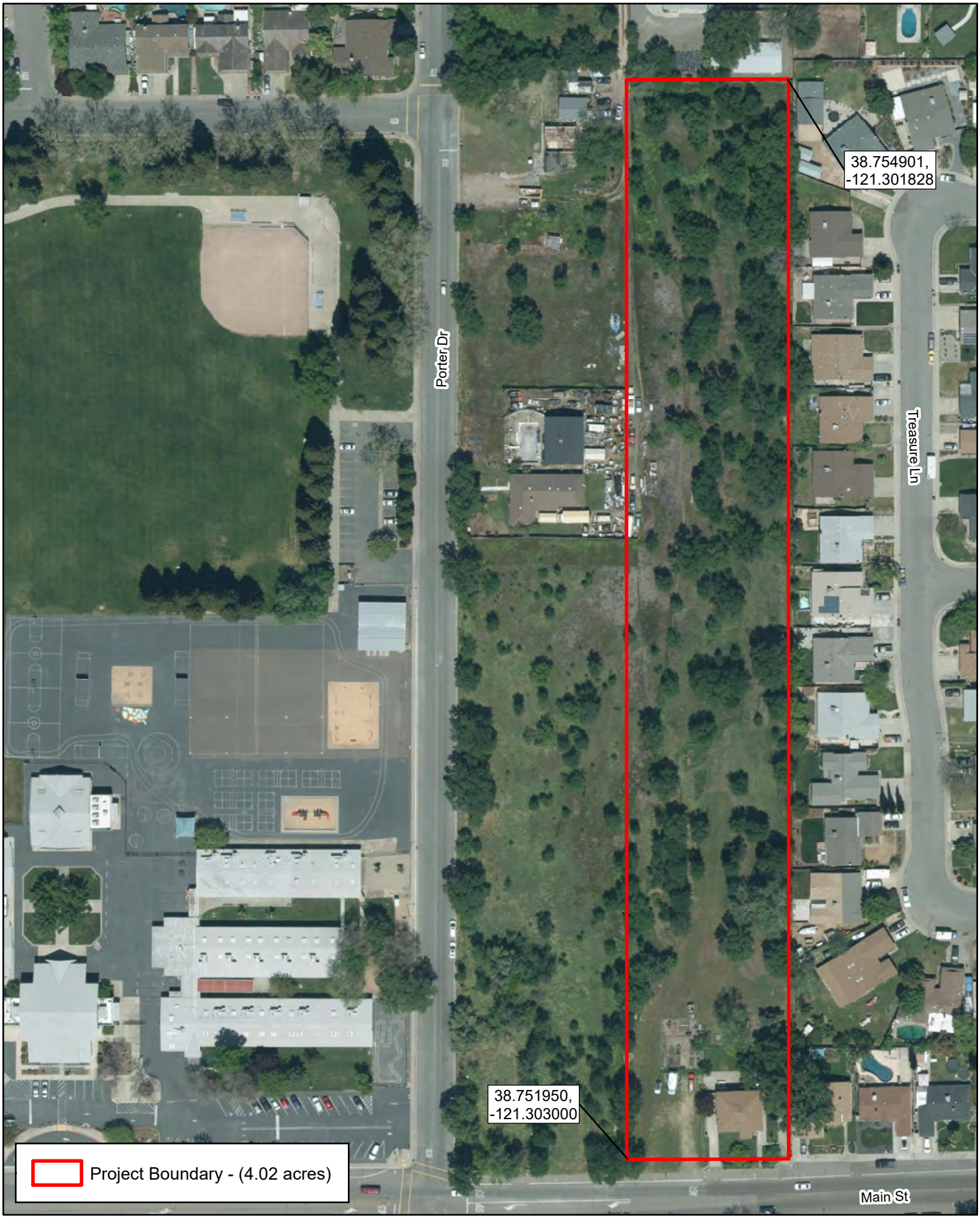
NORTH

Data Sources: ESRI, USGS, Placer County

1010 Main Street Development Project
Regional Location
Figure 1

gallaway ENTERPRISES

GE: #22-100 Map Date: 07/11/2022



NORTH

1:1,500

0 50 100 Feet

Data Sources: ESRI, City of Roseville
04/22/2019, Placer County

1010 Main Street Development Project
Project Location
Figure 2

gallaway ENTERPRISES

GE: #22-100 Map Date: 07/11/2022

Survey Methodology

The entire Project site was surveyed on-foot by Gallaway Enterprises staff on April 13 and July 07, 2022 to identify any potentially jurisdictional features. The survey, mapping efforts, and report production were performed according to the current valid legal definitions of WOTUS in effect as of September 20, 2021. The boundaries of non-tidal, non-wetland waters, when present, were delineated at the ordinary high water mark (OHWM) as defined in 33 Code of Federal Regulations (CFR) 328.3. The OHWM represents the limit of United States Army Corps of Engineers (Corps) jurisdiction over non-tidal waters (e.g., streams and ponds) in the absence of adjacent wetlands (33 CFR 328.04) (Curtis, et. al. 2011). Historic aerial photographs available on Google Earth were analyzed prior to conducting the field visit. Areas identified as having potential wetland or unusual aerial signatures were assessed in the field to determine the current conditions.

Field data were entered onto data sheets using the most current format (**Appendix A**). Wetland perimeters based on the 1987 Delineation Manual and the Arid West Manual were recorded and defined according to their topographic and hydrologic orientation. Sample points were established for each wetland and corresponding upland zone for all wetland features. In addition, test pit sampling was performed and/or photographs were taken in areas displaying potential wetland signatures on aerial photographs and depressional topography. At each sampling point/test pit the data collected involved physical sampling of soils, recording dominant vegetation, and investigation regarding wetland hydrology indicators and hydrological connectivity. Only areas exhibiting the necessary wetland parameters according to the 1987 Delineation Manual and Arid West Manual on the date surveyed were mapped as wetlands. Photographs were taken to show wetland features, test pit areas, and/or areas identified as having unusual aerial signatures. The locations of the photo points are depicted in **Figure 3** and the associated photographs are provided at the end of the report.

Many of the terms used throughout this report have specific meanings relating to the federal wetland delineation process. Term definitions are based on the Corps 1987 Delineation Manual; the Arid West Manual; *Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States, (*Lichvar and McColley 2008*)* and the Corps *Jurisdictional Determination Form Instructional Guidebook* (2007). The terms defined below have specific meaning relating to the delineation of WOTUS as prescribed by §404 of the Clean Water Act (CWA) and described in 33 CFR Part 328 and 40 CFR Parts 110, 112, and 116, and 122.

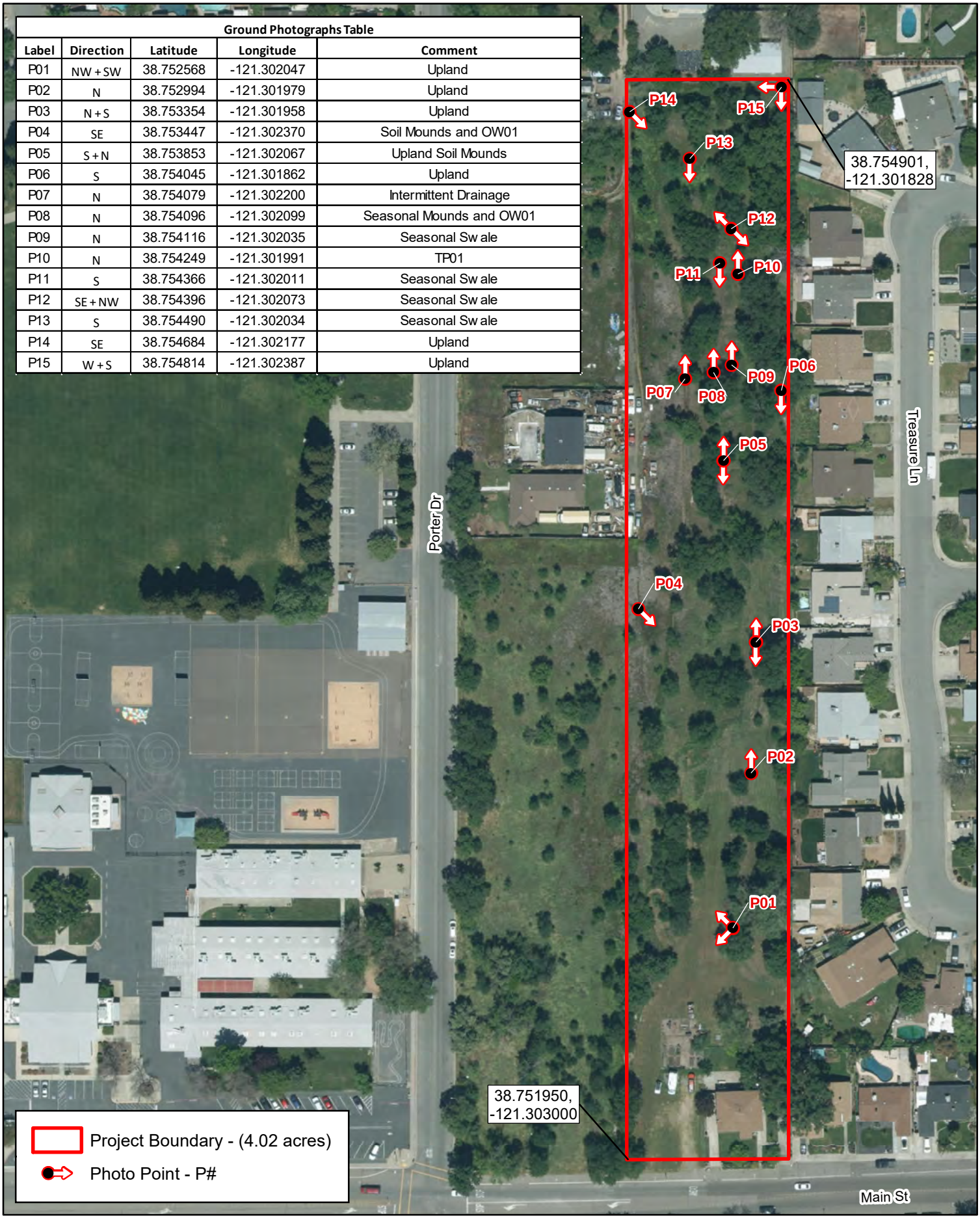
Determination of Hydrophytic Vegetation

The presence of hydrophytic vegetation was determined using the methods outlined in the 1987 Delineation Manual and the Arid West Manual. Areas were considered to have positive indicators of hydrophytic vegetation if they pass the dominance test, meaning more than 50 percent of the dominant species are obligate wetland, facultative wetland and facultative plants. Plant species were identified to the lowest taxonomy possible. Plant indicator status was determined by reviewing the 2020 Arid West Region Wetland Plant List and the 2020 National Wetland Plant List. In situations where dominance can be misleading due to seasonality, the prevalence index will be used to determine hydrophytic status of the community surrounding sample sites.

Plant indicator status categories:

Obligate wetland plants (OBL) – plants that occur almost always (estimated probability 99%) in wetlands under normal conditions, but which may also occur rarely (estimated probability 1%) in non-wetlands.

Facultative wetland plants (FACW) - plants that usually occur (estimated probability 67% to 99%) in



Ground Photographs Table

Label	Direction	Latitude	Longitude	Comment
P01	NW + SW	38.752568	-121.302047	Upland
P02	N	38.752994	-121.301979	Upland
P03	N + S	38.753354	-121.301958	Upland
P04	SE	38.753447	-121.302370	Soil Mounds and OW01
P05	S + N	38.753853	-121.302067	Upland Soil Mounds
P06	S	38.754045	-121.301862	Upland
P07	N	38.754079	-121.302200	Intermittent Drainage
P08	N	38.754096	-121.302099	Seasonal Mounds and OW01
P09	N	38.754116	-121.302035	Seasonal Swale
P10	N	38.754249	-121.301991	TP01
P11	S	38.754366	-121.302011	Seasonal Swale
P12	SE + NW	38.754396	-121.302073	Seasonal Swale
P13	S	38.754490	-121.302034	Seasonal Swale
P14	SE	38.754684	-121.302177	Upland
P15	W + S	38.754814	-121.302387	Upland

NORTH

1:1,500

0 50 100 Feet

Data Sources: ESRI, City of Roseville 04/22/2019, Placer County

1010 Main Street Development Project
Ground Photographs
Figure 3

gallaway ENTERPRISES

GE: #22-100 Map Date: 07/26/2022

wetlands under normal conditions, but also occur (estimated probability 1% to 33%) in non-wetlands.

Facultative plants (FAC) – Plants with a similar likelihood (estimated probability 33% to 67%) of occurring in both wetlands and non-wetlands.

Facultative upland plants (FACU) – Plants that occur sometimes (estimated probability1% to 33%) in wetlands, but occur more often (estimated probability 67% to 99%) in non-wetlands.

Obligate upland plants (UPL) – Plants that occur rarely (estimated probability 1%) in wetlands, but occur almost always (estimated probability 99%) in non-wetlands under natural conditions.

Determination of Hydric Soils

Soil survey information was reviewed for the current site condition. The field samples was evaluated by using the Munsell soil color chart (2009 Edition), hand texturing, and assessing soil features (e.g. oxidized root channels, evidence of hardpan, Mn and Fe concretions). Information regarding local soil and series descriptions is provided in **Appendix B.** Numerous soil pits (**Appendix A**) were dug portions of the site that exhibited concave or swale-like micro-topography. The current Natural Resources Conservation Service (NRCS) *Field Indicators of Hydric Soils in the United States, Version 8.2* (NRCS 2018) was used in conjunction with the Arid West Manual to determine the presence of hydric soil indicators within these soil pits.

Determination of Wetland Hydrology

Wetland hydrology was determined to be present if a site supported one or more of the following characteristics:

- Landscape position and surface topography (e.g. position of the site relative to an up-slope water source, location within a distinct wetland drainage pattern, and concave surface topography),
- Inundation or saturation for a long duration either inferred based on field indicators or observed during repeated site visits, and
- Residual evidence of ponding or flooding resulting in field indicators such as scour marks, sediment deposits, algal matting, surface soil cracks and drift lines.

The presence of water or saturated soil for approximately 12% or 14 consecutive days during the growing season typically creates anaerobic conditions in the soil, and these conditions affect the types of plants that can grow and the types of soils that develop (Wetland Training Institute 1995).

Historic aerial photographs were analyzed to look for primary and secondary wetland hydrology indicators of inundation or saturation. The historic aerial imagery reviewed was the public, readily available imagery provided on Google Earth. If aerial signatures demonstrated the presence of surface water on one or more of the historic aerial photographs viewed, inundation and a primary indicator of wetland hydrology was determined to be present. Saturation, a secondary indicator of wetland hydrology, was determined to be present if saturation, "darker patches within the field," were observed on one or more of the historic aerial photographs viewed and the presence of hydric soils was confirmed in these areas during the field survey.

Determination of Ordinary High Water Mark

Gallaway utilized methods consistent with the Arid West Manual and *Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States, (2008)* to determine the OHWM. The lateral extents of non-tidal water bodies (e.g. intermittent and ephemeral streams) were based on the OHWM, which is "the line on the shore established by the fluctuations of

water" (Corps 2005). The OHWM was determined based on multiple observed physical characteristics of the area, which can include scour, multiple observed flow events (from current and historical aerial photos), shelving, and changes in the character of soil, presence of mature vegetation, deposition, and topography. Due to the wide extent of some floodplains, adjacent riparian scrub areas characterized by hydric soils, hydrophytic vegetation, and hydrology may be included within the OHWM of a non-tidal water body (Curtis, et. al. 2011). Inclusion of minor special aquatic areas is an acceptable practice as outlined in the Arid West Manual.

Representative OHWM widths were measured in the field in feet incrementally throughout each drainage feature mapped as required by the Corps *Final Map and Drawing Standards for the South Pacific Division Regulatory Program* (2012). The widths measured in the field were used to ensure that other waters of the United States identified within the Project site are mapped and calculated at the appropriate average width for each channel segment based on the Corps definition of OHWM as defined in the Arid West OHWM Field Guide and the *Ordinary High Water Mark Identification RGL 05-05 (2005)* (RGL 05-05). When the average width of a feature changes, this change is shown on the delineation map as a feature transition and a new average channel width is determined.

Determination of Wetland Boundaries in Difficult Wetland Situations

The difficult wetland situation procedures for determining hydrophytic vegetation per the Arid West Manual were used when mapping the boundary of wetlands within the Project site due to the extreme drought conditions experienced in California in 2022 (NOAA 2022). To aid in the determination, spatial patterns, analysis of aerial photographs, topography, and landscape position were used in conjunction with vegetation data to determine the wetland boundary. Areas where wetland vegetation or wetland hydrology was lacking but where the landscape position was likely to concentrate water were closely inspected. Gallaway Enterprises mapped these areas as wetlands if hydric soil indicators were detected and at least one other hydric indicator was present (i.e. wetland hydrology or hydrophytic vegetation).

Aquatic Resource Boundary Determination and Acreage Calculation

The wetland-upland boundary was determined based on the presence or inference of positive indicators of all mandatory criteria. The site was traversed on foot to identify wetland features and boundaries. The spatial data obtained during the preparation of this wetland delineation was collected using a Trimble Geo Explorer 6000 Series GPS Receiver. No readings were taken with fewer than 5 satellites. Point data locations were recorded for at least 25 seconds at a rate of 1 position per second. Area and line data were recorded at a rate of 1 position per second while walking at a slow pace. All GPS data were differentially corrected for maximum accuracy. In some cases, when visual errors and degrees of precision are identified due to environmental factors negatively influencing the precision of the GPS instrument (i.e. dense tree cover, steep topography, and other factors affecting satellite connection) mapping procedures utilized available topographic and aerial imagery datasets in order to improve accuracy in feature alignment and location.

Non-Wetland and Non-Jurisdictional Feature Boundary Determination

Areas were determined to be non-wetlands if they did not meet the necessary wetland test parameters (hydrophytic vegetation, hydric soil, and wetland hydrology) (33 CFR 328.4) and were determined to be potentially non-jurisdictional if they were consistent with the description of non-jurisdictional features as presented in the *Corps Jurisdictional Determination Form Instructional Guidebook* (2007).

During the delineation, swale-like depressions were observed at the toe of the spoil piles in the northern section of the Project site. However, the majority of the depressions lacked hydrophytic vegetation and

indicators of wetland hydrology, or any evidence of an OHWM. A test pit (TP01) was taken in the deepest part of one such marginal depression to assess the wetland indicators present. The sampled point was the only portion of the depression with a small amount of algal crusting present and did not meet the requirements for hydrophytic vegetation. Since the deepest point of the depression did not meet the necessary criteria to be determined a wetland, the similar marginal depressions with less hydrological indicators were also considered non-wetland/upland. Field observations recorded at the test pit is included in the data sheet forms presented in **Appendix A**.

There were three deeper depressions located at the toe of spoil piles in the northern portion of the Project site that did meet all three wetland parameters and were mapped as wetland features (WF01-WF03, **Figure 4**). Although these three wetlands met the necessary wetland parameters, they are completely isolated features with upland soil mounds/spoil piles separating these wetlands and preventing any surface hydrologic connection to adjacent aquatic resources. Due to the highly isolated nature of these three wetlands, they meet the criteria to be considered by the Corps potentially non-jurisdictional features. To confirm the jurisdictional status of WOTUS within the Project site, a significant nexus determination would need to be conducted by the Corps.

Photo points were taken of these features to demonstrate the current site conditions at these locations on the Project site (**Figure 3**).

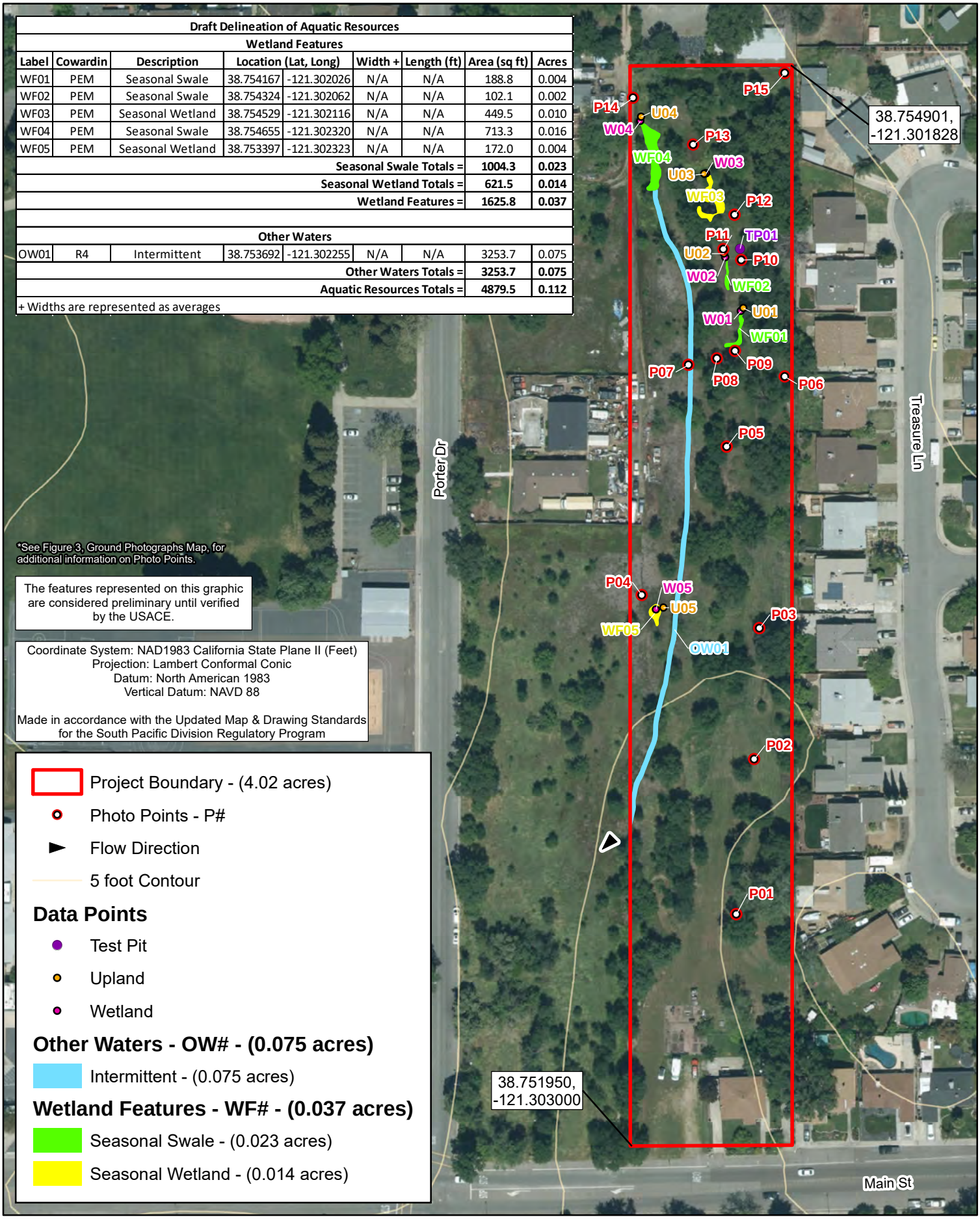
Results

Table 1 Summarizes the area calculations for the pre-jurisdictional features within the Project site. A complete Draft Delineation of Aquatic Resources map, utilizing a 1" to 125' scale, is included as **Figure 4**.

Waters of the United States: Other Waters

One feature (OW01) was identified as an "other waters of the United States" (OW) within the Project site. The area and linear footage data associated with this feature is provided in **Table 1**. Other waters of the United States are seasonal or perennial water bodies, including lakes, stream channels, ephemeral and intermittent drainages, ponds, and other surface water features that exhibit an ordinary high-water mark, but lack positive indicators for one or more of the three wetland parameters (hydrophytic vegetation, hydric soil, and wetland hydrology) (33 CFR 328.4). The boundaries of all other waters identified within the Project site were delineated based on the observed OHWM, including physical characteristics such as natural lines impressed on the bank, shelving, changes in the character of the soil, the destruction of terrestrial vegetation, debris lines and other appropriate indicators.

OW01 is an intermittent drainage originates in the northwest corner of the Project site and flows south through the northwestern portion of the Project site. This drainage then continues offsite and flows parallel to the southwestern boundary of the Project site until it flows into a culvert under Main Street. The OW feature identified within the Project site exhibited a discontinuous OHWM and was observed to contain appropriate morphology of bed, bank and scour. No water was observed within OW01 during the April or July field visits.



NORTH

1:1,500 1 inch = 125 feet

0 50 100 Feet

Data Sources: ESRI, City of Roseville 04/22/2019, Placer County

1010 Main Street Development Project
Draft Delineation of Aquatic Resources
Figure 4

gallaway ENTERPRISES

GE: #22-100 Map Date: 07/26/2022

Table 1. Summary of the Draft Delineation of Aquatic Resources Results for the 1010 Main Street Development Project.

Draft Delineation of Aquatic Resources						
Wetland Features						
Label	**Cowardin**	**Description**	**Width**	**Length (ft)**	**Area (sq ft)**	**Acres**
WF01	PEM	Seasonal Swale	N/A	N/A	188.8	0.004
WF02	PEM	Seasonal Swale	N/A	N/A	102.1	0.002
WF03	PEM	Seasonal Wetland	N/A	N/A	449.5	0.010
WF04	PEM	Seasonal Swale	N/A	N/A	713.3	0.016
WF05	PEM	Seasonal Wetland	N/A	N/A	172.0	0.004
				Seasonal Swale Totals =	**1004.3**	**0.023**
				Seasonal Wetland Totals =	**621.5**	**0.014**
				Wetland Features Totals =	**1625.8**	**0.037**
Other Waters						
Label	**Cowardin**	**Description**	**Width +**	**Length (ft)**	**Area (sq ft)**	**Acres**
OW01	R4	Intermittent	5	642.5	3253.7	0.075
				Other Waters Totals =	**3253.7**	**0.075**
				Aquatic Resources Totals =	**4879.5**	**0.112**
+ Widths are represented as averages						

Waters of the United States: Wetlands

A total of five wetland features occur within the Project site. These wetland features have been characterized as three seasonal swales and two seasonal wetlands (**Figure 4**). Seasonal wetlands are depressional features with a perched water table that typically stay inundated or saturated into the early summer months and are dominated by generalist wetland plant species. Swales are depressional features that function as low drainage pathways that typically connect to and help feed wetlands or other water features. All the wetlands identified within the Project site exhibited all necessary wetland parameters (**Appendix A**).

Of the five wetlands identified within the Project site, only two meet the criteria to be considered jurisdictional features (WF04 and WF05, **Figure 4**). The seasonal swale WF04 is a shallow depression that receives and pools surface sheetflow from the adjacent land to the northwest of the Project site and conveys this water directly into intermittent drainage OW01. The seasonal wetland WF05 is a slight depression located on a low terrace associated with OW01 that has a loose surface hydrologic connection to OW01.

The remaining three wetlands, seasonal wetland WF03 and seasonal swales WF01 and WF02, are all depressions that have formed at the toe of spoils piles and have developed positive wetland indicators. However, the spoil piles surrounding these three wetlands have completely cut these wetlands off from have a surface hydrologic connection to any adjacent aquatic resource. As such, these three wetlands meet the criteria to be considered potentially non-jurisdictional.

Photo points were taken of the wetlands within the Project site (**Figure 3**).

Soils

Gallaway collected soil data at numerous locations within the Project site. Field observations of soil characteristics included soil color, texture, structure, and the visual assessment of soil features (e.g. the presence, or absence of redoximorphic features and the depth of restrictive layers such as hardpans). Gallaway's soil texture evaluations rendered loams and sandy loams. Field observations of soil characteristics at the data points and test pit sites are included in the data sheet forms presented in **Appendix A**.

The geographic region in which the Project site is found is often characterized as having a naturally occurring duripan composed of cemented gravelly material that undulates throughout the region. Duripans restrict root growth, limit water infiltration, and result in a perching of the water table in certain locations. Within the Project site, the restrictive layers are composed of cemented gravelly material or lithic bedrock. The duripan is typically found at a depth of 20 to more than 80 inches based on the dominant soil map unit component found within the Project site. The depth of the hand dug soil pits were dug deep enough to determine the presence or rule out the absence of hydric soil indicators.

Gallaway queried the National Cooperative Soil Survey database to further evaluate the current soil conditions. One soil map unit occurs within the Project site. The map unit is listed below in **Table 2**. Based on Gallaway's review, the soil map units identified within the Project site contains a low percentage of hydric components (5%). Within this soil type, the hydric components are typically found in depressions. A copy of the soil survey map and a description of mapped soil units for the Project site are included as **Appendix B.**

Table 2. Soil Map Units, NRCS hydric soil designation, and approximate totals for the 1010 Main Street Development Project.

Map Unit Symbol	Map Unit Name	% Hydric Component in Map Unit	Landform of Hydric Component	% Map Unit in Project
141	Cometa-Fiddyment complex, 1 to 5 percent slopes	5%	Depressions	100%

Vegetation

During the site visits, the dominant vegetation present within the various wetlands within the Project site included perennial ryegrass (*Festuca perennis*) (FAC), lesser quaking grass (*Briza minor*) (FAC), fool's onion (*Triteleia hyacinthin*a) (FAC), and curly dock (*Rumex crispus*) (FAC). Vegetation within the OHWM of the intermittent drainage was dominated by a dense cover of perennial ryegrass (*Festuca perennis*) (FAC) with sparse curly dock (*Rumex crispus*) (FAC).

The upland annual grassland understory was dominated by wild oats (*Avena fatua*) (UPL), rip-gut brome (*Bromus diandrus*) (UPL), winter vetch (*Vicia villosa*) (NL), and soft chess (*Bromus hordeaceus*) (FACU). The tree canopy was dominated by valley oak (*Quercus lobata*) (FACU) and almond (*Prunus dulcis*) (NL).

Hydrology

Precipitation and localized surface runoff from the surrounding development provide the main hydrological inputs for the aquatic resources within the Project site. The seasonal swale WF04 holds surface runoff that enters the Project site from the northwest before becoming channelized and forming the intermittent drainage OW01. The intermittent drainage OW01 flows south through the Project site and continues offsite to the southwest. The offsite portion of this drainage continues south, running parallel to the Project boundary where it then drains into a culvert that flows under Main Street. This culvert feeds into the municipal storm drainage system, which is presumed to eventually outfall into Dry Creek. Dry Creek is a direct tributary of the Sacramento River. The seasonal wetland WF05 is a shallow depression adjacent to OW01. The seasonal wetland WF05 may contribute overflow to the drainage during heavy precipitation.

The remaining three wetland features (WF01, WF02, and WF03) occur in the northeastern portion of the Project site where there has been significant historic disturbances to the land due to past earthmoving work and the dumping of spoils. These three wetlands are not natural wetlands, but have developed over time on the site at the toe of spoil piles where surface hydrology has been impounded due to the piles. The many spoil piles in this portion of the Project site have completely cut off the three wetlands from the intermittent drainage or any other aquatic resource. Since these three wetlands lack any surface hydrologic connection to the intermittent drainage or any other jurisdictional feature, they do not meet the definition of a jurisdictional WOTUS.

To confirm the jurisdictional status of WOTUS within the Project site, a significant nexus determination will need to be conducted by the Corps.

Site Photos Taken on April 13 and July 07, 2022

P01 – Upland looking northwest

P03 – Upland looking south

P01 – Upland looking southwest

P03 – Upland looking north

P02 – Upland looking north

P04 – Seasonal wetland WF05 looking southeast

P05 – Upland soil mounds/spoil piles looking north

P07 – Intermittent drainage OW01 looking north

P05 – Upland soil mounds/spoil piles looking south

P08 – Upland mounds/end of WF01 looking north

P06 – Upland trench looking south

P09 – Seasonal swale WF01 looking north

P10 – TP01 looking north

P12 – Upland looking southeast

P11 – Seasonal swale WF02 looking south

P13 – Start of seasonal wetland WF03 looking south

P12 – Seasonal wetland WF03 looking northwest

P14 – Start of seasonal swale WF04 looking southeast

P15 – Upland looking south

P15 – Upland looking west

Glossary

Abutting: When referring to wetlands that are adjacent to a tributary, abutting defines those wetlands that are not separated from the tributary by an upland feature, such as a berm or dike.

Adjacent: Adjacent as used in "Adjacent to traditional navigable water," is defined in Corps and EPA regulations as "bordering, contiguous, or neighboring." Wetlands separated from other waters of the U.S. by man-made dikes or barriers, natural river berms, beach dunes and the like are 'adjacent wetlands. A wetland "abuts" a tributary if it is not separated from the tributary by uplands, a berm, dike, or similar feature.

While all wetlands that meet the agencies' definitions are considered adjacent wetlands, only those adjacent wetlands that have a continuous surface connection because they directly abut the tributary (e.g., they are not separated by uplands, a berm, dike, or similar feature) are considered jurisdictional under the plurality standard. (CWA Jurisdiction Following Rapanos v US and Carabell v US 12-02-08).

The regulations define "adjacent" as follows: "[t]he term adjacent means bordering, contiguous, or neighboring. Wetlands separated from other waters of the United States by man-made dikes or barriers, natural river berms, beach dunes and the like are 'adjacent wetlands.'" Under this definition, a wetland does not need to meet all criteria to be considered adjacent. The agencies consider wetlands to be bordering, contiguous, or neighboring, and therefore "adjacent" if at least one of following three criteria is satisfied:

(1) There is an unbroken surface or shallow sub-surface hydrologic connection between the wetland and jurisdictional waters; or

(2) The wetlands are physically separated from jurisdictional waters by "manmade dikes or barriers, natural river berms, beach dunes, and the like;" or,

(3) Where a wetland's physical proximity to a jurisdictional water is reasonably close, that wetland is "neighboring" and thus adjacent. For example, wetlands located within the riparian area or floodplain of a jurisdictional water will generally be considered neighboring, and thus adjacent. One test for whether a wetland is sufficiently proximate to be considered "neighboring" is whether there is a demonstrable ecological interconnection between the wetland and the jurisdictional waterbody. For example, if resident aquatic species (e.g., amphibians, reptiles, fish, mammals, or waterfowl) rely on both the wetland and the jurisdictional waterbody for all or part of their life cycles (e.g., nesting, rearing, feeding, etc.), that may demonstrate that the wetland is neighboring and thus adjacent. The agencies recognize that as the distance between the wetland and jurisdictional water increases, the potential ecological interconnection between the waters is likely to decrease.

The agencies will also continue to assert jurisdiction over wetlands "adjacent" to traditional navigable waters as defined in the agencies' regulations. Under EPA and Corps regulations and as used in this guidance, "adjacent" means "bordering, contiguous, or neighboring." Finding a continuous surface connection is not required to establish adjacency under this definition. The Rapanos decision does not affect the scope of jurisdiction over wetlands that are adjacent to traditional navigable waters. The agencies will assert jurisdiction over those adjacent wetlands that have a continuous surface connection with a relatively permanent, non-navigable tributary, without the legal obligation to make a significant nexus finding.

Atypical situation (significantly disturbed): In an atypical (significantly disturbed) situation, recent human activities or natural events have created conditions where positive indicators for hydrophytic vegetation, hydric soil, or wetland hydrology are not present or observable.

Channel. "An open conduit either naturally or artificially created which periodically or continuously contains moving water, or which forms a connecting link between two bodies of standing water" (Langbein and Iseri 1960:5).

Channel bank. The sloping land bordering a channel. The bank has steeper slope than the bottom of the channel and is usually steeper than the land surrounding the channel.

Cobbles. Rock fragments 7.6 cm (3 inches) to 25 .4 cm (10 inches) in diameter.

Debris flow. A moving mass of rock fragments, soil, and mud where more than 50% of the particles are larger than sand-sized.

Ditch. A constructed or excavated channel used to convey water.

Drift. Organic debris oriented to flow direction(s) (larger than small twigs).

Ephemeral stream. An ephemeral stream has flowing water only in direct response to precipitation events in a typical year. Ephemeral streambeds are located above the water table year-round. Groundwater is not a source of water for the stream. Runoff from rainfall is the primary source of water for stream flow.

Facultative wetland (FACW). Wetland indicator category; species usually occurs in wetlands (estimated probability 67–99%) but occasionally found in non-wetlands.

Flat. A level landform composed of unconsolidated sediments usually mud or sand. Flats may be irregularly shaped or elongate and continuous with the shore, whereas bars are generally elongate, parallel to the shore, and separated from the shore by water.

Gravel. A mixture composed primarily of rock fragments 2mm (0 .08 inch) to 7.6 cm (3 inches) in diameter. Usually contains much sand.

Growing season. The frost-free period of the year (see U.S. Department of Interior, National Atlas 1970:110-111 for generalized regional delineation).

Herbaceous. With the characteristics of an herb; a plant with no persistent woody stem above ground.

Hydric soil. Soil is hydric that is saturated, flooded, or ponded long enough during the growing season to develop anaerobic (oxygen-depleted) conditions in its upper part (i.e., within the shallow rooting zone of herbaceous plants).

Hydrophyte, **hydrophytic.** Any plant growing in water or on a substrate that is at least periodically deficient in oxygen as a result of excessive water content.

Intermittent stream. An intermittent stream has flowing water during certain times of the year and more than in direct response from precipitation, when elevated groundwater provides water for stream flow. During dry periods, intermittent streams may not have flowing water.

Jurisdictional Waters. Features that meet the definition of waters of the Unites States provided below and that fall under Corps regulations pursuant to Section 404 of the CWA are considered jurisdictional features.

Litter. Organic debris oriented to flow direction(s) (small twigs and leaves).

Man-induced wetlands. A man-induced wetland is an area that has developed at least some characteristics of naturally occurring wetlands due to either intentional or incidental human activities.

Non-Relatively Permanent Water: A non-relatively permanent water (NRPW) is defined as a tributary that is not a TNW and that typically flows for periods for less than 3 months. NRPWs are jurisdictional when they have a documented significant nexus to TNWs. All NRPWs must also contain appropriate morphology of bed, bank and scour and be clearly connected to a TNW.

Normal circumstances. This term refers to the soil and hydrologic conditions that are normally present, without regard to whether the vegetation has been removed.

Obligate hydrophytes. Species that are found only in wetlands e.g., cattail (*Typha latifolia*) as opposed to ubiquitous species that grow either in wetland or on upland-e .g., red maple (*Acer rubrum*).

Obligate wetland (OBL). Wetland indicator category; species occurs almost always (estimated probability 99%) under natural conditions in wetlands.

Other Waters of the United States. Other waters of the United States are seasonal or perennial water bodies, including lakes, stream channels, drainages, ponds, and other surface water features, that exhibit an ordinary high-water mark but lack positive indicators for one or more of the three wetland parameters (hydrophytic vegetation, hydric soil, and wetland hydrology) (33 CFR 328.4).

Palustrine the Palustrine System includes all nontidal wetlands dominated by trees, shrubs, persistent emergents, emergent mosses or lichens, and all such wetlands that occur in tidal areas where salinity due to ocean derived salts is below 0.5 parts per thousand. It also includes wetlands lacking such vegetation, but with all of the following four characteristics: (1) area less than 8 ha (20 acres); (2) active wave-formed or bedrock shoreline features lacking; (3) water depth in the deepest part of basin less than 2 m (6.6 feet) at low water; and (4) salinity due to ocean-derived salts is less than 0.5 parts per thousand.

Perennial stream. A perennial stream has flowing water year-round during atypical year. The water table is located above the stream bed for most of the year. Groundwater is the primary source of water for stream flow. Runoff from rainfall is a supplemental source of water for stream flow.

Ponded. Ponding is a condition in which free water covers the soil surface (e.g., in a closed depression) and is removed only by percolation, evaporation, or transpiration.

Problem area. Problem areas are those where one or more wetland parameters may be lacking because of normal seasonal or annual variations in environmental conditions that result from causes other than human activities or catastrophic natural events**.**

Relatively Permanent Waters of the U.S. Non-navigable tributaries of traditional navigable waters that are relatively permanent where the tributaries typically flow year-round or have continuous flow at least seasonally (e.g., typically three months).

Scour. Soil and debris movement.

Sheetflow. Overland flow occurring in a continuous sheet; a relatively high-frequency, low-magnitude event.

Shrub. A woody plant which at maturity is usually less than 6 m(20 feet) tall and generally exhibits several erect, spreading, or prostrate stems and has a bushy appearance ; e.g., speckled alder (*Alnus rugosa*) or buttonbush (*Cephalanthus occidentalis*).

Succession. Changes in the composition or structure of an ecological community.

Traditional Navigable Waters (TNWs)."[a]ll waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide." These waters are referred to in this guidance as traditional navigable waters. The traditional navigable waters include all of the "navigable waters of the United States," as defined in

33 C.F.R. Part 329 and by numerous decisions of the federal courts, plus all other waters that are navigable-in-fact (for example, the Great Salt Lake, UT, and Lake Minnetonka, MN). Thus, the traditional navigable waters include, but are not limited to, the "navigable waters of the United States" within the meaning of Section 10 of the Rivers and Harbors Act of 1899 (also known as "Section 10 waters").

Tree. A woody plant which at maturity is usually 6 m (20 feet) or more in height and generally has a single trunk, unbranched for 1 m or more above the ground, and a more or less definite crown; e.g., red maple (*Acer rubrum*), northern white cedar (*Thuja occidentalis*).

Typical Year. Defined by the EPA and Corps as meaning when precipitation and other climactic variables are within the normal periodic range for the geographic area based on a rolling thirty-year period.

Water table. The upper surface of a zone of saturation. No water table exists where that surface is formed by an impermeable body.

Waters of the United States (WOTUS). This is the encompassing term for areas under federal jurisdiction pursuant to Section 404 of the CWA. Waters of the United States are divided into "wetlands" and "other waters of the United States."

Watershed (drainage basin). An area of land that drains to a single outlet and is separated from other watersheds by a divide.

Wetland. Wetlands are defined as "areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (33 CFR 328.3 [b], 40 CFR 230.3). To be considered under potential federal jurisdiction, a wetland must support positive indicators for hydrophytic vegetation, hydric soil, and wetland hydrology.

Woody plant. A seed plant (gymnosperm or angiosperm) that develops persistent, hard, fibrous tissues, basically xylem; e.g., trees and shrubs.

Xeric. Relating or adapted to an extremely dry habitat.

References

Cheatham, N.H., and J.R. Haller. 1975. An annotated list of California habitat types. Univ. of California Natural Land and Water Reserve System, unpubl. manuscript.

Cowardin, Lewis M., Virginia Carter, Francis C. Golet and Edward T. LaRoe. 1979. Classification of Wetlands and Deepwater Habitats of the United States. U.S. Department of the Interior, Fish and Wildlife Service, Washington D.C.

Curtis, Katherine E., Robert W. Lichvar. 2010. Updated Datasheet for the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States. ERDC/CRREL TN-10-1. U.S. Army Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH

Curtis, Katherine E., Robert W. Lichvar, Lindsey E. Dixon. 2011. Ordinary High Flows and the Stage-Discharge Relationship in the Arid West Region (Technical Report). U.S. Army Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH

Environmental Laboratory 1987. U.S. Army Corps of Engineers wetlands delineation manual. (Technical Report Y-87-1). U.S. Army Waterways Experiment Station. Vicksburg, MS.

Lichvar, R.W., and J.S. Wakeley, ed. 2004. Review of Ordinary High Water Mark indicators for delineating arid streams in the southwestern United States. ERDC/CRREL TR-04-1. Hanover, NH: U.S. Army Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory. (http://www.crrel.usace.army.mil/techpub/CRREL _Reports/reports/TR04-21.pdf).

Lichvar, R.W., D. Finnegan, M. Ericsson, and W. Ochs. 2006. Distribution of Ordinary High Water Mark (OHWM) indicators and their reliability in identifying the limits of "Waters of the United States" in arid southwestern channels. ERDC/CRREL TR-06-5. Hanover, NH: U.S. Army Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory. (http://www.crrel.usace.army.mil/techpub/CRREL_Reports/ reports/TR06-5.pdf).

Lichvar, R.W. and S.M. McColley. 2008. A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Western Region of the Western United States. ERDC/CRREL TR-08-12. Hanover, NH: U.S. Army Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory.

Lichvar, R.W., D.L. Banks, W.N. Kirchner, and N.C. Melvin. 2016. State of California 2016 Wetland Plant List: The National Wetland Plant List: 2016 wetland ratings. Phytoneuron 2016-30: 1-17. U.S. Army Corps of Engineers. ISSN 2153 733X.

Mayer, K.E. and W.F. Laudenslayer. 1988. A Guide to Wildlife Habitats of California. California Department of Forestry and Fire Protection. Sacramento, CA.

National Centers for Environmental Information (NCEI). 2022. U.S. Climate Normals. SACRAMENTO METRO AP, California. Website https://www.ncei.noaa.gov/access/us-climate-normals/#dataset=normals-annualseasonal&timeframe=15&location=CA&station=USW00024257 [accessed 6.May 2022].

National Oceanic and Atmospheric Administration (NOAA). 2022. National Integrated Drought Information System. U.S. Drought Monitor. Accessed online through the U.S. Drought Portal (www.drought.gov).

Natural Resources Conservation Service (NRCS). 2022. Custom Soil Resource Report for Placer County, California. Western Part. Accessed through the NRCS Web Soil Survey website (http://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm).

Soil Survey Staff. 2010. Keys to Soil Taxonomy, 11th ed. USDA-Natural Resources Conservation Service, Washington, DC.

U.S. Army Corps of Engineers (Corps). 2007. U.S. Army Corps of Engineers Jurisdictional Determination Form Instructional Guidebook. Prepared jointly by the U.S. Army Corps of Engineers and the Environmental Protection Agency. May 30, 2007.

U.S. Army Corps of Engineers. 2008. Regional supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region. J.S. Wakeley, R.W. Lichvar, and C.V. Noble, ed. ERDC/EL TR-06-16. Vicksburg, MS: U.S. Army Engineer Research and Development Center, Environmental Laboratory.

U.S. Army Corps of Engineers, South Pacific Division. 2001. Final summary report: Guidelines for jurisdictional determinations for water of the United States in the arid Southwest. San Francisco, CA: U.S. Army Corps of Engineers, South Pacific Division. (http://www.spl.usace.army.mil/regulatory/lad.htm).

United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. http://soils.usda.gov/

United States Department of Agriculture, Natural Resources Conservation Service. 2018. Field Indicators of Hydric Soils in the United States, Version 8.2. L.M. Vasilas, G.W. Hurt, and J.F. Berkowitz (eds.). USDA, NRCS, in cooperation with the National Technical Committee for Hydric Soils.

Wetland Training Institute. 1995. Field guide for wetland delineation: 1987 Corps of Engineers manual. (WTI 95-3). Poolsville, MD.

Appendix A: Wetland Delineation Data Sheets

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: 1010 Main Street Roseville | City/County: Roseville | Sampling Date: July 07, 2022

Applicant/Owner: Pat Laughlin | State: CA | Sampling Point: TP01

Investigator(s): Christopher Belko | Section, Township, Range: Section 34, Township 11N, Range 06E

Landform (hillslope, terrace, etc.): terrace | Local relief (concave, convex, none): concave | Slope (%): 0.3

Subregion (LRR): C - Mediterranean California | Lat: 38.754397 | Long: -121.302015 | Datum: NAD83

Soil Map Unit Name: 141 Cometa-Fiddyment complex, 1 to 5 percent slopes | NWI classification: N/a

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ○ No ◉ (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 ○	No ◉	
Hydric Soil Present?	Yes ◉	No ○	**Is the Sampled Area within a Wetland?** Yes ○ No ◉
Wetland Hydrology Present?	Yes ◉	No ○	

Remarks: Drought conditions are present. Sampled point is at the deepest point of a swale like depression.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
Total Cover:	%		
Sapling/Shrub Stratum			
1.			
2.			
3.			
4.			
5.			
Total Cover:	%		
Herb Stratum			
1. *Avena fatua*	60	Yes	Not Listed
2. *Festuca perennis*	40	Yes	FAC
3.			
4.			
5.			
6.			
7.			
8.			
Total Cover:	100 %		
Woody Vine Stratum			
1.			
2.			
Total Cover:	%		

% Bare Ground in Herb Stratum 0 % | % Cover of Biotic Crust 10 %

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0 % (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	0
FACW species		x 2 =	0
FAC species	40	x 3 =	120
FACU species		x 4 =	0
UPL species	60	x 5 =	300
Column Totals:	100 (A)		420 (B)

Prevalence Index = B/A = 4.20

Hydrophytic Vegetation Indicators:

- ◉ Dominance Test is >50%
- ◉ Prevalence Index is ≤3.0[1]
- ☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ○ No ◉

Remarks:

SOIL

Sampling Point: TP01

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR 4/3	88	5YR 4/6	12	C	M	loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. CS=Covered or Coated Sand Grains

[2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (**LRR C**)
- ☐ 1 cm Muck (A9) (**LRR D**)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☒ Redox Depressions (F8)
- ☐ Vernal Pools (F9)

Indicators for Problematic Hydric Soils: [3]

- ☐ 1 cm Muck (A9) (**LRR C**)
- ☐ 2 cm Muck (A10) (**LRR B**)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present. unless distributed or problematic

Restrictive Layer (if present):

Type: n/a

Depth (inches): n/a

Hydric Soil Present? Yes ◉ No ○

Remarks: The depth of soil pit was deep enough to determine the and presence and absence of hydric soil indicators.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1) (**Nonriverine**)
- ☐ Sediment Deposits (B2) (**Nonriverine**)
- ☐ Drift Deposits (B3) (**Nonriverine**)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☒ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Plowed Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1) (**Riverine**)
- ☐ Sediment Deposits (B2) (**Riverine**)
- ☐ Drift Deposits (B3) (**Riverine**)
- ☒ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches):

Water Table Present? Yes ○ No ◉ Depth (inches):

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches):

Wetland Hydrology Present? Yes ◉ No ○

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: Only the sampled point at the deepest part of the depression has a minor amount of biotic crust. The rest of the depression does not have any biotic crust.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: 1010 Main Street Roseville | City/County: Roseville | Sampling Date: July 07, 2022

Applicant/Owner: Pat Laughlin | State: CA | Sampling Point: W01

Investigator(s): Christopher Belko | Section, Township, Range: Section 34, Township 11N, Range 06E

Landform (hillslope, terrace, etc.): terrace | Local relief (concave, convex, none): concave | Slope (%): 0

Subregion (LRR): C - Mediterranean California | Lat: 38.754226 | Long: -121.302014 | Datum: NAD83

Soil Map Unit Name: 141 Cometa-Fiddyment complex, 1 to 5 percent slopes | NWI classification: N/a

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ○ No ◉ (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 ◉	No ○	
Hydric Soil Present?	Yes ◉	No ○	**Is the Sampled Area within a Wetland?** Yes ◉ No ○
Wetland Hydrology Present?	Yes ◉	No ○	

Remarks: Drought conditions are present. Sampled point is a swale like depression at the base of soil mounds.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
Total Cover:	%		
Sapling/Shrub Stratum			
1.			
2.			
3.			
4.			
5.			
Total Cover:	%		
Herb Stratum			
1. *Festuca perennis*	85	Yes	FAC
2. *Avena fatua*	15	No	Not Listed
3.			
4.			
5.			
6.			
7.			
8.			
Total Cover:	100 %		
Woody Vine Stratum			
1.			
2.			
Total Cover:	%		

% Bare Ground in Herb Stratum 0 % | % Cover of Biotic Crust 17 %

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0 % (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	0
FACW species		x 2 =	0
FAC species	85	x 3 =	255
FACU species		x 4 =	0
UPL species	15	x 5 =	75
Column Totals:	100 (A)		330 (B)

Prevalence Index = B/A = 3.30

Hydrophytic Vegetation Indicators:

- ☒ Dominance Test is >50%
- Prevalence Index is ≤3.0[1]
- ☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ◉ No ○

Remarks:

SOIL

Sampling Point: W01

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR 3/2	85	5YR 4/6	15	C	M	silty loam	Redox in M and PL

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. CS=Covered or Coated Sand Grains

[2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (**LRR C**)
- ☐ 1 cm Muck (A9) (**LRR D**)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☒ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☒ Redox Depressions (F8)
- ☐ Vernal Pools (F9)

Indicators for Problematic Hydric Soils: [3]

- ☐ 1 cm Muck (A9) (**LRR C**)
- ☐ 2 cm Muck (A10) (**LRR B**)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present. unless distributed or problematic

Restrictive Layer (if present):

Type: n/a

Depth (inches): n/a

Hydric Soil Present? Yes ◉ No ○

Remarks: The depth of soil pit was deep enough to determine the presence of hydric soil indicators.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1) (**Nonriverine**)
- ☐ Sediment Deposits (B2) (**Nonriverine**)
- ☐ Drift Deposits (B3) (**Nonriverine**)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☒ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Plowed Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1) (**Riverine**)
- ☐ Sediment Deposits (B2) (**Riverine**)
- ☐ Drift Deposits (B3) (**Riverine**)
- ☒ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches):

Water Table Present? Yes ○ No ◉ Depth (inches):

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches):

Wetland Hydrology Present? Yes ◉ No ○

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: 1010 Main Street Roseville | City/County: Roseville | Sampling Date: July 07, 2022

Applicant/Owner: Pat Laughlin | State: CA | Sampling Point: U01

Investigator(s): Christopher Belko | Section, Township, Range: Section 34, Township 11N, Range 06E

Landform (hillslope, terrace, etc.): terrace | Local relief (concave, convex, none): convex | Slope (%): 0.3

Subregion (LRR): C - Mediterranean California | Lat: 38.754234 | Long: -121.302005 | Datum: NAD83

Soil Map Unit Name: 141 Cometa-Fiddyment complex, 1 to 5 percent slopes | NWI classification: N/a

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ○ No ◉ (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 ○	No ◉	
Hydric Soil Present?	Yes ◉	No ○	**Is the Sampled Area within a Wetland?** Yes ○ No ◉
Wetland Hydrology Present?	Yes ○	No ◉	

Remarks: Drought conditions are present.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
Total Cover:	%		
Sapling/Shrub Stratum			
1.			
2.			
3.			
4.			
5.			
Total Cover:	%		
Herb Stratum			
1. *Avena fatua*	90	Yes	Not Listed
2. *Festuca perennis*	10	No	FAC
3.			
4.			
5.			
6.			
7.			
8.			
Total Cover:	100 %		
Woody Vine Stratum			
1.			
2.			
Total Cover:	%		

% Bare Ground in Herb Stratum 0 % | % Cover of Biotic Crust 0 %

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0 % (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	0
FACW species		x 2 =	0
FAC species	10	x 3 =	30
FACU species		x 4 =	0
UPL species	90	x 5 =	450
Column Totals:	100 (A)		480 (B)

Prevalence Index = B/A = 4.80

Hydrophytic Vegetation Indicators:

- ◉ Dominance Test is >50%
- ◉ Prevalence Index is ≤3.0[1]
- ☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ○ No ◉

Remarks:

SOIL

Sampling Point: U01

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR 3/2	90	5YR 4/6	10	C	M	loam	Clay inclusions are present

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. CS=Covered or Coated Sand Grains

[2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (**LRR C**)
- ☐ 1 cm Muck (A9) (**LRR D**)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☒ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Vernal Pools (F9)

Indicators for Problematic Hydric Soils: [3]

- ☐ 1 cm Muck (A9) (**LRR C**)
- ☐ 2 cm Muck (A10) (**LRR B**)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present. unless distributed or problematic

Restrictive Layer (if present):

Type: n/a

Depth (inches): n/a

Hydric Soil Present? Yes ◉ No ○

Remarks: The majority of the redoximorphic concentrations were in clay inclusions. The depth of soil pit was deep enough to determine the and presence and absence of hydric soil indicators.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1) (**Nonriverine**)
- ☐ Sediment Deposits (B2) (**Nonriverine**)
- ☐ Drift Deposits (B3) (**Nonriverine**)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Plowed Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1) (**Riverine**)
- ☐ Sediment Deposits (B2) (**Riverine**)
- ☐ Drift Deposits (B3) (**Riverine**)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches):

Water Table Present? Yes ○ No ◉ Depth (inches):

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches):

Wetland Hydrology Present? Yes ○ No ◉

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: No indicators present.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: 1010 Main Street Roseville | City/County: Roseville | Sampling Date: April 13, 2022

Applicant/Owner: Pat Laughlin | State: CA | Sampling Point: W02

Investigator(s): Elena Gregg, Christopher Belko | Section, Township, Range: Section 34, Township 11N, Range 06E

Landform (hillslope, terrace, etc.): terrace | Local relief (concave, convex, none): none | Slope (%): 0

Subregion (LRR): C - Mediterranean California | Lat: 38.754374 | Long: -121.302067 | Datum: NAD83

Soil Map Unit Name: 141 Cometa-Fiddyment complex, 1 to 5 percent slopes | NWI classification: N/a

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ○ No ◉ (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 ◉	No ○	
Hydric Soil Present?	Yes ◉	No ○	**Is the Sampled Area within a Wetland?** Yes ◉ No ○
Wetland Hydrology Present?	Yes ◉	No ○	

Remarks: Drought conditions are present. Wetland feature is a clear swale depression formed at the toe of old debris mound.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
Total Cover:	%		
Sapling/Shrub Stratum			
1.			
2.			
3.			
4.			
5.			
Total Cover:	%		
Herb Stratum			
1. *Rumex crispus*	30	Yes	FAC
2. *Festuca perennis*	10	Yes	FAC
3. *Bromus diandrus*	10	Yes	Not Listed
4.			
5.			
6.			
7.			
8.			
Total Cover:	50 %		
Woody Vine Stratum			
1.			
2.			
Total Cover:	%		

% Bare Ground in Herb Stratum 50 % | % Cover of Biotic Crust 50 %

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 66.7 % (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	0
FACW species		x 2 =	0
FAC species	40	x 3 =	120
FACU species		x 4 =	0
UPL species	10	x 5 =	50
Column Totals:	50 (A)		170 (B)

Prevalence Index = B/A = 3.40

Hydrophytic Vegetation Indicators:

- ☒ Dominance Test is >50%
- ☐ Prevalence Index is ≤3.0[1]
- ☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ◉ No ○

Remarks:

SOIL

Sampling Point: W02

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR 2/2	70	5YR 5/6	5	C	M	loam	
			10YR 5/3	25	D	M		

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. CS=Covered or Coated Sand Grains

[2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (**LRR C**)
- ☐ 1 cm Muck (A9) (**LRR D**)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☒ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☒ Redox Depressions (F8)
- ☐ Vernal Pools (F9)

Indicators for Problematic Hydric Soils: [3]

- ☐ 1 cm Muck (A9) (**LRR C**)
- ☐ 2 cm Muck (A10) (**LRR B**)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present. unless distributed or problematic

Restrictive Layer (if present):

Type: n/a

Depth (inches): n/a

Hydric Soil Present? Yes ◉ No ○

Remarks: The depth of soil pit was deep enough to determine the presence of hydric soil indicators.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1) (**Nonriverine**)
- ☐ Sediment Deposits (B2) (**Nonriverine**)
- ☐ Drift Deposits (B3) (**Nonriverine**)
- ☒ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☒ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Plowed Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1) (**Riverine**)
- ☐ Sediment Deposits (B2) (**Riverine**)
- ☐ Drift Deposits (B3) (**Riverine**)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches):

Water Table Present? Yes ○ No ◉ Depth (inches):

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches):

Wetland Hydrology Present? Yes ◉ No ○

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: 1010 Main Street Roseville | City/County: Roseville | Sampling Date: April 13, 2022

Applicant/Owner: Pat Laughlin | State: CA | Sampling Point: U02

Investigator(s): Elena Gregg, Christopher Belko | Section, Township, Range: Section 34, Township 11N, Range 06E

Landform (hillslope, terrace, etc.): terrace | Local relief (concave, convex, none): none | Slope (%): 0

Subregion (LRR): C - Mediterranean California | Lat: 38.754384 | Long: -121.302072 | Datum: NAD83

Soil Map Unit Name: 141 Cometa-Fiddyment complex, 1 to 5 percent slopes | NWI classification: N/a

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ○ No ◉ (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 ○	No ◉	
Hydric Soil Present?	Yes ○	No ◉	**Is the Sampled Area within a Wetland?** Yes ○ No ◉
Wetland Hydrology Present?	Yes ○	No ◉	

Remarks: Drought conditions are present. Sampled point is in a narrow upland swale like depression

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
Total Cover:	%		
Sapling/Shrub Stratum			
1.			
2.			
3.			
4.			
5.			
Total Cover:	%		
Herb Stratum			
1. *Avena fatua*	30	Yes	Not Listed
2. *Bromus diandrus*	30	Yes	Not Listed
3. *Bromus hordeaceus*	10	No	FACU
4. *Vicia sativa*	3	No	FACU
5.			
6.			
7.			
8.			
Total Cover:	73 %		
Woody Vine Stratum			
1.			
2.			
Total Cover:	%		

% Bare Ground in Herb Stratum 27 % | % Cover of Biotic Crust 0 %

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0 % (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	0
FACW species		x 2 =	0
FAC species		x 3 =	0
FACU species	13	x 4 =	52
UPL species	60	x 5 =	300
Column Totals:	73 (A)		352 (B)

Prevalence Index = B/A = 4.82

Hydrophytic Vegetation Indicators:

- ◉ Dominance Test is >50%
- ◉ Prevalence Index is ≤3.0[1]
- ☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ○ No ◉

Remarks: Bare ground is covered by thatch.

SOIL

Sampling Point: U02

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR 2/2	73	5YR 5/6	2	C	PL	loam	
	10YR 3/2	25						

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. CS=Covered or Coated Sand Grains

[2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (**LRR C**)
- ☐ 1 cm Muck (A9) (**LRR D**)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Vernal Pools (F9)

Indicators for Problematic Hydric Soils: [3]

- ☐ 1 cm Muck (A9) (**LRR C**)
- ☐ 2 cm Muck (A10) (**LRR B**)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present. unless distributed or problematic

Restrictive Layer (if present):

Type: n/a

Depth (inches): n/a

Hydric Soil Present? Yes ○ No ◉

Remarks: The depth of soil pit was deep enough to determine the absence of hydric soil indicators.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1) (**Nonriverine**)
- ☐ Sediment Deposits (B2) (**Nonriverine**)
- ☐ Drift Deposits (B3) (**Nonriverine**)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Plowed Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1) (**Riverine**)
- ☐ Sediment Deposits (B2) (**Riverine**)
- ☐ Drift Deposits (B3) (**Riverine**)
- ☒ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches):

Water Table Present? Yes ○ No ◉ Depth (inches):

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches):

Wetland Hydrology Present? Yes ○ No ◉

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: No primary indicators are present.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: 1010 Main Street Roseville | City/County: Roseville | Sampling Date: April 13, 2022

Applicant/Owner: Pat Laughlin | State: CA | Sampling Point: W03

Investigator(s): Elena Gregg, Christopher Belko | Section, Township, Range: Section 34, Township 11N, Range 06E

Landform (hillslope, terrace, etc.): terrace | Local relief (concave, convex, none): concave | Slope (%): 0

Subregion (LRR): C - Mediterranean California | Lat: 38.754605 | Long: -121.302132 | Datum: NAD83

Soil Map Unit Name: 141 Cometa-Fiddyment complex, 1 to 5 percent slopes | NWI classification: N/a

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ○ No ◉ (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 ◉	No ○	
Hydric Soil Present?	Yes ◉	No ○	**Is the Sampled Area within a Wetland?** Yes ◉ No ○
Wetland Hydrology Present?	Yes ○	No ◉	

Remarks: Drought conditions are present. Sampled area is the end of the minute swale depression.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
Total Cover:	%		
Sapling/Shrub Stratum			
1.			
2.			
3.			
4.			
5.			
Total Cover:	%		
Herb Stratum			
1. *Festuca perennis*	75	Yes	FAC
2. *Triteleia hyacinthina*	5	No	FAC
3. *Briza minor*	5	No	FAC
4.			
5.			
6.			
7.			
8.			
Total Cover:	85 %		
Woody Vine Stratum			
1.			
2.			
Total Cover:	%		

% Bare Ground in Herb Stratum 15 % | % Cover of Biotic Crust 0 %

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0 % (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	0
FACW species		x 2 =	0
FAC species	85	x 3 =	255
FACU species		x 4 =	0
UPL species		x 5 =	0
Column Totals:	85 (A)		255 (B)

Prevalence Index = B/A = 3.00

Hydrophytic Vegetation Indicators:

- ☒ Dominance Test is >50%
- ☒ Prevalence Index is ≤3.0[1]
- ☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ◉ No ○

Remarks: Bare ground is covered by thatch.

SOIL

Sampling Point: W03

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR 3/2	93	5YR 4/6	7	C	PL	loam	Redox in PL and M

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. CS=Covered or Coated Sand Grains

[2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (**LRR C**)
- ☐ 1 cm Muck (A9) (**LRR D**)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☒ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☒ Redox Depressions (F8)
- ☐ Vernal Pools (F9)

Indicators for Problematic Hydric Soils: [3]

- ☐ 1 cm Muck (A9) (**LRR C**)
- ☐ 2 cm Muck (A10) (**LRR B**)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present. unless distributed or problematic

Restrictive Layer (if present):

Type: n/a

Depth (inches): n/a

Hydric Soil Present? Yes ◉ No ○

Remarks: The depth of soil pit was deep enough to determine the hydric soil indicators present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1) (**Nonriverine**)
- ☐ Sediment Deposits (B2) (**Nonriverine**)
- ☐ Drift Deposits (B3) (**Nonriverine**)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Plowed Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1) (**Riverine**)
- ☐ Sediment Deposits (B2) (**Riverine**)
- ☐ Drift Deposits (B3) (**Riverine**)
- ☒ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches):

Water Table Present? Yes ○ No ◉ Depth (inches):

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches):

Wetland Hydrology Present? Yes ○ No ◉

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: Algal matting is present further in the center of the feature, but lacking on the edge where the data point was taken.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: 1010 Main Street Roseville | City/County: Roseville | Sampling Date: April 13, 2022

Applicant/Owner: Pat Laughlin | State: CA | Sampling Point: U03

Investigator(s): Elena Gregg, Christopher Belko | Section, Township, Range: Section 34, Township 11N, Range 06E

Landform (hillslope, terrace, etc.): terrace | Local relief (concave, convex, none): none | Slope (%): 0

Subregion (LRR): C - Mediterranean California | Lat: 38.754604 | Long: -121.302139 | Datum: NAD83

Soil Map Unit Name: 141 Cometa-Fiddyment complex, 1 to 5 percent slopes | NWI classification: N/a

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ○ No ◉ (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 ○	No ◉	
Hydric Soil Present?	Yes ○	No ◉	**Is the Sampled Area within a Wetland?** Yes ○ No ◉
Wetland Hydrology Present?	Yes ○	No ◉	

Remarks: Drought conditions are present. Local relief is none to minutely swale like, but has micro-mound topography.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
Total Cover:	%		
Sapling/Shrub Stratum			
1.			
2.			
3.			
4.			
5.			
Total Cover:	%		
Herb Stratum			
1. *Festuca perennis*	40	Yes	FAC
2. *Bromus hordeaceus*	25	Yes	FACU
3. *Geranium dissectum*	10	No	Not Listed
4. *Elymus caput-medusae*	5	No	Not Listed
5.			
6.			
7.			
8.			
Total Cover:	80 %		
Woody Vine Stratum			
1.			
2.			
Total Cover:	%		

% Bare Ground in Herb Stratum 20 % | % Cover of Biotic Crust 0 %

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0 % (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	0
FACW species		x 2 =	0
FAC species	40	x 3 =	120
FACU species	25	x 4 =	100
UPL species	15	x 5 =	75
Column Totals:	80 (A)		295 (B)

Prevalence Index = B/A = 3.69

Hydrophytic Vegetation Indicators:

- ◉ Dominance Test is >50%
- ◉ Prevalence Index is ≤3.0[1]
- ☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ○ No ◉

Remarks: Bare ground is covered by thatch.

SOIL

Sampling Point: U03

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR 3/2	96	5YR 4/6	4	C	M	loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. CS=Covered or Coated Sand Grains

[2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (**LRR C**)
- ☐ 1 cm Muck (A9) (**LRR D**)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Vernal Pools (F9)

Indicators for Problematic Hydric Soils: [3]

- ☐ 1 cm Muck (A9) (**LRR C**)
- ☐ 2 cm Muck (A10) (**LRR B**)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present. unless distributed or problematic

Restrictive Layer (if present):

Type: n/a

Depth (inches): n/a

Hydric Soil Present? Yes ○ No ◉

Remarks: The depth of soil pit was deep enough to determine the absence of hydric soil indicators.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1) (**Nonriverine**)
- ☐ Sediment Deposits (B2) (**Nonriverine**)
- ☐ Drift Deposits (B3) (**Nonriverine**)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Plowed Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1) (**Riverine**)
- ☐ Sediment Deposits (B2) (**Riverine**)
- ☐ Drift Deposits (B3) (**Riverine**)
- ☒ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches):

Water Table Present? Yes ○ No ◉ Depth (inches):

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches):

Wetland Hydrology Present? Yes ○ No ◉

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: No primary indicators are present at the sampled point.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: 1010 Main Street Roseville | City/County: Roseville | Sampling Date: April 13, 2022

Applicant/Owner: Pat Laughlin | State: CA | Sampling Point: W04

Investigator(s): Elena Gregg, Christopher Belko | Section, Township, Range: Section 34, Township 11N, Range 06E

Landform (hillslope, terrace, etc.): terrace | Local relief (concave, convex, none): concave | Slope (%): 0

Subregion (LRR): C - Mediterranean California | Lat: 38.75475 | Long: -121.302361 | Datum: NAD83

Soil Map Unit Name: 141 Cometa-Fiddyment complex, 1 to 5 percent slopes | NWI classification: N/a

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ○ No ◉ (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 ◉	No ○	
Hydric Soil Present?	Yes ◉	No ○	**Is the Sampled Area within a Wetland?** Yes ◉ No ○
Wetland Hydrology Present?	Yes ○	No ◉	

Remarks: Drought conditions are present. Sampled area is a the beginning of a slight swale depression abutting a gravel road.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
Total Cover:	%		
Sapling/Shrub Stratum			
1.			
2.			
3.			
4.			
5.			
Total Cover:	%		
Herb Stratum			
1. *Festuca perennis*	70	Yes	FAC
2. *Bromus horeaceus*	10	No	FACU
3.			
4.			
5.			
6.			
7.			
8.			
Total Cover:	80 %		
Woody Vine Stratum			
1.			
2.			
Total Cover:	%		

% Bare Ground in Herb Stratum 20 % | % Cover of Biotic Crust 0 %

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0 % (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	0
FACW species		x 2 =	0
FAC species	70	x 3 =	210
FACU species	10	x 4 =	40
UPL species		x 5 =	0
Column Totals:	80 (A)		250 (B)

Prevalence Index = B/A = 3.13

Hydrophytic Vegetation Indicators:

- ☒ Dominance Test is >50%
- Prevalence Index is ≤3.0[1]
- ☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ◉ No ○

Remarks: Bare ground covered by thatch.

SOIL

Sampling Point: W04

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR 4/2	95	2.5YR 3/6	5	C	M	silty loam	Redox in PL and M

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. CS=Covered or Coated Sand Grains

[2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (**LRR C**)
- ☐ 1 cm Muck (A9) (**LRR D**)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☒ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☒ Redox Depressions (F8)
- ☐ Vernal Pools (F9)

Indicators for Problematic Hydric Soils: [3]

- ☐ 1 cm Muck (A9) (**LRR C**)
- ☐ 2 cm Muck (A10) (**LRR B**)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present. unless distributed or problematic

Restrictive Layer (if present):

Type: n/a

Depth (inches): n/a

Hydric Soil Present? Yes ◉ No ○

Remarks: The depth of soil pit was deep enough to determine the hydric soil indicators present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1) (**Nonriverine**)
- ☐ Sediment Deposits (B2) (**Nonriverine**)
- ☐ Drift Deposits (B3) (**Nonriverine**)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Plowed Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1) (**Riverine**)
- ☐ Sediment Deposits (B2) (**Riverine**)
- ☐ Drift Deposits (B3) (**Riverine**)
- ☒ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches):

Water Table Present? Yes ○ No ◉ Depth (inches):

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches):

Wetland Hydrology Present? Yes ○ No ◉

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: No primary indicators are present.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: 1010 Main Street Roseville | City/County: Roseville | Sampling Date: April 13, 2022

Applicant/Owner: Pat Laughlin | State: CA | Sampling Point: U04

Investigator(s): Elena Gregg, Christopher Belko | Section, Township, Range: Section 34, Township 11N, Range 06E

Landform (hillslope, terrace, etc.): terrace | Local relief (concave, convex, none): none | Slope (%): 0

Subregion (LRR): C - Mediterranean California | Lat: 38.754762 | Long: -121.302359 | Datum: NAD83

Soil Map Unit Name: 141 Cometa-Fiddyment complex, 1 to 5 percent slopes | NWI classification: N/a

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ○ No ◉ (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 ○	No ◉	
Hydric Soil Present?	Yes ◉	No ○	**Is the Sampled Area within a Wetland?** Yes ○ No ◉
Wetland Hydrology Present?	Yes ○	No ◉	

Remarks: Drought conditions are present.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
Total Cover:	%		
Sapling/Shrub Stratum			
1.			
2.			
3.			
4.			
5.			
Total Cover:	%		
Herb Stratum			
1. *Festuca perennis*	50	Yes	FAC
2. *Bromus horeaceus*	30	Yes	FACU
3.			
4.			
5.			
6.			
7.			
8.			
Total Cover:	80 %		
Woody Vine Stratum			
1.			
2.			
Total Cover:	%		

% Bare Ground in Herb Stratum 20 % | % Cover of Biotic Crust 0 %

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0 % (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	0
FACW species		x 2 =	0
FAC species	50	x 3 =	150
FACU species	30	x 4 =	120
UPL species		x 5 =	0
Column Totals:	80 (A)		270 (B)

Prevalence Index = B/A = 3.38

Hydrophytic Vegetation Indicators:

- ◉ Dominance Test is >50%
- ◉ Prevalence Index is ≤3.0[1]
- ☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ○ No ◉

Remarks: Bare ground covered by thatch.

SOIL

Sampling Point: U04

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-1	10YR 2/2	98	5YR 4/6	2	C	PL	silty loam	lots of organic material
1-5	10YR 4/2	97	5YR 4/6	3	C	PL	silty loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. CS=Covered or Coated Sand Grains

[2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (**LRR C**)
- ☐ 1 cm Muck (A9) (**LRR D**)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☒ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Vernal Pools (F9)

Indicators for Problematic Hydric Soils: [3]

- ☐ 1 cm Muck (A9) (**LRR C**)
- ☐ 2 cm Muck (A10) (**LRR B**)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present. unless distributed or problematic

Restrictive Layer (if present):

Type: n/a

Depth (inches): n/a

Hydric Soil Present? Yes ◉ No ○

Remarks: The depth of soil pit was deep enough to determine the hydric soil indicators present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1) (**Nonriverine**)
- ☐ Sediment Deposits (B2) (**Nonriverine**)
- ☐ Drift Deposits (B3) (**Nonriverine**)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Plowed Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1) (**Riverine**)
- ☐ Sediment Deposits (B2) (**Riverine**)
- ☐ Drift Deposits (B3) (**Riverine**)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches):

Water Table Present? Yes ○ No ◉ Depth (inches):

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches):

Wetland Hydrology Present? Yes ○ No ◉

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: No indicators are present.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: 1010 Main Street Roseville | City/County: Roseville | Sampling Date: April 13, 2022

Applicant/Owner: Pat Laughlin | State: CA | Sampling Point: W05

Investigator(s): Elena Gregg, Christopher Belko | Section, Township, Range: Section 34, Township 11N, Range 06E

Landform (hillslope, terrace, etc.): terrace | Local relief (concave, convex, none): concave | Slope (%): 0

Subregion (LRR): C - Mediterranean California | Lat: 38.753408 | Long: -121.30232 | Datum: NAD83

Soil Map Unit Name: 141 Cometa-Fiddyment complex, 1 to 5 percent slopes | NWI classification: N/a

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ○ No ◉ (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 ◉	No ○	
Hydric Soil Present?	Yes ◉	No ○	**Is the Sampled Area within a Wetland?** Yes ◉ No ○
Wetland Hydrology Present?	Yes ◉	No ○	

Remarks: Drought conditions are present. Area is a slight depression.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
Total Cover:	%		
Sapling/Shrub Stratum			
1.			
2.			
3.			
4.			
5.			
Total Cover:	%		
Herb Stratum			
1. *Festuca perennis*	70	Yes	FAC
2. *Bromus horeaceus*	15	No	FACU
3.			
4.			
5.			
6.			
7.			
8.			
Total Cover:	85 %		
Woody Vine Stratum			
1.			
2.			
Total Cover:	%		

% Bare Ground in Herb Stratum 15 % | % Cover of Biotic Crust 1 %

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0 % (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	0
FACW species		x 2 =	0
FAC species	70	x 3 =	210
FACU species	15	x 4 =	60
UPL species		x 5 =	0
Column Totals:	85 (A)		270 (B)

Prevalence Index = B/A = 3.18

Hydrophytic Vegetation Indicators:

- ☒ Dominance Test is >50%
- ☐ Prevalence Index is ≤3.0[1]
- ☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ◉ No ○

Remarks:

SOIL

Sampling Point: W05

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 4/2	95	2.5YR 3/6	5	C	M	silty loam	redox in M and PL

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. CS=Covered or Coated Sand Grains

[2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (**LRR C**)
- ☐ 1 cm Muck (A9) (**LRR D**)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☒ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☒ Redox Depressions (F8)
- ☐ Vernal Pools (F9)

Indicators for Problematic Hydric Soils: [3]

- ☐ 1 cm Muck (A9) (**LRR C**)
- ☐ 2 cm Muck (A10) (**LRR B**)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present. unless distributed or problematic

Restrictive Layer (if present):

Type: n/a

Depth (inches): n/a

Hydric Soil Present? Yes ◉ No ○

Remarks: The depth of soil pit was deep enough to determine the hydric soil indicators present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1) (**Nonriverine**)
- ☐ Sediment Deposits (B2) (**Nonriverine**)
- ☐ Drift Deposits (B3) (**Nonriverine**)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☒ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Plowed Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1) (**Riverine**)
- ☐ Sediment Deposits (B2) (**Riverine**)
- ☐ Drift Deposits (B3) (**Riverine**)
- ☒ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches):

Water Table Present? Yes ○ No ◉ Depth (inches):

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches):

Wetland Hydrology Present? Yes ◉ No ○

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: 1010 Main Street Roseville | City/County: Roseville | Sampling Date: April 13, 2022

Applicant/Owner: Pat Laughlin | State: CA | Sampling Point: U05

Investigator(s): Elena Gregg, Christopher Belko | Section, Township, Range: Section 34, Township 11N, Range 06E

Landform (hillslope, terrace, etc.): terrace | Local relief (concave, convex, none): none | Slope (%): 0

Subregion (LRR): C - Mediterranean California | Lat: 38.753413 | Long: -121.302294 | Datum: NAD83

Soil Map Unit Name: 141 Cometa-Fiddyment complex, 1 to 5 percent slopes | NWI classification: N/a

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ○ No ◉ (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 ○	No ◉	
Hydric Soil Present?	Yes ◉	No ○	**Is the Sampled Area within a Wetland?** Yes ○ No ◉
Wetland Hydrology Present?	Yes ○	No ◉	

Remarks: Drought conditions are present. Local relief none to minutely convex.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
Total Cover:	%		
Sapling/Shrub Stratum			
1.			
2.			
3.			
4.			
5.			
Total Cover:	%		
Herb Stratum			
1. *Bromus horeaceus*	55	Yes	FACU
2. *Festuca perennis*	15	Yes	FAC
3. *Elymus caput-medusae*	5	No	Not Listed
4.			
5.			
6.			
7.			
8.			
Total Cover:	75 %		
Woody Vine Stratum			
1.			
2.			
Total Cover:	%		

% Bare Ground in Herb Stratum 25 % | % Cover of Biotic Crust 0 %

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0 % (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	0
FACW species		x 2 =	0
FAC species	15	x 3 =	45
FACU species	55	x 4 =	220
UPL species	5	x 5 =	25
Column Totals:	75 (A)		290 (B)

Prevalence Index = B/A = 3.87

Hydrophytic Vegetation Indicators:

- ◉ Dominance Test is >50%
- ◉ Prevalence Index is ≤3.0[1]
- ☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ○ No ◉

Remarks: Bare ground covered by thatch.

SOIL

Sampling Point: U05

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR 4/2	96	2.5YR 3/6	4	C	M	silty loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. CS=Covered or Coated Sand Grains

[2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (**LRR C**)
- ☐ 1 cm Muck (A9) (**LRR D**)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☒ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Vernal Pools (F9)

Indicators for Problematic Hydric Soils: [3]

- ☐ 1 cm Muck (A9) (**LRR C**)
- ☐ 2 cm Muck (A10) (**LRR B**)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present. unless distributed or problematic

Restrictive Layer (if present):

Type: n/a

Depth (inches): n/a

Hydric Soil Present? Yes ◉ No ○

Remarks: The depth of soil pit was deep enough to determine the hydric soil indicators present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1) (**Nonriverine**)
- ☐ Sediment Deposits (B2) (**Nonriverine**)
- ☐ Drift Deposits (B3) (**Nonriverine**)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Plowed Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1) (**Riverine**)
- ☐ Sediment Deposits (B2) (**Riverine**)
- ☐ Drift Deposits (B3) (**Riverine**)
- ☒ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches):

Water Table Present? Yes ○ No ◉ Depth (inches):

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches):

Wetland Hydrology Present? Yes ○ No ◉

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: No primary indicators are present.

Appendix B: NRCS Soils Map and Soil Series Description

United States Department of Agriculture

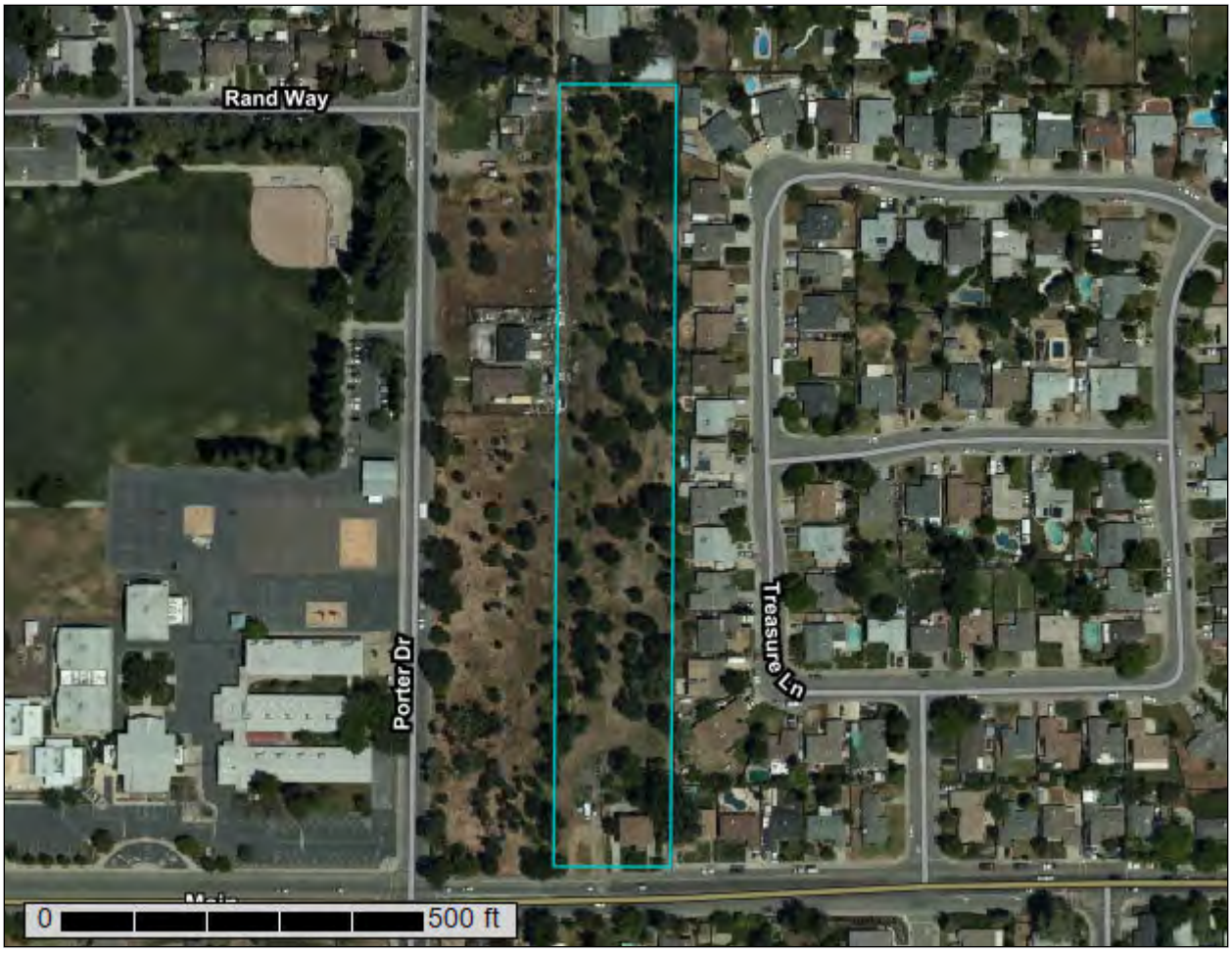
NRCS

Natural Resources Conservation Service

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

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

1010 Main Street Roseville



July 18, 2022

Preface

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

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

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

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

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

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

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

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

Contents

How Soil Surveys Are Made

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

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

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

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

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

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

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

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

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

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

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

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

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

Soil Map

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

Custom Soil Resource Report
Soil Map

Map Scale: 1:1,930 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 25 50 100 150

Feet: 0 50 100 200 300

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 10N WGS84

MAP LEGEND

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

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

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

Water Features
- Streams and Canals

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

Background
- Aerial Photography

MAP INFORMATION

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

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

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

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

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

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

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

Soil Survey Area: Placer County, California, Western Part
Survey Area Data: Version 13, Sep 3, 2021

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

Date(s) aerial images were photographed: May 11, 2019—May 12, 2019

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

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
141	Cometa-Fiddyment complex, 1 to 5 percent slopes	4.0	100.0%
Totals for Area of Interest		**4.0**	**100.0%**

Map Unit Descriptions

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

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

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

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

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

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

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

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

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

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

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

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

Placer County, California, Western Part

141—Cometa-Fiddyment complex, 1 to 5 percent slopes

Map Unit Setting

National map unit symbol: hfzk
Elevation: 20 to 400 feet
Mean annual precipitation: 10 to 23 inches
Mean annual air temperature: 61 to 63 degrees F
Frost-free period: 230 to 300 days
Farmland classification: Not prime farmland

Map Unit Composition

Cometa and similar soils: 40 percent
Fiddyment and similar soils: 30 percent
Minor components: 30 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Cometa

Setting

Landform: Terraces
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from granite

Typical profile

H1 - 0 to 18 inches: sandy loam
H2 - 18 to 29 inches: clay
H3 - 29 to 60 inches: sandy loam

Properties and qualities

Slope: 1 to 5 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Very low (about 2.2 inches)

Interpretive groups

Land capability classification (irrigated): 4e
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: D
Ecological site: R017XD093CA - CLAYPAN
Hydric soil rating: No

Description of Fiddyment

Setting

Landform: Ridges

Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from siltstone

Typical profile

H1 - 0 to 12 inches: loam
H2 - 12 to 28 inches: clay loam
H3 - 28 to 35 inches: indurated
H4 - 35 to 39 inches: weathered bedrock

Properties and qualities

Slope: 1 to 5 percent
Depth to restrictive feature: 20 to 35 inches to duripan; 35 to 39 inches to lithic bedrock
Drainage class: Well drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Very low (about 2.7 inches)

Interpretive groups

Land capability classification (irrigated): 4e
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: D
Ecological site: R017XD093CA - CLAYPAN
Hydric soil rating: No

Minor Components

Kaseberg, loam

Percent of map unit: 10 percent
Hydric soil rating: No

San joaquin, sandy loam

Percent of map unit: 10 percent
Hydric soil rating: No

Ramona, sandy loam

Percent of map unit: 5 percent
Hydric soil rating: No

Alamo, clay

Percent of map unit: 5 percent
Landform: Depressions
Hydric soil rating: Yes

Soil Information for All Uses

Soil Reports

The Soil Reports section includes various formatted tabular and narrative reports (tables) containing data for each selected soil map unit and each component of each unit. No aggregation of data has occurred as is done in reports in the Soil Properties and Qualities and Suitabilities and Limitations sections.

The reports contain soil interpretive information as well as basic soil properties and qualities. A description of each report (table) is included.

Land Classifications

This folder contains a collection of tabular reports that present a variety of soil groupings. The reports (tables) include all selected map units and components for each map unit. Land classifications are specified land use and management groupings that are assigned to soil areas because combinations of soil have similar behavior for specified practices. Most are based on soil properties and other factors that directly influence the specific use of the soil. Example classifications include ecological site classification, farmland classification, irrigated and nonirrigated land capability classification, and hydric rating.

Hydric Soils

This table lists the map unit components that are rated as hydric soils in the survey area. This list can help in planning land uses; however, onsite investigation is recommended to determine the hydric soils on a specific site (National Research Council, 1995; Hurt and others, 2002).

The three essential characteristics of wetlands are hydrophytic vegetation, hydric soils, and wetland hydrology (Cowardin and others, 1979; U.S. Army Corps of Engineers, 1987; National Research Council, 1995; Tiner, 1985). Criteria for all of the characteristics must be met for areas to be identified as wetlands. Undrained hydric soils that have natural vegetation should support a dominant population of ecological wetland plant species. Hydric soils that have been converted to other uses should be capable of being restored to wetlands.

Hydric soils are defined by the National Technical Committee for Hydric Soils (NTCHS) as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the

upper part (Federal Register, 1994). These soils, under natural conditions, are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation.

The NTCHS definition identifies general soil properties that are associated with wetness. In order to determine whether a specific soil is a hydric soil or nonhydric soil, however, more specific information, such as information about the depth and duration of the water table, is needed. Thus, criteria that identify those estimated soil properties unique to hydric soils have been established (Federal Register, 2002). These criteria are used to identify map unit components that normally are associated with wetlands. The criteria used are selected estimated soil properties that are described in "Soil Taxonomy" (Soil Survey Staff, 1999) and "Keys to Soil Taxonomy" (Soil Survey Staff, 2006) and in the "Soil Survey Manual" (Soil Survey Division Staff, 1993).

If soils are wet enough for a long enough period of time to be considered hydric, they should exhibit certain properties that can be easily observed in the field. These visible properties are indicators of hydric soils. The indicators used to make onsite determinations of hydric soils are specified in "Field Indicators of Hydric Soils in the United States" (Hurt and Vasilas, 2006).

Hydric soils are identified by examining and describing the soil to a depth of about 20 inches. This depth may be greater if determination of an appropriate indicator so requires. It is always recommended that soils be excavated and described to the depth necessary for an understanding of the redoximorphic processes. Then, using the completed soil descriptions, soil scientists can compare the soil features required by each indicator and specify which indicators have been matched with the conditions observed in the soil. The soil can be identified as a hydric soil if at least one of the approved indicators is present.

Map units that are dominantly made up of hydric soils may have small areas, or inclusions, of nonhydric soils in the higher positions on the landform, and map units dominantly made up of nonhydric soils may have inclusions of hydric soils in the lower positions on the landform.

The criteria for hydric soils are represented by codes in the table (for example, 2). Definitions for the codes are as follows:

1. All Histels except for Folistels, and Histosols except for Folists.
2. Soils in Aquic suborders, great groups, or subgroups, Albolls suborder, Historthels great group, Histoturbels great group, Pachic subgroups, or Cumulic subgroups that:
    A. Based on the range of characteristics for the soil series, will at least in part meet one or more Field Indicators of Hydric Soils in the United States, or
    B. Show evidence that the soil meets the definition of a hydric soil;
3. Soils that are frequently ponded for long or very long duration during the growing season.
    A. Based on the range of characteristics for the soil series, will at least in part meet one or more Field Indicators of Hydric Soils in the United States, or
    B. Show evidence that the soil meets the definition of a hydric soil;
4. Map unit components that are frequently flooded for long duration or very long duration during the growing season that:
    A. Based on the range of characteristics for the soil series, will at least in part meet one or more Field Indicators of Hydric Soils in the United States, or

B. Show evidence that the soil meets the definition of a hydric soil;

Hydric Condition: Food Security Act information regarding the ability to grow a commodity crop without removing woody vegetation or manipulating hydrology.

References:
Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.
Federal Register. September 18, 2002. Hydric soils of the United States.
Federal Register. July 13, 1994. Changes in hydric soils of the United States.
Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.
National Research Council. 1995. Wetlands: Characteristics and boundaries.
Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18.
Soil Survey Staff. 2006. Keys to soil taxonomy. 10th edition. U.S. Department of Agriculture, Natural Resources Conservation Service.
Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service. U.S. Department of Agriculture Handbook 436.
Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.
United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.

Report—Hydric Soils

Hydric Soils–Placer County, California, Western Part				
Map symbol and map unit name	**Component**	**Percent of map unit**	**Landform**	**Hydric criteria**
141—Cometa-Fiddyment complex, 1 to 5 percent slopes				
	Alamo, clay	5	Depressions	2

References

American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.

American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. September 18, 2002. Hydric soils of the United States.

Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

National Research Council. 1995. Wetlands: Characteristics and boundaries.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_054262

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service, U.S. Department of Agriculture Handbook 436. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053577

Soil Survey Staff. 2010. Keys to soil taxonomy. 11th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053580

Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.

United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.

United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2_053374

United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/landuse/rangepasture/?cid=stelprdb1043084

United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2_054242

United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053624

United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210. http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052290.pdf

gallaway ENTERPRISES

BIOLOGICAL RESOURCES ASSESSMENT

Aquatic, Terrestrial, and Botanical Resources

1010 Main Street Development Project

City of Roseville, Placer County, California

August 2022

Prepared for:
Pat Laughlin
591 Colusa Avenue
Yuba City, CA 95991
(530) 701-2680
pat@stromerrealty.com

Prepared by:
Gallaway Enterprises
117 Meyers Street, Suite 120
Chico CA 95928
(530) 332-9909
www.gallawayenterprises.com

CONTENTS

FIGURES

TABLES

APPENDICES

BIOLOGICAL RESOURCES ASSESSMENT

1010 Main Street Development Project

City of Roseville, Placer County, California
Section 34, Township 11N, Range 06E

INTRODUCTION

Purpose and Overview

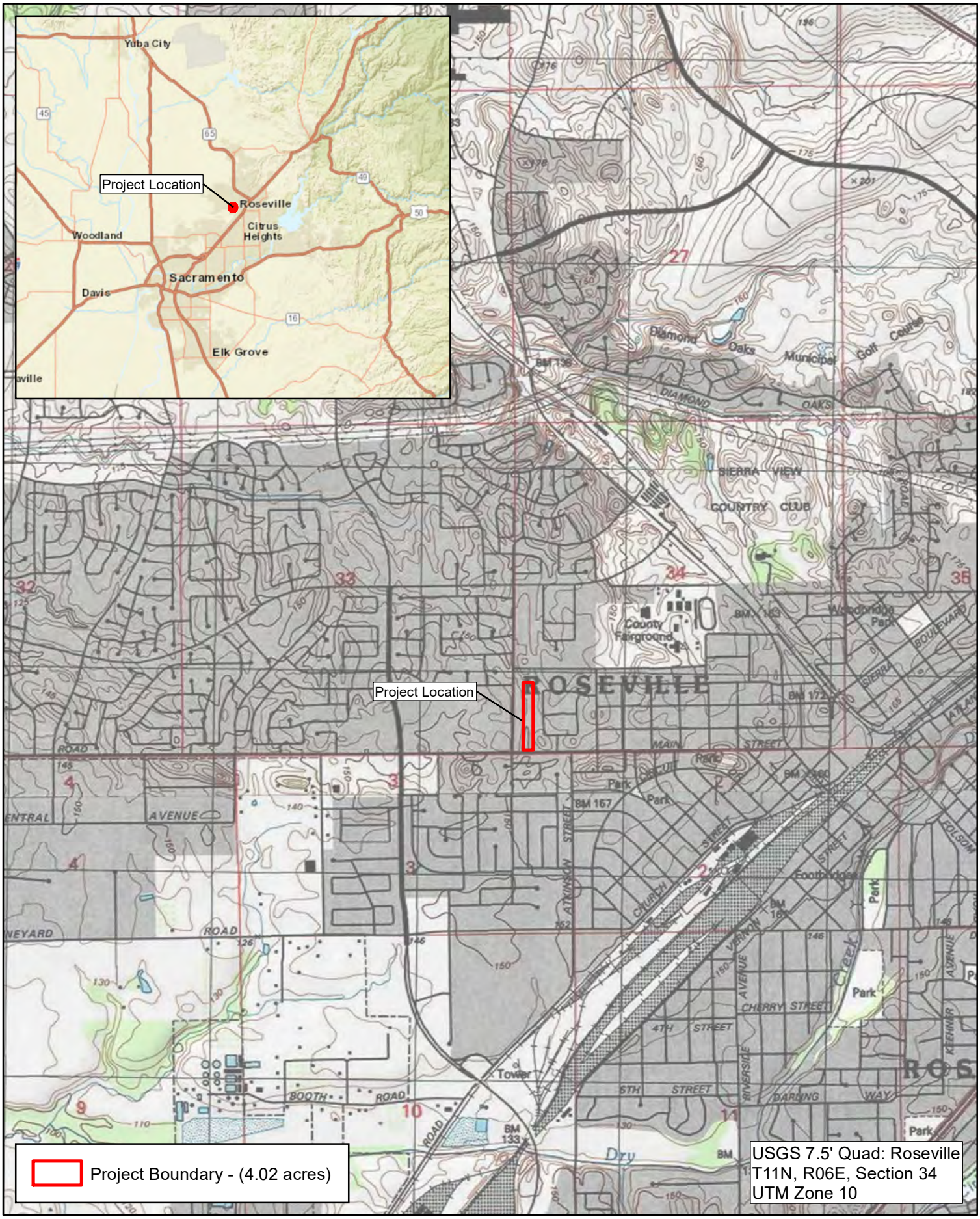
The purpose of this biological resources assessment (BRA) is to document the endangered, threatened, sensitive, and rare wildlife and botanical species and their habitats that occur or may occur in the approximately 4-acre biological survey area (BSA) of the 1010 Main Street Development Project, APN 015-080-026-000 (Project). The BSA is located on Main Street in the City of Roseville, between Porter Drive and Athan Avenue (**Figure 1**).

The BSA is the area where biological surveys are conducted and includes all areas to be affected directly or indirectly by proposed Project activities (**Figure 2**). Gallaway Enterprises conducted habitat assessments and botanical surveys within the BSA to evaluate site conditions and the potential for special-status species to occur. Other primary references consulted included species lists and information gathered from the United States Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC), the National Oceanic and Atmospheric Administration's (NOAA) National Marine Fisheries Service (NMFS), the California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database (CNDDB), the California Native Plant Society's (CNPS) Inventory of Rare and Endangered Plants of California, and literature review. The results of the BRA are the findings of habitat assessments and surveys and the recommendations for avoidance and minimization measures.

Environmental Setting

The BSA (latitude 38.751950, longitude -121.303000) is located in the Great Valley geomorphic province, consisting of the central part of California between the Coast Range and the Sierra Nevada mountain ranges. The BSA is generally characterized as a disturbed urban environment surrounded by development, including dense residential subdivisions and a school. The BSA contains scattered almond trees (*Prunus dulcis*) interspersed within a historically disturbed valley oak (*Quercus lobata*) woodland with an understory of non-native annual grassland. A house with a yard is present in the southeastern corner. The BSA is flat to slightly sloped with a series of pronounced soil mounds/spoil piles in the northern portion. Seasonal swales are present in the northern third of the BSA. An intermittent drainage develops in the northwestern corner of the site and runs south through the BSA before exiting the site to the west.

The average annual precipitation for the area is 22.49 inches and the average temperature is 61.6° F (NCEI 2022) in the region where the survey area is located. The BSA is at an elevation of 146 to 151 feet above sea level and is sloped between 1 to 5 percent. Soils within the survey area are primarily loams and sandy loams, with a restrictive layer ranging from 20 to more than 80 inches in depth.



NORTH

1:24,000

0 0.25 0.5 Miles

Data Sources: ESRI, USGS, Placer County

1010 Main Street Development Project
Regional Location
Figure 1

gallaway ENTERPRISES

GE: #22-100 Map Date: 07/19/2022

NORTH

1:1,800

0 50 100 Feet

Data Sources: ESRI, Placer County
City of Roseville 04/22/2019

1010 Main Street Development Project
Biological Survey Area
Figure 2

gallaway ENTERPRISES

GE: #22-100 Map Date: 07/21/2022

Project Description

The BSA is proposed for residential development and appurtenant infrastructure.

METHODS

References Consulted

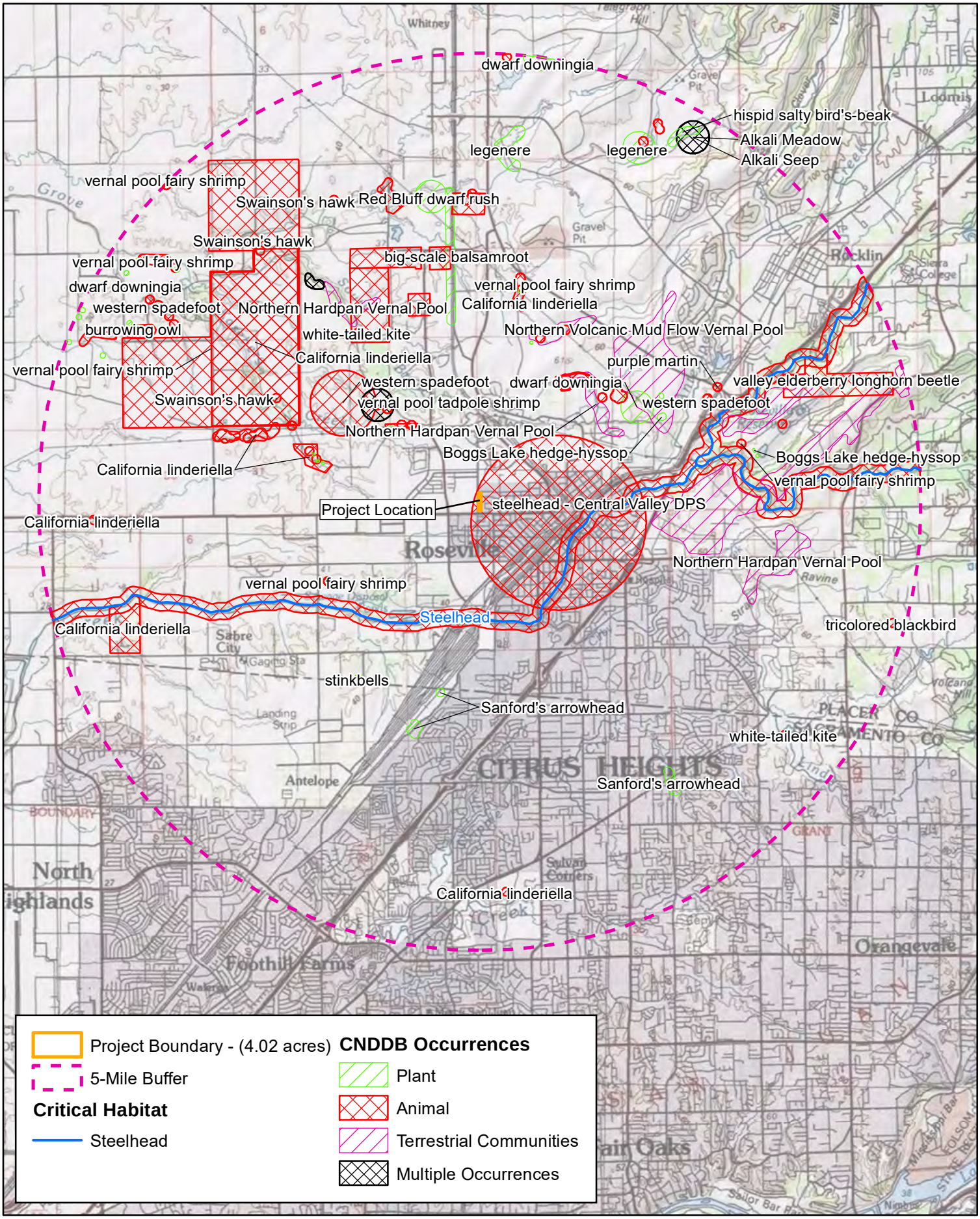
Gallaway Enterprises obtained lists of special-status species that occur in the vicinity of the BSA. The CNDDB Geographic Information System (GIS) database was also consulted and showed special-status species within a 5-mile radius of the BSA (**Figure 3**). Other primary sources of information regarding the occurrence of federally listed threatened, endangered, proposed, and candidate species and their habitats within the BSA used in the preparation of this BRA are:

- The USFWS IPaC Official Species List for the Project boundary, July 15, 2022, Project Code: 2022-0064184 (**Appendix A: Official Species Lists**);
- The results of a species record search of the CDFW CNDDB RareFind 5 for the 7.5-minute USGS "Pleasant Grove," "Roseville," "Rocklin," "Rio Linda," "Citrus Heights," and "Folsom" quadrangles (**Appendix A: Official Species Lists**);
- The review of the CNPS Inventory of Rare and Endangered Vascular Plants of California for the 7.5-minute USGS "Pleasant Grove," "Roseville," "Rocklin," "Rio Linda," "Citrus Heights," and "Folsom" quadrangles (**Appendix A: Official Species Lists**);
- USFWS Critical Habitat Portal, June 10, 2022; and
- Results from the habitat assessments conducted by Gallaway Enterprises on April 13, June 13, and July 7, 2022 (**Appendix B: Observed Species Lists; Appendix C: Project Site Photos**). and
- Results from the Delineation of Aquatic Resources conducted by Gallaway Enterprises on April 13 and July 7, 2022 (**Appendix D: Draft Delineation of Aquatic Resources Map**).

Special-Status Species

Special-status species that have potential to occur in the BSA are those that fall into one of the following categories:

- Listed as threatened or endangered, or are proposed or candidates for listing under the California Endangered Species Act (CESA, 14 California Code of Regulations 670.5) or the Federal Endangered Species Act (ESA, 50 Code of Federal Regulations 17.12);
- Listed as a Species of Special Concern (SSC) by CDFW or protected under the California Fish and Game Code (CFGC) (e.g., Fully Protected species);
- Ranked by the CNPS as 1A, 1B, or 2;
- Protected under the Migratory Bird Treaty Act (MBTA);
- Protected under the Bald and Golden Eagle Protection Act; or
- Species that are otherwise protected under policies or ordinances at the local or regional level as required by the California Environmental Quality Act (CEQA §15380).



NORTH

1:90,000

0 0.5 1 Miles

Data Sources: ESRI, USGS, Placer County, CNDDB, USFWS, NMFS

1010 Main Street Development Project
CNDDB Occurrences and Critical Habitat
Figure 3

gallaway ENTERPRISES

GE: #22-100 Map Date: 07/19/2022

Critical Habitat

The ESA requires that critical habitat be designated for all federally listed species. Critical habitat is designated for areas that provide essential habitat elements that enable a species' survival, and which are occupied by the species during the species listing under the ESA. For the purposes of designating critical habitat, habitat is considered the abiotic and biotic setting that currently or periodically contains the resources and conditions necessary to support one or more life processes of a species.

The USFWS Critical Habitat Portal was accessed on June 10, 2022 to determine whether critical habitat occurs within the BSA. Appropriate Federal Registers were also used to confirm the presence or absence of critical habitat.

Sensitive Natural Communities

Sensitive Natural Communities (SNCs) are monitored by CDFW with the goal of preserving these areas of habitat that are rare or ecologically important. Many SNCs are designated as such because they represent a historical landscape and are typically preserved as valued components of California's diverse habitat assemblage. The CNDDB was accessed on June 10, 2022 to determine whether the BSA occurs within a mapped SNC.

Aquatic Resources

A formal delineation of aquatic resources was conducted by Gallaway Enterprises on April 13 and July 7, 2022 (**Appendix D: Draft Delineation of Aquatic Resources Map).**

Habitat Assessments and Protocol-level Rare Plant Survey

Habitat assessments were conducted by Gallaway Enterprises staff on April 13, June 13, and July 7, 2022 (**Figure 4**). The wildlife habitat assessment was conducted by Biologist Jessica Sellers on June 13, 2022 and the botanical habitat assessment was conducted by Senior Botanist Elena Gregg and Botanist Chris Belko on April 13 and July 7, 2022.

Habitat assessments for botanical and wildlife species were conducted to determine if suitable habitat elements for special-status species occur within the BSA. The habitat assessments were conducted by walking the entire BSA and recording observed species and specific habitat types and elements. If habitat was observed for special-status species, it was then evaluated for quality based on vegetation composition and structure, physical features (e.g., soils, elevation), microclimate, surrounding area, presence of predatory species and available resources (e.g., prey items, nesting substrates), and land use patterns.

Additionally, Mrs. Gregg and Mr. Belko conducted a protocol-level rare plant survey for all plant species with blooming periods that overlapped the date of the field visits. The survey was conducted by walking in all accessible areas of the BSA and taking inventory of observed botanical species and habitat elements. A Trimble Global Positioning System (GPS) unit was on hand to record the location, extent, and estimated number of individuals of any special-status plant populations observed within the BSA. A list of all plant species observed during the surveys is included in **Appendix B**.

NORTH

1:1,600

0 50 100 Feet

Data Sources: ESRI, Placer County
City of Roseville 04/22/2019

1010 Main Street Development Project
Habitat Types
Figure 4

gallaway ENTERPRISES

GE: #22-100 Map Date: 07/29/2022

RESULTS

Terrestrial Habitat

Valley Oak Woodland

The majority of the BSA consisted of disturbed valley oak woodland, featuring valley oak and almond trees, with a few scattered black walnut (*Juglans hindsii*) and white mulberry trees (*Morus alba*). This habitat type consists of partially closed canopies comprised mostly of deciduous, broad-leaved species and primarily dominated by valley oaks. The understory consists of annual grasses and forbs. These woodlands provide food and cover for many wildlife species. Acorns produced by oaks have long been considered important to some birds and mammals as a food source. Common wildlife species that utilize valley oak woodland include oak titmouse (*Baeolophus inornatus*), acorn woodpecker (*Melanerpes formicivorus*), raptors, and western gray squirrel (*Sciurus griseus*).

Annual grassland

Annual grassland habitat occurs throughout the BSA in small patches and as prevalent groundcover. Annual grassland habitat is composed primarily of introduced annual plant species occurring on flat plains to gently rolling foothills throughout the state. Plant species composition depend largely on annual precipitation, fire regimes, and grazing practices. Vegetation within this community is primarily composed of wild oats (*Avena fatua*), rip-gut brome (*Bromus diandrus*), winter vetch (*Vicia villosa*), and soft chess (*Bromus hordeaceus*). Many wildlife species use grassland habitat for foraging but often require some other habitat characteristic such as woody vegetation, cliffs, caves, or ponds in order to find shelter and cover for escapement (Mayer and Laudenslayer 1988). Common species that are found breeding in this habitat type include a variety of ground-nesting avian species and small mammals.

Urban

Urban habitat is present in the southern portion of the BSA, which is composed of a residential homestead, paved roads, and associated landscaping including fruit and nut trees. This environment can present a mosaic of vegetation, including primarily ornamental landscaping, but can also incorporate native tree species. Generalist and invasive species often occupy urban habitat, such as common raven (*Corvus corax*), house sparrow (*Passer domesticus*), scrub-jay (*Aphelocoma californica*) and Brewer's blackbird (*Euphagus cyanocephalus*), as well as small to medium mammals (e.g., raccoon [*Procyon lotor*], opossum [*Didelphis virginiana*]) (Mayer and Laudenslayer 1988).

Aquatic Habitat

Palustrine

Palustrine habitat occurs in the form of five wetland features in the northern portion of the BSA; three seasonal swales and two seasonal wetlands. Of the five wetland features present within the BSA, three are man-induced wetlands that have formed at the toe of spoil piles. All of the wetland features within the BSA were dry during the April site visit. According to the Cowardin classification system, palustrine habitats are inland, nontidal depressions containing standing water that vary in size from small ponds to large areas that cover many acres. Typical palustrine habitats include floodplains, inland marshes, and

wetlands including vernal and seasonal wetlands. Seasonal wetlands are depressional features with a perched water table that typically stay inundated or saturated into the early summer months and are dominated by generalist wetland plant species. Swales are depressional features that function as low drainage pathways that typically connect to and help feed wetlands or other water features. The typically calm waters of palustrine habitats offer environmental conditions that contrast sharply with those of running water and may provide breeding and foraging habitat for a variety of amphibians, reptiles, and birds.

Riverine

Riverine habitat is characterized by intermittent or continually running water. The drainage that flows through the site is an intermittent stream that runs north to south through the BSA. This intermittent stream provides aquatic habitat when it is flowing during the winter and early spring months. Later in the year, flows subside and the drainage is dry during summer and fall months prior to yearly rains. The drainage was not flowing at the time of the site visit. Its substrate is primarily mud and is heavily vegetated with perennial ryegrass (*Festuca perennis*).

No riparian vegetation is present along the riverine habitat within the BSA. The riverine habitat within the BSA may provide suitable habitat for some aquatic species when water is present but does not provide suitable habitat components for special-status fishes.

Critical Habitat

There is no designated critical habitat within the BSA.

Sensitive Natural Communities

No CDFW-designated SNCs occur within the BSA.

Aquatic Resources

A Draft Delineation of Aquatic Resources for the Project was prepared by Gallaway Enterprises in July of 2022. At the time of the preparation of this BRA, the Draft Delineation of Aquatic Resources had not yet been submitted to the regulatory agencies for verification. The draft delineation map is provided as **Appendix D**.

Special-Status Species

A summary of special-status species assessed for potential occurrence within the BSA based on the USFWS IPaC species list, NOAA-NMFS species list, CDFW CNDDB report, and the CNPS inventory of rare and endangered plants within the "Pleasant Grove," "Roseville," "Rocklin," "Rio Linda," "Citrus Heights," and "Folsom" quadrangles is described in **Table 1**. Potential for occurrence was determined by reviewing database queries from federal and state agencies, performing field visits, and evaluating habitat characteristics.

Table 1. Special-status Species and Sensitive Natural Communities and their Potential to Occur within the BSA of the 1010 Main Street Development Project, Placer County, CA

Common Name *(Scientific Name)*	**Status** Fed/State/CNPS	**Associated Habitats**	**Potential for Occurrence**
SENSITIVE NATURAL COMMUNITIES			
Alkali Meadow	_/SNC/_	Meadows.	None. There is no designated Alkali Meadow within the BSA.
Alkali Seep	_/SNC/_	Seeps.	None. There is no designated Alkali Seep within the BSA.
Northern Claypan Vernal Pool	_/SNC/_	Vernal pools.	None. There is no designated Northern Claypan Vernal Pool within the BSA.
Northern Hardpan Vernal Pool	_/SNC/_	Vernal pools.	None. There is no designated Northern Hardpan Vernal Pool within the BSA.
Northern California Volcanic Mud Flow Vernal Pool	_/SNC/_	Vernal pools.	None. There is no designated Northern California Volcanic Mud Flow Vernal Pool within the BSA.
Valley Needlegrass Grassland	_/SNC/_	Grasslands.	None. There is no designated Valley Needlegrass Grassland within the BSA.
PLANTS			
Big-scale balsamroot (*Balsamorhiza macrolepis*)	_/_/1B.2	Typically serpentine grasslands and openings in chaparral and woodlands. (Blooming Period [BP]: Mar – Jun)	None. There are no suitable soils within the BSA. This species was not observed during protocol-level botanical surveys.
Boggs Lake hedge-hyssop (*Gratiola heterosepala*)	_/SE/1B.2	Lake margins and vernal pools. (BP: Apr – Aug)	None. There is no suitable vernal habitat within the BSA. This species was not observed during protocol-level botanical surveys.
Dwarf downingia (*Downingia pusilla*)	_/_/2B.2	Wetlands and vernal pools within valley and foothill grasslands. (BP: Mar – May)	None. There is no suitable vernal habitat within the BSA. This species was not observed during protocol-level botanical surveys.
Hispid salty bird's-beak (*Chloropyron molle* ssp. *hispidum*)	_/_/1B.1	In damp, alkaline soils. (BP: Jun – Sep)	None. There are no suitable soils within the BSA. This species was not observed during protocol-level botanical surveys.
Legenere (*Legenere limosa*)	_/_/1B.1	Vernal pools. (BP: Apr – Jun)	None. There is no suitable vernal habitat within the BSA. This species was not observed during protocol-level botanical surveys.

Common Name *(Scientific Name)*	**Status** Fed/State/CNPS	**Associated Habitats**	**Potential for Occurrence**
PLANTS			
Pincushion navarretia *(Navarretia myersii* ssp. *myersii)*	_/_/1B.1	Vernal pools. (BP: Apr – May)	None. There is no suitable vernal habitat within the BSA. This species was not observed during protocol-level botanical surveys.
Red Bluff dwarf rush (*Juncus leiospermus* var. *leiospermus*)	_/_/1B.1	Vernal pools and vernally mesic sites. (BP: Mar – Jun)	None. There is no suitable vernal habitat within the BSA. This species was not observed during protocol-level botanical surveys.
Sacramento Orcutt grass (*Orcuttia viscida*)	SE/FE/1B.1	Vernal pools. (BP: Apr – Jul[Sep])	None. There is no suitable vernal habitat within the BSA. This species was not observed during protocol-level botanical surveys.
Sanford's arrowhead (*Sagittaria sanfordii*)	_/_/1B.2	In standing or slow-moving freshwater ponds, marshes, and ditches. (BP: May – Oct [Nov])	None. There is no suitably wet habitat within the BSA. This species was not observed during protocol-level botanical surveys.
INVERTEBRATES			
Conservancy fairy shrimp (*Branchinecta conservatio*)	FE/_/_	Deep, moderately turbid vernal pools.	None. There is no suitable vernal habitat within the BSA.
Monarch butterfly (*Danaus plexippus*)	FC/_/_	Egg and larval stage dependent upon milkweed (*Asclepias* spp.). Adults migrate seasonally, amassing in in dense tree canopies, e.g. eucalyptus.	None. No milkweed was observed within the BSA during protocol-level botanical surveys.
Valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*)	FT/_/_	Blue elderberry (*Sambucus cerulea*) shrubs; usually associated with riparian areas.	None. No elderberry shrubs were observed within the BSA during protocol-level botanical surveys.
Vernal pool fairy shrimp (*Branchinecta lynchi*)	FT/_/_	Vernal pools and seasonally ponded areas.	None. There is no suitable vernal habitat within the BSA. The wetlands present are too shallow to support the life cycle of this species or are swale features that do not support suitable pooled habitat.

Common Name *(Scientific Name)*	Status Fed/State/CNPS	Associated Habitats	Potential for Occurrence
INVERTEBRATES			
Vernal pool tadpole shrimp (*Lepidurus packardi*)	FE/_/_	Deep vernal pools.	None. There is no vernal habitat within the BSA. The wetlands present are too shallow to support the life cycle of this species.
FISH			
Chinook salmon Central Valley spring-run ESU *(Oncorhynchus tshawytscha)*	FT/ST/_	Sacramento River and its tributaries.	None. The intermittent drainage within the BSA does not contain suitable habitat and drains into a municipal storm drainage system offsite.
Delta smelt *(Hypomesus transpacificus)*	FT/SE/_	Found only from the San Pablo Bay upstream through the Delta in Contra Costa, Sacramento, San Joaquin, Solano, and Yolo Counties.	None. The BSA is not located within this species' range.
Steelhead California Central Valley DPS *(Oncorhynchus mykiss irideus)*	FT/_/_	Sacramento River and its tributaries.	None. The intermittent drainage within the BSA does not contain suitable habitat and drains into a municipal storm drainage system offsite.
HERPTILES			
Giant garter snake *(Thamnophis gigas)*	FT/ST/_	Prefers freshwater marsh and low gradient streams. Has adapted to drainage canals and irrigation ditches.	None. The BSA does not provide suitable habitat components for this species, such as the presence of water during its active season (USFWS 2017).
Western pond turtle *(Actinemys marmorata)*	_/SSC/_	Inhabits ponds, marshes, rivers, streams, and irrigation ditches with aquatic vegetation. Requires suitable basking sites and upland habitat for egg-laying.	None. The intermittent drainage within the BSA does not contain suitable habitat and drains into a municipal storm drainage system offsite.
Western spadefoot (*Spea hammondii*)	_/SSC/_	Occurs primarily in grassland habitats. Vernal pools and connected seasonal drainages are typically used for breeding and egg-laying.	None. Aquatic features onsite are too heavily vegetated to support this species (USFWS 2005).

Common Name *(Scientific Name)*	**Status** Fed/State/CNPS	**Associated Habitats**	**Potential for Occurrence**
BIRDS			
Bank swallow (*Riparia riparia*)	_/ST/_	Requires vertical banks/cliffs with fine-textured/sandy soils near streams, rivers, lakes, ocean to dig nesting hole.	None. There is no suitable habitat within the BSA.
Burrowing owl (*Athene cunicularia*)	_/SSC/_	Grasslands or openings with friable soils, rodent burrows, or man-made structures (e.g., culverts, debris piles).	None. There is no suitable habitat within the BSA. Existing small grassland patches are surrounded by tall trees for raptor perches and residential development.
California black rail (*Laterallus jamaicensis coturniculus*)	_/ST, FP/_	Brackish and fresh emergent wetlands with dense vegetation (bulrushes and cattails).	None. There is no suitable habitat within the BSA.
Grasshopper sparrow (*Ammodramus savannarum*)	_/SSC/_	Open expanses of grassy habitat with very few trees. Favors native grasslands with a mix of grasses, forbs, and scattered shrubs. Loosely colonial when nesting.	None. There is no suitable open habitat within the BSA.
Purple martin (*Progne subis*)	_/SSC/_	Breeds in riparian woodland, oak woodland, open coniferous forests. Secondary cavity nester. Requires nest sites adjacent to open foraging areas of water or land.	None. There is no accessible water source during the purple martin breeding season.
Song sparrow Modesto population (*Melospiza melodia*)	_/SSC/_	Prefers early successional riparian corridors for nesting, can be found along vegetated irrigation canals and levees (Shuford and Gardali 2008).	None. There is no suitable habitat or riparian corridors within the BSA.
Swainson's hawk (*Buteo swainsoni*)	_/ST/_	Valleys and low foothills. Requires tall trees for nesting and open land for foraging, preferably grasslands and grain or pasture fields.	**Low**. There is potentially suitable nesting habitat within the BSA.

Common Name *(Scientific Name)*	**Status** Fed/State/CNPS	**Associated Habitats**	**Potential for Occurrence**
BIRDS			
Tricolored blackbird (*Agelaius tricolor*)	_/ST/_	Colonial nester in large freshwater marshes. Requires open, accessible water source and does most of its foraging in open habitats such as farm fields, pastures, cattle pens, large lawns.	None. There is no suitable habitat within or adjacent to the BSA. There is no water present during the tricolored blackbird nesting season, which is a steadfast habitat requirement for this species (CDFW 2018).
Western yellow-billed cuckoo (*Coccyzus americanus occidentalis*)	FT/SE/_	Nests in dense riparian forests that occur in patch sizes of 25 acres or greater with a width of at least 330 feet.	None. There is no riparian habitat within the BSA.
White-tailed kite	_/FP/_	Rolling foothills and valley margins with scattered oaks and river bottomlands or marshes often next to deciduous woodlands.	**Low**. There is potentially suitable nesting habitat within the BSA.
MAMMALS			
American badger (*Taxidea taxus*)	_/SSC/_	Habitat generalist including valley and foothill grasslands with friable soil and an abundance of rodent prey.	None. There is no suitable habitat within the BSA. The BSA is isolated within an urban landscape.
Pallid bat (*Antrozous pallidus*)	_/SSC/_	Roosts within buildings, rock crevices, bridges, and occasionally tree hollows. Most common in open, dry habitats with rocky areas, occasionally trees with cavities or peeling bark for roosting.	**Moderate**. The mature trees within the BSA may provide suitable roosting habitat.

CODE DESIGNATIONS	
FE = Federally-listed Endangered	**SNC** = CDFW Sensitive Natural Community
FT = Federally-listed Threatened	**CNPS California Rare Plant Rank (CRPR):**
FC = Federal Candidate Species	**CRPR 1B** = Rare or Endangered in California or elsewhere
SE = State-listed Endangered	
ST = State-listed Threatened	**CRPR 2** = Rare, Threatened or Endangered in California, more common elsewhere
SC = State Candidate for Listing as Threatened or Endangered	**CRPR 3** = More information is needed
SR = State-listed Rare	**0.1** = Seriously Threatened
SSC = State Species of Special Concern	**0.2** = Fairly Threatened
FP = CDFW Fully Protected Species	**0.3** = Not very Threatened

Potential for Occurrence: Any bird or bat species could fly over the BSA, but this is not considered a potential occurrence. The categories for the potential for occurrence include:

None: The species or natural community does not occur and has no potential to occur in the BSA based on sufficient surveys, the lack suitable habitat, and/or the BSA is well outside of the known distribution of the species.

Low: Potential habitat in the BSA is sub-marginal and/or the species is known to occur in the vicinity of the BSA.

Moderate: Suitable habitat is present in the BSA and/or the species is known to occur in the vicinity of the BSA. Pre-construction surveys may be required.

High: Habitat in the BSA is highly suitable for the species and there are reliable records close to the BSA, but the species was not observed. Pre-construction surveys required.

Known: Species was detected in the BSA or a recent reliable record exists for the BSA.

Endangered, Threatened, and Rare Plants

There were no endangered, threatened, or rare plants observed within the BSA on April 13 and July 7, 2022 and no suitable habitat elements for special-status plant species were observed during the habitat evaluation and protocol-level rare plant surveys that were conducted. A complete list of botanical species observed within the BSA can be found in **Appendix B**.

Endangered, Threatened, and Special-Status Wildlife

A wildlife habitat assessment was conducted within the BSA on June 13, 2022. Suitable habitat was identified for Swainson's hawk, white-tailed kite, pallid bat, and several avian species protected under the MBTA. A list of species observed within the BSA during the field site visit is provided in **Appendix B.**

Swainson's hawk

Swainson's hawks are listed under the CESA as threatened. They are found throughout the western part of the United States and from Canada to Mexico. Swainson's hawks are a fairly large, slender hawk with three different color morph displays. The most common morph in northern California is the dark morph, which demonstrates black to dark brown under coverts and flight feathers. Suitable habitat includes open grasslands or agricultural fields that are adjacent to a riparian forest or oak woodland. Swainson's hawks primarily nest in riparian forests next to open fields that provide foraging opportunities. Nesting and courtship begin in April. Current threats facing the Swainson's hawk are loss of nesting and foraging habitat, change in agricultural regimes, pesticides, poaching and human disturbances (CDFW 1994).

CNDDB Occurrences

There are 18 CNDDB occurrences within 10 miles of the BSA. The closest record (CNDDB #791) is approximately 2.75 miles northwest of the BSA, reported in 1996 within the City of Roseville Public Golf Course, but reported abandoned in 2001. There are no active nests within 10 miles of the BSA.

Status of Swainson's hawk occurring within the BSA

Once abundant in areas surrounding the BSA, there has been significant loss to Swainson hawk foraging and nesting habitat with the development of the City of Roseville and surrounding areas. Mature trees within the BSA provide potentially nesting habitat and there are several parks, barren lots, and a golf course within 1 mile of the BSA, in addition to several other golf courses and parks within 5 miles of the BSA that may provide suitable foraging habitat.

Within the BSA there are mature oaks that may provide potentially suitable nesting habitat. Annual grassland that may be utilized for foraging is limited within the BSA. There are no active Swainson's hawk nests within a 10 mile radius of the BSA and no Swainson's hawks were observed during their active nesting season on the June 13, 2022 habitat assessment; therefore, the potential for occurrence is **low**.

White-tailed kite

The white-tailed kite was listed as Fully Protected by the State of California in 1957. They are yearlong residents in coastal and valley lowlands; frequently found near agricultural areas. White-tailed kites also inhabit herbaceous and open stages of most habitats in cismontane California. They forage in undisturbed, open grasslands, meadows, farmlands, and emergent wetlands; however, they will rarely dive into tall cover. They use a variety of tree species to perch and roost, preferring to place their nests near tops of dense oak, willow, or other tree stands. Nests are usually located near an open foraging area that supports dense vole populations.

CNDDB occurrences

There are two (2) CNDDB occurrences of white-tailed kite within 5 miles of the BSA (#31, 56). These occurrences were observed in oak woodlands in the 1990s.

Status of white-tailed kite occurring in the BSA

There are mature trees that may support white-tailed kite nesting within the BSA; however, due to the limited amount of foraging habitat within the BSA, there is **low** potential for white-tailed kite to occur.

Pallid bat

Pallid bats are designated as a CDFW SSC. Pallid bats roost alone, in small groups (2 to 20 bats), or gregariously (hundreds of individuals). Day and night roosts include crevices in rocky outcrops and cliffs, caves, mines, trees (e.g., basal hollows of coast redwoods and giant sequoias, bole cavities of oaks, exfoliating Ponderosa pine and valley oak bark, deciduous trees in riparian areas, and fruit trees in orchards), and various human structures such as bridges (especially wooden and concrete girder designs), barns, porches, bat boxes, and human-occupied as well as vacant buildings. Roosts generally have unobstructed entrances/exits, are high above the ground, warm, and inaccessible to terrestrial predators. However, this species has also been found roosting on or near the ground under burlap sacks, stone piles, rags, and baseboards. Lewis 1996 found that pallid bats have low roost fidelity and both pregnant and

lactating pallid bats changed roosts an average of once every 1.4 days throughout the summer. Overwintering roosts have relatively cool, stable temperatures and are located in protected structures beneath the forest canopy or on the ground, out of direct sunlight. In other parts of the species' range, males and females have been found hibernating alone or in small groups, wedged deeply into narrow fissures in mines, caves, and buildings. At low latitudes, outdoor winter activity has been reported at temperatures between –5 and 10 °C (WBWG 2022).

CNDDB Occurrences

The nearest occurrence of pallid bat is located approximately 7 miles southeast of the BSA (#233). This occurrence was collected in 1941.

Status of pallid bat occurring in the BSA

Mature trees within the BSA could potentially provide suitable roosting habitat for pallid bat. Evidence of roosting (i.e., urine stains and guano) was not observed during the biological habitat assessment. There is **moderate** potential for pallid bat to occur within the BSA.

Migratory birds and raptors

Nesting birds are protected under the MBTA (16 USC 703) and the CFGC (§3503). The MBTA (16 USC §703) prohibits the killing of migratory birds or the destruction of their occupied nests and eggs except in accordance with regulations prescribed by the USFWS. The bird species covered by the MBTA includes nearly all of those that breed in North America, excluding introduced (i.e., exotic) species (50 Code of Federal Regulations §10.13). Activities that involve the removal of vegetation including trees, shrubs, grasses, and forbs or ground disturbance has the potential to affect bird species protected by the MBTA. The CFGC (§3503.5) states that it is "unlawful to take, possess, or destroy any birds in the order Falconiformes (hawks, eagles, and falcons) or Strigiformes (owls) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto." Take includes the disturbance of an active nest resulting in the abandonment or loss of young. The CFGC (§3503) also states that "it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto."

CNDDB Occurrences

The majority of migratory birds and raptors protected under the MBTA and CFGC are not recorded on the CNDDB because they are abundant and widespread.

Status of migratory birds and raptors occurring within the BSA

There is potentially suitable habitat for a variety of nesting avian species within the BSA.

REGULATORY FRAMEWORK

The following describes federal, state, and local environmental laws and policies that may be relevant if the BSA were to be developed or modified.

Federal

Waters of the United States, Clean Water Act, Section 404

The US Army Corps of Engineers (Corps) and the U.S. Environmental Protection Agency (EPA) regulate the discharge of dredged or fill material into jurisdictional waters of the United States, under the Clean Water Act (§404). The term "waters of the United States" is an encompassing term that includes "wetlands" and "other waters." Wetlands have been defined for regulatory purposes as follows: "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions (33 CFR 328.3, 40 CFR 230.3). Wetlands generally include swamps, marshes, bogs, and similar areas." Other waters of the United States are seasonal or perennial water bodies, including lakes, stream channels, drainages, ponds, and other surface water features, that exhibit an ordinary high-water mark but lack positive indicators for one or more of the three wetland parameters (i.e., hydrophytic vegetation, hydric soil, and wetland hydrology) (33 CFR 328.4).

The Corps may issue either individual permits on a case-by-case basis or general permits on a program level. General permits are pre-authorized and are issued to cover similar activities that are expected to cause only minimal adverse environmental effects. Nationwide permits are general permits issued to cover particular fill activities. All nationwide permits have general conditions that must be met for the permits to apply to a particular project, as well as specific conditions that apply to each nationwide permit.

Clean Water Act, Section 401

The Clean Water Act (§401) requires water quality certification and authorization for placement of dredged or fill material in wetlands and Other Waters of the United States. In accordance with the Clean Water Act (§401), criteria for allowable discharges into surface waters have been developed by the State Water Resources Control Board, Division of Water Quality. The resulting requirements are used as criteria in granting National Pollutant Discharge Elimination System (NPDES) permits or waivers, which are obtained through the Regional Water Quality Control Board (RWQCB) per the Clean Water Act (§402). Any activity or facility that will discharge waste (such as soils from construction) into surface waters, or from which waste may be discharged, must obtain an NPDES permit or waiver from the RWQCB. The RWQCB evaluates an NPDES permit application to determine whether the proposed discharge is consistent with the adopted water quality objectives of the basin plan.

Migratory Bird Treaty Act

The MBTA (16 USC §703) prohibits the killing of migratory birds or the destruction of their occupied nests and eggs except in accordance with regulations prescribed by the USFWS. The bird species covered by the MBTA includes nearly all of those that breed in North America, excluding introduced (i.e., exotic) species (50 Code of Federal Regulations §10.13).

Federal Endangered Species Act

The United States Congress passed the ESA in 1973 to protect species that are endangered or threatened with extinction. The ESA is intended to operate in conjunction with the National Environmental Policy Act (NEPA) to help protect the ecosystems upon which endangered and threatened species depend.

Under the ESA, species may be listed as either "endangered" or "threatened." Endangered means a species is in danger of extinction throughout all or a significant portion of its range. Threatened means a species is likely to become endangered within the foreseeable future throughout all or a significant portion of its range. All species of plants and animals, except non-native species and pest insects, are eligible for listing as endangered or threatened. The USFWS also maintains a list of "candidate" species. Candidate species are species for which there is enough information to warrant proposing them for listing, but that have not yet been proposed. "Proposed" species are those that have been proposed for listing but have not yet been listed.

The ESA makes it unlawful to "take" a listed animal without a permit. Take is defined as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in any such conduct." Through regulations, the term "harm" is defined as "an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering."

Magnuson-Stevens Fishery Conservation and Management Act

The Magnuson-Stevens Fishery Conservation and Management Act (MSA) established procedures designed to identify, conserve, and enhance essential fish habitat (EFH) for those species regulated under a federal fisheries management plan (FMP). The MSA requires federal agencies to consult with the National Marine Fisheries Service (NMFS) on all actions, or proposed actions, authorized, funded, or undertaken by the agencies that may adversely affect EFH (MSA section 305[b][2]). A component of this consultation process is the preparation and submittal of an Essential Fish Habitat Assessment (EFHA). The EFH mandate applies to all species managed under an FMP. For the Pacific coast (excluding Alaska), there are three FMPs covering groundfish, coastal pelagic species, and Pacific salmon.

State of California

California Endangered Species Act

The CESA is similar to the ESA but pertains to state-listed endangered and threatened species. The CESA requires state agencies to consult with the CDFW when preparing documents to comply with the CEQA. The purpose is to ensure that the actions of the lead agency do not jeopardize the continued existence of a listed species or result in the destruction, or adverse modification of habitat essential to the continued existence of those species. In addition to formal listing under the federal and state endangered species acts, "Species of Special Concern" receive consideration by CDFW. Species of Special Concern are those whose numbers, reproductive success, or habitat may be threatened.

California Fish and Game Code (§3503.5)

The CFGC (§3503.5) states that it is "unlawful to take, possess, or destroy any birds in the order Falconiformes (hawks, eagles, and falcons) or Strigiformes (all owls except barn owls) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto." Take includes the disturbance of an active nest resulting in the abandonment or loss of young. The CFGC (§3503) also states that "it is unlawful to take, possess, or needlessly destroy

the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto."

California Migratory Bird Protection Act

The CMBPA amends the CFGC (§3513) to mirror the provisions of the MBTA and allow the State of California to enforce the prohibition of take or possession of any migratory nongame bird as designated in the federal MBTA, including incidental take.

Activities that involve the removal of vegetation including trees, shrubs, grasses, and forbs or ground disturbance have the potential to affect bird species protected by the MBTA and CFGC. Thus, vegetation removal and ground disturbance in areas with breeding birds should be conducted outside of the breeding season (approximately March 1 through August 31). If vegetation removal or ground-disturbing activities are conducted during the breeding season, then a qualified biologist must determine if there are any nests of bird species protected under the MBTA and CFGC present in the Project area prior to commencement of vegetation removal or ground-disturbing activities. If active nests are located or presumed present, then appropriate avoidance measures (e.g., spatial or temporal buffers) must be implemented.

California Environmental Quality Act Guidelines §15380

Although threatened and endangered species are protected by specific federal and state statutes, CEQA Guidelines §15380(d) provides that a species not listed on the federal or state list of protected species may be considered rare or endangered if the species can be shown to meet certain specified criteria. These criteria have been modeled based on the definition in the ESA and the section of the CFGC dealing with rare, threatened, and endangered plants and animals. The CEQA Guidelines (§15380) allows a public agency to undertake a review to determine if a significant effect on species that have not yet been listed by either the USFWS or CDFW (e.g. candidate species, species of concern) would occur. Thus, CEQA provides an agency with the ability to protect a species from a project's potential impacts until the respective government agencies have an opportunity to designate the species as protected, if warranted.

Lake and Streambed Alteration Agreement, CFGC (§1602)

The CDFW is a trustee agency that has jurisdiction under the CFGC (§1600 et seq.). The CFGC (§1602), requires that a state or local government agency, public utility, or private entity must notify CDFW if a proposed Project will "substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake designated by the department, or use any material from the streambeds… except when the department has been notified pursuant to Section 1601." If an existing fish or wildlife resource may be substantially adversely affected by the activity, CDFW may propose reasonable measures that will allow protection of those resources. If these measures are agreeable to the parties involved, they may enter into an agreement with CDFW identifying the approved activities and associated mitigation measures.

Rare and Endangered Plants

The CNPS maintains a list of plant species native to California with low population numbers, limited distribution, or otherwise threatened with extinction. This information is published in the Inventory of

Rare and Endangered Vascular Plants of California. Potential impacts to populations of CNPS California Rare Plant Rank (CRPR) plants receive consideration under CEQA review. The CNPS CRPR categorizes plants as follows:

- Rank 1A: Plants presumed extinct in California;
- Rank 1B: Plants rare, threatened, or endangered in California or elsewhere;
- Rank 2A: Plants presumed extirpated or extinct in California, but not elsewhere;
- Rank 2B: Plants rare, threatened, or endangered in California, but more numerous elsewhere;
- Rank 3: Plants about which we need more information; and
- Rank 4: Plants of limited distribution.

The California Native Plant Protection Act (CFGC §1900-1913) prohibits the taking, possessing, or sale within the state of any plants with a state designation of rare, threatened, or endangered as defined by CDFW. An exception to this prohibition allows landowners, under specific circumstances, to take listed plant species, provided that the owners first notify CDFW and give the agency at least 10 days to retrieve (and presumably replant) the plants and/or seeds before they are destroyed. Fish and game Code §1913 exempts from the 'take' prohibition "the removal of endangered or rare native plants from a canal, lateral channel, building site, or road, or other right of way."

CONCLUSIONS AND RECOMMENDATIONS

Endangered, Threatened, and Rare Plants

There are no special-status botanical species present within the BSA; therefore, there will be no effects to special-status botanical species or their habitats and no avoidance and minimization measures are proposed.

Endangered, Threatened, and Special-status Wildlife

The following are the recommended minimization and mitigation measures to reduce or eliminate Project-associated impacts to special-status wildlife species. These proposed measures may be amended or superseded by the Project-specific permits issued by the regulatory agencies.

Swainson's hawk and white-tailed kite

- A protocol-level nesting raptor survey shall be conducted within 7 days prior to the initiation of Project activities to determine the presence or absence of active Swainson's hawk or white-tailed kite nests within the BSA or within 500 feet of the Project boundary, where feasible. If an active Swainson's hawk or white-tailed kite nest is found, no work shall occur within 250 feet of the active nest and CDFW shall be consulted.

Pallid bat

- If mature trees are proposed for removal, they should be removed and/or fallen between September 16 – March 15 outside of the bat maternity season. Trees should be removed at dusk to minimize impacts to roosting bats.

Migratory birds

- Project activities, including site grubbing and vegetation removal, shall be initiated outside of the bird nesting season (February 1 – August 31).
- If Project activities cannot be initiated outside of the bird-nesting season, then the following will occur:
  - A qualified biologist shall conduct a pre-construction survey within 250 feet of the BSA, where accessible, within 7 days prior to the start of Project activities.
  - If an active avian nest (i.e., containing egg[s] or young) is observed within the BSA or in an area adjacent to the BSA where impacts could occur, then a species protection buffer will be established. The species protection buffer will be defined by the qualified biologist based on the species, nest type, and tolerance to disturbance. Construction activity shall be prohibited within the buffer zones until the young have fledged or the nest fails. Nests shall be monitored by a qualified biologist once per week and a report submitted to the CEQA lead agency weekly.

Other Natural Resources

Waters of the United States

If activities occur within the ordinary high water mark and/or result in fill or discharge to any waters of the United States which include but are not limited to, intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, "wetlands," sloughs, prairie potholes, wet meadows, playa lakes, vernal pools or natural ponds, then the following will need to be obtained:

- Prior to any discharge or fill material into waters of the United States, authorization under a Nationwide Permit or Individual Permit shall be obtained from the Corps (Clean Water Act §404). For fill requiring a Corps permit, a water quality certification from the Regional Water Quality Board (Clean Water Act §401) shall also be obtained prior to discharge of dredged or fill material.
- Prior to any activities that would obstruct the flow of or alter the bed, channel, or bank of any perennial, intermittent or ephemeral creeks, notification of streambed alteration shall be submitted to the CDFW, and, if required, a Lake and Streambed Alteration Agreement (CFGC §1602) shall be obtained.

Mitigation requirements for the fill of waters of the United States will be implemented through an onsite restoration plan, and/or an In Lieu Fund and/or a certified mitigation bank with a Service Area that covers the Project area. These agreements, certifications and permits may be contingent upon successful completion of the CEQA process.

Oak Woodland

Impacts to native oaks within the BSA must be mitigated as required by the City of Roseville. The City of Roseville enacted a Tree Preservation Ordinance (Chapter 19.66 of the Municipal Code). Prior to Project entitlement a Tree Permit must be obtained. Required to be included with a Tree Permit application is a site plan map, tree inventory, impacts assessment, and tree protection measures required.

REFERENCES

Baldwin, B. G., D. H. Goldman, D. J. Keil, R. Patterson, T. J. Rosatti, and D. H. Wilken, editors. 2012. The Jepson Manual: vascular plants of California, second edition. University of California Press, Berkeley.

California Department of Fish and Wildlife (CDFW). 1994. Staff Report Regarding Mitigation for Impacts to Swainson's Hawks. CDFW. Sacramento, CA.

CDFW. 2018. A Status Review of the Tricolored Blackbird (*Agelaius tricolor*) in California. California Department of Fish and Wildlife. Sacramento, California. February 2018.

California Native Plant Society, Rare Plant Program. 2022. Rare Plant Inventory (online edition, v9-01 1.5). Website https://www.rareplants.cnps.org [accessed 15 July 2022].

California Natural Diversity Database (CNDDB). 2022. Rarefind 5. California Department of Fish and Wildlife. Sacramento, California [accessed 15 July 2022].

Lewis, Susan. 1996. Low Roost-Site Fidelity in Pallid Bats: Associated Factors and Effect on Group Stability. Behavioral Ecology and Sociobiology Vol. 39, No. 5, pp. 335-344.

Mayer, K.E and Laudenslayer, W.F. 1988. A guide to Wildlife Habitats of California. California Department of Forestry and Fire Protection. Sacramento, California.

National Centers for Environmental Information (NCEI). 2022. U.S. Climate Normals. ROSEVILLE 2.4 SE, California. Website https://www.ncei.noaa.gov/access/us-climate-normals/#dataset=normals-annualseasonal&timeframe=15&location=CA&station=US1CAPC0021 [accessed 15 July 2022].

Shuford, W. D., and Gardali, T., editors. 2008. California Bird Species of Special Concern: A ranked assessment of species, subspecies, and distinct populations of birds of immediate conservation concern in California. Studies of Western Birds 1. Western Field Ornithologists, Camarillo, California, and California Department of Fish and Game, Sacramento.

Tesky, Julie L. 1994. *Buteo swainsoni*. In: Fire Effects Information System, [Online]. U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Fire Sciences Laboratory (Producer). Available: www.fs.fed.us/database/feis/animals/bird/busw/all.html [15 July 2022].

USFWS. 2005. Recovery Plan for Vernal Pool Ecosystems of California and Southern Oregon. U.S. Fish and Wildlife Service; Portland, Oregon.

USFWS. 2017. Recovery Plan for the Giant Garter Snake (*Thamnophis gigas*). USFWS, Pacific Southwest Region, Sacramento, California. vii + 71 pp.

Western Bat Working Group (WBWG). 2022. Pallid bat (*Antrozous pallidus*). Website http://wbwg.org/western-bat-species/ [accessed 14 June 2022].

Zeiner, D.C., W.F. Laudenslayer, Jr., K.E. Mayer, and M. White, eds. 1990. California's Wildlife. Vol. I-III. California Depart. of Fish and Game, Sacramento, California.

LIST OF PREPARERS

Brittany Reaves. Associate Biologist and GIS Analyst I. B.S. in Parks and Natural Resources Management, California State University, Chico. Mrs. Reaves has more than 5 years of experience conducting protocol-level wildlife surveys and biological habitat assessments, collecting field data, and preparing technical documents, maps, and reports.

Elena Gregg. Senior Botanist. B.S. in Environmental Biology and Management, University of California, Davis. Mrs. Gregg has over 16 years of experience conducting protocol-level botanical surveys, botanical habitat assessments, arborist surveys, and wetland delineations.

Jessica Sellers. Biologist. B.S. in Wildlife (Conservation Biology/Applied Vertebrate Ecology), Humboldt State University, Arcata, California. Ms. Sellers has more than 9 years of experience performing wildlife surveys and monitoring, habitat assessments, biological and botanical data collection, and preparation of technical documents and reports.

Appendix A

Official Species Lists

United States Department of the Interior

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

In Reply Refer To: July 15, 2022
Project Code: 2022-0064184
Project Name: 1010 Main Street Development Project

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

To Whom It May Concern:

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

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

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

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

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

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

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

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

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

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

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

Attachment(s):

- Official Species List

Official Species List

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

This species list is provided by:

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

Project Summary

Project Code: 2022-0064184
Event Code: None
Project Name: 1010 Main Street Development Project
Project Type: New Constr - Above Ground
Project Description: residential development
Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@38.75341735,-121.30212683599134,14z

Counties: Placer County, California

Endangered Species Act Species

There is a total of 7 threatened, endangered, or candidate species on this species list.

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

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

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

---

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

Reptiles

NAME	STATUS
Giant Garter Snake *Thamnophis gigas* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4482	Threatened

Fishes

NAME	STATUS
Delta Smelt *Hypomesus transpacificus* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/321	Threatened

Insects

NAME	STATUS
Monarch Butterfly *Danaus plexippus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate
Valley Elderberry Longhorn Beetle *Desmocerus californicus dimorphus* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/7850	Threatened

Crustaceans

NAME	STATUS
Conservancy Fairy Shrimp *Branchinecta conservatio* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/8246	Endangered
Vernal Pool Fairy Shrimp *Branchinecta lynchi* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/498	Threatened
Vernal Pool Tadpole Shrimp *Lepidurus packardi* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/2246	Endangered

Critical habitats

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

IPaC User Contact Information

Agency: Gallaway Enterprises
Name: Brittany Reaves
Address: 117 Meyers Street, Suite 120
City: Chico
State: CA
Zip: 95928
Email brittany@gallawayenterprises.com
Phone: 5303329909

From: Brittany Reaves
To: NMFS SpeciesList - NOAA Service Account
Subject: 1010 Main Street Development Project
Date: Tuesday, July 19, 2022 5:19:47 PM

1010 Main Street Development Project

Quad Name **Roseville**

Quad Number **38121-G3**

ESA Anadromous Fish

SONCC Coho ESU (T) -
CCC Coho ESU (E) -
CC Chinook Salmon ESU (T) -
CVSR Chinook Salmon ESU (T) - **X**
SRWR Chinook Salmon ESU (E) -
NC Steelhead DPS (T) -
CCC Steelhead DPS (T) -
SCCC Steelhead DPS (T) -
SC Steelhead DPS (E) -
CCV Steelhead DPS (T) - **X**
Eulachon (T) -
sDPS Green Sturgeon (T) -

ESA Anadromous Fish Critical Habitat

SONCC Coho Critical Habitat -
CCC Coho Critical Habitat -
CC Chinook Salmon Critical Habitat -
CVSR Chinook Salmon Critical Habitat -
SRWR Chinook Salmon Critical Habitat -
NC Steelhead Critical Habitat -
CCC Steelhead Critical Habitat -
SCCC Steelhead Critical Habitat -
SC Steelhead Critical Habitat -
CCV Steelhead Critical Habitat - **X**
Eulachon Critical Habitat -
sDPS Green Sturgeon Critical Habitat -

ESA Marine Invertebrates

Range Black Abalone (E) -
Range White Abalone (E) -

ESA Marine Invertebrates Critical Habitat

Black Abalone Critical Habitat -

ESA Sea Turtles

East Pacific Green Sea Turtle (T) -
Olive Ridley Sea Turtle (T/E) -
Leatherback Sea Turtle (E) -
North Pacific Loggerhead Sea Turtle (E) -

ESA Whales

Blue Whale (E) -
Fin Whale (E) -
Humpback Whale (E) -
Southern Resident Killer Whale (E) -
North Pacific Right Whale (E) -
Sei Whale (E) -
Sperm Whale (E) -

ESA Pinnipeds

Guadalupe Fur Seal (T) -
Steller Sea Lion Critical Habitat -

Essential Fish Habitat

Coho EFH -
Chinook Salmon EFH - **X**
Groundfish EFH -
Coastal Pelagics EFH -
Highly Migratory Species EFH -

MMPA Species (See list at left)

ESA and MMPA Cetaceans/Pinnipeds

See list at left and consult the NMFS Long Beach office 562-980-4000

MMPA Cetaceans -
MMPA Pinnipeds -

Brittany Reaves
Associate Biologist/GIS Analyst I
Gallaway Enterprises
(530) 332-9909

From: NMFS SpeciesList - NOAA Service Account
To: Brittany Reaves
Subject: Federal ESA - - NOAA Fisheries Species List Re: 1010 Main Street Development Project
Date: Tuesday, July 19, 2022 5:20:06 PM

Please retain a copy of each email request that you send to NOAA at nmfs.wcrca.specieslist@noaa.gov as proof of your official Endangered Species Act SPECIES LIST. The email you send to NOAA should include the following information: your first and last name; email address; phone number; federal agency name (or delegated state agency such as Caltrans); mailing address; project title; brief description of the project; and a copy of a list of threatened or endangered species identified within specified geographic areas derived from the NOAA Fisheries, West Coast Region, California Species List Tool. You may only receive this instruction once per week. If you have questions, contact your local NOAA Fisheries liaison.

Selected Elements by Common Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Pleasant Grove (3812174) OR Roseville (3812173) OR Rocklin (3812172) OR Rio Linda (3812164) OR Citrus Heights (3812163) OR Folsom (3812162))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Alkali Meadow *Alkali Meadow*	CTT45310CA	None	None	G3	S2.1	
Alkali Seep *Alkali Seep*	CTT45320CA	None	None	G3	S2.1	
American badger *Taxidea taxus*	AMAJF04010	None	None	G5	S3	SSC
An andrenid bee *Andrena subapasta*	IIHYM35210	None	None	G1G2	S1S2	
bank swallow *Riparia riparia*	ABPAU08010	None	Threatened	G5	S2	
big-scale balsamroot *Balsamorhiza macrolepis*	PDAST11061	None	None	G2	S2	1B.2
Boggs Lake hedge-hyssop *Gratiola heterosepala*	PDSCR0R060	None	Endangered	G2	S2	1B.2
Brandegee's clarkia *Clarkia biloba ssp. brandegeeae*	PDONA05053	None	None	G4G5T4	S4	4.2
burrowing owl *Athene cunicularia*	ABNSB10010	None	None	G4	S3	SSC
California black rail *Laterallus jamaicensis coturniculus*	ABNME03041	None	Threatened	G3T1	S1	FP
California linderiella *Linderiella occidentalis*	ICBRA06010	None	None	G2G3	S2S3	
Cooper's hawk *Accipiter cooperii*	ABNKC12040	None	None	G5	S4	WL
double-crested cormorant *Nannopterum auritum*	ABNFD01020	None	None	G5	S4	WL
dwarf downingia *Downingia pusilla*	PDCAM060C0	None	None	GU	S2	2B.2
giant gartersnake *Thamnophis gigas*	ARADB36150	Threatened	Threatened	G2	S2	
grasshopper sparrow *Ammodramus savannarum*	ABPBXA0020	None	None	G5	S3	SSC
great blue heron *Ardea herodias*	ABNGA04010	None	None	G5	S4	
great egret *Ardea alba*	ABNGA04040	None	None	G5	S4	
hispid salty bird's-beak *Chloropyron molle ssp. hispidum*	PDSCR0J0D1	None	None	G2T1	S1	1B.1

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
legenere *Legenere limosa*	PDCAM0C010	None	None	G2	S2	1B.1
merlin *Falco columbarius*	ABNKD06030	None	None	G5	S3S4	WL
Northern Claypan Vernal Pool *Northern Claypan Vernal Pool*	CTT44120CA	None	None	G1	S1.1	
Northern Hardpan Vernal Pool *Northern Hardpan Vernal Pool*	CTT44110CA	None	None	G3	S3.1	
Northern Volcanic Mud Flow Vernal Pool *Northern Volcanic Mud Flow Vernal Pool*	CTT44132CA	None	None	G1	S1.1	
osprey *Pandion haliaetus*	ABNKC01010	None	None	G5	S4	WL
pallid bat *Antrozous pallidus*	AMACC10010	None	None	G4	S3	SSC
pincushion navarretia *Navarretia myersii ssp. myersii*	PDPLM0C0X1	None	None	G2T2	S2	1B.1
purple martin *Progne subis*	ABPAU01010	None	None	G5	S3	SSC
Red Bluff dwarf rush *Juncus leiospermus var. leiospermus*	PMJUN011L2	None	None	G2T2	S2	1B.1
Ricksecker's water scavenger beetle *Hydrochara rickseckeri*	IICOL5V010	None	None	G2?	S2?	
Sacramento Orcutt grass *Orcuttia viscida*	PMPOA4G070	Endangered	Endangered	G1	S1	1B.1
Sanford's arrowhead *Sagittaria sanfordii*	PMALI040Q0	None	None	G3	S3	1B.2
silver-haired bat *Lasionycteris noctivagans*	AMACC02010	None	None	G3G4	S3S4	
song sparrow ("Modesto" population) *Melospiza melodia pop. 1*	ABPBXA3013	None	None	G5T3?Q	S3?	SSC
steelhead - Central Valley DPS *Oncorhynchus mykiss irideus pop. 11*	AFCHA0209K	Threatened	None	G5T2Q	S2	
stinkbells *Fritillaria agrestis*	PMLIL0V010	None	None	G3	S3	4.2
Swainson's hawk *Buteo swainsoni*	ABNKC19070	None	Threatened	G5	S3	
tricolored blackbird *Agelaius tricolor*	ABPBXB0020	None	Threatened	G1G2	S1S2	SSC
valley elderberry longhorn beetle *Desmocerus californicus dimorphus*	IICOL48011	Threatened	None	G3T2T3	S3	
Valley Needlegrass Grassland *Valley Needlegrass Grassland*	CTT42110CA	None	None	G3	S3.1	

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
vernal pool fairy shrimp *Branchinecta lynchi*	ICBRA03030	Threatened	None	G3	S3	
vernal pool tadpole shrimp *Lepidurus packardi*	ICBRA10010	Endangered	None	G4	S3S4	
western pond turtle *Emys marmorata*	ARAAD02030	None	None	G3G4	S3	SSC
western ridged mussel *Gonidea angulata*	IMBIV19010	None	None	G3	S1S2	
western spadefoot *Spea hammondii*	AAABF02020	None	None	G2G3	S3	SSC
western yellow-billed cuckoo *Coccyzus americanus occidentalis*	ABNRB02022	Threatened	Endangered	G5T2T3	S1	
white-tailed kite *Elanus leucurus*	ABNKC06010	None	None	G5	S3S4	FP

Record Count: 47

Search Results

9 matches found. Click on scientific name for details

Search Criteria: CRPR is one of [**1A:1B:2A:2B**] , Quad is one of [**3812174:3812173:3812172:3812164:3812163:3812162**]

SCIENTIFIC NAME	▲ COMMON NAME	BLOOMING PERIOD	FED LIST	STATE LIST	CA RARE PLANT RANK
Balsamorhiza macrolepis	big-scale balsamroot	Mar-Jun	None	None	1B.2
Gratiola heterosepala	Boggs Lake hedge-hyssop	Apr-Aug	None	CE	1B.2
Downingia pusilla	dwarf downingia	Mar-May	None	None	2B.2
Chloropyron molle ssp. *hispidum*	hispid salty bird's-beak	Jun-Sep	None	None	1B.1
Legenere limosa	legenere	Apr-Jun	None	None	1B.1
Navarretia myersii ssp. *myersii*	pincushion navarretia	Apr-May	None	None	1B.1
Juncus leiospermus var. *leiospermus*	Red Bluff dwarf rush	Mar-Jun	None	None	1B.1
Orcuttia viscida	Sacramento Orcutt grass	Apr-Jul(Sep)	FE	CE	1B.1
Sagittaria sanfordii	Sanford's arrowhead	May-Oct(Nov)	None	None	1B.2

Showing 1 to 9 of 9 entries

Suggested Citation:

California Native Plant Society, Rare Plant Program. 2022. Rare Plant Inventory (online edition, v9-01 1.5). Website https://www.rareplants.cnps.org [accessed 15 July 2022].

Appendix B

Observed Species Lists

Plant Species Observed within the 1010 Main Street Roseville Property on April 13 and July 07, 2022	
Scientific Name	**Common Name**
Agave sp.	Agave
Avena fatua	Wild oats
Briza minor	Lesser quaking-grass
Bromus diandrus	Rip-gut brome
Bromus hordeaceus	Soft chess
Centaurea solstitialis	Yellow star thistle
Cichorium intybus	Chicory
Dichelostemma multiflorum	Round-toothed ookow
Elymus caput-medusae	Medusahead
Erodium botrys	Long-beaked stork's-bill
Festuca myuros	Rattail fescue
Festuca perennis	Rye-grass
Ficus carica	Wild fig
Galium aparine	Bedstraw
Geranium dissectum	Cut-leaved geranium
Hordeum marinum ssp. *gussoneanum*	Mediterranean barley
Hypochaeris glabra	Smooth cat's ear
Iris sp.	Iris
Juglans hindsii	Black walnut
Lactuca serriola	Prickly lettuce
Leontodon saxatilis	Hawkbit
Ligustrum lucidum	Privet
Malva neglecta	Common mallow
Medicago polymorpha	Common bur-clover
Morus alba	White mulberry
Opuntia sp.	Prickly pear cactus
Oxalis pes-caprae	Bermuda buttercup
Populus fremontii	Fremont's cottonwood
Prunus dulcis	Almond
Quercus lobata	Valley oak
Raphanus sativus	Radish
Rosa sp.	Wild rose
Rumex crispus	Curly dock
Sisymbrium officinale	Hedge mustard
Solanum sp.	Nightshade
Sonchus asper	Sow thistle
Torilis arvensis	Hedge parsley
Trifolium hirtum	Rose clover
Triteleia hyacinthina	Wild hyacinth
Vicia villosa	Winter vetch
Vitis sp.	Cultivated grape

Scientific Name	**Common Name**
Wildlife Species Observed within the 1010 Main Street BRA on June 13, 2022	
Scientific Name	**Common Name**
Aphelocoma californica	California Scrub-jay
Haemorhous mexicanus	House Finch
Streptopelia decaocto	Eurasian Collared-Dove

Appendix C

Project Site Photos

Project Site Photos

Taken July 7, 2022

Looking north toward oak woodland.

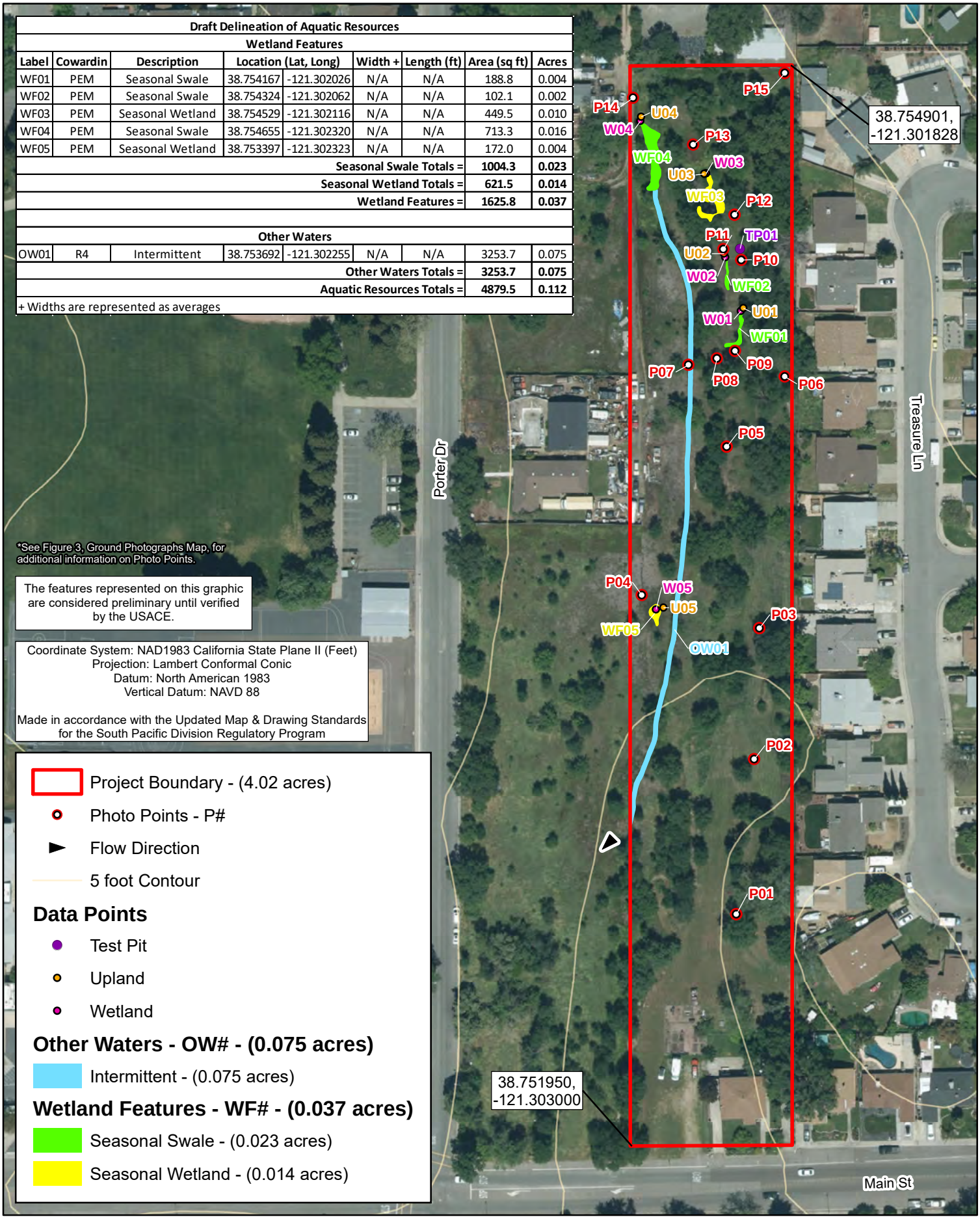
Looking south toward urban habitat.

Heavily vegetated intermittent drainage, looking north.

Looking south toward seasonal swale.

Appendix D

Draft Delineation of Aquatic Resources Map



NORTH

1:1,500 1 inch = 125 feet

0 50 100 Feet

Data Sources: ESRI, City of Roseville 04/22/2019, Placer County

1010 Main Street Development Project
Draft Delineation of Aquatic Resources
Figure 4

gallaway ENTERPRISES

GE: #22-100 Map Date: 07/26/2022

gallaway ENTERPRISES

117 Meyers Street • Suite 120 • Chico CA 95928 • 530-332-9909

April 17, 2023

Pat Laughlin
591 Colusa Avenue
Yuba City, CA 95991

Re: Arborist Report for the 1010 Main Street Development Project – Roseville, California.

As requested, Gallaway Enterprises conducted an Arborist Report for the approximately 4-acre 1010 Main Street Development Project (Project) site on April 12th and 13th, 2023. Please find enclosed a summary of the results of the inventory conducted.

Project Location and Environmental Setting

The Project site is located within the city limits of Roseville, California, and is positioned north of Main Street and east of Porter Drive. The site falls within the "Roseville" 7.5-minute United States Geological Survey (USGS) quadrangle, Section 34, Township 11N, Range 6E; latitude 38.75343, longitude -121.30204. The Project site is generally characterized as a disturbed urban environment surrounded by dense residential subdivisions and a school. The Project site contains scattered non-native trees interspersed within a valley oak (*Quercus lobata*) woodland with an understory of non-native annual grassland. An existing residential building with a yard is present in the southeastern corner of the Project site.

Regulatory Framework

The Project site is located within the City of Roseville and, therefore, requires compliance with the Roseville Municipal Code and Zoning Ordinance. Pursuant to Chapter 19.66 of the Roseville Zoning Ordinance, removal of any protected tree exceeding 6 inches in DBH requires a tree removal permit. A 'protected tree' is defined as any "native oak tree equal to or greater than six inches in diameter at breast height (DBH) measured as a total of a single trunk or multiple trunks." The provisions for tree removal are described in Section 19.66.040 of the Zoning Ordinance.

Survey Method

The tree inventory was conducted on April 12th and 13th, 2023 by ISA Certified Arborist Christopher Cummings (WE-13431A). The tree inventory was conducted only in accordance with the guidelines outlined in the City of Roseville Tree Preservation Ordinance (Chapter 19.66 of the Municipal Code). All trees present within the Project site that had any one trunk or multiple trunks totaling a DBH of 6 inches or greater were identified to the species level, assigned a number, the DBH was measured, and their locations recorded using a Trimble Geo Explorer 6000 Series GPS Receiver.

Gallaway Enterprises then conducted a health assessment for all of the protected trees. A level 2 basic visual assessment (per ISA's ANSI A300 Part 9 and companion BMP guidelines) of each tree was conducted from the ground by walking completely around the tree and looking at the growing site, trunk, trunk collar, and branches.

Following this visual assessment, each inventoried tree was assigned a health rating of 0 to 5, with 0 being a tree with poor health and 5 being a tree in excellent health. The ratings were based on the following standards:

Poor (0): These trees have a major defect that could result in instability of the tree or a portion of the tree failing that could be considered a hazard. The defect is typically extensive dead and/or decay.

Fair to Poor (1): These trees exhibit potential health detractors including substantial deadwood or decay in the branches, extensive suckering, and wounds, evidence of some decay or a cavity on the trunk.

Fair (2): These are generally sound trees but often have prominent leans, trunk elongation from competition with other trees, or general branching defects. Other potential health detractors include some deadwood or decay in the branches, suckering or overgrowth by vines.

Fair to Good (3): These are average trees; they are generally in good health and without prominent defects in their branching pattern and overall structure. These trees are not overgrown with vines (e.g. mistletoe, ivy, grape, blackberry).

Good (4): These trees are above average, with good branch form. The trees are not overcrowded or light-starved and have plenty of room to grow. These trees often look much like a "3" except they are larger, older, and better established in the tree stand.

Excellent (5): These trees are considered excellent in all aspects: form, branching, and structure.

Results of the Survey

The entire Project site was dominated by valley oak woodland, with an understory of annual grassland. Native valley oaks (*Quercus douglasii*) were the dominant tree in the tree canopy throughout the site. One interior live oak (*Quercus wislizeni*) was present along the northeastern perimeter of the Project site. Several other species of trees were observed including peach, mulberry, cottonwood, olive, pecan, plum and walnut. No riparian areas or riparian vegetation was observed within the Project site. The location of all the protected trees within the Project site is depicted in **Attachment A**. A total of 185 valley oaks and 1 interior live oak were inventoried within the Project site (**Attachment B**). The average DBH of the inventoried trees throughout the Project site is 12 inches and the average health of the trees inventoried was 1.

The low average health of the trees on the site was largely due to drought stress brought on by the consecutive extreme droughts that the region has experienced. The impacts of drought stress on the trees was more severe where the trees were crowded, and where other health concerns were present (e.g. cavities or decay in the trunk). Drought stress was evidenced by the above average amount of suckering and dead/broken branches.

A table listing each tree inventoried within the Project site and its assessed health rating is provided in **Attachment B**.

A level 2 basic visual assessment from ground level was conducted; however, visual signs of decline may not have been outwardly evident or evident from the ground surface. As such, the accuracy of the heath rating is limited by the visual appearance of the trees at the time of the survey. An Arborist's Disclaimer Statement is provided as **Attachment C**.

Limitations of the Survey

This Arborist Report and associated tree location map does not address the Roseville Municipal Code §19.66.40.2. (Tree Location) requirements which mandate that the exact location of protected tree trunk and dripline be conducted by a professional engineer or licensed land surveyor. Additionally, recommendations for each protected tree cannot be made due to the lack of information regarding grading activities and building siting.

Recommendations

It is recommended that as many healthy native tree species (trees with a health rating of 3 or greater, **Attachment B**) as feasible, based on the proposed Project goals, be retained within the Project site due to their aesthetics and usefulness to wildlife.

The removal of any City regulated trees (native oaks with a single trunk or multiple trunks totaling 6 inches or greater in DBH) on the Project site must be in compliance with the City's Municipal Code. City protected trees present within the Project site include the inventoried oak trees. If protected trees are proposed to be removed on the site, a tree removal permit will be required to be obtained from the City. Mitigation for removal of trees will be determined through consultation with the City.

If any of the trees present within the Project site are proposed for preservation, care should be taken to implement the avoidance and minimization measures outlined in Chapter 19.66.060 of the City's Municipal Code. If construction activities or soil compaction occur within the dripline of a tree proposed for preservation, these activities may harm the tree to the point of failure. Preserved trees in close proximity to structures or walkways should be regularly monitored by a qualified arborist following construction activities for signs of stress or failure and properly managed (e.g. pruning dead branches, ensuring appropriate water regime for the species).

This work was performed by an arborist and complies with the conditions of the discretionary project, the arborist report, the Tree Permit and this Zoning Ordinance. Should you have any questions or need any additional information, please do not hesitate to contact me at (530) 332-9909 or Kevin Sevier, Vice President of Gallaway Enterprises at kevin@gallawayenterprises.com.

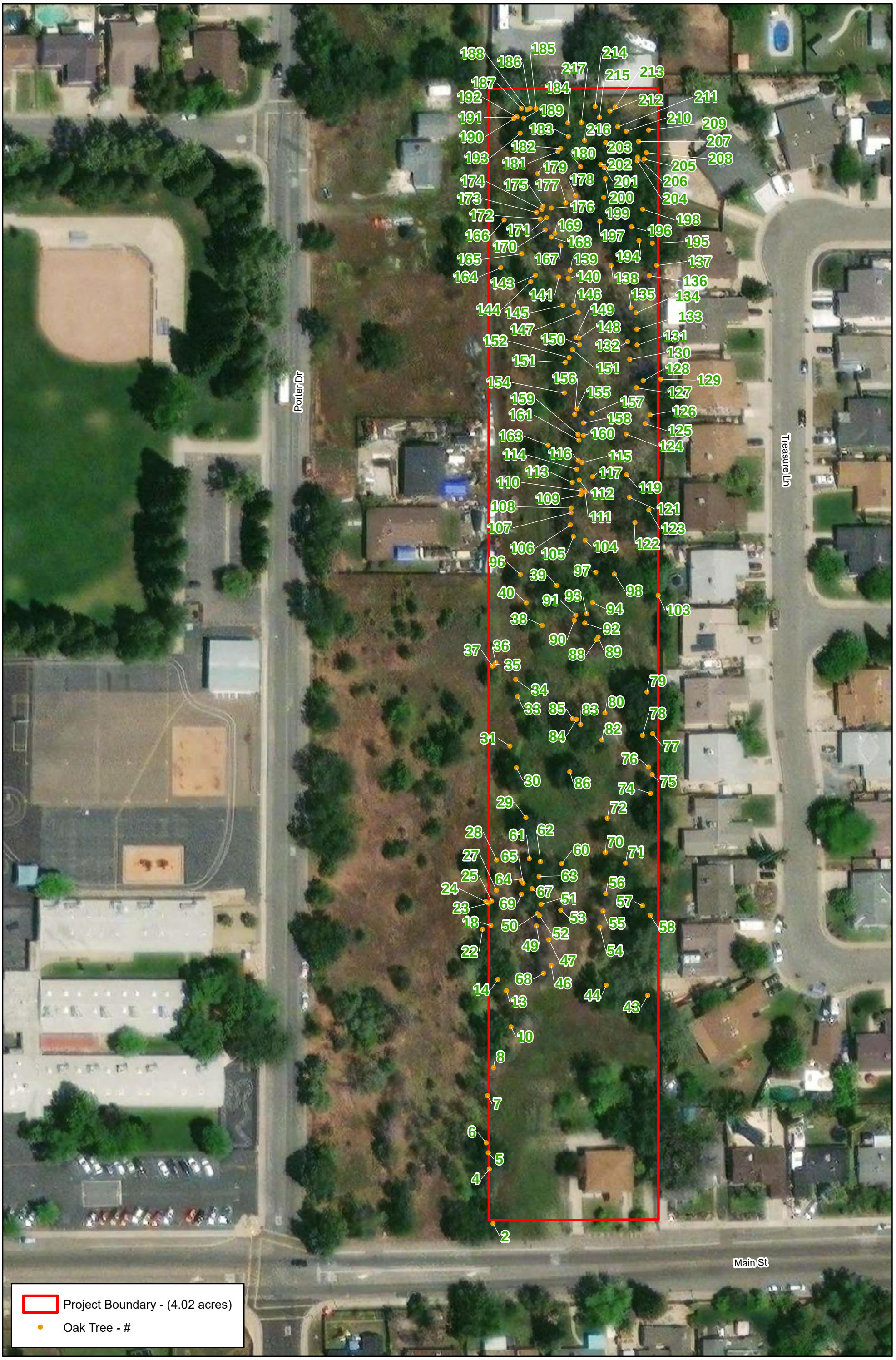
Sincerely,

Christopher Cummings
WE-13431A
Gallaway Enterprises

Attachment A: Tree Location Map
Attachment B: Tree Data Table
Attachment C: Arborist's Disclaimer

Attachment A

Tree Location Map



1:1,000
0 50 100 Feet
Data Sources: ESRI, City of Roseville
NORTH

1010 Main Street Roseville
Tree Location Map
Attachment A

gallaway ENTERPRISES

GE: #23-016 Map Date: 04/17/2023

Attachment B

Tree Data Table

1010 Main Street Roseville Arborist Report													
Tree #	Species	Scientific Name	Health Num	Health Desc	DBH 1	DBH 2	DBH 3	DBH 4	DBH 5	DBH 6	Total DBH	Protected	Comments
2	Valley Oak	Quercus lobata	3	Fair to good	13	17	0	0	0	0	30	Yes	near drainage
4	Valley Oak	Quercus lobata	0	Poor	15	0	0	0	0	0	15	Yes	dead, near drainage
5	Valley Oak	Quercus lobata	3	Fair to good	19	0	0	0	0	0	19	Yes	near drainage
6	Valley Oak	Quercus lobata	1	Fair to poor	6	0	0	0	0	0	6	Yes	near drainage
7	Valley Oak	Quercus lobata	2	Fair	10	0	0	0	0	0	10	Yes	near drainage
8	Valley Oak	Quercus lobata	0	Poor	12	0	0	0	0	0	12	Yes	dead, near drainage
10	Valley Oak	Quercus lobata	2	Fair	5	0	0	0	0	0	5	No	near drainage
13	Valley Oak	Quercus lobata	3	Fair to good	6	0	0	0	0	0	6	Yes	near drainage
14	Valley Oak	Quercus lobata	3	Fair to good	8	0	0	0	0	0	8	Yes	near drainage
18	Valley Oak	Quercus lobata	2	Fair	8	0	0	0	0	0	8	Yes	moderate dead branches and suckering
22	Valley Oak	Quercus lobata	1	Fair to poor	5	5	0	0	0	0	10	Yes	extensive decay and dead branches, near drainage
23	Valley Oak	Quercus lobata	1	Fair to poor	5	0	0	0	0	0	5	No	extensive decay and suckering , near drainage
24	Valley Oak	Quercus lobata	3	Fair to good	8	0	0	0	0	0	8	Yes	some suckering and crowded canopy, near drainage
25	Valley Oak	Quercus lobata	1	Fair to poor	4	0	0	0	0	0	4	No	dead branches and suckering, poor structure, near drainage
27	Valley Oak	Quercus lobata	3	Fair to good	7	0	0	0	0	0	7	Yes	few dead branches, near drainage
28	Valley Oak	Quercus lobata	3	Fair to good	7	0	0	0	0	0	7	Yes	near drainage
29	Valley Oak	Quercus lobata	4	Good	16	0	0	0	0	0	16	Yes	good structure, minor dead branches, near drainage
30	Valley Oak	Quercus lobata	3	Fair to good	16	0	0	0	0	0	16	Yes	mild dead branches, near drainage
31	Valley Oak	Quercus lobata	3	Fair to good	9	0	0	0	0	0	9	Yes	near drainage
33	Valley Oak	Quercus lobata	3	Fair to good	4	3	0	0	0	0	7	Yes	near drainage
34	Valley Oak	Quercus lobata	2	Fair	6	0	0	0	0	0	6	Yes	extensive gals, near drainage
35	Valley Oak	Quercus lobata	3	Fair to good	5	0	0	0	0	0	5	No	aprox 25ft from nearby drainage
36	Valley Oak	Quercus lobata	3	Fair to good	5	0	0	0	0	0	5	No	aprox 25ft from nearby drainage
37	Valley Oak	Quercus lobata	3	Fair to good	7	0	0	0	0	0	7	Yes	aprox 25ft from nearby drainage
38	Valley Oak	Quercus lobata	3	Fair to good	6	3	0	0	0	0	9	Yes	directly in nearby drainage
39	Valley Oak	Quercus lobata	3	Fair to good	21	0	0	0	0	0	21	Yes	mature, good structure, some die back, near drainage
40	Valley Oak	Quercus lobata	3	Fair to good	8	8	0	0	0	0	16	Yes	some dead branches, near drainage
43	Valley Oak	Quercus lobata	4	Good	21	0	0	0	0	0	21	Yes	well established, good structure, few dead branch
44	Valley Oak	Quercus lobata	4	Good	18	0	0	0	0	0	18	Yes	well established, few dead branches
46	Valley Oak	Quercus lobata	2	Fair	12	0	0	0	0	0	12	Yes	heavy die back and suckering
47	Valley Oak	Quercus lobata	0	Poor	12	0	0	0	0	0	12	Yes	whole tree is dead
49	Valley Oak	Quercus lobata	0	Poor	4	6	0	0	0	0	10	Yes	whole tree is dead
50	Valley Oak	Quercus lobata	0	Poor	4	0	0	0	0	0	4	No	whole tree is dead
51	Valley Oak	Quercus lobata	0	Poor	6	0	0	0	0	0	6	Yes	whole tree is dead
52	Valley Oak	Quercus lobata	0	Poor	9	8	0	0	0	0	17	Yes	severe decay and suckering
53	Valley Oak	Quercus lobata	3	Fair to good	10	0	0	0	0	0	10	Yes	some suckering, crowded canopy
54	Valley Oak	Quercus lobata	2	Fair	9	0	0	0	0	0	9	Yes	poor structure, moderate dead branches and suckers
55	Valley Oak	Quercus lobata	0	Poor	10	5	0	0	0	0	15	Yes	severe decay
56	Valley Oak	Quercus lobata	1	Fair to poor	8	5	0	0	0	0	13	Yes	poor structure, moderate dead branches and suckers
57	Valley Oak	Quercus lobata	3	Fair to good	16	0	0	0	0	0	16	Yes	well established, some dead branches, nest
58	Valley Oak	Quercus lobata	2	Fair	4	0	0	0	0	0	4	No	poor structure, stunted growth
60	Valley Oak	Quercus lobata	2	Fair	11	0	0	0	0	0	11	Yes	severe suckering, some dead branches
61	Valley Oak	Quercus lobata	1	Fair to poor	6	0	0	0	0	0	6	Yes	severe suckering and dead branches, poor structure
62	Valley Oak	Quercus lobata	3	Fair to good	15	0	0	0	0	0	15	Yes	moderate smaller dead branches, some suckering
63	Valley Oak	Quercus lobata	0	Poor	8	4	0	0	0	0	12	Yes	whole tree is dead
64	Valley Oak	Quercus lobata	0	Poor	6	0	0	0	0	0	6	Yes	whole tree is dead
65	Valley Oak	Quercus lobata	0	Poor	5	0	0	0	0	0	5	No	severe decay and suckering
67	Valley Oak	Quercus lobata	1	Fair to poor	9	0	0	0	0	0	9	Yes	moderate dead branches and suckering
68	Valley Oak	Quercus lobata	1	Fair to poor	12	0	0	0	0	0	12	Yes	significant decay and suckering
69	Valley Oak	Quercus lobata	0	Poor	5	0	0	0	0	0	5	No	whole tree is dead
70	Valley Oak	Quercus lobata	3	Fair to good	13	0	0	0	0	0	13	Yes	good structure, minor dead branches
71	Valley Oak	Quercus lobata	0	Poor	12	9	0	0	0	0	21	Yes	one stem is dead, other stem poor health
72	Valley Oak	Quercus lobata	3	Fair to good	8	8	0	0	0	0	16	Yes	good structure, minor dead branches
74	Valley Oak	Quercus lobata	3	Fair to good	3	3	2	0	0	0	8	Yes	good structure, some suckering
75	Valley Oak	Quercus lobata	3	Fair to good	3	3	0	0	0	0	6	Yes	some suckering, minor dead branches
76	Valley Oak	Quercus lobata	3	Fair to good	4	0	0	0	0	0	4	No	minor dead branches
77	Valley Oak	Quercus lobata	2	Fair	10	10	4	0	0	0	24	Yes	heavy suckering
78	Valley Oak	Quercus lobata	1	Fair to poor	3	2	0	0	0	0	5	No	poor structure
79	Valley Oak	Quercus lobata	3	Fair to good	23	0	0	0	0	0	23	Yes	mature, mild suckering
80	Valley Oak	Quercus lobata	0	Poor	11	15	0	0	0	0	26	Yes	whole tree is dead
82	Valley Oak	Quercus lobata	1	Fair to poor	7	0	0	0	0	0	7	Yes	poor structure, heavy suckering
83	Valley Oak	Quercus lobata	2	Fair	18	0	0	0	0	0	18	Yes	moderate dead branches and suckering
84	Valley Oak	Quercus lobata	0	Poor	7	0	0	0	0	0	7	Yes	severe decay and suckering
85	Valley Oak	Quercus lobata	0	Poor	16	0	0	0	0	0	16	Yes	whole tree is dead
86	Valley Oak	Quercus lobata	3	Fair to good	7	7	6	11	10	4	45	Yes	some suckering
88	Valley Oak	Quercus lobata	0	Poor	13	0	0	0	0	0	13	Yes	whole tree is dead
89	Valley Oak	Quercus lobata	2	Fair	8	13	0	0	0	0	21	Yes	severe suckering
90	Valley Oak	Quercus lobata	0	Poor	9	0	0	0	0	0	9	Yes	whole tree is dead
91	Valley Oak	Quercus lobata	0	Poor	5	0	0	0	0	0	5	No	whole tree is dead
92	Valley Oak	Quercus lobata	0	Poor	4	6	0	0	0	0	10	Yes	whole tree is dead
93	Valley Oak	Quercus lobata	0	Poor	5	0	0	0	0	0	5	No	whole tree is dead
94	Valley Oak	Quercus lobata	0	Poor	5	0	0	0	0	0	5	No	whole tree is dead
96	Valley Oak	Quercus lobata	2	Fair	9	0	0	0	0	0	9	Yes	moderate suckering and gals
97	Valley Oak	Quercus lobata	0	Poor	4	4	2	0	0	0	10	Yes	2 stems dead, other severe suckering
98	Valley Oak	Quercus lobata	1	Fair to poor	25	0	0	0	0	0	25	Yes	mature, severe suckering, moderate dead branches
103	Valley Oak	Quercus lobata	1	Fair to poor	5	4	0	0	0	0	9	Yes	extensive suckering, poor structure
104	Valley Oak	Quercus lobata	0	Poor	9	9	0	0	0	0	18	Yes	severe decay and suckering
105	Valley Oak	Quercus lobata	0	Poor	12	0	0	0	0	0	12	Yes	severe decay and suckering
106	Valley Oak	Quercus lobata	0	Poor	11	0	0	0	0	0	11	Yes	severe decay and suckering
107	Valley Oak	Quercus lobata	0	Poor	7	10	0	0	0	0	17	Yes	whole tree is dead
108	Valley Oak	Quercus lobata	0	Poor	7	7	0	0	0	0	14	Yes	severe decay and suckering
109	Valley Oak	Quercus lobata	1	Fair to poor	7	10	0	0	0	0	17	Yes	heavy suckering and dead branches
110	Valley Oak	Quercus lobata	0	Poor	5	0	0	0	0	0	5	No	whole tree is dead
111	Valley Oak	Quercus lobata	0	Poor	6	6	0	0	0	0	12	Yes	whole tree is dead
112	Valley Oak	Quercus lobata	0	Poor	7	0	0	0	0	0	7	Yes	whole tree is dead
113	Valley Oak	Quercus lobata	1	Fair to poor	10	0	0	0	0	0	10	Yes	severe suckering
114	Valley Oak	Quercus lobata	2	Fair	3	3	0	0	0	0	6	Yes	moderate suckering and dead branches
115	Valley Oak	Quercus lobata	0	Poor	5	0	0	0	0	0	5	No	whole tree is dead
116	Valley Oak	Quercus lobata	0	Poor	4	0	0	0	0	0	4	No	severe decay
117	Valley Oak	Quercus lobata	0	Poor	8	8	0	0	0	0	16	Yes	severe decay and suckering
119	Valley Oak	Quercus lobata	0	Poor	7	5	0	0	0	0	12	Yes	whole tree is dead
121	Valley Oak	Quercus lobata	1	Fair to poor	12	16	0	0	0	0	28	Yes	severe decay and suckering
122	Valley Oak	Quercus lobata	1	Fair to poor	15	11	0	0	0	0	26	Yes	severe decay and suckering
123	Valley Oak	Quercus lobata	2	Fair	17	0	0	0	0	0	17	Yes	moderate dead branches and suckering

124	Valley Oak	Quercus lobata	0	Poor	18	15	15	6	0	0	54	Yes	severe decay and suckering
125	Valley Oak	Quercus lobata	0	Poor	9	0	0	0	0	0	9	Yes	whole tree is dead
126	Valley Oak	Quercus lobata	2	Fair	6	0	0	0	0	0	6	Yes	moderate suckering some dead branches
127	Valley Oak	Quercus lobata	0	Poor	12	0	0	0	0	0	12	Yes	whole tree is dead
128	Valley Oak	Quercus lobata	0	Poor	15	0	0	0	0	0	15	Yes	whole tree is dead
129	Valley Oak	Quercus lobata	2	Fair	16	0	0	0	0	0	16	Yes	moderate dead branches and suckering, poor structu
130	Valley Oak	Quercus lobata	0	Poor	12	12	0	0	0	0	24	Yes	whole tree is dead
131	Valley Oak	Quercus lobata	0	Poor	9	0	0	0	0	0	9	Yes	whole tree is dead
132	Valley Oak	Quercus lobata	0	Poor	15	0	0	0	0	0	15	Yes	whole tree is dead
133	Valley Oak	Quercus lobata	1	Fair to poor	19	17	0	0	0	0	36	Yes	severe suckering, moderate dieback, old base wound
134	Valley Oak	Quercus lobata	0	Poor	9	8	0	0	0	0	17	Yes	whole tree is dead
135	Valley Oak	Quercus lobata	0	Poor	6	15	0	0	0	0	21	Yes	whole tree is dead
136	Interior Live Oak	Quercus wislizeni	2	Fair	7	5	0	0	0	0	12	Yes	moderate dead branches and suckering
137	Valley Oak	Quercus lobata	0	Poor	25	0	0	0	0	0	25	Yes	whole tree is dead
138	Valley Oak	Quercus lobata	1	Fair to poor	4	4	0	0	0	0	8	Yes	moderate dead branches and suckering
139	Valley Oak	Quercus lobata	0	Poor	3	3	2	0	0	0	8	Yes	whole tree is dead
140	Valley Oak	Quercus lobata	0	Poor	8	0	0	0	0	0	8	Yes	whole tree is dead
141	Valley Oak	Quercus lobata	0	Poor	6	0	0	0	0	0	6	Yes	whole tree is dead
143	Valley Oak	Quercus lobata	2	Fair	15	0	0	0	0	0	15	Yes	moderate dead branches and suckering
144	Valley Oak	Quercus lobata	2	Fair	6	0	0	0	0	0	6	Yes	moderate suckering , poor structure
145	Valley Oak	Quercus lobata	2	Fair	10	0	0	0	0	0	10	Yes	moderate suckering
146	Valley Oak	Quercus lobata	0	Poor	9	0	0	0	0	0	9	Yes	severe decay and suckering
147	Valley Oak	Quercus lobata	0	Poor	7	0	0	0	0	0	7	Yes	whole tree is dead
148	Valley Oak	Quercus lobata	0	Poor	10	0	0	0	0	0	10	Yes	severe decay and suckering
149	Valley Oak	Quercus lobata	1	Fair to poor	10	0	0	0	0	0	10	Yes	severe suckering, poor structure
150	Valley Oak	Quercus lobata	1	Fair to poor	6	0	0	0	0	0	6	Yes	severe suckering, poor structure
151	Valley Oak	Quercus lobata	1	Fair to poor	14	0	0	0	0	0	14	Yes	severe suckering, moderate dieback
152	Valley Oak	Quercus lobata	0	Poor	7	0	0	0	0	0	7	Yes	whole tree is dead
151	Valley Oak	Quercus lobata	1	Fair to poor	13	0	0	0	0	0	13	Yes	moderate dead branches, severe suckering
154	Valley Oak	Quercus lobata	2	Fair	10	0	0	0	0	0	10	Yes	heavy suckering
155	Valley Oak	Quercus lobata	0	Poor	6	0	0	0	0	0	6	Yes	whole tree is dead
156	Valley Oak	Quercus lobata	0	Poor	6	0	0	0	0	0	6	Yes	whole tree is dead
157	Valley Oak	Quercus lobata	0	Poor	23	0	0	0	0	0	23	Yes	whole tree is dead
158	Valley Oak	Quercus lobata	1	Fair to poor	7	0	0	0	0	0	7	Yes	severe suckering, poor structure
159	Valley Oak	Quercus lobata	0	Poor	6	0	0	0	0	0	6	Yes	whole tree is dead
160	Valley Oak	Quercus lobata	1	Fair to poor	8	0	0	0	0	0	8	Yes	severe suckering, poor structure
161	Valley Oak	Quercus lobata	1	Fair to poor	4	0	0	0	0	0	4	No	poor structure, moderate suckering
163	Valley Oak	Quercus lobata	3	Fair to good	11	0	0	0	0	0	11	Yes	crowded canopy
164	Valley Oak	Quercus lobata	3	Fair to good	5	5	4	0	0	0	14	Yes	few dead branches
165	Valley Oak	Quercus lobata	0	Poor	5	0	0	0	0	0	5	No	whole tree is dead
166	Valley Oak	Quercus lobata	3	Fair to good	10	0	0	0	0	0	10	Yes	some suckering
167	Valley Oak	Quercus lobata	0	Poor	18	10	0	0	0	0	28	Yes	severe decay and suckering
168	Valley Oak	Quercus lobata	0	Poor	8	0	0	0	0	0	8	Yes	whole tree is dead
169	Valley Oak	Quercus lobata	0	Poor	4	0	0	0	0	0	4	No	whole tree is dead
170	Valley Oak	Quercus lobata	0	Poor	5	0	0	0	0	0	5	No	suckering and decay
171	Valley Oak	Quercus lobata	0	Poor	5	0	0	0	0	0	5	No	whole tree is dead
172	Valley Oak	Quercus lobata	0	Poor	5	0	0	0	0	0	5	No	whole tree is dead
173	Valley Oak	Quercus lobata	0	Poor	7	0	0	0	0	0	7	Yes	whole tree is dead
174	Valley Oak	Quercus lobata	0	Poor	4	0	0	0	0	0	4	No	whole tree is dead
175	Valley Oak	Quercus lobata	0	Poor	8	5	0	0	0	0	13	Yes	whole tree is dead
176	Valley Oak	Quercus lobata	0	Poor	6	0	0	0	0	0	6	Yes	whole tree is dead
177	Valley Oak	Quercus lobata	1	Fair to poor	6	0	0	0	0	0	6	Yes	severe suckering, moderate dead branches
178	Valley Oak	Quercus lobata	0	Poor	5	0	0	0	0	0	5	No	whole tree is dead
179	Valley Oak	Quercus lobata	0	Poor	11	0	0	0	0	0	11	Yes	whole tree is dead
180	Valley Oak	Quercus lobata	1	Fair to poor	4	0	0	0	0	0	4	No	moderate dead branches and suckering
181	Valley Oak	Quercus lobata	0	Poor	7	0	0	0	0	0	7	Yes	severe decay
182	Valley Oak	Quercus lobata	1	Fair to poor	6	5	0	0	0	0	11	Yes	severe suckering, poor structure
183	Valley Oak	Quercus lobata	1	Fair to poor	8	0	0	0	0	0	8	Yes	severe suckering, poor structure
184	Valley Oak	Quercus lobata	1	Fair to poor	15	0	0	0	0	0	15	Yes	severe suckering moderate dead branches
185	Valley Oak	Quercus lobata	2	Fair	6	0	0	0	0	0	6	Yes	heavy suckering
186	Valley Oak	Quercus lobata	1	Fair to poor	6	0	0	0	0	0	6	Yes	moderate dead branches and suckering
187	Valley Oak	Quercus lobata	2	Fair	5	0	0	0	0	0	5	No	poor structure, some suckering
188	Valley Oak	Quercus lobata	2	Fair	5	0	0	0	0	0	5	No	poor structure, some suckering
189	Valley Oak	Quercus lobata	1	Fair to poor	5	0	0	0	0	0	5	No	poor structure, moderate dead branches
190	Valley Oak	Quercus lobata	1	Fair to poor	4	0	0	0	0	0	4	No	heavy suckering, poor structure
191	Valley Oak	Quercus lobata	1	Fair to poor	6	0	0	0	0	0	6	Yes	heavy suckering, poor structure
192	Valley Oak	Quercus lobata	1	Fair to poor	4	0	0	0	0	0	4	No	heavy suckering
193	Valley Oak	Quercus lobata	2	Fair	9	7	0	0	0	0	16	Yes	moderate suckering
194	Valley Oak	Quercus lobata	2	Fair	15	0	0	0	0	0	15	Yes	heavy suckering and dead branches
195	Valley Oak	Quercus lobata	2	Fair	17	15	0	0	0	0	32	Yes	heavy suckering moderate dieback
196	Valley Oak	Quercus lobata	2	Fair	12	0	0	0	0	0	12	Yes	moderate dead branches and suckering
197	Valley Oak	Quercus lobata	2	Fair	16	0	0	0	0	0	16	Yes	moderate dead branches and suckering
198	Valley Oak	Quercus lobata	3	Fair to good	21	0	0	0	0	0	21	Yes	some dead branches
199	Valley Oak	Quercus lobata	3	Fair to good	8	5	0	0	0	0	13	Yes	some dead branches
200	Valley Oak	Quercus lobata	2	Fair	8	11	0	0	0	0	19	Yes	moderate dead branches and suckering
201	Valley Oak	Quercus lobata	2	Fair	10	0	0	0	0	0	10	Yes	heavy suckering, poor structure
202	Valley Oak	Quercus lobata	2	Fair	6	0	0	0	0	0	6	Yes	heavy suckering, poor structure
203	Valley Oak	Quercus lobata	3	Fair to good	8	0	0	0	0	0	8	Yes	some suckering
204	Valley Oak	Quercus lobata	3	Fair to good	16	0	0	0	0	0	16	Yes	some suckering and dead branches
205	Valley Oak	Quercus lobata	2	Fair	10	0	0	0	0	0	10	Yes	heavy suckering and poor structure
206	Valley Oak	Quercus lobata	2	Fair	25	0	0	0	0	0	25	Yes	matter, moderate dead branches
207	Valley Oak	Quercus lobata	0	Poor	5	0	0	0	0	0	5	No	whole tree is dead
208	Valley Oak	Quercus lobata	3	Fair to good	4	0	0	0	0	0	4	No	some dead branches, crowded canopy
209	Valley Oak	Quercus lobata	3	Fair to good	12	0	0	0	0	0	12	Yes	some dead branches
210	Valley Oak	Quercus lobata	2	Fair	6	0	0	0	0	0	6	Yes	heavy suckering poor structure
211	Valley Oak	Quercus lobata	2	Fair	7	6	0	0	0	0	13	Yes	heavy suckering and poor structure
212	Valley Oak	Quercus lobata	2	Fair	5	0	0	0	0	0	5	No	heavy suckering and poor structure
213	Valley Oak	Quercus lobata	0	Poor	9	0	0	0	0	0	9	Yes	whole tree is dead
214	Valley Oak	Quercus lobata	2	Fair	11	6	0	0	0	0	17	Yes	moderate dead branches annd suckering
215	Valley Oak	Quercus lobata	2	Fair	3	5	6	0	0	0	14	Yes	heavy suckering and some dead branches
216	Valley Oak	Quercus lobata	3	Fair to good	4	0	0	0	0	0	4	No	some dead branches, crowded canopy
217	Valley Oak	Quercus lobata	2	Fair	4	0	0	0	0	0	4	No	heavy suckering

Attachment C

Arborist's Disclaimer

Arborist Disclaimer Statement

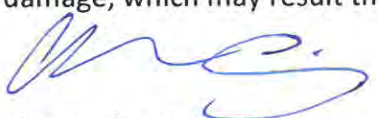
Arborists are tree specialists who use their education, knowledge, training, experience, and research to examine trees and woodlands. Arborists recommend measures to enhance the beauty and health of trees and forests, while attempting to reduce the risk of living near them. Clients may choose to accept or disregard the recommendations of the arborist, or to seek additional advice.

Arborists cannot detect every condition that could possibly lead to the structural failure of a tree. Trees are living organisms subject to attack by disease, insects, fungi and other forces of nature. There are some inherent risks with trees that cannot be predicted with any degree of certainty, even by a skilled and experienced arborist. Arborists cannot predict acts of nature including, without limitation, storms of sufficient strength, which can cause even a healthy tree to fail. Any entity who develops land and builds structures with a tree in the vicinity should be aware and inform future residents of the risks of living with trees and this arborists disclaimer.

Arborists cannot guarantee that a tree will be healthy or safe under all circumstances, or for a specified period of time. Likewise, remedial treatments cannot be guaranteed 100%.

Treatment, pruning, and removal of trees may involve considerations beyond the scope of the arborist's services, such as property boundaries, property ownership, disputes between neighbors and other issues. Consulting arborists cannot take such considerations into account unless complete and accurate information is disclosed to the arborist by the client.

The basic tree health assessment conducted herein does not constitute a tree risk assessment. Neither this author nor Gallaway Enterprises has assumed any responsibility for liability associated with the trees on or adjacent to this project site, their future demise and/or any damage, which may result therefrom. To live near trees is to accept some degree of risk.



Christopher Cummings
ISA Certified Arborist WE-13431A