

ATTACHMENT C



EL MACERO COUNTRY CLUB GENERAL PLAN AMENDMENT PROJECT INITIAL STUDY/NEGATIVE DECLARATION

Lead Agency:

County of Yolo
Department of Community Services
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ACRONYMS AND ABBREVIATIONS

AB	Assembly Bill
ADU	Accessory Dwelling Unit
AMM	Avoidance and Minimization Measure
APN	Assessor Parcel Number
BMP	best management practice
BRA	Biological Resources Assessment
CAAP	Climate Action and Adaptation Plan
CalEEMod	California Emissions Estimator Model
CAL FIRE	California Department of Forestry and Fire Protection
Caltrans	California Department of Transportation
CAP	Climate Action Plan
CARB	California Air Resources Board
CBC	California Building Code
CBSC	California Building Standards Code
CCA	community choice aggregation
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CGS	California Geological Survey
CHRIS	California Historical Resources Information System
CH ₄	methane
CNEL	Community Noise Equivalent Level
CO	carbon monoxide
CO ₂	carbon dioxide
CO ₂ e	carbon dioxide equivalent
CRHR	California Register of Historical Resources
CSA	El Macero County Service Area
dB	decibels
dBA	A-weighted decibels
DOC	California Department of Conservation
DPM	diesel particulate matter
DTSC	California Department of Toxic Substances Control
EIR	Environmental Impact Report
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FIRM	Flood Insurance Rate Map

FMMP.....	Farmland Mapping and Monitoring Program
FTA	Federal Transit Administration
GHG	greenhouse gas
GPA.....	General Plan Amendment
HCP.....	Habitat Conservation Plan
HVAC	heating, ventilation, and air conditioning
IBC	International Building Code
IS.....	Initial Study
ITE.....	Institute of Transportation Engineers
LOS	level of service
MMRP	Mitigation Monitoring and Reporting Program
MND	Mitigated Negative Declaration
MT	metric tons
N ₂ O	nitrous oxide
NCPP.....	Natural Community Conservation Plan
ND	Negative Declaration
NHPA	National Historic Preservation Act
NO _x	nitrogen oxides
NO ₂	nitrogen dioxide
NPDES.....	National Pollutant Discharge Elimination System
NRCS.....	Natural Resources Conservation Service
NWIC	Northwest Information Center
OPR.....	California Governor’s Office of Planning and Research
PD-66.....	Planned Development No. 66
PG&E	Pacific Gas & Electric Company
PM _{2.5}	particulate matter less than 2.5 microns
PM ₁₀	particulate matter less than 10 microns
PR	Parks and Recreation
PRC	Public Resource Code
RL.....	Low Density Residential
ROG	reactive organic gases
RPS	Renewable Portfolio Standards
SB	Senate Bill
SHMA	Seismic Hazards Mapping Act
SMAQMD	Sacramento Metropolitan Air Quality Management District
SO ₂	sulfur dioxide
SRA	State Responsibility Area
SVAB.....	Sacramento Valley Air Basin
SWPPP	Stormwater Pollution Prevention Plan
SWRCB.....	State Water Resources Control Board
TAC.....	toxic air contaminants
TCR	tribal cultural resource

TPM Tentative Parcel Map
UAIC United Auburn Indian Community
USDA U.S. Department of Agriculture
USEPA..... U.S. Environmental Protection Agency
USGS..... U.S. Geological Survey
VCE Valley Clean Energy
VHFHSZ..... very high fire hazard severity zone
VMT vehicle miles traveled
YDWN..... Yocha Dehe Wintun Nation
YSAQMD..... Yolo-Solano Air Quality Management District

Section 1 | Introduction

1.1 PROJECT SUMMARY

Project Title:	El Macero Country Club General Plan Amendment Project
Lead Agency Name and Address:	County of Yolo Department of Community Services 292 W Beamer St Woodland, CA 95695
Contact and Phone Number:	Tracy Gonzalez, Associate Planner, County of Yolo, Tracy.Gonzalez@yolocounty.gov, (530) 666-8803
Project Location:	El Macero Country Club Golf Course, El Macero, CA 95618 (a portion of APN 068-130-010)
Project Sponsor’s Name and Address:	El Macero Country Club 44571 Clubhouse Drive El Macero, CA 95618 Chris Johnson, General Manager Chris.johnson@troon.com
General Plan Designation:	Parks and Recreation (PR)
Zoning:	Parks and Recreation (P-R)
Description of the Project:	<p>The Project is a request from the El Macero Country Club to create three new residential parcels from a portion of the approximately 170-acre El Macero golf course parcel (APN 068-130-010) totaling approximately 0.97 acres within the established El Macero community in unincorporated Yolo County. To facilitate the expansion of residential uses and future development of the three parcels, the Project requires the following discretionary approvals:</p> <ul style="list-style-type: none">• General Plan Amendment (GPA) to redesignate approximately 0.97 acres of the golf course property from Parks and Recreation (PR) to Residential Low (RL);• Rezone from Parks and Recreation (P-R) to Low Density Residential with Planned Development No. 66 (R-L/PD-66);• Approval of a Tentative Parcel Map (TPM) to create three residential parcels ranging in size from 12,927 square feet to 15,412 square feet from the existing golf course parcel; and• A Variance to allow a reduced front yard setback from 35 feet to 30 feet for proposed Lots 2 and 3. <p>The remaining approximately 169 acres of the golf course property would retain the existing Parks and Recreation (PR) General Plan land use designation and P-R zoning. The Project is described further in Section 2.2.</p>

Surrounding Land Uses and Setting:	The three proposed parcels that make up the Project Site are surrounded by recreational use (golf course), single-family residences, and roadways (Clubhouse Drive and Country Club Drive).
Other Public Agencies Whose Approval may be Required:	Project shall comply with all permitting requirements from the Yolo County Building Division, Public Works Division, and Environmental Health Division.
Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance impacts to tribal cultural resources, procedures regarding confidentiality, etc.?	<p>On December 12, 2025, Yolo County Department of Community Services notified tribes requesting Assembly Bill (AB) 52 notification and Senate Bill (SB) 18 notification for projects subject to CEQA. During tribal consultation, two responses were received. The United Auburn Indian Community declined consultation on December 19, 2025, and the Yocha Dehe Wintun Nation requested consultation on January 15, 2026.</p> <p>Through consultation via virtual meeting held on February 4, 2026, the Yocha Dehe Wintun Nation provided a cultural sensitivity training agreement and a <i>Treatment Protocol for Handling Human Remains and Cultural Items Affiliated with the Yocha Dehe Wintun Nation</i>, which will be incorporated into the Project and implemented as a condition of approval.</p>

1.2 REGULATORY BACKGROUND

This document evaluates the potential environmental impacts of the El Macero Country Club General Plan Amendment Project (Project) in accordance with the California Environmental Quality Act (CEQA) (Public Resources Code [PRC] §21000 et seq.), and the State CEQA Guidelines (Title 14 California Code of Regulations §15000 et seq). This Initial Study (IS) was prepared by the County of Yolo (County) to determine if the Project could result in significant impacts on the environment. In accordance with CEQA Guidelines §15064(a), an Environmental Impact Report (EIR) must be prepared if there is substantial evidence that a project may result in significant impacts on the environment. If the lead agency for the CEQA process determines that there is no substantial evidence for such impacts, or if potential impacts can be reduced through revisions to the project description or the addition of mitigation measures, a Negative Declaration (ND) or Mitigated Negative Declaration (MND) can be prepared (CEQA Guidelines §15070). The County, as the CEQA lead agency for the Project, has determined that an IS/ND is the appropriate document for compliance with CEQA and the CEQA Guidelines.

1.3 PUBLIC REVIEW

In accordance with CEQA Guidelines §15073, this document will be circulated to local, State, and federal agencies, as well as to interested organizations and individuals who may wish to review and comment on it. In reviewing this document, affected public agencies and the interested public should focus on whether the document sufficiently identifies and analyzes potential impacts on the environment. Following the public review period, the County will review and evaluate the evidence contained in this document and public comments received, may prepare a Statement of Findings prepared for the Project, and may issue an approval of the Project.

1.4 SUMMARY OF FINDINGS

Section 4 of this document contains the analysis and discussion of potential environmental impacts resulting from implementation of the Project.

Based on the resource areas evaluated, it was determined that the Project would have no impact on the following: Agriculture and Forestry Resources, Mineral Resources, Wildfire.

Impacts of the Project were determined to be less than significant for the following resource areas: Aesthetics, Air Quality, Biological Resources, Cultural Resources, Energy, Geology and Soils, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Hydrology and Water Quality, Land Use and Planning, Noise, Population and Housing, Public Services, Recreation, Transportation, Tribal Cultural Resources, and Utilities and Service Systems.

No resource areas would require mitigation measures to reduce impacts to less-than-significant levels. Therefore, a Mitigation Monitoring and Reporting Program (MMRP) would not be required.

1.5 DOCUMENT ORGANIZATION

This document is organized in the following manner:

- **Section 1 – Introduction.** This section provides a project overview and regulatory background and describes the public review process and organization of this document.
- **Section 2 – Project Description.** This section describes the project location, project components, alternatives considered, and potential construction details associated with implementation of the Project.
- **Section 3 – Determination.** This section identifies the environmental factors considered in the analyses contained in this Initial Study and includes the Lead Agency’s determination.
- **Section 4 – Evaluation of Environmental Impacts.** This section describes the environmental setting relevant to the Project and analyzes the potential environmental impacts of the Project. Resource topics appear in the order they appear in Appendix G (Environmental Checklist) of the CEQA Guidelines. Mandatory Findings of Significance are also presented in this section.
- **Section 5 – List of Preparers.** This section contains a list of individuals that assisted in the preparation of this document.
- **Section 6 – References.** This section identifies the sources used in the preparation of this document.

Section 2 | Project Description

2.1 PROJECT LOCATION

The Project includes the creation of three new residential parcels within the El Macero Country Club golf course (Project Site), currently identified as a portion of Assessor’s Parcel Number (APN) 068-130-010. El Macero is an established community within unincorporated Yolo County, California (**Figures 1 and 2**). The El Macero Country Club is a private, member-owned club which features an 18-hole golf course with residential development surrounding the approximately 170-acre course. One of the proposed residential parcels is located in the southwest portion of the golf course parcel along Clubhouse Drive (Lot 1), while the other two proposed residential parcels are located in the northeastern portion of the golf course parcel, along Country Club Drive (Lots 2 and 3; **Figure 3**).

Regional access to the Project Site is provided via Interstate 80, which is located approximately 0.6 miles north of the Project Site. The golf course parcel is generally bound by N El Macero Drive to the north, E El Macero Drive to the east, S El Macero Drive to the south, and Mace Boulevard to the west. Local access to the three proposed parcels is provided from Clubhouse Drive (Lot 1) and Country Club Drive (Lots 2 and 3). The three proposed parcels are surrounded by recreational use (golf course), single-family residences, and roadways. The Project Site is located within a portion of Section 7 and 18 of Township 8 North, Range 3 East of the Mount Diablo Base and Meridian, within the “Davis” United States Geological Survey 7.5-minute quadrangle.

2.2 PROJECT COMPONENTS

The Project would create three new residential parcels from a portion of the approximately 170-acre El Macero golf course parcel (APN 068-130-010) totaling approximately 0.97 acres. Respectively, the three new parcels would be approximately 12,927 square feet (Lot 1), 15,412 square feet (Lot 2), and 13,741 square feet (Lot 3) as shown in **Figure 4**.

To facilitate the creation and future residential development of the three parcels, the Project requires the following discretionary approvals:

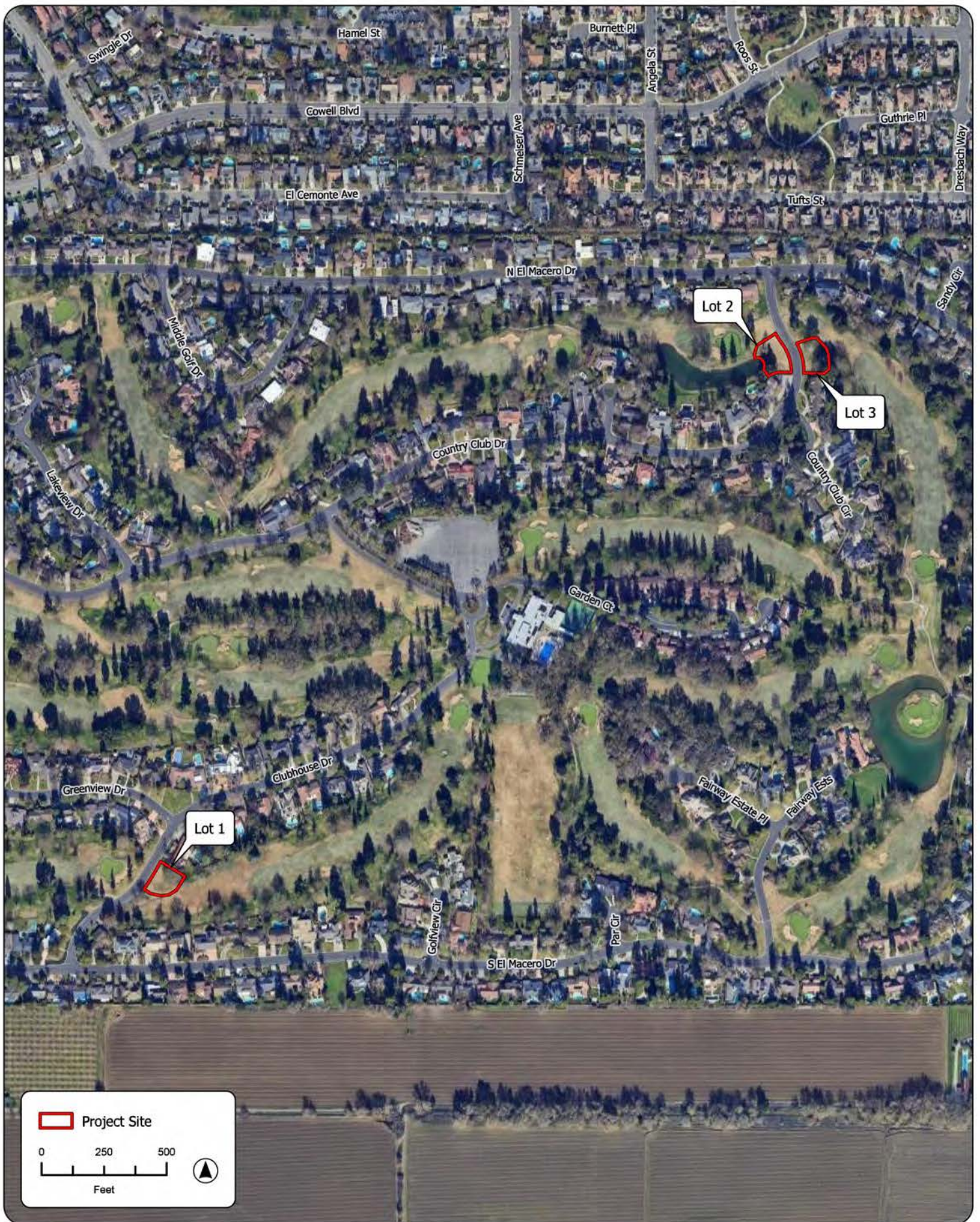
- General Plan Amendment (GPA) to redesignate approximately 0.97 acres of the golf course property from Parks and Recreation (PR) to Residential Low (RL);
- Rezone from Parks and Recreation (P-R) to Low Density Residential with Planned Development No. 66 (R-L/PD-66);
- Approval of a Tentative Parcel Map (TPM) to create three residential parcels from a portion of the existing golf course parcel; and
- A Variance to allow a reduced front yard setback from 35 feet to 30 feet for proposed Lots 2 and 3.

The remaining approximately 169 acres of the golf course parcel would retain its existing PR General Plan land use designation and P-R zoning.



SOURCE: ESRI, 2026; Acorn Environmental, 3/2/2026

Figure 1
Regional Location



SOURCE: ESRI, 2026; Google Earth Aerial Photograph, 1/7/2024; Cunningham Engineering, 2026; Acorn Environmental, 3/2/2026

Figure 2
Site and Vicinity



SOURCE: ESRI, 2026; Google Earth Aerial Photograph, 1/7/2024; Cunningham Engineering, 2026; Acorn Environmental, 3/2/2026



Figure 3
Aerial Overview

The Project does not include construction of residences at this time; however, the request for a general plan amendment and rezone to create three new residential parcels would allow for the future expansion of residential uses consistent with applicable development standards. Future residential development would require building permits and extension of utility services consistent with County and service provider requirements. The environmental analysis in this Initial Study assumes the future development of two single-family residences and one Accessory Dwelling Unit (ADU) on each new parcel, as allowed under the R-L/PD-66 zoning regulations, for a total of 9 residences, which would be an indirect result of the Project. ADUs are mandated by State law to be permitted ministerially (through non-discretionary approvals) and are generally exempt from CEQA. However, the impacts associated with future construction of ADUs on each of the three new parcels would be considered negligible with the implementation of Yolo County standard development requirements, including compliance with building and fire code regulations.

Water and sewer service for El Macero is provided by the El Macero County Service Area (CSA), which contracts with the City of Davis for services. Service extension would be coordinated by the future parcel owners to accommodate development. Water service for all proposed parcels, and wastewater service for Lots 2 and 3 would be extended from the fronting roadways. Lot 1 would require an approximately 169-foot extension of an existing sewer main from the intersection of El Macero Drive and Clubhouse Drive. Storm drain facilities with adequate capacity currently exist within the fronting roadways and no upgrades are anticipated.

Implementation of the Project would require limited physical modifications, including removal of approximately 10 feet of existing golf cart path in the vicinity of proposed Lot 1 and replacement with turf. In addition, irrigation lines serving the golf course would be rerouted to accommodate the proposed parcel boundaries. A 15-foot access easement would be established on Lot 2 adjacent to the existing golf course pond to allow for ongoing golf course maintenance access. The Project would not require relocation of tee boxes or greens and would not substantially alter golf course playability.

2.3 CONSTRUCTION

Future residential construction would involve typical residential construction activities, including minor grading, trenching for utilities, paving, tree removal, and building construction. Construction activities would be temporary and would comply with applicable County regulations and standard construction best management practices.

2.4 PROJECT COMMITMENTS

The following commitments have been incorporated into the Project design or will be implemented as conditions of approval to avoid or minimize potential environmental impacts associated with the Project and future residential development.

2.4.1 Cultural and Tribal Cultural Resources

As a condition of Project approval, all personnel involved in ground-disturbing activities associated with future development of the parcels shall complete cultural sensitivity training prior to the initiation of construction activities. The training will be conducted consistent with the cultural sensitivity training agreement provided by the Yocha Dehe Wintun Nation.

In addition, inadvertent discovery protocols will be implemented during ground-disturbing activities. In the event that previously unknown cultural resources, human remains, or cultural items are encountered during construction, work in the vicinity of the discovery shall cease and appropriate procedures consistent with State law and *Treatment Protocol for Handling Human Remains and Cultural Items Affiliated with the Yocha Dehe Wintun Nation*, as provided by the Yocha Dehe Wintun Nation, shall be followed (**Appendix A**).

2.4.2 Yolo Habitat Conservation Plan/Natural Community Conservation Plan Avoidance and Minimization Measures

The Project is covered under the Yolo Habitat Conservation Plan/Natural Community Conservation Plan (Yolo HCP/NCCP). The following Avoidance and Minimization Measures (AMMs) have been incorporated into the Project's conditions of approval and will be implemented as a condition of Yolo HCP/NCCP permitting. A copy of the submitted application package is included in **Appendix B**. The Yolo Habitat Conservancy has indicated that AMM 14 related to western pond turtle will not be required (Yolo Habitat Conservation Agency, 2026).

AMM 1: Establish Buffers, AMM 2: Design Developments to Minimize Indirect Effects at Urban-Habitat Interfaces, and AMM 9: Establish Buffers around Sensitive Natural Communities. There are no sensitive natural communities or aquatic features within the Project area but there is a golf course pond (lacustrine land cover) immediately adjacent to Lot 2 of the Project (west of Country Club Drive). This pond consists of a constructed and maintained golf course water hazard and does not provide habitat for Yolo HCP/NCCP Covered Species. The Project has been designed with a 25-foot no development buffer around undeveloped areas surrounding the pond to minimize potential indirect effects to the feature per Yolo HCP/NCCP requirements.

AMM 3: Confine and Delineate Work Area. Prior to construction, orange construction fencing will be installed along the boundaries of the work area in all land cover types except Urban and Vegetated Corridor. During the Worker Awareness Training (see AMM 6, below), it will be made clear that no construction vehicles, equipment, or personnel will cross the orange construction fencing.

AMM 4: Cover Trenches and Holes during Construction and Maintenance. Workers will cover open trenches and holes associated with construction activities. The construction contractor will inspect open trenches and holes prior to filling and contact a qualified biologist to remove or release any trapped wildlife found in the trenches or holes.

AMM 5: Control Fugitive Dust. Workers will minimize the spread of dust from work sites to natural communities or covered species habitats on adjacent lands.

AMM 6: Conduct Worker Training. A worker awareness training program will be developed that specifically targets the special-status species with potential to occur on the Project Site (including Yolo HCP/NCCP Covered Species) and detailing the Project permits. This training program will be submitted to the Yolo Habitat Conservancy (Conservancy) for approval at least 1 week prior to the planned training date. Following Conservancy approval (or if no response is received in that week), the worker awareness training will be administered by a Yolo HCP/NCCP qualified biologist to all construction personnel working on the Project. All personnel working on the Project will receive this training until site grading is complete.

AMM 7: Control Nighttime Lighting of Project Construction Sites. Workers will direct all lights for nighttime lighting of Project construction sites into the project construction area and minimize the lighting of natural habitat areas adjacent to the Project construction area.

AMM 8: Avoid and Minimize Effects of Construction Staging Areas and Temporary Work Areas. The staging area for the Project will be within the permanent impact portion of the Project footprint, or in other adjacent developed areas or areas under construction.

AMM 10: Avoid and Minimize Effects on Wetlands and Waters. The Project will comply with stormwater management plans that regulate development as part of compliance with regulations under National Pollutant Discharge Elimination System (NPDES) permit requirements. Covered activities will not result in any fill of waters or wetlands regulated under Section 404 of the Clean Water Act, State Water Resources Control Board (State Board), Fish and Game Code Section 1602, or Regional Board regulations.

AMM 16: Minimize Take and Adverse Effects on Habitat of Swainson's Hawk and White-Tailed Kite. Numerous potential nest trees for Swainson's hawk and white-tailed kite are present within 1,320 feet of the Project Site. Therefore, if construction commences between March 15 and August 30, the project proponent will retain a qualified biologist to conduct preconstruction surveys for active Swainson's hawk and white-tailed kite nests within 15 days prior to the beginning of the construction activity. Surveys will be conducted consistent with the guidelines provided by the Swainson's Hawk Technical Advisory Committee (2000). The results of the survey will be submitted to the Conservancy and California Department of Fish and Wildlife (CDFW).

If active nests are found during preconstruction surveys, a 1,320-foot initial temporary nest disturbance buffer shall be established. If project related activities within the temporary nest disturbance buffer are determined to be necessary during the nesting season, then the qualified biologist will monitor the nest and will, along with the project proponent, consult with CDFW to determine the best course of action necessary to avoid nest abandonment or take of individuals. Work may be allowed only to proceed within the temporary nest disturbance buffer if Swainson's hawk or white-tailed kite are not exhibiting agitated behavior, such as defensive flights at intruders, getting up from a brooding position, or flying off the nest, and only with the agreement of CDFW. The designated on-site biologist/monitor shall be on-site daily while construction-related activities are taking place within the 1,320-foot buffer and shall have the authority to stop work if raptors are exhibiting agitated behavior. No active nest tree pruning or removal will occur during the period between March 1 and August 30, unless a qualified biologist determines that the young have fledged and the nest is no longer active.

Section 3 | Determination

3.1 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

All environmental factors listed below were evaluated in this Initial Study. As discussed in the analysis in **Section 4**, the Project would not result in any potentially significant environmental impacts.

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

The Project is a request for a general plan amendment, rezone, and tentative parcel map to create three new residential parcels from a portion of the El Macero Country Club golf course (APN 068-130-010) to allow for the future expansion of residential uses within an existing residential community. The Project also includes a request for a variance to allow a reduced front yard setback for proposed Lot 2 and Lot 3 to match the building envelope of adjacent lots. The future expansion of residential uses on each new parcel adjacent to the golf course and existing residences represents a minor infill project and would be developed in accordance with the County’s R-L/PD-66 development requirements. As discussed in this document, potential environmental effects associated with the Project would be less than significant and would occur within the context of an already developed and serviced area. The Project would comply with applicable federal, State, and local regulations, including the Yolo Habitat Conservation Plan/Natural Community Conservation Plan and applicable building and environmental standards. Because the Project would not result in significant environmental impacts, preparation of an Environmental Impact Report is not required and a Negative Declaration is appropriate.

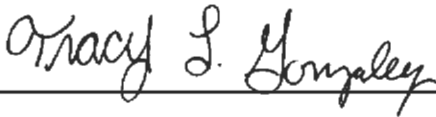
3.2 DETERMINATION

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

- I find that the Project **COULD NOT** have a significant effect on the environment, and a **NEGATIVE DECLARATION** will be prepared.
- I find that although the Project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A **MITIGATED NEGATIVE DECLARATION** will be prepared.
- I find that the Project **MAY** have a significant effect on the environment, and an **ENVIRONMENTAL IMPACT REPORT** is required.

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

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



Signature

04/09/2026

Date

Tracy Gonzalez

Printed Name

Section 4 | Evaluation of Environmental Impacts

The analyses of environmental impacts in **Section 4 Evaluation of Environmental Impacts** result in an impact statement, which have the following meanings:

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

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

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

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

4.1 AESTHETICS

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

4.1.1 Introduction

The Project Site is part of the El Macero Country Club golf course. The three proposed parcels consist of landscaped grass and trees associated with the golf course. Land uses adjacent to the Project Site include single-family residences and recreational uses associated with the golf course. Agricultural uses are present further east and south of the El Macero community; however, the Project Site is separated from agricultural uses by existing single-family residential development. Photographs of the Project Site are shown below as **Photographs 1-3**.



Photograph 1 – View of Lot 1 facing west, from Clubhouse Drive.



Photograph 2 – View of Lot 2 facing northwest, from Country Club Drive.



Photograph 3 - View of Lot 3 facing north, from Country Club Drive.

4.1.2 Discussion

- a, c) **Less-than-Significant Impact.** The Project Site and surrounding golf course and residential community are considered urbanized and have not been officially designated as a scenic vista. Public views of the Project Site are limited to those by surrounding residences and those traveling on roads within the community. Views from roads that experience higher travel, such as Interstate 80 north of the site, are generally blocked due to buildings, trees, and topography. Future development of the parcels would introduce residential structures where open golf course landscaping currently exists; however, the scale and character of the proposed homes would be consistent with surrounding residential development within the El Macero community. Impacts to scenic vistas and scenic quality would be less than significant.
- b) **No Impact.** The Project Site is not within or near a designated state scenic highway or a County-designated scenic roadway. The nearest segment of designated highway is State Route 160, located approximately 11 miles southeast of the Project Site (California Department of Transportation [Caltrans], 2026). The 2030 Countywide General Plan Policy CC-1.13 also designates South River Road from Jefferson Boulevard in the City of West Sacramento to the Sacramento County Line as a local scenic roadway, about 7.5 miles southeast of the Project Site. Therefore, the Project would not substantially damage scenic resources within a state scenic highway and would result in no impact.
- d) **Less-than-Significant Impact.** Future residential development of the proposed parcels in accordance with the County's R-L/PD-66 development requirements would result in a minor increase in low-intensity nighttime lighting consistent with the surrounding residential community. Therefore, the Project would result in a less-than-significant-impact.

4.2 AGRICULTURE AND FORESTRY RESOURCES

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program (FMMP) of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

4.2.1 Discussion

- a-e) **No Impact.** The Project Site is currently zoned Parks and Recreation (P-R) and is designated as Parks and Recreation (PR) in the 2030 Countywide General Plan. The Project Site is not considered to be agricultural, forest land or timberland and is not under a Williamson Act contract. The Project Site is currently developed as a golf course and consists of open space with landscaped grass. Therefore, the Project would not result in the conversion of farmland or forestland to non-agricultural uses and would have no impact on agricultural or forest resources.

4.3 AIR QUALITY

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

4.3.1 Introduction

This section evaluates the potential for the Project to result in significant air quality impacts and has been prepared using the methods and assumptions recommended in the Yolo-Solano Air Quality Management District's (YSAQMD's) *Handbook for Assessing and Mitigating Air Quality Impacts* (YSAQMD, 2007) and subsequent YSAQMD guidance. The Project is a request for a general plan amendment, rezone, and tentative parcel map to create three new residential parcels from the El Macero Country Club golf course (APN 068-130-010) to allow for the future expansion of residential uses within an existing residential community. The Project also includes a request for a variance to allow a reduced front yard setback for proposed Lot 2 and Lot 3. Although specific development is not yet proposed, it is anticipated that future residential development of the parcels would occur at a future date in accordance with the County's R-L/PD-66 development requirements. Accordingly, this analysis evaluates air quality impacts based on that assumed development scenario and includes a quantitative assessment of associated emissions.

4.3.2 Setting

Yolo County is located within the boundaries of the Sacramento Valley Air Basin (SVAB). The SVAB encompasses eleven counties including all of Shasta, Tehama, Glenn, Colusa, Butte, Sutter, Yuba, Sacramento, and Yolo Counties, the westernmost portion of Placer County and the northeastern half of Solano County. The SVAB is bound by the North Coast Ranges on the west and Northern Sierra Nevada Mountains on the east; the intervening terrain is relatively flat. The SVAB has a Mediterranean climate characterized by hot, dry summers and mild, rainy winters. Temperatures typically range from about 20 to 115 degrees Fahrenheit, with summer highs in the 90s and occasional winter freezes. Average annual rainfall is approximately 20 inches, primarily occurring between November and March.

The mountains surrounding the SVAB create a barrier to airflow, which can trap air pollutants under

certain meteorological conditions. Air stagnation is most common in autumn and early winter when high-pressure cells reduce surface winds and vertical flow, allowing pollutants to accumulate. Concentrations are highest during temperature inversions, which trap pollutants near the ground. During the ozone season (May through October), the Sacramento Valley typically experiences calm or light winds in the morning, followed by an afternoon delta breeze from the southwest that generally carries pollutants to the north out of the Valley. However, between July and September, a circulation pattern known as the “Schultz Eddy” often develops, causing winds to shift and recirculate pollutants back to the south. This recirculation can increase the concentration of air pollutants and the likelihood of exceeding federal or state air quality standards before the pattern weakens later in the day (YSAQMD, 2007).

Attainment Status

Concentrations of criteria air pollutants (the most prevalent air pollutants known to be harmful to human health) are used to indicate the quality of the ambient air. Criteria air pollutants include ozone, carbon monoxide (CO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), respirable and fine particulate matter (PM₁₀ and PM_{2.5}), and lead. Areas in compliance with state and federal thresholds for concentrations of criteria air pollutants are classified as being in "attainment." As shown in **Table 4.3-1**, Yolo County is currently designated as a nonattainment (transitional) area for state ozone standards and as a nonattainment area for state PM₁₀ standards. Yolo County is currently designated as a nonattainment (severe) area for federal ozone standards and as a nonattainment (moderate) area for federal PM_{2.5} standards. All other federal and State ambient air quality standards are designated as either attainment or unclassifiable.

Table 4.3-1: Air Quality Attainment Status for Yolo County

Pollutant	State	Federal
Ozone	Nonattainment (Transitional)	Nonattainment (Severe) *
CO	Attainment	Attainment/Unclassified
NO _x	Attainment	Attainment/Unclassified
SO _x	Attainment	Attainment/Unclassified
PM ₁₀	Nonattainment	Unclassified
PM _{2.5}	Unclassified	Nonattainment (Moderate)
Lead	Attainment	Attainment/Unclassified

*Yolo County is designated nonattainment (Severe) for the 2008 federal ozone standard and nonattainment (Serious) for the 2015 federal ozone standard.

Source: California Air Resources Board (CARB), 2023; U.S. Environmental Protection Agency (USEPA), 2026

Sensitive Receptors

Sensitive receptors are generally considered to include those land uses where exposure to pollutants could result in health-related impacts to sensitive individuals. The 2030 Countywide General Plan defines sensitive receptors as residentially designated land uses; hospitals, nursing/convalescent homes, and similar board and care facilities; hotels and lodging; school and day care centers; and neighborhood parks. The Project Site is located within the El Macero community. The nearest sensitive receptors are existing residences located immediately adjacent to the boundaries of the three proposed parcels.

4.3.3 Discussion

- a) **Less-than-Significant Impact.** The applicable air quality plan is the YSAQMD *2019 Triennial Assessment and Plan Update* (2019 Plan), which covers the years 2015 - 2017 (YSAQMD, 2019).

The 2019 Plan relies on emissions forecasts developed by the California Air Resource Board (CARB), and projects whose anticipated growth is accounted for in the emissions projections used to formulate the air quality plan are considered consistent with that plan. Although the Project includes a general plan amendment, rezone, and tentative parcel map to allow future residential development of each of the new parcels in accordance with the County’s R-L/PD-66 development requirements, the scale of development is considered small and would not result in a substantial increase in population or regional emissions. Therefore, the Project would not conflict with the assumptions underlying YSAQMD’s 2019 Plan. Furthermore, as discussed under **Impact b)**, the indirect result of the Project may include future construction and operation of the Project would not generate emissions of criteria air pollutants or precursors that exceed YSAQMD thresholds of significance, which are intended to identify projects that could cumulatively contribute to regional nonattainment within the SVAB. Accordingly, the Project would result in a less-than-significant impact.

- b) **Less-than-Significant Impact.** Yolo County is currently designated nonattainment (transitional) for state ozone standards and nonattainment for state PM₁₀ standards. Further, Yolo County is currently designated nonattainment (severe) for federal ozone standards and nonattainment (moderate) for federal PM_{2.5} standards. Project-specific emissions of pollutants for which the County is designated nonattainment that exceed YSAQMD thresholds of significance for criteria pollutants, as identified in **Table 4.3-2**, would be considered to result in a significant cumulative impact on regional air quality unless such emissions are offset (YSAQMD, 2007).

Table 4.3-2: Thresholds of Significance for Criteria Pollutants of Concern

Pollutant	Threshold
ROG	10 tons/year
NO _x	10 tons/year
PM ₁₀	80 lbs./day
CO	Violation of a state ambient air quality standard for CO

Notes: Thresholds apply to both construction and operational air quality impacts. ROG = reactive organic gases; NO_x = nitrogen oxides
 Source: YSAQMD, 2007

The construction emissions anticipated as an indirect result of the Project were calculated using the USEPA-approved California Emissions Estimator Model (CalEEMod), version 2022.1, and compared to the above YSAQMD thresholds of significance to determine the level of impact. The air quality modeling assumed the construction of one single-family residence per lot (three residences total). However, zoning allows for up to two residences and one ADU per lot (up to six residences and three ADUs total). If emissions were conservatively assumed to increase proportionally to this maximum buildout, they would still remain below applicable YSAQMD thresholds of significance. Model inputs primarily relied on CalEEMod default values.

Construction

Construction anticipated as an indirect result of the Project would result in the temporary generation of emissions from the use of construction equipment on site, earthmoving, and worker and vendor vehicle trips. The emissions for future construction anticipated on each new parcel were estimated using CalEEMod, with detailed modeling results provided in **Appendix C**. CalEEMod incorporates CARB emission factors and default construction assumptions that are

consistent with regional modeling protocols. As shown in **Table 4.3-3**, the maximum construction emissions would not exceed YSAQMD thresholds of significance.

Table 4.3-3: Maximum Project Construction Emissions

Summary Report	ROG (tons/year)	NO _x (tons/year)	PM ₁₀ (lbs./day)	PM _{2.5} * (lbs./day)
2026	0.05	0.27	22.43	3.89
YSAQMD Threshold	10	10	80	--
Threshold Exceeded?	No	No	No	No

Notes: Modeling assumes the construction of three residences; however, even at the conservative full buildout scenario (six residences and three ADUs), emissions would remain below YSAQMD thresholds.

* YSAQMD does not have a threshold of significance for PM_{2.5}. PM_{2.5} emissions are shown for informational purposes.

Source: **Appendix C**

Operation

Operation of the Project would result in emissions from area, energy, and mobile sources. The primary operational emissions associated with new development projects include CO, PM₁₀, and ozone precursors (reactive organic gases [ROG] and NO_x) that are emitted as vehicle exhaust. Operational emissions were estimated using CalEEMod, with detailed modeling results provided in **Appendix C**. As detailed in **Table 4.3-4**, the Project’s operational emissions would not exceed YSAQMD thresholds of significance and represent a negligible contribution to regional emissions within the SVAB. Therefore, the Project would have a less-than-significant impact on air quality.

Table 4.3-4: Maximum Project Operational Impacts

Summary Report	ROG (tons/year)	NO _x (tons/year)	PM ₁₀ (lbs./day)	PM _{2.5} * (lbs./day)
Area	0.03	0.0002	0.00	0.00
Energy	0.0002	0.004	0.002	0.002
Mobile	0.02	0.023	14.26	1.46
Total Emissions	0.047	0.023	14.26	1.46
YSAQMD Threshold	10	10	80	--
Threshold Exceeded?	No	No	No	No

Notes: Modeling assumes the operation of three residences; however, even at the conservative full buildout scenario (six residences and three ADUs), emissions would remain below YSAQMD thresholds.

* YSAQMD does not have a threshold of significance for PM_{2.5}. PM_{2.5} emissions are shown for informational purposes.

Source: **Appendix C**.

- c) **Less-than-Significant Impact.** The nearest sensitive receptors to the Project Site are residences located immediately adjacent to the boundaries of the three proposed parcels, within the El Macero community. During construction, sensitive receptors may be affected by the temporary generation of fugitive dust emissions from construction activities. However, compliance with applicable YSAQMD rules and regulations governing fugitive dust, including Rule 2.5 (Nuisance), would minimize these emissions. This rule prohibits any source from generating air contaminants or other materials that would cause injury, detriment, nuisance, or annoyance to the public; endanger the comfort, repose, health, or safety of the public; or damage businesses or property. As discussed in **Impact b)**, the Project’s construction and operational emissions are below

YSAQMD thresholds of significance for all criteria air pollutants and would not result in a significant impact to nearby sensitive receptors.

Construction-related activities could result in the generation of toxic air contaminants (TACs), specifically diesel particulate matter (DPM), from off-road equipment exhaust emissions, with the potential to affect nearby sensitive receptors. However, construction would be temporary, lasting less than a year, which is a relatively short duration compared to the long-term exposure periods (e.g., 30 years or more) typically associated with health risk impacts from TACs. Equipment utilized during construction would be required to comply with CARB's In-Use Off-Road Diesel-Fueled Fleets Regulation, which limits idling and mandates construction fleets reduce emissions by phasing out older high-emitting diesel vehicles, thereby reducing emissions of DPM. Given the temporary nature of construction and the relatively short duration of potential exposure, the potential for any one sensitive receptor in the area to experience prolonged pollutant exposure is low. Additionally, the Project and anticipated development of six single-family residences and three ADUs, does not include operational activities that would be considered substantial sources of TACs. Therefore, the Project would not expose sensitive receptors to significant pollutant concentrations during construction or operation and would result in a less-than-significant impact.

- d) **Less-than-Significant Impact.** Common facilities known to generate odors include, but are not limited to, wastewater treatment facilities, sanitary landfills, transfer stations, composting facilities, and petroleum refineries. It is anticipated that six single-family residences and three ADUs would be constructed as a result of the Project at a future date; however, residential uses are not typically considered significant odor emitters. Additionally, the Project Site is not located near facilities known to generate substantial odors. Future construction activities may generate temporary odors from diesel-fueled equipment and the application of asphalt, structural coatings, and other construction materials. However, such odors would be short-term, localized, and would dissipate quickly. Therefore, impacts related to odors would be less than significant.

4.4 BIOLOGICAL RESOURCES

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

4.4.1 Introduction

This section is based on a Biological Resources Assessment (BRA) prepared by Madrone Ecological Consulting in October 2025 (**Appendix B**). On October 7, 2025, Madrone Ecological Consulting conducted a biological survey of the Project Site including an aquatic resources delineation in accordance with U.S. Army Corps of Engineers methods and guidance. The Project Site consists entirely of “developed” land with no aquatic resources. The developed area includes portions of the golf course and is dominated by mowed and maintained turf. Large trees within and adjacent to the Project Site provide potential nesting habitat for Swainson’s hawk and white-tailed kite, though no suitable foraging habitat occurs on the Project Site. These trees also provide marginally suitable roosting habitat for hoary bat; however, the potential for occurrence is low and hoary bat is not State or federally-listed, a candidate for listing, or a CDFW species of special concern.

The Project is required to comply with the Yolo Habitat Conservation Plan/Natural Community Conservation Plan (Yolo HCP/NCCP). The Yolo HCP/NCCP is a comprehensive, county-wide plan to provide for the conservation of State and federally listed and other sensitive species and the natural communities and agricultural land on which they depend. The Yolo HCP/NCCP land cover type found on the Project Site is “Developed,” with no covered species habitat. The Yolo HCP/NCCP coordinates mitigation to conserve 12 identified sensitive species and approximately 8,000 acres of natural communities and agricultural land on which the species depend. All covered projects are expected to follow the applicable AMMs that are identified in the Yolo HCP/NCCP to ensure impacts to biological resources are reduced. The AMMs and how the Project would adhere to AMMs are discussed in **Section 2.4**, Project Commitments.

Applicable regulations including the Federal Endangered Species Act, Clean Water Act, Migratory Bird Treaty Act, Bald and Golden Eagle Protection Act, CEQA, California Endangered Species Act, and California Fish and Game Code are discussed in **Appendix B**.

4.4.2 Discussion

The Project would not directly result in construction activities, but would facilitate the future residential development on the three new parcels in accordance with the County’s R-L/PD-66 development requirements. Potential biological impacts associated with future development are discussed below.

- a) **Less-than-Significant Impact.** The BRA evaluated the potential for special-status plant and wildlife species to occur within the Project Site. The site consists of maintained turf and ornamental landscaping within an active golf course and does not contain native habitat or sensitive natural communities. Given the absence of suitable habitat on the Project Site and the limited scale of future development, the Project would not substantially reduce the local or regional population of any special-status species.

The hoary bat was identified as a species with low potential to roost in trees on or adjacent to the Project Site and is not considered a species with protected status. The Project would not substantially reduce habitat at a population level.

White-tailed kite and Swainson’s hawk were identified as two species which could potentially nest within trees on or near the Project Site. Future construction activities would be subject to the Migratory Bird Treaty Act, which prohibits take of migratory bird species (including white-tailed kite and Swainson’s hawk) and their active nests. Project commitments listed in **Section 2.4**

include pre-construction bird surveys in compliance with the Yolo HCP/NCCP AMMs, which would avoid or minimize potential impacts to nesting birds during construction activities.

Because the site is highly disturbed, does not contain sensitive habitat, and would be subject to mandatory Yolo HCP/NCCP compliance, the Project would have a less-than-significant impact on special-status species.

- b, c) **Less-than-Significant Impact.** The Project Site is currently maintained as landscaped turf within a developed golf course setting. The BRA did not identify aquatic resources, riparian habitat, or other sensitive natural communities within the Project Site. A recreational pond associated with the golf course is located just west of proposed Lot 2. The pond is isolated, artificially created, and does not provide habitat for special-status species. Additionally, the development includes a 25-foot setback from the pond. As such, impacts to sensitive natural communities and aquatic resources would be less than significant.
- d) **Less-than-Significant Impact.** The Project Site is located within a developed golf course and residential community. The site does not function as a regional wildlife corridor. Construction activities could temporarily disturb common wildlife species using landscaped areas. Implementation of Yolo HCP/NCCP AMMs related to confining work areas and minimizing indirect effects at urban–habitat interfaces would minimize potential impacts. Given the limited habitat value of the site and the small scale of development (three residential parcels), impacts to wildlife movement or nursery sites would be less than significant.
- e) **Less-than-Significant Impact.** The Project would not conflict with any local policies or ordinances for protecting biological resources. There are approximately six trees with driplines that overlap the developable pads of the proposed parcels. While no tree removal is proposed at this time, future residential development may propose removal of some of these trees consistent with County policies. The Project does not include sensitive tree communities such as oak or riparian woodland. Therefore, potential removal is considered less than significant.
- f) **Less-than-Significant Impact.** The Project is subject to and required to comply with the Yolo HCP/NCCP. As required under the HCP/NCCP, the Applicant must implement all applicable AMMs to avoid and minimize direct and indirect impacts to covered species and sensitive natural communities. The AMMs that will be required as a condition of approval are listed in **Section 2.4**. With implementation of AMMs the Project would be consistent with the Yolo HCP/NCCP and impacts would be less than significant.

4.5 CULTURAL RESOURCES

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

4.5.1 Introduction

A cultural resources records search was conducted by the Northwest Information Center (NWIC) through the California Historical Resources Information System (CHRIS). The search identified no records of any previous cultural resource studies within the Project area. NWIC noted the presence of valley oak groves, valley oak trees, and mixed vegetation in, or adjacent to, the proposed project area (P-57-000132). Additionally, the area has the possibility of containing unrecorded archaeological sites and NWIC recommended contacting local Native American tribes regarding traditional, cultural, and religious heritage values.

On December 11, 2025, the Yolo County Department of Community Services distributed AB 52 notification letters to a total of five tribes that had previously submitted a written request to the County to receive notification of proposed projects. These tribes included the Yocha Dehe Wintun Nation, Wilton Rancheria, Cortina Rancheria Band of Wintun Indians of California, Lone Band of Miwok Indians, and Torres-Martinez Desert Cahuilla Indians.

The United Auburn Indian Community (UAIC) responded to the AB 52 notification and determined the Project is not likely to affect resources of cultural significance to UAIC and government-to-government consultation is not required. The Yocha Dehe Wintun Nation (YDWN) also responded to the AB 52 notification and provided responses in January and February of 2026. YDWN concluded that the Project is within the aboriginal territories of YDWN and requested consultation with the County regarding the Project. In follow-up correspondence and consultation with the County, the YDWN stated they are not aware of any known cultural resources near the Project, but requested that in the event of unanticipated discovery of cultural items the Cultural Resources Department be contacted. YDWN provided a cultural sensitivity training agreement and *Treatment Protocol for Handling Human Remains and Cultural Items Affiliated with the Yocha Dehe Wintun Nation* (**Appendix A**), which will be incorporated into the Project and implemented as a condition of approval as discussed in **Section 2.4**.

4.5.2 Discussion

- a) **No Impact.** There are no historic properties under Section 106 of the National Historic Preservation Act (NHPA) or historical resources under CEQA that would be affected by the Project. NWIC noted the presence of valley oak groves, valley oak trees, and mixed vegetation in, or adjacent to, the proposed project area (P-57-000132). However, P-57-000132 is unevaluated as cultural resource specialists tend to concur that oak groves and associated natural habitats are not possible to define as either an archaeological or historical resource (Peirce, 2017; Scher et al., 2018). Thus, this resource is considered ineligible for the California Register of Historical Resources (CRHR). Development of the Project would not cause any adverse change in the significance of historical resources. Therefore, the Project would result in no impact.
- b) **Less-than-Significant Impact.** No cultural resources were identified on the Project Site through the records search. The probability of intact archaeological deposits being present on the Project Site is low due to the absence of previously recorded archaeological sites in the vicinity and previous disturbance associated with development and ongoing maintenance of the golf course landscape. In the event that previously unknown cultural resources are inadvertently discovered during ground-disturbing activities, California Public Resources Code Section 5097.5 prohibits further excavation, removal, or destruction of any historic or prehistoric ruins, burial grounds, and archaeological or historical features and requires the County to follow the professional standards for determining commercial and archaeological value, in accordance with those procedures established in the federal Archaeological Resources Protection Act of 1979 (Public Law 96-95), as amended, and in compliance with the Uniform Regulations set forth in Subpart A (commencing with Section 7.1) of Part 7 of Title 43 of the Code of Federal Regulations. Additionally, Project personnel would adhere to the treatment protocol provided by the Yocha Dehe Wintun Nation for inadvertent discoveries and would complete cultural sensitivity training prior to initiation of ground-disturbing activities (**Appendix A**). Therefore, the Project would result in a less-than-significant impact.
- c) **Less-than-Significant Impact.** No cultural resources such as cemeteries or burial areas were identified on or within the vicinity of the Project Site during the records search. In the event of discovery or recognition of any human remains within the Project Site, California Health and Safety Code Section 7050.5 requires excavation to cease in the vicinity of the discovery until the coroner of the County has determined that the remains are not subject to the provisions of Section 27491 of the Government Code or any other related provisions of law concerning investigation of the circumstances, manner, and cause of any death, and the recommendations concerning the treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative, in the manner provided in Section 5097.98 of the Public Resources Code. If the coroner determines that the remains are not subject to his or her authority and if the coroner recognizes the human remains to be those of a Native American, or has reason to believe that they are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission so that a Most Likely Descendant may be identified pursuant to Public Resources Code Section 5097.98. The Project would be required to comply with Section 7050.5 of the California Health and Safety Code and Section 5097.98 of the Public Resources Code. Additionally, Project personnel would adhere to the treatment protocol provided by the Yocha Dehe Wintun Nation for inadvertent discoveries and would complete cultural sensitivity training prior to initiation of ground-disturbing activities (**Appendix A**). Therefore, the Project would result in a less-than-significant impact.

4.6 ENERGY

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Result in potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

4.6.1 Introduction

Electricity and natural gas services are provided to the Project Site by Pacific Gas & Electric (PG&E).

4.6.2 Discussion

- a, b) **Less-than-Significant Impact.** CEQA Guidelines Appendix F provides guidance for evaluating potential energy impacts, including whether a project would result in wasteful, inefficient, or unnecessary consumption of energy resources. CEQA Guidelines Appendix F does not establish numeric thresholds for determining when energy use is wasteful, inefficient, or unnecessary. Instead, Appendix F directs lead agencies to consider whether a project would result in inefficient energy consumption during construction or operation and whether it would conflict with state or local energy conservation policies.

The following analysis provides a summary of the Project’s energy consumption during construction and operation under the assumed development scenario that up to two homes and one ADU may be constructed on the three new parcels in accordance with the R-L/P-D-66 development requirements at a future date. The analysis also evaluates the Project’s consistency with applicable state and local plans related to renewable energy and energy efficiency.

Construction

Construction as an indirect result of the Project would involve on-site energy demand and fuel consumption (e.g., gasoline and diesel) for worker and vendor vehicle trips, as well as for the operation of construction equipment and machinery. Electricity may also be used for temporary lighting and other construction-related needs. However, construction activities would be temporary and limited in scale, and would occur intermittently across the Project Site. Equipment utilized during construction of the Project would be typical of construction projects in the region and would be required to comply with CARBs In-Use Off-Road Diesel-Fueled Fleets Regulation, which imposes limits on idling and mandates construction fleets reduce emissions by phasing out older high-emitting diesel vehicles, improving the overall fuel efficiency of the fleet. Fuel consumption during construction activities would be temporary and minimal relative to regional energy demand given that future residential development would be constructed in accordance

with the County's R-L/PD-66 development requirements and represent a minor infill addition within an already developed area. As such, compliance with applicable energy conservation and fuel efficiency regulations would minimize temporary energy demand and impacts to energy resources. The Project would have a less-than-significant impact on energy resources during construction.

Operation

Energy use associated with operation of the Project would be typical of residential uses, including electricity for interior and exterior lighting, heating and cooling systems, refrigeration, appliances, security systems, and other standard residential needs. The Project is not anticipated to utilize natural gas infrastructure. The Project would be required to comply with the most recent provisions of the California Building Standards Code (CBSC), including CALGreen (CCR Title 24, Part 11) and the Energy Code (CCR Title 24, Part 6). This would ensure that the Project implements sustainable construction practices and reduces energy consumption by incorporating high-performance building envelopes, efficient heating, ventilation, and air conditioning (HVAC) systems, and advanced lighting technologies. In addition, PG&E, the electricity provider for the Project, must comply with the State's Renewables Portfolio Standard, which mandates that investor-owned utilities, electric service providers, and community choice aggregators procure at least 60% of their electricity from eligible renewable resources by 2030. Further, under SB 100, PG&E must source 100% of electricity retail sales from eligible renewable and zero-carbon resources by 2045 without increasing carbon emissions elsewhere in the grid. Compliance with the CBSC and applicable regulations would ensure that any future construction as an indirect result of the Project consumes energy efficiently and avoids wasteful, inefficient, or unnecessary energy use. Therefore, the Project would have a less-than-significant impact on energy resources.

4.7 GEOLOGY AND SOILS

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: <ul style="list-style-type: none"> i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. 	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii. Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii. Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv. Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Directly or indirectly destroy a unique paleontological resource or site of unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

4.7.1 Introduction

No new buildings or structures would be immediately constructed as a direct result of the Project, although it is anticipated that future residential development of the proposed parcels would be constructed in accordance with the County's R-L/PD-66 development requirements. There would be no construction directly associated with the proposed general plan amendment, rezone, and tentative parcel map, although future construction activities would likely include site preparation, grading, landscaping, and paving to accommodate future residential development. The Project Site is generally flat with elevations ranging from approximately 36 to 39 feet above mean sea level.

4.7.2 Setting

Regional Faults

Although there are few active faults within the Central Valley itself, the valley lies between major fault zones associated with the Sierra foothills to the east and the Coast Range mountains to the west. The Foothills Fault Zone extends along the western edge of the Sierra Nevada and, although not necessarily inactive, faults in this zone experienced displacement more than 1.6 million years ago. The western edge of the Foothills Fault Zone is located approximately 45 miles east of the Project Site. The major faults within and parallel to the Coast Range in the San Francisco Bay Area are younger than those in the Foothills Fault Zone and include the Concord-Green Valley faults, the Rogers Creek/Hayward fault zones, and the San Andreas Fault zone. The Concord, Hayward, and San Andreas faults are strike-slip faults that have experienced movement within the last 150 years. Depending on the magnitude of the earthquake and its intensity, a major seismic event on any of these active faults could cause moderate to strong ground shaking at the Project Site. Yolo County has a low probability for earthquake hazards compared to the rest of California (Yolo County, 2009).

As identified in the 2030 Countywide General Plan, there are two main faults located in Yolo County, the Hunting Creek Fault and the Dunnigan Hills Fault. The Dunnigan Hills fault has been mapped as a late Pleistocene to Holocene Fault and late Quaternary alluvial deposits conceal the fault (U.S. Geological Survey [USGS], 2017). The Dunnigan Hills Fault is not considered an active fault. The Hunting Creek Fault is an active (Holocene) fault system (USGS, 2000). The Hunting Creek fault is located approximately 30 miles northwest of the Project Site in an area that is sparsely populated. Only a very short trace of the Huntington Creek fault occurs in the northwest part of the County. Most of the fault is in Lake and Napa Counties (Yolo County, 2009).

Alquist-Priolo Act

The Alquist-Priolo Act is intended to provide the citizens with increased safety and to minimize the loss of life during and immediately following earthquakes by facilitating seismic retrofitting to strengthen buildings against ground shaking. The Project Site is not located within an Alquist-Priolo Zone (California Department of Conservation [DOC], 2026a).

Seismic Hazard Mapping Act

The Seismic Hazards Mapping Act (SHMA) of 1990 directs the DOC California Geological Survey (CGS) to identify and map areas prone to earthquake hazards of liquefaction, earthquake-induced landslide, and amplified ground shaking. The SHMA was passed by the legislature following the 1989 Loma Prieta earthquake. The SHMA requires the State Geologist to establish regulatory zones and to issue appropriate

maps. These maps are distributed to all affected cities, counties, and state agencies for their use in planning and controlling construction and development (DOC, 2019). The Project Site is not located in a Seismic Hazard Zone (i.e., fault, liquefaction, landslide, or liquefaction landslide overlap zone) (DOC, 2026a).

California Building Code

The 2025 edition of the California Building Code (CBC) is based on the 2024 International Building Code (IBC) published by the International Code Council. The code is updated triennially, and the 2025 edition of the CBC, which was published by the California Building Standards Commission, took effect on January 1, 2026. The CBC, which is codified in Title 24 of the California Code of Regulations, Part 2, was promulgated to safeguard public health, safety, and general welfare by establishing minimum standards related to structural strength, means of egress facilities, and general stability of buildings.

The CBC establishes minimum standards for the design and construction of buildings and structures in California and applies to the construction, alteration, movement, replacement, location, and demolition of buildings and structures throughout the State (California Department of General Services, 2026).

Seismic design provisions of the CBC generally prescribe minimum lateral forces applied statically to the structure, combined with the gravity forces of the dead and live loads of the structure, which the structure then must be designed to withstand. Structures are intended to: (1) resist minor earthquakes without damage, (2) resist moderate earthquakes without structural damage but with some nonstructural damage, and (3) resist major earthquakes without collapse, but with some structural as well as nonstructural damage. Compliance with CBC requirements is intended to reduce the potential for structural failure and associated risks to people and property during seismic events.

Soils

A Web Soil Survey Report was generated for the Project Site by the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS). The Soils Report found that 100 percent of the Project Site consists of Sycamore silt loam, drained, 0 percent slopes (NRCS, 2026).

4.7.3 Discussion

a.i, a.ii) **Less-than-Significant Impact.** The Project Site is not located within an Alquist-Priolo Earthquake Fault Zone and is approximately 30 miles from the nearest active fault. Therefore, it is very unlikely that the Project Site would experience fault rupture from known mapped earthquake faults. Major factors that affect the severity (intensity) of ground shaking include the size (magnitude) of the earthquake, the distance to the fault that generated the earthquake, and the underlying geologic materials. Seismic ground shaking from a regional fault zone, including those along the Foothills Fault Zone and major faults within the Coast Range in the San Francisco Bay Area, could affect the Project Site. The CGS identifies the Project Site vicinity as an area that could experience severe shaking (CGS, 2025).

Although conformance to CBC recommendations does not guarantee that significant structural damage would not occur onsite in the event of a maximum magnitude earthquake, it can be expected that a well-designed and constructed modern structure would not directly or indirectly expose people or structures to potentially substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking. Future development on the Project Site

would be required to comply with the California Building Code and applicable local building regulations, which incorporate seismic safety standards intended to reduce potential risks associated with ground shaking. Therefore, the Project would result in a less-than-significant impact.

- a.iii, a.iv) **Less-than-Significant Impact.** As discussed above, the Project Site is underlain by Sycamore silt loam (NRCS, 2026). The Project Site is not mapped by the CGS for hazardous liquefaction conditions under the SHMA. Permeability for the underlying soil type is moderate, surface runoff is low, and the erosion hazards are low. This would result in a relatively low potential for liquefaction to occur at the Project Site. The Project Site is flat and would have a very low risk for landslides and slope failures. Therefore, the Project would result in a less-than-significant impact.
- b) **Less-than-Significant Impact.** The Project does not include the construction of residences at this time; however the request involves the creation of three new parcels to facilitate future expansion of residential uses consistent with applicable development standards. Construction activities would take place on a generally flat site with slopes of zero to two percent. The flat terrain significantly reduces the potential for substantial soil erosion, as slopes are a major factor in erosion risk. Although construction activities can temporarily increase the risk of erosion and sedimentation by exposing soils to wind and runoff, the overall risk remains low due to the site's characteristics and the low erosion hazard associated with the soils. Due to the underlying soil's low surface runoff and soil erosion hazards being low, it is very unlikely that any topsoil would be washed away and cause significant damage to off-site properties, utilities, or roadways. Therefore, the Project would result in a less-than-significant impact.
- c) **Less-than-Significant Impact.** The Project is not located in an area of unstable geologic material. As discussed above, the underlying soil has moderate permeability, surface runoff is low, and the erosion hazards are low. Prior to issuance of building permits for future development, site-specific geotechnical conditions would be evaluated as necessary and any recommended design or construction measures would be incorporated into project plans consistent with applicable building and safety requirements. Based on soil conditions and topography, the potential for underlying materials to result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse is low. Therefore, the Project would result in a less-than-significant impact.
- d) **Less-than-Significant Impact.** The Project Site is underlain by Sycamore silt loam, which is not identified by NRCS as having a high shrink-swell potential associated with expansive soils. Although the proposed general plan amendment, rezone, and tentative parcel map would not directly result in construction, future development of single-family residences would be required to comply with the California Building Code, which includes design standards to address potential soil expansion and contraction. Therefore, the Project would result in a less-than-significant impact.
- e) **No Impact.** The Project will receive sewer service from the El Macero CSA. The Project does not include the construction of a private on-site wastewater treatment (septic) system that would rely on soil conditions for wastewater disposal. Therefore, the Project would result in no impact.
- f) **Less-than-Significant Impact.** The proposed general plan amendment, rezone, and tentative parcel map would not directly result in construction activities; however, future development

could involve ground-disturbing activities associated with site preparation and building construction. No unique geologic features are known to occur on the Project Site and the relatively low-intensity development anticipated would involve limited excavation depths. If paleontological resources are inadvertently discovered during ground-disturbing activities, work in the vicinity of the find would cease and the discovery would be evaluated by a qualified professional paleontologist consistent with applicable State regulations and standard professional guidelines, including Public Resources Code Section 5097.5 and Society of Vertebrate Paleontology recommendations. Based on the limited extent of anticipated ground disturbance and the availability of standard discovery procedures, impacts to paleontological resources would be less than significant.

4.8 GREENHOUSE GAS EMISSIONS

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of GHGs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

4.8.1 Introduction

Greenhouse gas (GHG) emissions under the assumed development scenario would be temporarily generated during construction activities from off-road equipment and worker and vendor vehicle trips. Long-term operational emissions would result from residential energy consumption (electricity and natural gas, if applicable), vehicle trips, water conveyance and treatment, and solid waste disposal.

4.8.2 Setting

Certain gases in the Earth’s atmosphere, known as greenhouse gases (GHGs), play a critical role in determining the Earth’s surface temperature. The primary GHGs of concern include carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O). As solar radiation enters the Earth’s atmosphere from space, the Earth’s surface absorbs a portion of the radiation, and a smaller portion of this radiation is reflected back toward space through the atmosphere. However, infrared radiation is selectively absorbed by GHGs in the atmosphere. As a result, infrared radiation released from the Earth that otherwise would have escaped back into space is “trapped,” resulting in a warming of the atmosphere. This phenomenon, known as the “greenhouse effect,” is responsible for maintaining a habitable climate on Earth. Anthropogenic (e.g., human-caused) emissions of GHGs lead to atmospheric levels above natural ambient concentrations, leading to global climate change. Climate change is predicted to have impacts related to flooding and other natural disasters, agriculture, habitats, water supply, and the global economy. Climate change is expected to affect Yolo County in many ways: through an increase in extreme heat events; more extreme precipitation events, including flood and drought; and larger and more-catastrophic wildfires (Yolo County, 2024). GHGs are typically quantified in terms of “carbon dioxide equivalent” (CO₂e), a common measure used to compare the emissions of various GHGs based on their global warming potential. This measure is usually presented in metric tons (MT) and is expressed as MTCO₂e.

Yolo County contributes to climate change by generating GHG emissions from various sectors, including on-road transportation, building energy, water and wastewater, solid waste, off-road equipment, and agriculture. Yolo County’s community wide GHG emissions in 2022 are estimated to be 755,520 MT CO₂e, with on-road transportation and building energy accounting for over half of the inventory (Yolo County, 2024).

Regulatory Considerations

Assembly Bill 32 (AB 32)

California’s major initiative for reducing GHG emissions is outlined in AB 32, the “California Global Warming Solutions Act of 2006,” which was signed into law in 2006. AB 32 codifies the statewide goal of reducing GHG emissions to 1990 levels by 2020 and requires CARB to prepare a Scoping Plan that outlines the main State strategies for reducing GHGs to meet the 2020 deadline. In addition, AB 32 requires CARB to adopt regulations to require reporting and verification of statewide GHG emissions. Based on this guidance, CARB approved a 1990 statewide GHG level and 2020 limit of 427 MMT CO₂e. The Scoping Plan was approved by CARB on December 11, 2008, and included measures to address GHG emission reduction strategies related to energy efficiency, water use, and recycling and solid waste, among other measures. Many of the GHG reduction measures included in the Scoping Plan (e.g., Low Carbon Fuel Standard, Advanced Clean Car standards, and Cap-and-Trade) have been adopted since approval of the Scoping Plan.

In May 2014, CARB approved the first update to the AB 32 Scoping Plan. The 2013 Scoping Plan update defined CARB’s climate change priorities for the next five years and set the groundwork to reach post-2020 statewide goals. Senate Bill 32 (SB 32) was signed by the governor on September 8, 2016, to extend AB 32 by requiring the State to further reduce GHGs to 40 percent below 1990 levels by 2030 (the other provisions of AB 32 remain unchanged). To ensure consistency with SB 32 CARB adopted another update to the Scoping Plan in December 2017. The 2017 Scoping Plan update highlights California’s progress toward meeting the “near-term” 2030 GHG emission reduction goals defined in the original Scoping Plan. The strategy includes extending the Cap-and-Trade program post-2020, implementation of the Short-Lived Climate Pollutant Plan and Mobile Source Strategy and increasing renewable energy generation and improving energy efficiency. In 2016, the Legislature passed SB 32. This established a benchmark for California to reduce GHG emissions to 40 percent below 1990 levels by 2030. Under the 2022 Scoping Plan, seven key areas were identified: transportation sustainability, clean electricity grid, sustainable manufacturing and buildings, carbon dioxide removal and capture, short-lived climate pollutants (non-combustion gases), and natural and working lands.

Yolo County Climate Action Plan

The Yolo County Climate Action Plan (CAP) was adopted in March 2011 and identifies strategies to reduce GHG emissions and combat climate change across five sectors including: Agriculture, Transportation and Land Use, Energy, Solid Waste and Wastewater, and Adaptation. To reduce the GHG emissions related to electricity use, the CAP calls for pursuing a community choice aggregation (CCA) program to ensure that the renewable energy and zero-carbon content of the electricity supplied to customers meets the goals of the CAP as well as mandatory Renewable Portfolio Standards (RPS) targets. Consistent with these goals, Yolo County joined with the Cities of Davis, Woodland, and Winters to form Valley Clean Energy (VCE), a CCA that provides electricity to customers in the three members cities and unincorporated areas of the County.

Yolo County Climate Emergency Declaration

The Yolo County Board of Supervisors approved a Climate Emergency Declaration (Resolution No. 20-114) on September 29, 2020. The Resolution required Yolo County to create an advisory body to develop and propose a new CAP designed to reduce all GHG emissions in Yolo County and set a countywide goal of achieving net-negative emissions by 2030.

Yolo County Climate Action and Adaptation Plan

In response to the 2020 Climate Emergency Declaration, Yolo County adopted the 2030 Climate Action and Adaptation Plan (CAAP) in 2024 to guide local efforts to reduce GHG emissions and increase resilience to climate change impacts within unincorporated Yolo County. The CAAP establishes sector-based strategies to reduce emissions and enhance adaptation across multiple sectors, including agriculture; water and wastewater; solid waste; off-road equipment; on-road transportation; and building energy. Implementation of the CAAP is organized through a tiered framework consisting of strategies, measures, and actions intended to guide County policies, programs, and future decision-making related to climate mitigation and adaptation. The CAAP actions are intended to prepare the community for climate change impacts, improve public safety, address environmental justice, and enhance the quality of life for residents.

4.8.3 Discussion

- a) **Less-than-Significant Impact.** The YSAQMD has not established quantitative GHG emissions thresholds; however, construction and operation emissions under the assumed development scenario for the Project are quantified and disclosed for transparency, and guidance from the Sacramento Metropolitan Air Quality Management District (SMAQMD) is used to evaluate Project emissions. In the absence of locally adopted numeric GHG thresholds, reliance on SMAQMD screening thresholds is considered appropriate and conservative for purposes of CEQA analysis. SMAQMD’s *Guide to Air Quality Assessment in Sacramento County* provides screening levels for evaluating construction and operational GHG emissions. For construction and operation emissions, if a project generates 1,100 metric tons of GHG emissions per year or less, impacts can be considered less than significant (SMAQMD, 2020). The Project’s construction and operation GHG emissions were calculated using CalEEMod version 2022.1 and results are summarized below and in **Appendix C**.

Construction

GHG emissions associated with the Project construction would result from the use of equipment on site, and worker and vendor vehicle trips. Estimated construction-related GHG emissions are presented in **Table 4.8-1**, with detailed CalEEMod modeling results provided in **Appendix C**. As shown, the Project would not generate construction-related GHG emissions exceeding the SMAQMD construction threshold of 1,100 MT of CO₂e per year. Construction-related emissions would represent a minimal and temporary contribution to regional GHG emissions given that future residential development in accordance with the County’s R-L/PD-66 development requirements would represent a minor infill addition within an already developed area. Therefore, construction-related GHG emissions would be less than significant.

Table 4.8-1: Total Estimated Construction GHG Emissions

Year	GHG Emissions (MT CO ₂ e/year)
2027	69
SMAQMD Threshold	1,100
Threshold Exceeded?	No

Source: **Appendix C**

Operation

The Project's estimated annual operational GHG emissions are presented in **Table 4.8-2**, with detailed CalEEMod modeling results provided in **Appendix C**. As shown in **Table 4.8-2**, the Project's annual operational emissions would remain below SMAQMD's 1,100 MT CO₂e per year threshold of significance for GHG emissions. The estimated annual operational emissions of approximately 50 MT CO₂e represent a negligible fraction of Yolo County's community-wide emissions inventory. Therefore, impacts related to operational emissions would be less than significant.

Table 4.8-2: Estimated Operational GHG Emissions

Operational Emissions	Annual Emissions (MT CO₂e/year)
Annual Operational Emissions	50
SMAQMD Threshold	1,100
Threshold Exceeded?	No

Source: **Appendix C**.

- b) **No Impact.** Because the Project's construction and operational GHG emissions would be well below the SMAQMD screening threshold of 1,100 MT CO₂e per year, the Project's incremental contribution to cumulative GHG emissions would not be cumulatively considerable. Accordingly, the Project would not conflict with statewide GHG reduction targets established under AB 32, SB 32, or the CARB Scoping Plan. The local plan for reducing GHG emissions applicable to the Project is the Yolo County Action Plan (CAP), adopted in March 2011. The CAP defines a mandatory 2020 reduction target, and 2030, 2040, and 2050 GHG reduction goals for unincorporated Yolo County. The CAP contains 15 primary measures that will help the unincorporated area achieve GHG reductions and successfully adapt to climate change. CAP Measures E-3 (Reduce Energy Consumption in New Residential and Non-Residential Units) and E-4 (Increase On-Site Renewable Energy Generation to Reduce Demand for Grid Energy) are applicable to any future development that indirectly results from the Project. Both measures are focused on reducing energy demand, which reduces GHG emissions (Yolo County, 2008).

Yolo County adopted the 2030 CAAP in 2024 to guide local climate policy; however, the CAAP is not a CEQA-qualified GHG reduction plan pursuant to CEQA Guidelines Section 15183.5 and does not establish project-level performance standards. By complying with applicable State regulations that reduce GHG emissions, including CARB's In-Use Off-Road Diesel-Fueled Fleets Regulation and Title 24 building energy efficiency standards, the Project would be consistent with the intent of the CAAP and with relevant strategies identified in the CAAP related to reducing off-road equipment emissions and increasing building energy efficiency. As the Project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions, there would be no impact.

4.9 HAZARDS AND HAZARDOUS MATERIALS

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Expose people or structures, either directly or indirectly to a significant risk of loss, injury or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

4.9.1 Introduction

The California Department of Toxic Substances Control (DTSC) defines a hazardous material as: “a substance or combination of substances that, because of its quantity, concentration or physical, chemical, or infectious characteristics, may either: 1) cause, or significantly contribute to an increase in mortality or an increase in serious, irreversible, or incapacitating illness; or 2) pose a substantial present or potential hazard to human health or environment when improperly treated, stored, transported, disposed of, or otherwise managed.” Hazardous waste is regulated by federal and State laws and is required to be recycled or properly disposed of. Hazardous wastes include waste listed on one of the four Resource Conservation and Recovery Act hazardous wastes lists: the F-list (non-specific source wastes), K-list (source-specific wastes), P-list and U-list (both lists consist of discarded commercial waste products), or waste that exhibits one of the four characteristics of a hazardous waste, which include ignitability, corrosivity, reactivity, or toxicity.

No hazardous waste sites are listed on the DTSC EnviroStor database or the State Water Resources Control Board (SWRCB) GeoTracker database as occurring within the Project Site or its immediate vicinity (DTSC, 2026; SWRCB, 2026).

The Project Site is currently developed as a golf course and consists of open space with landscaped grass. While routine golf course maintenance may involve the use of fertilizers and herbicides, such materials are applied and managed in accordance with applicable federal and State regulations and do not constitute hazardous waste sites.

The nearest airport, Yolo County Airport, is located over 9 miles west of the Project Site. The nearest school, Pioneer Elementary School, is located within the City of Davis approximately 0.4 miles north of the Project Site. The Project Site is in a Local Responsibility Area for fire protection and is in an area identified as having no Fire Hazard Severity Zone by the California Department of Forestry and Fire Protection (CAL FIRE; CAL FIRE, 2026). Additionally, Yolo County identifies the Project area as “NonWildland” and as not within the wildland–urban interface, indicating a low potential for significant wildfire risk (Yolo County, 2026).

4.9.2 Discussion

- a, b) **Less-than-Significant Impact.** Future construction on the Project Site would involve the use of common construction equipment that may contain fuels, solvents, and other potentially hazardous materials. The use of these materials would be required to comply with all applicable federal, State, and local regulations governing the transportation, storage, and use of hazardous materials. Therefore, impacts related to the routine transport, use, or disposal of hazardous materials during construction would be less than significant. Under the assumed development scenario, residential development would be constructed on each of the three new parcels at a future date in accordance with the County’s R-L/PD-66 development requirements. Because future development is anticipated to be residential in nature, the Project is not expected to involve the routine transport, use, or disposal of hazardous materials beyond small quantities of typical household products (e.g., cleaning supplies, pesticides, and herbicides). Such materials are commonly used in residential settings and are regulated under existing State and local requirements. Thus, impacts would be less than significant.

- c) **No Impact.** The nearest school to the Project Site is Pioneer Elementary School, located within the City of Davis approximately 0.4-mile northwest of the proposed Lots 2 and 3. Because no schools are located within one-quarter mile of the Project Site, the Project would not emit hazardous emissions or handle hazardous materials within one-quarter mile of an existing or proposed school. Thus, the Project would have no impact.
- d) **No Impact.** The DTSC and the SWRCB maintain and update lists of hazardous material sites pursuant to Government Code Section 65962.5. The Project Site and surrounding area are not located on or near any federal, State, or locally designated hazardous waste sites listed in the databases maintained by DTSC (EnviroStor) or the SWRCB (GeoTracker) (DTSC, 2026; SWRCB, 2026). Thus, the Project would have no impact.
- e) **No Impact.** The Project Site is not located within an airport land use plan and is not within two miles of a public airport or public use airport. There would be no impact.
- f) **No Impact.** The Project would not impair implementation of or physically interfere with any adopted emergency response or emergency evacuation plan. Access to the residential parcels would be provided via existing roadways (Clubhouse Drive and Country Club Drive), and the Project would not alter roadway configurations, impact capacity, or introduce physical barriers that would restrict emergency access or evacuation routes. The minimal increase in residential traffic would not affect emergency response times. Therefore, the Project would not interfere with adopted emergency response or evacuation plans, and no impact would occur.
- g) **No Impact.** Because the Project Site is not located in a State or Local Responsibility Area designated as a Fire Hazard Severity Zone (CAL FIRE, 2026), the Project would not exacerbate wildfire risks and there would be no impact.

4.10 HYDROLOGY AND WATER QUALITY

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

4.10.1 Introduction

The Project Site is located within the El Macero community in unincorporated Yolo County and consists of maintained turf associated with the golf course fairway. The site is generally flat and maintained as landscaped lawn within an existing residential and recreational setting. No aquatic resources or jurisdictional waters were identified within the Project Site during the aquatic resource delineation conducted as part of the BRA (**Appendix B**).

Surface drainage in the Project area is conveyed through existing storm drain facilities along adjacent roadways that ultimately discharge to downstream drainage features associated with the golf course. According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRMs), the Project Site is located in Zone X (Minimal Risk), which represents areas determined to be outside of the 100- and 500-year floodplains (FEMA, 2026a and 2026b). Proposed Lot 1 is located on FIRM Map 06113C0612G and Lots 2 and 3 are located on Map 06113C0629G.

Applicable regulations for water resources in the Project area include the federal Clean Water Act (Section 404 and 401) and the NPDES program administered by the SWRCB. Projects that disturb one acre or more of soil are typically required to obtain coverage under the SWRCB's Construction General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities and implement a Stormwater Pollution Prevention Plan (SWPPP). Because the project does not exceed one acre in size, construction activities associated with future residential development would not be expected to obtain coverage under the State Construction General Permit.

In addition, water quality within the Project area is regulated under the Porter-Cologne Water Quality Control Act and the Water Quality Control Plan for the Sacramento and San Joaquin River Basins (Basin Plan), which establishes beneficial uses, water quality objectives, and implementation programs for waters within the Central Valley Region. The SWRCB and Central Valley Regional Water Quality Control Board regulate construction dewatering and other discharges that could affect the quality of waters of the State.

At the local level, the Yolo County Improvement Standards establish requirements for sanitary sewer systems, water systems, storm drainage, grading, stormwater quality, and erosion and sediment control for improvements within County easements and rights-of-way and certain private development projects. Additionally, the City of Davis Standard Specifications and improvement requirements apply to water and sewer connections within the El Macero community. Groundwater management in Yolo County is addressed through the Yolo Subbasin Groundwater Sustainability Plan prepared pursuant to the Sustainable Groundwater Management Act.

4.10.2 Discussion

a, c.i) **Less-than-Significant Impact.** The Project involves a general plan amendment, rezone, and tentative parcel map to create three new parcels from a portion of an existing golf course to allow future residential development in accordance with the County's R-L/PD-66 development requirements. The Project would not directly result in construction activities; however, future residential development could involve site preparation, grading, and construction activities that could temporarily expose soils and generate stormwater runoff.

Construction activities that disturb soil have the potential to increase erosion and sediment transport during rainfall events; however, future development would be required to comply with

applicable federal, State, and local stormwater quality regulations including obtaining coverage under the SWRCB's NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities. Although preparation of a SWPPP is not required for projects that disturb less than one acre, implementation of erosion and sediment control best management practices (BMPs) during general construction activities would minimize sediment transport and protect water quality. Additionally, Yolo County improvement standards require the use of appropriate erosion control and stormwater management measures during construction activities. These requirements would reduce the potential for construction-related pollutants to enter nearby drainage systems.

Because future development would be subject to regulatory requirements that control stormwater discharges and protect water quality, the Project would not violate water quality standards or substantially degrade surface or groundwater quality. Therefore, impacts would be less than significant.

- b) **Less-than-Significant Impact.** The Project would not directly result in construction or water demand. Future residential development in accordance with the County's R-L/PD-66 development requirements would result in a minor increase in water demand relative to existing conditions. Water service would be provided through the El Macero CSA, which contracts with the City of Davis to provide water services to the community. The limited increase in water demand associated with six residences and three ADUs would represent a negligible increase in groundwater extraction relative to regional water supplies. In addition, the Project Site is relatively small and does not function as a significant groundwater recharge area.

Because the scale of development is minimal and water service would be provided through existing municipal infrastructure, the Project would not substantially decrease groundwater supplies or interfere with groundwater recharge. Therefore, impacts would be less than significant.

- c. ii, iii, iv) **Less-than-Significant Impact.** Future residential development could introduce additional impervious surfaces such as rooftops, driveways, and patios that may slightly increase stormwater runoff. However, the Project Site is relatively small and located within a developed area within an established residential community that is already served by existing storm drainage infrastructure.

Yolo County Public Works requires that drainage improvements associated with development tie into existing drainage facilities and comply with County improvement standards. Stormwater runoff from new impervious surfaces would be conveyed through existing storm drain facilities along adjacent roadways.

Given the relatively small increase in impervious surfaces associated with six residences and three ADUs, and the availability of existing drainage infrastructure, future development would not substantially alter drainage patterns in a manner that would cause erosion or flooding on- or off-site. Therefore, impacts would be less than significant.

- d) **No Impact.** As discussed in **Section 4.10.1**, the Project Site is not located in a flood hazard area. The Project Site is not located near any large enclosed water bodies that could generate seiche hazards. The site is also located far inland from coastal areas where tsunami hazards could occur. The Project anticipates future residential development in accordance with the County's R-L/PD-

66 development requirements which would involve typical residential uses and would not involve the routine use, storage, or transport of hazardous materials that could pose a significant risk of pollutant release during a flood event. Because the Project does not involve land uses that would introduce substantial sources of pollutants and the site is not subject to flood, tsunami or seiche hazards, the Project would not risk the release of pollutants due to inundation. Therefore, the Project would result in no impact.

- e) **Less-than-Significant Impact.** The Project would not directly result in construction activities but would facilitate future residential development within an existing developed community in accordance with the County's R-L/PD-66 development requirements. Future development would be required to comply with applicable federal, State, and local regulations related to stormwater management and water quality, including the NPDES program. Because the project does not exceed one acre in size, construction activities associated with future residential development would not be expected to obtain coverage under the State Construction General Permit or prepare a SWPPP. Implementation of BMPs would control erosion and minimize sedimentation and pollutant discharges.

The Project would represent a very small incremental increase in water demand associated with six residences and three ADUs, and would be served through existing municipal infrastructure. As such, the Project would not interfere with regional groundwater management objectives or obstruct implementation of a groundwater sustainability plan.

Because the Project would comply with applicable water quality regulations and would not substantially affect groundwater management, the Project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. Therefore, impacts would be less than significant.

4.11 LAND USE AND PLANNING

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

4.11.1 Discussion

- a) **No Impact.** The Project Site is within El Macero, an established community which includes a golf course and residences. The Project would provide for limited additional housing within the community and would not divide the established community because access would occur through existing internal roadways and no physical barriers or infrastructure would be introduced that would disrupt community connectivity. Therefore, the Project would result in no impact.
- b) **Less-than-Significant Impact.** The Project Site is zoned Parks and Recreation (P-R) and is surrounded by Low Density Residential (R-L) zoning. Further, El Macero is also subject to Planned Development No. 66 (PD-66). According to the Yolo County Zoning Code, the purpose of the Planned Development Overlay zone is to encourage a more flexible and efficient use of land for larger urban development projects. The Project involves a general plan amendment to change the land use designation from Parks and Recreation (PR) to Residential Low (RL), a rezone of approximately 0.97 acres of the Project Site from P-R to R-L/PD-66, and a tentative parcel map to create three residential parcels from the larger golf course parcel. The Project also includes a request for a variance to allow a reduced front yard setback for proposed Lot 2 and Lot 3 to match the building envelope of adjacent lots. The Project Site is located within an established residential community and is surrounded by residential and recreational uses. The proposed Project would facilitate the expansion and construction of limited residential development consistent with the surrounding land uses and the planned development framework applied within the El Macero community. The proposed Project would be compatible with the existing residential character of the existing community and would represent a minor infill addition within an already developed area. The Project would not cause a significant environmental impact due to a conflict with any land use plans, policies or regulations. Therefore, the impact would be less than significant.

4.12 MINERAL RESOURCES

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

4.12.1 Discussion

- a, b) **No Impact.** The California DOC Mines Online tool does not identify any documented mines on the Project Site (DOC, 2026b). The site is not within a Mineral Resource Zone as identified on the 2030 General Plan Conservation Element (Yolo County, 2009). The Project Site does not contain a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan. Therefore, the Project would result in no impact.

4.13 NOISE

Would the project result in:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Generation of excessive ground borne vibration or ground borne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

4.13.1 Introduction

Noise levels are commonly measured in decibels (dB) using the A-weighted sound pressure level (dBA). Decibels are measured on a logarithmic scale where a doubling of a noise energy source, such as doubling traffic volumes, would increase the noise level by 3 dB; similarly, dividing the energy in half would result in a decrease of 3 dB (Caltrans, 2013). Noise levels from a point source, such as construction, industrial machinery, typically attenuate or drop off at a rate of 6 dBA per doubling of distance. Noise from a line source (e.g., roadway, pipeline, or railroad) typically attenuates at about 3 dBA per doubling of distance (Caltrans, 2013). Generally, any large structure blocking the line of sight will provide at least a 5-dBA reduction in source noise levels at the receiver (Federal Highway Administration [FHWA], 2011).

Yolo County has not adopted a noise ordinance that sets specific noise level limits for different land uses. The 2030 Countywide General Plan (General Plan) Health and Safety Element defines noise sensitive receptors as residentially designated land uses; hospitals, nursing/convalescent homes, and similar board and care facilities; hotels and lodging; schools and day care centers; and neighborhood parks. The nearest sensitive receptors are residences located immediately adjacent to the boundaries of the three proposed parcels, within the community of El Macero.

The General Plan incorporates the State’s land use noise compatibility guidance, which is expressed in terms of Community Noise Equivalent Level (CNEL) and is used to evaluate the acceptability of long-term exterior noise exposure for new development. The General Plan identifies up to 60 dB CNEL as generally acceptable for low-density residential land uses. Temporary construction noise is evaluated separately from CNEL-based land use compatibility guidance.

4.13.2 Discussion

a) Less-than-Significant Impact.

Construction

The Project would involve construction activities that could temporarily increase ambient noise levels in the vicinity of the Project Site. Construction noise would be generated by heavy equipment such as excavators, loaders, graders, and trucks, with noise levels varying based on the type and amount of equipment in use at any given time, and the distance to sensitive receptors. As discussed in **Section 4.13.1**, the nearest sensitive receptors are residences located adjacent to the boundaries of the three proposed parcels. **Table 4.13-1** below presents typical maximum noise levels generated by construction equipment at a distance of 50 feet:

Table 4.13-1: Construction Equipment Noise Levels

Construction Equipment	Typical Maximum Noise Levels (dBA) at 50 feet
Backhoe	80
Compactor	82
Concrete Mixer	85
Concrete Saw	90
Excavator	81
Generator Set	82
Grader	85
Paver	85
Truck	84
Dozer	85
Roller	85
Scraper	85
Tractor/Loader	80
Welder	74

Sources: Federal Transit Administration (FTA), 2018

Given that noise levels from construction generally attenuate at a rate of approximately 6 dBA per doubling of distance, sensitive receptors located adjacent to the Project Site parcel boundaries could experience noise levels ranging from 74 dBA to 90 dBA, depending on the specific equipment in use. While construction noise would be temporarily noticeable to nearby residents, construction activities would be short-term, intermittent, and limited in duration. The Project anticipates future residential development in accordance with the County's R-L/PD-66 development requirements and would not require large-scale grading or extended heavy equipment operation. Construction would occur during typical daytime hours and would comply with applicable State and local requirements governing equipment operation and idling. Because construction noise would be temporary, limited in scope, and consistent with typical residential infill development activities, impacts would be less than significant.

Operation

Operation of the Project would be consistent with General Plan Policy HS-7.1, which requires that new development be compatible with the existing and projected noise environment. The Project would not directly result in construction activities but would facilitate future residential development within an existing developed community in accordance with the County's R-L/PD-66 development requirements. Therefore, operational noise generated by the Project would be consistent with the existing noise environment. Primary operational noise sources would include vehicle trips on local roadways, on-site vehicle movements, HVAC systems, and occasional maintenance activities. As discussed in **Section 4.17**, the indirect result of the Project is anticipated to generate approximately seven and nine vehicle trips during the a.m. and p.m. peak hours, respectively. This minimal increase in traffic would not substantially increase local traffic volumes or roadway noise levels. Operational noise would be intermittent and comparable to existing residential noise levels in the surrounding area. Residential HVAC equipment would be required to comply with applicable building standards and manufacturer specifications, and would not result in sustained noise levels substantially above typical residential background conditions. Therefore, operational noise impacts would be less than significant.

b) **Less than Significant Impact.**

Construction

Construction activity can result in varying degrees of groundborne vibration, depending on the specific construction equipment used and operations involved. There are no historic resources or fragile structures located within or adjacent to the Project Site. Therefore, this analysis focuses on the potential for construction-related vibration to cause damage to buildings of conventional construction and to result in human annoyance at nearby residences. The FTA Transit Noise and Vibration Impact Assessment Manual identifies 0.2 in/sec PPV as the threshold for potential damage to non-engineered timber and masonry buildings and 0.3 in/sec PPV for engineered concrete and masonry buildings (FTA, 2018). The highest vibration-generating equipment with the potential to be used for Project construction includes vibratory rollers, which typically generate vibration levels of 0.210 in/sec PPV at 25 feet. While the nearest sensitive receptors are adjacent to the Project Site parcel boundaries, they would still be approximately 50 feet from anticipated construction activities and equipment use. At this distance, vibration levels associated with a vibratory roller would be approximately 0.07 in/sec PPV, which is below the thresholds for both structural damage and human perception. Given the limited scale of development and the absence of pile driving or other high-vibration construction techniques, vibration impacts would be minimal and temporary. As such, construction vibration impacts would be less than significant.

Operation

The Project would not directly result in construction activities but would facilitate future development within an existing developed community in accordance with the County's R-L/PD-66 development requirements. The future operation of residential uses would not involve the use of high-vibration-generating equipment. Therefore, the Project would not introduce new sources of groundborne vibration and operational vibration impacts would be less than significant.

c) **No Impact.** There are no private airstrips or public airports within 2 miles of the Project Site. As a result, the Project would not expose residents or workers in the area to excessive noise from aircraft activity and there would be no impact.

4.14 POPULATION AND HOUSING

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

4.14.1 Discussion

- a) **Less-than-Significant Impact.** The Project is a request for a general plan amendment, rezone, and tentative parcel map to facilitate the expansion of residential uses on a portion of the approximately 170-acre El Macero golf course parcel (APN 068-130-010) totaling approximately 0.97 acres. The Project would not directly result in construction activities but would facilitate the creation of three residential parcels and future residential development within an existing developed community. The future development represents a negligible increase in housing supply and population within the County and surrounding community and would not induce substantial population growth in the area. Therefore, the Project would result in a less-than-significant impact.
- b) **No Impact.** The Project would not displace any existing housing units or residents. Therefore, the Project would result in no impact.

4.15 PUBLIC SERVICES

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

4.15.1 Discussion

- a.i) **Less-than-Significant Impact.** The Project Site receives fire protection services from the East Davis County Fire Protection District, located about 0.6 miles northwest of the Project Site. The District consists of five volunteers who are appointed by the Yolo County District 4 Supervisor. The District contracts with the City of Davis Fire Department for services to the Project Site. The anticipated increase in fire and emergency protection calls as a result of future development of the Project Site would be minor and within the capacity of existing fire protection facilities; the Project would not require new fire protection facilities. Therefore, the Project would result in a less-than-significant impact.
- a.ii) **Less-than-Significant Impact.** The Yolo County Sheriff’s Office provides police protection to the Project Site, with the nearest station approximately 8.5 miles northwest of the Project Site in Woodland. As stated above, the Project would not substantially increase the County’s population. The Project is not expected to result in a substantial increase in demand for police services that would require the construction of new or expanded police facilities. Therefore, the Project would result in a less-than-significant impact.
- a.iii-v) **Less-than-Significant Impact.** As stated above, the Project would not directly result in construction activities but would facilitate future residential development on each new parcel. The Project would not substantially increase the County’s population. As such, the Project would not require the construction of new schools, parks, or other public facilities. Therefore, the Project would result in a less-than-significant impact.

4.16 RECREATION

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

4.16.1 Discussion

- a, b) **Less-than-Significant Impact.** The Project would indirectly result in the construction of future residential development on the three proposed parcels in accordance with the County’s R-L/PD-66 development requirements. The Project would result in a minimal increase in the use of existing recreational facilities. The addition of three homes would not substantially increase demand for recreational facilities or require the construction or expansion of such facilities. Therefore, the Project would result in a less-than-significant impact.

4.17 TRANSPORTATION

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

4.17.1 Introduction

This section evaluates the potential for the Project to result in impacts to transportation facilities and circulation, which include vehicles, pedestrians, bicyclists, and transit. Additionally, the impact of the Project on vehicle miles traveled (VMT) has been included consistent with the requirements of SB 743 and CEQA Guidelines Section 15064.3.

4.17.2 Discussion

- a) **Less-than-Significant Impact.** The roadway network within unincorporated Yolo County consists primarily of two-lane roads that are designed to serve small farming communities and agricultural uses. Thus, policies in the 2030 Countywide General Plan encourage inter- and intra-regional traffic to use State and federal interstates and highways, since the primary role of county roads is to serve local and agricultural traffic. Additionally, Yolo County General Plan Policy CI-3.1 in the County’s Circulation Element states that level of service (LOS) C should be maintained during the peak hours. The assumed development scenario would generate minimal traffic and would not result in a deterioration of any County intersection below LOS C.

Regional access to the Project Site is provided via Interstate 80, which is located approximately 0.6 miles north of the Project Site. The golf course parcel is generally bound by N El Macero Drive to the north, E El Macero Drive to the east, S El Macero Drive to the south, and Mace Boulevard to the west. Local access to the three proposed parcels is provided from Clubhouse Drive (Lot 1) and Country Club Drive (Lots 2 and 3).

Trip generation for the Project was calculated using the fitted curve equation for Land Use Code 210 (Single Family Detached Residential) and average rates for Land Use Code 220 (Low-Rise

Multifamily Housing, as detailed in the Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition.¹ The indirect result of the Project (i.e., new residential uses) would generate approximately 98 daily vehicle trips, including approximately seven vehicle trips during the weekday morning peak hour and approximately nine vehicle trips during the afternoon peak hour. The peak hour corresponds to commuting traffic on nearby local and regional facilities, which typically occurs between 7:00am and 9:00am during the morning and between 4:00pm and 6:00pm during the afternoon.

Given the limited number of trips generated by the indirect result of Project and its location within an existing residential community served by established local roadways, the Project would not require construction of new public roadways or modification of existing intersections.

Based upon the small number of trips generated by the Project, the Project would not conflict with the 2030 Countywide General Plan or any other program plan, ordinance, or policy addressing the circulation system including roadways or transit. The Project would not cause a LOS rating to deteriorate from LOS C or better to LOS D, E or F at any of the intersections. Furthermore, the Project would not result in degradation of the LOS (or a significant increase in delay) on any roadway segments currently being utilized by bus transit in the area and would not increase ridership beyond existing capacity. In relation to the existing conditions, the Project would not cause substantial changes to the pedestrian or bicycle traffic in the area and would not significantly impact or require changes to the design of any existing or planned bicycle or pedestrian facilities. Therefore, the Project would result in a less-than-significant impact.

b) **Less-than-Significant Impact.** VMT refers to the amount and distance of vehicle travel attributable to a project. Pursuant to SB 743 and CEQA Guidelines Section 15064.3, a project's transportation impact is determined based on its effect on VMT rather than roadway congestion. The California Governor's Office of Planning and Research (OPR) document *Technical Advisory on Evaluating Transportation Impacts in CEQA* provides general direction regarding the methods to be employed and significance criteria to evaluate VMT impacts, absent policies adopted by local agencies. The directive addresses several aspects of VMT impact analysis, and is organized as follows:

- **Screening Criteria:** Screening criteria are intended to quickly identify when a project should be expected to cause a less-than-significant VMT impact without conducting a detailed study.
- **Significance Thresholds:** Significance thresholds define what constitutes an acceptable level of VMT and what could be considered a significant level of VMT requiring mitigation.
- **Analysis Methodology:** These are the potential procedures and tools for producing VMT forecasts to use in the VMT impact assessment.
- **Mitigation:** Projects that are found to have a significant VMT impact based on the County's significance thresholds are required to implement mitigation measures to reduce impacts to a less-than-significant level (or to the extent feasible).

Screening Criteria: Screening criteria can be used to quickly identify whether sufficient evidence exists to presume a project would have a less-than-significant VMT impact without conducting a

¹ The ITE Trip Generation Manual does not have a rate for accessory dwelling units; as a proxy, the Low-Rise Multifamily Residential rates (ITE Land Use Code 220) were used due to because its similar characteristics (e.g., attached product type).

detailed study. However, each project should be evaluated against the evidence supporting that screening criteria to determine if it applies. Projects meeting at least one of the criteria below can be presumed to have a less than significant VMT impact, absent substantial evidence that the project will lead to a significant impact.

The extent to which the Project qualifies under each criterion is noted below.

- **Small Projects:** Defined as a project that generates 110 or fewer average daily vehicle trips.
- **Affordable Housing:** Defined as a project consisting of deed-restricted affordable housing.
- **Local-Serving Non-Residential Development:** The directive notes that local serving retail uses can reduce travel by offering customers more choices in closer proximity. Local serving retail uses of 50,000 square feet or less can be presumed to have a less-than-significant impact.
- **Projects in Low VMT-Generating Area:** Defined as a residential or office project that is in a VMT efficient area based on an available VMT Estimation Tool. The project must be consistent in size and land use type (i.e., density, mix of uses, transit accessibility) as the surrounding built environment.
- **Proximity to High Quality Transit:** The directive notes that employment and residential development located within one-half mile of a high-quality transit corridor can be presumed to have a less-than-significant impact.

Impact Conclusion: The extent to which the Project's VMT impacts can be presumed to be less than significant has been determined based on review of the OPR directive's screening criteria and general guidance. The OPR Small Project criteria is applicable to the Project. The indirect result of the Project (i.e., new residential uses) is estimated to generate a maximum of approximately 98 daily vehicle trips, which is below the OPR threshold of 110 daily trips. As the 110 average daily trips threshold would not be exceeded, the Project's VMT impacts can be presumed to be less than significant. Therefore, the Project would result in a less-than-significant impact.

- c) **Less-than-Significant Impact.** Access to the residential parcels would be provided via private, individual driveways along Clubhouse Drive and Country Club Drive. These driveways would be designed to meet all applicable County standards and would be located in an area already developed with single-family residences with similar access. The Project would not introduce new access points to arterial roadways and would not substantially alter existing circulation patterns. Therefore, the Project would result in a less-than-significant-impact.
- d) **Less-than-Significant Impact.** The Project would not substantially increase hazards to vehicle safety due to increased traffic, which could result in inadequate emergency access. Private driveway and curbside access would conform to all applicable County Fire Department requirements, accommodating emergency access to the Project Site. In addition, the small addition of traffic from the Project would not result in any significant changes to emergency vehicle response times in the area. Therefore, the Project would result in a less-than-significant impact.

4.18 TRIBAL CULTURAL RESOURCES

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: <ul style="list-style-type: none"> <li>i. Listed or eligible for listing in the CRHR, or in the local register of historical resources as defined in Public Resources Code Section 5020.1(k), or 	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<ul style="list-style-type: none"> <li>ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe. 	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

4.18.1 Introduction

Methodology

Tribal Cultural Resources (TCRs) are a class of resources defined under AB 52. TCRs include sites, features, places, cultural landscapes, and sacred places or objects that have cultural value or significance to a Tribe. To qualify as a TCR, the resource must either: 1) be listed on, or be eligible for, listing on the California Register of Historical Resources (CRHR) or other local historic register; or 2) constitute a resource that the lead agency, at its discretion and supported by substantial evidence, determines should be treated as a TCR (PRC §21074). AB 52 also states that tribal representatives are considered experts appropriate for providing substantial evidence regarding the locations, types, and significance of TCRs within their traditional and cultural affiliated geographic area, and therefore, the identification and analysis of TCRs should involve government-to-government tribal consultation between the CEQA lead agency and

interested tribes. (PRC §21080.3.1(a)).

Yolo County notifies tribes requesting AB 52 notification for projects subject to CEQA. The Yocha Dehe Wintun Nation was contacted in December of 2025 and subsequently requested consultation with the County regarding the Project. Consultation resulted in the inclusion of a treatment protocol and cultural sensitivity training for Project personnel as part of the Project design and conditions of approval, as described in **Section 2.4**.

4.18.2 Discussion

- a.i) **Less-than-Significant Impact.** No TCRs either listed or eligible for listing by the State or County were identified on the Project Site as a result of the records search (discussed further in **Section 4.5.1**) and AB 52 consultation. Therefore, the Project would result in a less-than-significant impact.

- a.ii) **Less-than-Significant Impact.** As discussed above, no TCRs are known to occur on the Project Site or in the surrounding vicinity. However, the Project Site is located in the aboriginal territory of the Yocha Dehe Wintun Nation (YDWN) and the Project could result in inadvertent discoveries. YDWN requested that the Project incorporate the *Treatment Protocol for Handling Human Remains and Cultural Items Affiliated with the Yocha Dehe Wintun Nation (Appendix A)* in the event that Native American remains, grave goods, ceremonial items, or items of cultural patrimony are discovered during ground-disturbing activities, and agreement that Project personnel will complete the YDWN's cultural sensitivity training. These terms have been incorporated into the Project design and will be implemented as conditions of approval as discussed in **Section 2.4**. Therefore, the Project would result in a less-than-significant impact.

4.19 UTILITIES AND SERVICE SYSTEMS

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

4.19.1 Discussion

The Project would not directly result in construction or utility demand; however, the proposed Project would allow future residential development of on each proposed parcel in accordance with the County's R-L/PD-66 development requirements, which could incrementally increase demand for utilities and service systems as discussed below.

- a) **Less-than-Significant Impact.** The Project would require water and sewer service from the El Macero CSA, which contracts with the City of Davis for services in the El Macero community. The El Macero CSA serves all properties within a defined area of the community of El Macero. The

parcels adjacent to the Project Site currently receive services which would be extended to the Project parcels. Electric and natural gas services are provided to the El Macero community by PG&E, with electricity supplied through Valley Clean Energy, the local community choice energy provider. PG&E reviewed the project and determined that the proposed improvements do not appear to directly interfere with existing PG&E facilities or easement rights (PG&E, 2025). Stormwater runoff from new impervious surfaces associated with future development would drain via existing storm drain mains along adjacent roadways.

Yolo County Public Works requires that new utility connections be installed consistent with County improvement standards and that drainage improvements tie into existing drainage facilities. Water and sewer connections would also be installed in accordance with City of Davis standard specifications and utility plans would require City review and approval.

The Project's connection to existing utilities would comply with all federal, state, and local regulations. Therefore, the Project would result in a less-than-significant impact.

- b, c) **Less-than-Significant Impact.** Water and wastewater services in the El Macero community are administered through the El Macero County Service Area, which contracts with the City of Davis to provide utility services. All water and sewer connections will be installed per City of Davis standard specifications. The associated water and wastewater demands for three residences would be minimal in relation to the area serviced as a whole. Therefore, the Project would have a less-than-significant impact on water supplies and wastewater systems.
- d, e) **Less-than-Significant Impact.** Construction and operation of future residential uses would generate a limited amount of solid waste and would comply with all federal, state, and local statutes and regulations related to solid waste. Solid waste services are provided by Recology, with residential solid waste being transported to the Yolo County Central Landfill. Future residents would be required to participate in the applicable solid waste, recycling, and organics collection programs consistent with state and local requirements, including Assembly Bill 939 and Senate Bill 1383. The landfill has sufficient permitted capacity and Project waste would be negligible relative to the available capacity. Therefore, the Project would result in a less-than-significant impact.

4.20 WILDFIRE

If located in or near SRA or lands classified as very high fire hazard severity zones, would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrollable spread of wildfire?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

4.20.1 Introduction

The Project Site is not located in a State Responsibility Area (SRA; where CAL FIRE is responsible for fire prevention and suppression) or a very high fire hazard severity zone (VHFHSZ; CAL FIRE, 2026). The closest VHFHSZ is approximately 18 miles west of the Project Site, near Winters, CA. The City of Davis Fire Department - Station 33 and East Davis County Fire Protection District are located approximately 0.6 miles northwest of the Project Site.

4.20.2 Discussion

a-d) **No Impact.** The Project Site is not located in an SRA or a VHFHSZ. There are no elements of the Project that would exacerbate wildland fire risk in the Project area. The foreseeable future construction of single-family residences would adhere to applicable CBC and fire safety standards that minimize the risk of igniting a fire. Therefore, the Project would result in no impact.

4.21 CEQA MANDATORY FINDINGS OF SIGNIFICANCE

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

4.21.1 Discussion

- a) **Less-than-Significant Impact.** The Project would not substantially degrade the quality of the environment, substantially reduce habitat for fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory.

As described in **Section 4.4**, Biological Resources, the Project Site consists of maintained turf and ornamental landscaping within an existing golf course and does not contain sensitive natural communities, aquatic resources, or habitat for special-status species. Compliance with applicable regulations, including the Migratory Bird Treaty Act and the Yolo HCP/NCCP, would avoid or minimize potential impacts to biological resources.

As discussed in **Section 4.5**, Cultural Resources, records searches and tribal consultation did not identify known cultural resources on the Project Site. In addition, the Project would incorporate cultural sensitivity training and treatment protocols developed in consultation with the Yocha Dehe Wintun Nation to address any inadvertent discoveries during ground-disturbing activities.

Because the Project Site is located within a developed community and does not contain sensitive environmental resources, and because the Project would comply with applicable regulatory requirements, impacts would be less than significant.

- b) **Less-than-Significant Impact.** The Project includes a general plan amendment, rezone, and tentative parcel map to create three new residential parcels from a small portion of the Project Site to facilitate the expansion of residential uses. Although no development is proposed as part of the Project, the environmental analysis assumes future development of two single-family residences and one ADU on each of the three parcels, for a total of six residences and three ADUs. The Project Site is located within the established El Macero residential community and represents a minor infill development consistent with the County's General Plan land use framework.

The incremental impacts associated with the Project would be small and primarily related to temporary construction activities and minimal increases in vehicle trips and utility demand associated with future residential development on each parcel in accordance with the County's R-L/PD-66 development requirements. As discussed throughout this Initial Study, these impacts would be less than significant and would occur within the context of an already developed community served by existing infrastructure and public services.

Because the Project's contribution to potential cumulative impacts would be minimal and the Project would comply with applicable regulations and County standards, the Project's incremental contribution to cumulative environmental effects would not be cumulatively considerable.

- c) **Less-than-Significant Impact.** The Project would not result in environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly. As discussed throughout this Initial Study, the Project would not expose residents or the public to significant hazards related to air quality, noise, hazardous materials, geologic hazards, flooding, wildfire, or other environmental conditions. Potential impacts associated with construction and future residential use would be temporary, localized, and consistent with typical residential development within an existing community. Because the Project would not introduce substantial environmental hazards or conditions that could adversely affect human health or safety, impacts would be less than significant.

Section 5 | List of Preparers

County of Yolo

Tracy Gonzalez Associate Planner

Acorn Environmental

Jennifer Wade Project Director

Katie Francisco Deputy Project Manager/Environmental Analyst

Shadde Rosenblum Senior Environmental Analyst

Emma Miller Environmental Analyst

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Appendix A

Yocha Dehe Wintun Nation
Treatment Protocol



YOCHA DEHE
CULTURAL RESOURCES

February 6, 2026

Yolo County Dept. of Community Services
Attn: Tracy Gonzales,
292 W. Beamer Street
Woodland, CA 95695

RE: El Macero Country Club General Plan YD-12122025-03

Dear Ms. Gonzales:

Thank you for the consultation meeting on Wednesday, February 4, 2026, regarding the proposed El Macero Country Club General Plan. We appreciate you taking the time to discuss the project.

Based on the information provided during the consultation meeting, Yocha Dehe Wintun Nation is not aware of any known cultural resources near this project site, and a cultural monitor is not needed. However, if any new information or cultural items are found, please contact the Cultural Resources Department. In addition, we recommend cultural sensitivity training for any pre-project personnel.

Furthermore, we request that you incorporate Yocha Dehe Wintun Nation's Treatment Protocol into the mitigation measures for this project. Please submit the updated mitigation measures to the Cultural Resources Department once completed.

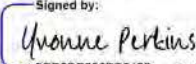
To execute a cultural sensitivity training agreement prior to the start of the project, please contact:

Eric Hernandez, Site Protection Manager
Yocha Dehe Wintun Nation
Phone: (530) 723-3313
Email: ehernandez@yochadehe.gov

Please refer to identification number YD-12122025-03 in correspondence concerning this project.

Thank you for providing us the opportunity to comment.

Sincerely,

Signed by:

Yvonne Perkins
Tribal Historic Preservation Officer



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Treatment Protocol for Handling Human Remains and Cultural Items Affiliated with the Yocha Dehe Wintun Nation

The purpose of this Protocol is to formalize procedures for the treatment of Native American human remains, grave goods, ceremonial items, and items of cultural patrimony, in the event that any are found in conjunction with development, including archaeological studies, excavation, geotechnical investigations, grading, and any ground disturbing activity. This Protocol also formalizes procedures for Tribal monitoring during archaeological studies, grading, and ground-disturbing activities.

I. Cultural Affiliation

The Yocha Dehe Wintun Nation ("Tribe") traditionally occupied lands in Yolo, Solano, Lake, Colusa and Napa Counties. The Tribe has designated its Cultural Resources Committee ("Committee") to act on the Tribe's behalf with respect to the provisions of this Protocol. Any human remains which are found in conjunction with Projects on lands culturally-affiliated with the Tribe shall be treated in accordance with Section III of this Protocol. Any other cultural resources shall be treated in accordance with Section IV of this Protocol.

II. Inadvertent Discovery of Native American Human Remains

Whenever Native American human remains are found during the course of a Project, the determination of Most Likely Descendant ("MLD") under California Public Resources Code Section 5097.98 will be made by the Native American Heritage Commission ("NAHC") upon notification to the NAHC of the discovery of said remains at a Project site. If the location of the site and the history and prehistory of the area is culturally-affiliated with the Tribe, the NAHC contacts the Tribe; a Tribal member will be designated by the Tribe to consult with the landowner and/or project proponents.

Should the NAHC determine that a member of an Indian tribe other than Yocha Dehe Wintun Nation is the MLD, and the Tribe is in agreement with this determination, the terms of this Protocol relating to the treatment of such Native American human remains shall not be applicable; however, that situation is very unlikely.

III. Treatment of Native American Remains

In the event that Native American human remains are found during development of a Project and the Tribe or a member of the Tribe is determined to be MLD pursuant to Section II of this Protocol, the following provisions shall apply. The Medical Examiner shall immediately be notified, ground disturbing activities in that location shall cease and the Tribe shall be allowed, pursuant to California Public Resources Code Section 5097.98(a), to (1) inspect the site of the discovery and (2) make determinations as to how the human remains and grave goods should be treated and disposed of with appropriate dignity.



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The Tribe shall complete its inspection and make its MLD recommendation within forty-eight (48) hours of getting access to the site. The Tribe shall have the final determination as to the disposition and treatment of human remains and grave goods. Said determination may include avoidance of the human remains, reburial on-site, or reburial on tribal or other lands that will not be disturbed in the future.

The Tribe may wish to rebury said human remains and grave goods or ceremonial and cultural items on or near the site of their discovery, in an area which will not be subject to future disturbances over a prolonged period of time. Reburial of human remains shall be accomplished in compliance with the California Public Resources Code Sections 5097.98(a) and (b).

The term "human remains" encompasses more than human bones because the Tribe's traditions call for the burial of associated cultural items with the deceased (funerary objects), and/or the ceremonial burning of Native American human remains, funerary objects, grave goods and animals. Ashes, soils and other remnants of these burning ceremonies, as well as associated funerary objects and unassociated funerary objects buried with or found near the Native American remains are to be treated in the same manner as bones or bone fragments that remain intact.

IV. Non-Disclosure of Location of Reburials

Unless otherwise required by law, the site of any reburial of Native American human remains shall not be disclosed and will not be governed by public disclosure requirements of the California Public Records Act, Cal. Govt. Code § 6250 *et seq.* The Medical Examiner shall withhold public disclosure of information related to such reburial pursuant to the specific exemption set forth in California Government Code Section 6254(r). The Tribe will require that the location for reburial is recorded with the California Historic Resources Inventory System ("CHRIS") on a form that is acceptable to the CHRIS center. The Tribe may also suggest that the landowner enter into an agreement regarding the confidentiality of site information that will run with title on the property.

V. Treatment of Cultural Resources

Treatment of all cultural items, including ceremonial items and archeological items will reflect the religious beliefs, customs, and practices of the Tribe. All cultural items, including ceremonial items and archeological items, which may be found at a Project site should be turned over to the Tribe for appropriate treatment, unless otherwise ordered by a court or agency of competent jurisdiction. The Project Proponent should waive any and all claims to ownership of Tribal ceremonial and cultural items, including archeological items, which may be found on a Project site in favor of the Tribe. If any intermediary, (for example, an archaeologist retained by the Project Proponent) is necessary, said entity or individual shall not possess those items for longer than is reasonably necessary, as determined solely by the Tribe.



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VI. Inadvertent Discoveries

If additional significant sites or sites not identified as significant in a Project environmental review process, but later determined to be significant, are located within a Project impact area, such sites will be subjected to further archeological and cultural significance evaluation by the Project Proponent, the Lead Agency, and the Tribe to determine if additional mitigation measures are necessary to treat sites in a culturally appropriate manner consistent with CEQA requirements for mitigation of impacts to cultural resources. If there are human remains present that have been identified as Native American, all work will cease for a period of up to 30 days in accordance with Federal Law.

VIII. Work Statement for Tribal Monitors

The description of work for Tribal monitors of the grading and ground disturbing operations at the development site is attached hereto as Addendum I and incorporated herein by reference.



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ADDENDUM I

**Yocha Dehe Wintun Nation
Tribal Monitors
Description of Work and Treatment Protocol**

I. Preferred Treatment

The preferred protocol upon the discovery of Native American human remains is to (1) secure the area, (2) cover any exposed human remains or other cultural items, and (3) avoid further disturbances in the area.

II. Comportment

All parties to the action are strongly advised to treat the remains with appropriate dignity, as provided in Public Resource Code Section 5097.98. We further recommend that all parties to the action treat tribal representatives and the event itself with appropriate respect. For example, jokes and antics pertaining to the remains or other inappropriate behavior are ill advised.

III. Excavation Methods

If, after the Yocha Dehe Tribal representative has been granted access to the site and it is determined that avoidance is not feasible, an examination of the human remains will be conducted to confirm they are human and to determine the position, posture, and orientation of the remains. At this point, we recommend the following procedures:

(A) Tools. All excavation in the vicinity of the human remains will be conducted using fine hand tools and fine brushes to sweep loose dirt free from the exposure.

(B) Extent of Exposure. In order to determine the nature and extent of the grave and its contents, controlled excavation should extend to a full buffer zone around the perimeter of the remains.

(C) Perimeter Balk. To initiate the exposure, a perimeter balk (especially, a shallow trench) should be excavated, representing a reasonable buffer a minimum of 10 cm around the maximum extent of the known skeletal remains, with attention to counter-intuitive discoveries or unanticipated finds relating to this or other remains. The dirt from the perimeter balk should be bucketed, distinctly labeled, and screened for cultural materials.

(D) Exposure Methods. Excavation should then proceed inward from the walls of the balk as well as downward from the surface of the exposure. Loose dirt should be scooped out and brushed off into a dustpan or other collective device. Considerable care should be given to ensure that human remains are not further impacted by the process of excavation.

(E) Provenience. Buckets, collection bags, notes, and tags should be fully labeled per provenience, and a distinction should be made between samples collected from: (1) **Perimeter**



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Balk (described above), (2) **Exposure** (dirt removed in exposing the exterior/burial plan and associations, and (3) **Matrix** (dirt from the interstices between bones or associations). Thus, each burial may have three bags, "Burial 1 Perimeter Balk," "Burial 1 Exposure Balk," "Burial 1 Matrix."

Please note the provisions below with respect to handling and conveyance of records and samples.

(F) Records. The following records should be compiled in the field: (1) a detailed scale drawing of the burial, including the provenience of and full for all human remains, associated artifacts, and the configuration of all associated phenomena such as burial pits, evidence for preinterment grave pit burning, soil variability, and intrusive disturbance, (2) complete a formal burial record using the consultants proprietary form or other standard form providing information on site #, unit or other proveniences, level depth, depth and location of the burial from a fixed datum, workers, date(s), artifact list, skeletal inventory, and other pertinent observations, (3) crew chief and worker field notes that may supplement or supercede information contained in the burial recording form, and (4) photographs, including either or standard photography or high-quality (400-500 DPI or 10 MP recommended) digital imaging.

(G) Stipulations for Acquisition and Use of Imagery. Photographs and images may be used only for showing location or configuration of questionable formation or for the position of the skeleton. They are not to be duplicated for publication unless a written release is obtained from the Tribe.

(H) Association. Association between the remains and other cultural materials should be determined in the field in consultation with an authorized Tribal representative, and may be amended per laboratory findings. Records of provenience and sample labels should be adequate to determine association or degree of likelihood of association of human remains and other cultural materials.

(I) Samples. For each burial, all **Perimeter Balk** soil is to be 1/8"-screened. All **Exposure** soil is to be 1/8"-screened, and a minimum of one 5-gallon bucket of excavated but unscreened Exposure soil is to be collected, placed in a plastic garbage bag in the bucket. All **Matrix** soil is to be carefully excavated, screened as appropriate, and then collected in plastic bags placed in 5-gallon buckets.

(J) Human remains are not to be cleaned in the field.

(K) Blessings. Prior to any physical action related to human remains, a designated tribal representative will conduct prayers and blessings over the remains. The archaeological consultant will be responsible for insuring that individuals and tools involved in the action are available for traditional blessings and prayers, as necessary.



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IV. Lab Procedures

No laboratory studies are permitted without consultation with the tribe. Lab methods are determined on a project-specific basis in consultation with Yocha Dehe Wintun Nation representatives. The following procedures are recommended:

(A) Responsibility. The primary archaeological consultant will be responsible for insuring that all lab procedures follow stipulations made by the Tribe.

(B) Blessings. Prior to any laboratory activities related to the remains, a designated tribal representative will conduct prayers and blessings over the remains. The archaeological consultant will be responsible for insuring that individuals and tools involved in the action are available for traditional blessings and prayers, as necessary.

(C) Physical Proximity of Associations. To the extent possible, all remains, associations, samples, and original records are to be kept together throughout the laboratory process. In particular, **Matrix** dirt is to be kept in buckets and will accompany the remains to the lab. The primary archaeological consultant will be responsible for copying all field records and images, and insuring that the original notes and records accompany the remains throughout the process.

(E) Additional Lab Finds. Laboratory study should be done making every effort to identify unanticipated finds or materials missed in the field, such as objects encased in dirt or human remains misidentified as faunal remains in the field. In the event of discovery of additional remains, materials, and other associations the tribal representatives are to be contacted immediately.

V. Re-internment without Further Disturbance

No laboratory studies are permitted on human remains and funerary objects. The preferred treatment preference for exhumed Native American human remains is reburial in an area not subject to further disturbance. Any objects associated with remains will be reinterred with the remains.



YOCHA DEHE
CULTURAL RESOURCES

VI. Curation of Recovered Materials

Should all, or a sample, of any archaeological materials collected during the data recovery activities – with the exception of Human Remains – need to be curated, an inventory and location information of the curation facility shall be given to tribe for our records.

Appendix B

Yolo Habitat Conservation
Plan Application Package



Yolo Habitat Conservation Plan Application Package

El Macero Golf Course Project

Yolo County, California

November 2025



Prepared for:

El Macero Country Club
Chris Johnson
44571 Clubhouse Drive
El Macero, CA 95618

Recommended Citation:

Madrone Ecological Consulting, LLC (Madrone). 2024. *Yolo Habitat Conservation Plan Application Package El Macero Golf Course Project*. Prepared for El Macero Country Club. Published on 7 November 2025.

APPLICATION



PURPOSE OF THIS FORM

Complete this form to apply for incidental take permit coverage under the Yolo Habitat Conservation Plan/Natural Community Conservation Plan (Yolo HCP/NCCP) and submit electronically to your local planning office. The completion of this form satisfies the minimum requirements for permit coverage. The Yolo Habitat Conservancy (“Conservancy”) encourages submittal of a preliminary application to your local planning office to ensure timely and accurate completion. Your local agency planning office also may request additional information to clarify or complete your application. Chapter 6 of the Permitting Guide provides instructions for form completion, available along with additional resources on the Conservancy’s web site under the “Permitting” tab. Please note if an application fee is required (see Screening Form, Box D), you should submit this fee to the Conservancy early in the application process. The Conservancy automatically adjusts mitigation fees by March 15th of each year to reflect current land prices and other expenses. If an applicant does not complete their application and issue payment prior to the fee update, the new fees will apply. The applicant may, however, pay mitigation fees early at the previous year’s rate consistent with the Conservancy’s Early Payment of Mitigation Fees Policy.

Regional-scale data related land cover, sensitive natural communities, and covered species habitats in Yolo is made available through the Yolo HCP/NCCP GeoMapper online mapping tool. The GeoMapper tool is accessible via the Resources tab of the Yolo Habitat Conservancy website below, although it is intended for informational purposes only. All HCP/NCCP permit applicants must have site-specific planning level surveys by a qualified biologist to determine actual land cover and sensitive natural communities and species habitats in and around a project site to determine the correct amount of land cover mitigation fees and project specific Avoidance and Minimization Measures (AMMs).

<https://www.yolohabitatconservancy.org/resources>

BOX A: Preliminary/Final Application

Check one box.

- Preliminary Application (signature not required) Final Application (complete form and signature required)

BOX B: APPLICATION DETAILS

1 Project name	El Macero Golf Course	
2 Submittal date		
3 Application/project file number(s) (assigned by local agency)		
4 YHC internal tracking #		
5 Local agency with approval authority	<input type="checkbox"/> Yolo County <input checked="" type="checkbox"/> City of Davis <input type="checkbox"/> City of Woodland <input type="checkbox"/> City of West Sacramento <input type="checkbox"/> City of Winters <input type="checkbox"/> Other _____	<input type="checkbox"/> Special Participating Entity (SPE) Note: Applicants not subject to approval from the County or cities, or for projects not specifically identified and not specifically excluded as a covered activity under the Plan, should check this box to request permit coverage as an SPE if desired. SPE permit coverage is not guaranteed, are processed by the Conservancy, and must be approved by the Conservancy Board.

BOX C: PROJECT CONTACT		
1 Property Owner		
1.a Property owner name	El Macero Country Club	
1.b Mailing address	44571 Clubhouse Drive, El Macero, CA 95618	
1.c Phone (home/office)	530-753-3363	1.d Phone (Cellular)
1.e Email	Chris.Johnson@troon.com	
2 Project Agent/Applicant		
2.a Company/organization	El Macero Country Club	
2.b Name of primary contact	Chris Johnson	
2.c Mailing address	44571 Clubhouse Drive, El Macero, CA 95618	
2.d Phone (office)	530-753-3363	2.e Phone (Cellular)
2.f Email	Chris.Johnson@troon.com, andi@cecwest.com; bwatson@madroneeco.com	
Permissions		
3 Local agency and/or the Conservancy may contact the property owner directly	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
4 Local agency and/or the Conservancy may contact the project agent/applicant directly	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

BOX D: PROJECT INFORMATION																											
1 Project address and location	<small>One parcel is located south of the intersection of Clubhouse Drive and Greenview Drive, and the other parcel is located north of the intersection of Country Club Drive and Country Club Circle.</small>																										
2 Assessor parcel number(s) APNs and acreage by parcel (not applicable for linear projects).	068-130-010																										
3 Total acreage of parcel(s) (not applicable for linear projects spanning multiple parcels)	1.3 acres																										
4 Using the GeoMapper's Spatially Defined Planning Unit Map, find your proposed project site. Check the Planning Unit in which your project lies.	<table border="0"> <tr> <td>Yolo County Planning Units</td> <td><input type="checkbox"/> 12 – Colusa Basin</td> </tr> <tr> <td><input type="checkbox"/> 1 – Little Blue Ridge</td> <td><input type="checkbox"/> 13 – Colusa Basin Plains</td> </tr> <tr> <td><input type="checkbox"/> 2 – North Blue Ridge</td> <td><input type="checkbox"/> 14 – North Yolo Basin</td> </tr> <tr> <td><input type="checkbox"/> 3 – South Blue Ridge</td> <td><input type="checkbox"/> 15 – South Yolo Basin</td> </tr> <tr> <td><input type="checkbox"/> 4 – Capay Hills</td> <td><input type="checkbox"/> 16 – Yolo Basin Plains</td> </tr> <tr> <td><input type="checkbox"/> 5 – Dunnigan Hills</td> <td><input type="checkbox"/> 17 – North Yolo Bypass</td> </tr> <tr> <td><input type="checkbox"/> 6 – Upper Cache Creek</td> <td><input type="checkbox"/> 18 – South Yolo Bypass</td> </tr> <tr> <td><input type="checkbox"/> 7 – Lower Cache Creek</td> <td></td> </tr> <tr> <td><input type="checkbox"/> 8 – Upper Putah Creek</td> <td>Cities</td> </tr> <tr> <td><input type="checkbox"/> 9 – Lower Putah Creek</td> <td><input type="checkbox"/> 19 – City of Woodland</td> </tr> <tr> <td><input type="checkbox"/> 10 – Hungry Hollow Basin</td> <td><input checked="" type="checkbox"/> 20 – City of Davis</td> </tr> <tr> <td><input type="checkbox"/> 11 – Willow Slough Basin</td> <td><input type="checkbox"/> 21 – City of West Sacramento</td> </tr> <tr> <td></td> <td><input type="checkbox"/> 22 – City of Winters</td> </tr> </table>	Yolo County Planning Units	<input type="checkbox"/> 12 – Colusa Basin	<input type="checkbox"/> 1 – Little Blue Ridge	<input type="checkbox"/> 13 – Colusa Basin Plains	<input type="checkbox"/> 2 – North Blue Ridge	<input type="checkbox"/> 14 – North Yolo Basin	<input type="checkbox"/> 3 – South Blue Ridge	<input type="checkbox"/> 15 – South Yolo Basin	<input type="checkbox"/> 4 – Capay Hills	<input type="checkbox"/> 16 – Yolo Basin Plains	<input type="checkbox"/> 5 – Dunnigan Hills	<input type="checkbox"/> 17 – North Yolo Bypass	<input type="checkbox"/> 6 – Upper Cache Creek	<input type="checkbox"/> 18 – South Yolo Bypass	<input type="checkbox"/> 7 – Lower Cache Creek		<input type="checkbox"/> 8 – Upper Putah Creek	Cities	<input type="checkbox"/> 9 – Lower Putah Creek	<input type="checkbox"/> 19 – City of Woodland	<input type="checkbox"/> 10 – Hungry Hollow Basin	<input checked="" type="checkbox"/> 20 – City of Davis	<input type="checkbox"/> 11 – Willow Slough Basin	<input type="checkbox"/> 21 – City of West Sacramento		<input type="checkbox"/> 22 – City of Winters
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BOX D: PROJECT INFORMATION

- 5 Provide a project description. Please refer to the Permitting Guide for details to include in the project description. Label as **Attachment 1** or indicate in this box the page numbers of the planning level survey where this information can be found.
- 6 Provide a legible vicinity map of the project site and surrounding area (PDF). Refer to the Permitting Guide for more information about details to include on the vicinity map. Label as **Attachment 2**. Rather than a separate PDF, applicant may include the site plan in the planning level survey report.
- If so, provide page number here: _____
- 7 Provide a site plan that shows the proposed project site and surrounding area. (PDF and CAD or GIS-compatible). Refer to the Permitting Guide for more information about details to include in the site plan and details regarding the required CAD or GIS-compatible digital information to be attached. Label as **Attachment 3**. Rather than a separate PDF, applicant may include the site plan in the planning level survey report or other report. If so, attach report or excerpt and provide report name and page number here: _____

BOX E: NATURAL COMMUNITY AND LAND COVER IMPACTS AND MITIGATION FEES

Complete Items 1-26 below, referring to the Permitting Guide for calculation methods.

- Total fee amount for each land cover type will be auto-generated based on acreage amount (and for recurring temporary impacts, number of years out of the 50-year permit term the impact will occur).
- Temporary impact fee formula = land cover fee x area of temporary effect in acres x (F/50) where F = the number of years in which the activity will occur during the rest of the permit term (until 2069).
- Must include required land cover fee buffer area associated with the project. This is generally 10 feet for linear projects (e.g. roads, utility corridors, pipelines) and 50 feet for all other projects. See Chapter 3 of the Permitting Guide.
- Fees will be updated annually, typically in March.
- Wetland fees are in addition to land cover fees.

Submit a planning level survey, including a field-verified land cover map and the name and qualifications of the qualified biologist(s) responsible for preparation of the report. Label as **Attachment 4**. Mapped areas shown on the site plan (**Attachment 3** in **Box D, Item 7**) should be consistent with the acreages entered below. Include photographs of temporary impact areas. Label photos as **Attachment 5**.

Land Cover Types	Land Cover Permanently Impacted by Project (in acres)			Land Cover Temporarily Impacted by Project (in acres)	Years of Recurring Temporary Impact	Fees (Auto Generated)				
	Permanent Impact (acres)	Fee Buffer (acres)	TOTAL			Land Cover Fee (per acre)	Wetland Fee (per acre)	Permanent Impact, Land Cover Fee	Temporary Impact, Land Cover Fee	Wetland Fee
1 <input checked="" type="checkbox"/> Developed (including ruderal with no covered species habitat) ^a	1.3		1.3			\$0	\$0	\$ 0.00	\$ 0.00	\$ 0.00
2 <input type="checkbox"/> Ruderal with covered species habitat ^a			0.0			\$16,672	\$0	\$ 0.00	\$ 0.00	\$ 0.00
3 <input type="checkbox"/> Barren, No Covered Species Habitat			0.0			\$0	\$0	\$ 0.00	\$ 0.00	\$ 0.00
4 <input type="checkbox"/> Barren, With Covered Species Habitat			0.0			\$16,672	\$0	\$ 0.00	\$ 0.00	\$ 0.00
5 <input type="checkbox"/> Vegetated Corridor with Covered Species Habitat			0.0			\$16,672	\$0	\$ 0.00	\$ 0.00	\$ 0.00
6 <input type="checkbox"/> Grassland (all types)			0.0			\$16,672	\$0	\$ 0.00	\$ 0.00	\$ 0.00
7 <input type="checkbox"/> Alkali Prairie			0.0			\$16,672	\$0	\$ 0.00	\$ 0.00	\$ 0.00
8 <input type="checkbox"/> Fresh Emergent Wetland (all types)			0.00			\$16,672	\$93,648	\$ 0.00	\$ 0.00	\$ 0.00

BOX E: NATURAL COMMUNITY AND LAND COVER IMPACTS AND MITIGATION FEES											
9	<input type="checkbox"/> Valley Foothill Riparian			0.00			\$16,672	\$98,448	\$ 0.00	\$ 0.00	\$ 0.00
10	<input type="checkbox"/> Lacustrine and Riverine			0.00			\$16,672	\$75,107	\$ 0.00	\$ 0.00	\$ 0.00
11	<input type="checkbox"/> Cultivated Land (all types)			0.0			\$16,672	\$0	\$ 0.00	\$ 0.00	\$ 0.00
12	<input type="checkbox"/> Citrus/Subtropical			0.0			\$16,672	\$0	\$ 0.00	\$ 0.00	\$ 0.00
13	<input type="checkbox"/> Deciduous Fruits/Nuts			0.0			\$16,672	\$0	\$ 0.00	\$ 0.00	\$ 0.00
14	<input type="checkbox"/> Vineyards			0.0			\$16,672	\$0	\$ 0.00	\$ 0.00	\$ 0.00
15	<input type="checkbox"/> Turf Farm			0.0			\$16,672	\$0	\$ 0.00	\$ 0.00	\$ 0.00
16	<input type="checkbox"/> Flowers/Nursery/Tree Farms			0.0			\$16,672	\$0	\$ 0.00	\$ 0.00	\$ 0.00
17	<input type="checkbox"/> Semiag/Incidental to Agriculture			0.0			\$16,672	\$0	\$ 0.00	\$ 0.00	\$ 0.00
18	<input type="checkbox"/> Eucalyptus			0.0			\$16,672	\$0	\$ 0.00	\$ 0.00	\$ 0.00
TOTAL									0.00	0.00	0.00
19	TOTAL LAND COVER IMPACTS AND MITIGATION FEES										\$0.00
20	APPLICATION FEE (The application fee is credited towards the cost of the mitigation fees if the application fee is paid prior to the submittal of the mitigation fee payment . Application fee as of January 1, 2020: \$1,981)										\$
21	OTHER CREDITS (Advanced fee payment or in lieu fee credit – must be verified by Conservancy). Add Attachment 6										\$
22	TOTAL LAND COVER IMPACTS AND MITIGATION FEES DUE (Mitigation fees due are determined at the time of payment unless they were paid in accordance with the Yolo HCP/NCCP Early Payment of Mitigation Fees Policy. See www.yolohabitatconservancy.org for current fee schedule.)										\$ 0.00
^a Land cover fees applicable if covered species habitat is present.											

BOX F: CONDITIONS OF APPROVAL: CONDUCT PLANNING LEVEL SURVEYS

Based on a planning level survey conducted by a qualified biologist using the land cover definitions described in the Permitting Guide in Table 2-1, indicate which sensitive natural communities and covered species are relevant to your project. Indicate below whether suitable covered species habitats are present (Column A) and, where applicable, if there is a need to conduct a more focused survey(s) for covered species (Column B) to confirm presence. Complete species-specific planning level surveys as needed consistent with protocols referenced in Appendix A of the Permitting Guide. Alternatively, covered species presence can be assumed, which would require adherence to applicable AMMs and implementation of avoidance measures or preconstruction surveys. Attach all species-specific planning level surveys as **Attachment 7**. Describe, map, and tabulate impacts the project will have on each natural community and each species for which habitat is present. Impact calculations must correspond to the permanent and temporary impact calculations in Box E. Label as **Attachment 8**. Alternatively, the impact assessment can be incorporated into the planning level survey. **Important:** Be aware of the timing requirements for conducting a species-specific planning level survey (Table 6-1 in the Permitting Guide) to avoid project delays.

	A. Project Site Conditions Requiring Planning Level Survey	B. Species-Specific Planning Level Survey Results	C. Documentation
Sensitive Natural Communities			
1 Alkali prairie and vernal pool complex	<p>Are vernal pools or alkali seasonal wetlands present within 250 feet of project footprint?</p> <p><input type="checkbox"/> Yes. <i>Design project to avoid vernal pools or alkali seasonal wetlands by 250 feet or lesser buffer if approved by wildlife agencies (see Permitting Guide Table 2-1). Check Box G, AMMs 9 and 10. Go to Column C.</i></p> <p><input checked="" type="checkbox"/> No</p>	N/A	<p>Map attached? (Attachment 4)</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If vernal pools or alkali seasonal wetlands are present on or near the site, provide map showing how project avoids these wetlands.</p>
2 Valley foothill riparian	<p>Is valley foothill riparian present within 100 feet of the project site boundary?</p> <p><input type="checkbox"/> Yes. <i>Design project to avoid valley foothill riparian by 100 feet or count all portions within 100 feet in the impact acreage (see Permitting Guide Table 2-1). Check Box G, AMMs 9 and 10. Go to Column C and provide map.</i></p> <p><input checked="" type="checkbox"/> No</p>	N/A	<p>Map attached? (Attachment 4)</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Provide map showing the valley foothill riparian in relation to the project footprint.</p>
3 Lacustrine and riverine	<p>Are any streams, rivers, lakes, or ponds within 25 feet of project footprint inside urban planning units, or within 100 feet of project footprint outside urban planning units?</p> <p><input checked="" type="checkbox"/> Yes. <i>Design project to avoid these resources by 25 feet inside urban planning units or 100 feet outside urban planning units, or count all portions within these distances in the impact acreage, unless a variance is allowed. Check Box G, AMMs 9 and 10. Go to Column C and provide map.</i></p> <p><input type="checkbox"/> No</p>	N/A	<p>Map attached? (Attachment 4)</p> <p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Provide map showing any streams, rivers, lakes, or ponds in relation to the project footprint.</p>

BOX F: CONDITIONS OF APPROVAL: CONDUCT PLANNING LEVEL SURVEYS			
	A. Project Site Conditions Requiring Planning Level Survey	B. Species-Specific Planning Level Survey Results	C. Documentation
Sensitive Natural Communities			
4	<p>Fresh emergent wetlands</p> <p>Are there any fresh emergent wetlands within 50 feet of project footprint outside urban planning units?</p> <p><input type="checkbox"/> Yes. <i>Design project to avoid these resources by 50 feet, or count all portions within 50 feet in the impact acreage. Check Box G, AMMs 9 and 10. Go to Column C and provide map). Survey period: May 31–September 30</i></p> <p><input checked="" type="checkbox"/> No</p>	N/A	<p>Map attached? (Attachment 4)</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p>Provide map of fresh emergent wetlands in relation to the project footprint.</p>
Plants			
5	<p>Palmate-bracted bird's beak</p> <p>Is suitable habitat present within 250 feet of the project site boundary? (see Permitting Guide Table 2-2)</p> <p><input type="checkbox"/> Yes. <i>Survey for palmate-bracted bird's beak consistent with Permitting Guide Appendix A. Check Box G, AMM 11. Go to Column B. Survey period: May 31–September 30</i></p> <p><input checked="" type="checkbox"/> No</p>	<p>Is palmate-bracted bird's beak present?</p> <p><input type="checkbox"/> Yes. <i>Design project to avoid occupied habitat as described in AMM 11. Go to Column C.</i></p> <p><input type="checkbox"/> No. <i>Go to Column C.</i></p>	<p>Species-specific planning level survey report attached? (Attachment 7)</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p><i>Include report of species-specific planning level survey and map of habitat and any plants found in relation to project footprint.</i></p>
Invertebrates			
6	<p>Valley elderberry longhorn beetle</p> <p>Is there presence of elderberry shrubs in the project site or within 100 feet outside of the project site boundary that could be impacted by the project?</p> <p><input type="checkbox"/> Yes. <i>Identify and map all elderberry shrubs in and within 100 feet of project footprint with stems greater than one inch in diameter at ground level. For mapped shrubs that cannot be avoided, quantify the number of stems greater than one inch in diameter at ground level, and identify any such stems with valley elderberry longhorn beetle exit holes. Check Box G, AMM 12. Go to Column C and provide survey report. Survey period: Year-round</i></p> <p><input checked="" type="checkbox"/> No</p>	N/A	<p>Species-specific planning level survey report attached? (Attachment 7)</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p>

BOX F: CONDITIONS OF APPROVAL: CONDUCT PLANNING LEVEL SURVEYS			
	A. Project Site Conditions Requiring Planning Level Survey	B. Species-Specific Planning Level Survey Results	C. Documentation
Amphibians			
7	<p>California tiger salamander</p> <p>Is there presence of California tiger salamander aquatic or upland habitat in the project footprint, or aquatic habitat within 500 feet of the project footprint?</p> <p><input type="checkbox"/> Yes. Check box G, AMM 13. Is the habitat within designated critical habitat for California tiger salamander, as determined using the GeoMapper?</p> <p><input type="checkbox"/> Yes. Design project to avoid designated critical habitat.</p> <p><input type="checkbox"/> No. If aquatic habitat cannot be avoided by 500 feet, either conduct surveys as described in the Permitting Guide Appendix A, or assume species presence. Survey period: After rainfall, November 1 to May 15. Go to Column B.</p> <p><input checked="" type="checkbox"/> No</p>	<p>Are California tiger salamanders present or assumed to be present in aquatic habitat?</p> <p><input type="checkbox"/> Yes. If the species is present or assumed to be present, the Yolo HCP/NCCP will not allow any loss of occupied aquatic habitat until at least four new occupied breeding pools are discovered or established and protected in the Plan Area. Contact Yolo Habitat Conservancy. Go to Column C.</p> <p><input type="checkbox"/> No</p>	<p>Species-specific planning level survey attached? (Attachment 7)</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p>
Reptiles			
8	<p>Western Pond Turtle</p> <p>Is western pond turtle habitat present in the project footprint?</p> <p><input type="checkbox"/> Yes. Check Box G, AMM 14. A qualified biologist is required to evaluate whether there is moderate to high likelihood of western pond turtle presence. Go to Columns B and C.</p> <p><input checked="" type="checkbox"/> No</p>	<p>Moderate to high likelihood of western pond turtle presence?</p> <p><input type="checkbox"/> Yes: Check Box F for western pond turtle preconstruction surveys.</p> <p><input type="checkbox"/> No</p>	<p>Habitat evaluation attached? (Attachment 7)</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p>
9	<p>Giant Garter Snake</p> <p>Is there any giant garter snake habitat (as defined in the Permitting Guide, Table 2-2) within the project footprint?</p> <p><input type="checkbox"/> Yes. Design project to avoid or minimize impact on giant garter snake habitat to the extent practicable. If habitat cannot be avoided, see AMM 15. Check Box F for giant garter snake Preconstruction surveys, and check Box G, AMM 15.</p> <p><input checked="" type="checkbox"/> No</p>	N/A	N/A

BOX F: CONDITIONS OF APPROVAL: CONDUCT PLANNING LEVEL SURVEYS			
	A. Project Site Conditions Requiring Planning Level Survey	B. Species-Specific Planning Level Survey Results	C. Documentation
Birds			
10 Swainson's Hawk and White-tailed Kite	<p>Are there suitable Swainson's hawk or white-tailed kite nest trees within 1,320 feet of the project footprint?</p> <p><input checked="" type="checkbox"/> Yes. <i>If nest trees cannot be avoided by 1,320 feet, check Box F for hawk and kite Preconstruction surveys, and Box G, AMM 16.</i></p> <p><input type="checkbox"/> No</p>	N/A	N/A
11 Western yellow-billed cuckoo	<p>Is suitable habitat present within 500 feet of the project site boundary?</p> <p><input type="checkbox"/> Yes. <i>If there are breeding records for the western yellow-billed cuckoo within ¼ mile of the project site from the previous three years (as determined by GeoMapper), then assume species is present. If there are no breeding records with ¼ mile, then either assume species is present or survey consistent with Chapter 6 of the Permitting Guide. See columns B and C. Check Box F for western yellow-billed cuckoo Preconstruction surveys and Check Box G, AMM 17.</i></p> <p>Survey period: June 1–August 30.</p> <p><input checked="" type="checkbox"/> No</p>	<p>Is western yellow-billed cuckoo present or assumed to be present?</p> <p><input type="checkbox"/> Yes. <i>If project cannot avoid occupied habitat by 500 feet, avoid take of nesting birds as described in AMM 17.</i></p> <p><input type="checkbox"/> No.</p>	<p>Species Survey attached? (Attachment 7)</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p>
12 Western Burrowing Owl	<p>Is western burrowing owl habitat present on the project site, or within 500 feet of the project site?</p> <p><input type="checkbox"/> Yes. <i>Conduct planning level surveys for occupied habitat as described in Permitting Guide Appendix A. Go to Columns B and C. Survey period: February 1–August 31 during the breeding season; September 1–January 31 during nonbreeding season.</i></p> <p><input checked="" type="checkbox"/> No</p>	<p>Are burrowing owls present?</p> <p><input type="checkbox"/> Yes. <i>Check Box G, AMM18. If burrows cannot be avoided, consistent with Table 2-3 in the Permitting Guide, Check Box F for western burrowing owl preconstruction surveys.</i></p> <p><input type="checkbox"/> No</p>	<p>Species-specific planning level survey attached? (Attachment 7)</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p>

BOX F: CONDITIONS OF APPROVAL: CONDUCT PLANNING LEVEL SURVEYS			
	A. Project Site Conditions Requiring Planning Level Survey	B. Species-Specific Planning Level Survey Results	C. Documentation
13 Least Bell's Vireo	<p>Is least Bell's vireo habitat present in and within 500 feet of project footprint?</p> <p><input type="checkbox"/> Yes. Check Box G, AMM 19. Are there nesting records for the species within ¼ mile of the site from the previous three years (determined using the GeoMapper)?</p> <p><input type="checkbox"/> Yes. Assume species is present. See Column B.</p> <p><input type="checkbox"/> No. Conduct planning level surveys, as described in Permitting Guide Appendix A. See Columns B and C. Survey period: April 1–July 15</p> <p><input checked="" type="checkbox"/> No</p>	<p>Are least Bell's vireo nests present or assumed to be present?</p> <p><input type="checkbox"/> Yes. Check Box F for least Bell's vireo preconstruction surveys. Avoid take of birds as described in AMM 19.</p> <p><input type="checkbox"/> No.</p>	<p>Species Survey attached? (Attachment 7)</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p>
14 Bank Swallow	<p>Is bank swallow nesting habitat present on the project site, or within 500 feet of the project site?</p> <p><input type="checkbox"/> Yes. Check Box G, AMM 20. Conduct planning level surveys as described in Permitting Guide Appendix A. Go to Columns B and C. Survey period: March 1–August 15</p> <p><input checked="" type="checkbox"/> No</p>	<p>Are nesting bank swallows present?</p> <p><input type="checkbox"/> Yes. Check Box F for bank swallow preconstruction surveys. Avoid take of birds as described in AMM 19.</p> <p><input type="checkbox"/> No.</p>	<p>Species-specific planning level survey attached? (Attachment 7)</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p>
15 Tricolored Blackbird	<p>Is tricolored blackbird nesting habitat present on the project site, or within 1,300 feet of the project site?</p> <p><input type="checkbox"/> Yes. Conduct planning level surveys as described in Permitting Guide Appendix A. Check Box G, AMM 21. Go to Column C. Survey period: March 1–July 30</p> <p><input checked="" type="checkbox"/> No</p>	N/A	<p>Species-specific planning level survey attached? (Attachment 7)</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p>

BOX G: CONDITIONS OF APPROVAL: CONDUCT PRE-CONSTRUCTION SURVEYS			
<p>Indicate which species in Items 1-7 are relevant to your project. Important: Refer to Chapter 4 of the Permitting Guide for information about survey purpose, the land cover types and site conditions requiring preconstruction surveys, survey area size, and survey timing.</p>			
Birds			
1	<input checked="" type="checkbox"/> Swainson's hawk	4	<input type="checkbox"/> Western burrowing owl
2	<input checked="" type="checkbox"/> White-tailed kite	5	<input type="checkbox"/> Least-Bell's vireo
3	<input type="checkbox"/> Western yellow-billed cuckoo		
Reptiles			
6	<input type="checkbox"/> Giant garter snake	7	<input type="checkbox"/> Western pond turtle

BOX H: CONDITIONS OF APPROVAL: AVOIDANCE AND MINIMIZATION MEASURES (AMMs)	
Check the avoidance and minimization measures below that apply to your project. Refer to the Permitting Guide for assistance. Describe how you will fulfill the requirements of each required condition. Plan your construction carefully around the translocation or other dates required by the AMMs. Label as Attachment 9 .	
1	<input checked="" type="checkbox"/> AMM1: <i>Establish Resource Protection Buffers</i>
2	<input checked="" type="checkbox"/> AMM 2: <i>Design Developments to Minimize Indirect Effects at Urban-Habitat Interfaces (this AMM does not apply to new development where it is immediately adjacent to existing developed lands)</i>
3	<input checked="" type="checkbox"/> AMM 3: <i>Confine and Delineate Work Area</i>
4	<input checked="" type="checkbox"/> AMM 4: <i>Cover Trenches and Holes during Construction and Maintenance</i>
5	<input checked="" type="checkbox"/> AMM 5: <i>Control Fugitive Dust</i>
6	<input checked="" type="checkbox"/> AMM 6: <i>Conduct Worker Training</i>
7	<input checked="" type="checkbox"/> AMM 7: <i>Control Nighttime Lighting of Project Construction Sites</i>
8	<input checked="" type="checkbox"/> AMM 8: <i>Avoid and Minimize Effects of Construction Staging Areas and Temporary Work Areas</i>
9	<input checked="" type="checkbox"/> AMM 9: <i>Establish Resource Protection Buffers around Sensitive Natural Communities</i>
10	<input checked="" type="checkbox"/> AMM 10: <i>Avoid and Minimize Effects on Wetlands and Waters</i>
11	<input type="checkbox"/> AMM 11: <i>Minimize Take and Adverse Effects on Palmate-Bracted Bird's Beak</i>
12	<input type="checkbox"/> AMM 12: <i>Minimize Take and Adverse Effects on Habitat of Valley Elderberry Longhorn Beetle</i>
13	<input type="checkbox"/> AMM 13: <i>Minimize Take and Adverse Effects on Habitat of California Tiger Salamander</i>
14	<input checked="" type="checkbox"/> AMM 14: <i>Minimize Take and Adverse Effects on Habitat of Western Pond Turtle</i>
15	<input type="checkbox"/> AMM 15: <i>Minimize Take and Adverse Effects on Habitat of Giant Garter Snake</i>
16	<input checked="" type="checkbox"/> AMM 16: <i>Minimize Take and Adverse Effects on Habitat of Swainson's Hawk and White-Tailed Kite</i>
17	<input type="checkbox"/> AMM 17: <i>Minimize Take and Adverse Effects on Habitat of Western Yellow-Billed Cuckoo</i>
18	<input type="checkbox"/> AMM 18: <i>Minimize Take and Adverse Effects on Western Burrowing Owl</i>
19	<input type="checkbox"/> AMM 19: <i>Minimize Take and Adverse Effects on Least Bell's Vireo</i>
20	<input type="checkbox"/> AMM 20: <i>Minimize Take and Adverse Effects on Habitat of Bank Swallow</i>
21	<input type="checkbox"/> AMM 21: <i>Minimize Take and Adverse Effects on Habitat of Tricolored Blackbird</i>


BOX I: ATTACHMENT CHECKLIST	
Indicate which attachments are provided below. Note: Attachments must meet the requirements described in Permitting Guide . If these requirements are not met, your application may be delayed.	
All Projects	
<input checked="" type="checkbox"/>	Attachment 1. Project Description (Box C). Attach separately or indicate report page #s here:
<input checked="" type="checkbox"/>	Attachment 2. Vicinity map PDF (Box C). Attach separately or indicate report page # here:
<input checked="" type="checkbox"/>	Attachment 3. Site Plan (Box C). Attach separately or indicate report page # here: Also include CAD or GIS compatible data.
Projects with Impacts	
<input type="checkbox"/>	Attachment 4. Planning level survey (Box D)
<input type="checkbox"/>	Attachment 5. Photos of temporary impact areas. Attach separately or indicate report page #s here:
<input type="checkbox"/>	Attachment 6. Documentation if land is offered in lieu of fees (Box D, Item 30)
<input checked="" type="checkbox"/>	Attachment 7. Species-specific planning level survey(s) (Box E). Attach separately or indicate report page #s here: See El Macero Golf Course Biological Resources Report
<input checked="" type="checkbox"/>	Attachment 8. Unavoidable impacts on covered species. Attach separately or indicate report page #s here:

BOX I: ATTACHMENT CHECKLIST

Attachment 9. Description of compliance with avoidance and minimization measures (Box G). Attach separately or indicate report page #s here:

BOX J: SIGNATURES

By checking the box and signing below I certify all information in the application is true and correct to the best of my knowledge. I also certify I understand the requirements of the AMMs, including dates for elderberry translocation or other dates that may affect construction timing.

1 Property owner name and contact information	Name	Chris Johnson		
	Phone	530-753-3363	Email	chris.johnson@troan.com
2 Property owner signature	Chris Johnson	<small>Digitally signed by Chris Johnson Date: 2025.11.12 11:48:01 -0800</small>	Date	11.12.2025
3 Project agent/applicant name and contact information	Name	Ben Watson		
	Phone	916-822-3230	Email	bwatson@madroneeco.com
4 Project agent/applicant signature			Date	11/14/25

FORM SUBMITTAL INSTRUCTIONS

Submit this form electronically to the applicable contact below. If the project applicant is seeking HCP/NCCP permit coverage as an SPE, submit the form to the Yolo Habitat Conservancy. The signed Final Application and payment of all other Plan fees is required following project approval and prior to formal Yolo HCP/NCCP approval.

LOCAL AGENCY PLANNING OFFICE CONTACT INFORMATION

Yolo County Jeff Anderson Planning Division Department of Community Services 292 West Beamer Street, Woodland (530) 666-8043	City of West Sacramento Justin Hardy Community Development Department 1110 West Capitol Ave., 2 nd Floor, West Sacramento (916) 617-4557	City of Davis Dara Dungworth Community Development & Sustainability 23 Russell Blvd., Suite 2, Davis (530) 757-5610 ext. 5882	City of Woodland Erika Bumgardner Planning Division 300 First Street, Woodland (530) 661-5886	City of Winters Kelly Mumper Community Development Department 318 First Street, Winters (530) 794-6718
---	--	--	---	--

YOLO HABITAT CONSERVANCY CONTACT INFORMATION

Address: PO Box 2202, Woodland, CA 95776 Phone: 530-848-6211 Email: info@yolohabitatconservancy.org

FOR STAFF USE ONLY

Project planner name		Phone number	
Email		Date	
Covered activity type			
HCP/NCCP Application	<input type="checkbox"/> Complete <input type="checkbox"/> Not complete		<input type="checkbox"/> Special Participating Entity



*Small summation errors may occur due to rounding.
Aerial Source: ESRI/SACOG, 18 March 2022

Figure 5
Yolo HCP Land Cover Communities

El Macero Golf Course
Yolo County, California



Attachments

- Attachment 1. Project Description and Location
- Attachment 2. Site Vicinity Map
- Attachment 3. Site Plan (associated KML or SHP file will be emailed upon request)
- Attachment 7. El Macero Golf Course Biological Resources Report
- Attachment 8. Description of Anticipated Impacts to Covered Species
- Attachment 9. Description of Compliance with Avoidance and Mitigation Measures

Attachment 1

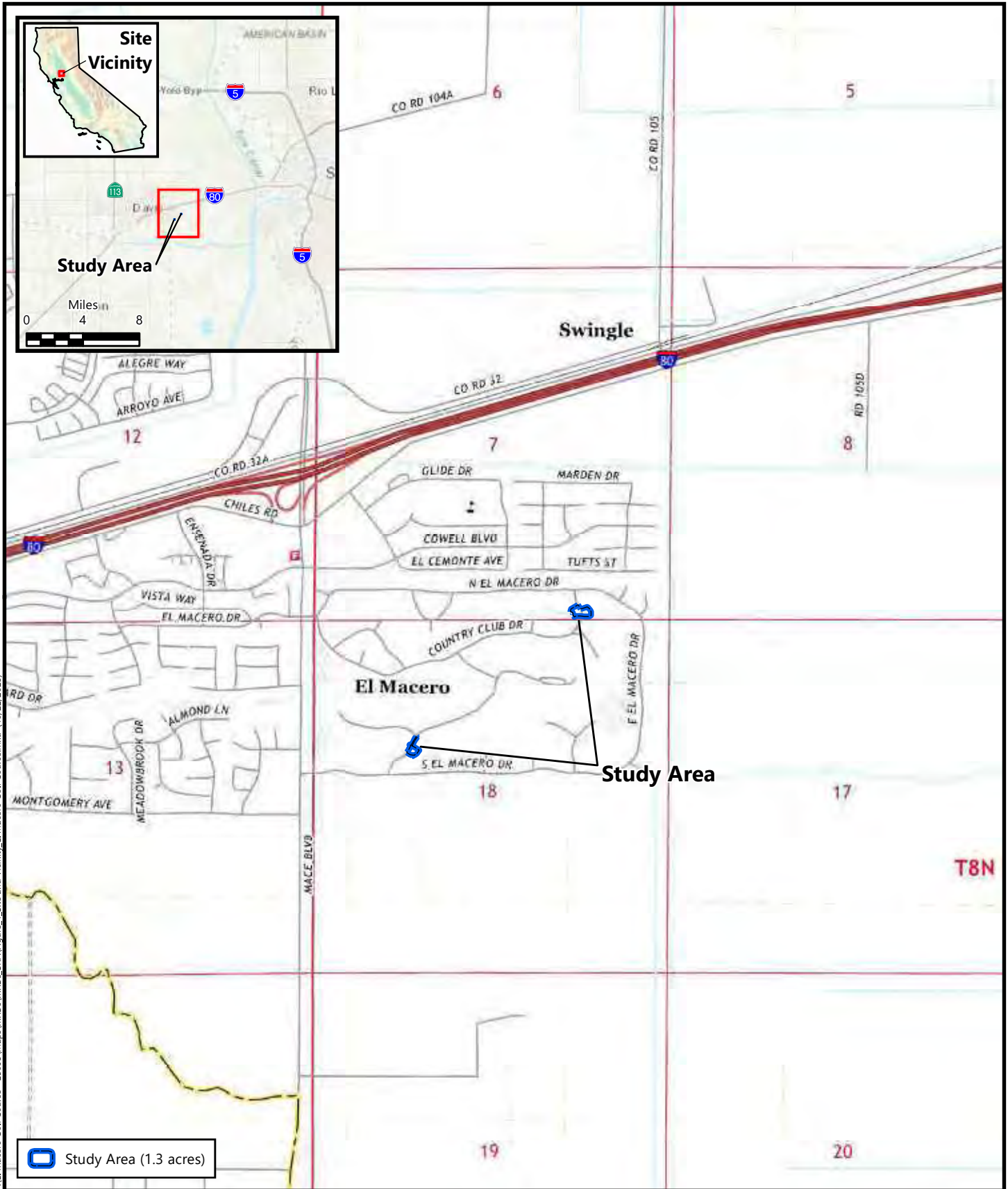
Project Description and Location

The El Macero Golf Course Project (Project) consists of two parcels within the community of El Macero, located just southwest of the City of Davis in Yolo County (County), California. One parcel (approximately 0.44 acre) is located south of the intersection of Clubhouse Drive and Greenview Drive, and the other parcel (approximately 0.87 acre) is located north of the intersection of Country Club Drive and Country Club Circle. The approximately 1.3-acre (both parcels combined) Project Area is situated within Sections 7 and 18, Township 8 North, Range 3 East (MDB&M) of the "Davis, California" 7.5-Minute Series USGS Topographic Quadrangle.

The Project proposes to develop three residential lots within the El Macero community: Lot 1 (approximately 12,927 square feet), Lot 2 (approximately 15,412 square feet), and Lot 3 (approximately 13,741 square feet). The lots will all feature 30 to 35-foot setbacks consistent with the Architectural Review Committee (ARC) Rules. Lot 2 will also include a 15-foot access easement to be reserved by the El Macero Country Club for maintenance purposes. An existing sewer main along Clubhouse Drive will be extended to serve Lot 1. In addition, approximately 10 feet of golf cart path will be removed and replaced with maintained grass within the vicinity of Lot 1. The proposed development area is currently part of the Parks and Recreation (P-R) zoning land use designation but will require rezoning to the Low Density Residential (R-L) land use designation.

Attachment 2

Site Vicinity Map



P:\El Macero Golf Course - 25095\Maps\MXD\MXD_BRA\Figure_1_Site and Vicinity_El Macero Golf Course.mxd (10/22/2025)

Figure 1
Site and Vicinity

Source: United States Geologic Survey, 2021
 "Davis, California" 7.5-Minute Topographic Quadrangle
 Sections 7 and 18, Township 8 North, Range 2 East, MDBM
 Latitude (NAD83): 38.573218°, Longitude (NAD83): -121.722758°

El Macero Golf Course
Yolo County, California



Attachment 3

Site Plan

(associated KML or SHP file will be emailed upon request)

2025 EL MACERO LOT ADDITIONS TENTATIVE PARCEL MAP NO. 5267

COUNTY OF YOLO CALIFORNIA
CUNNINGHAM ENGINEERING
AUGUST 2025

PROPERTY DESCRIPTION

A PORTION OF PARCEL B OF THAT CERTAIN RECORD OF SURVEY FILED IN BOOK 8 OF MAPS & SURVEYS AT PAGE 58, YOLO COUNTY RECORDS, ALSO KNOWN AS "EL MACERO COUNTRY CLUB," WITHIN SECTIONS 7 & 16, T.8N., R.3E., M.C.S.B.M.

NOTES:

- THIS TENTATIVE PARCEL MAP WAS PREPARED UNDER THE DIRECTION OF STEVEN J. GREENFIELD, PCE 52880.
- ALL INFORMATION ON THIS MAP IS DEEMED TO BE OF A PRELIMINARY NATURE AND IS NOT TO BE RELIED ON FOR SURVEY OR PROPERTY LINE INFORMATION.
- THE EXISTING BOUNDARY AND TOPOGRAPHY INFORMATION IS BASED ON A FIELD SURVEY PERFORMED BY MORROW SURVEYING, INC., DATED 06/10/2025.
- THIS TENTATIVE PARCEL MAP CONFORMS WITH ALL REQUIREMENTS OF THE STATE OF CALIFORNIA SUBDIVISION MAP ACT.
- THIS TENTATIVE PARCEL MAP CONFORMS WITH ALL THE REQUIREMENTS OF THE YOLO COUNTY LAND DEVELOPMENT & ZONING ORDINANCE.

BASIS OF BEARINGS

THE BASIS OF BEARINGS FOR THIS MAP IS IDENTICAL WITH THAT OF THE RECORD OF SURVEY RECORDED IN BOOK 8 OF MAPS & SURVEYS, PAGE 58.

LEGEND:

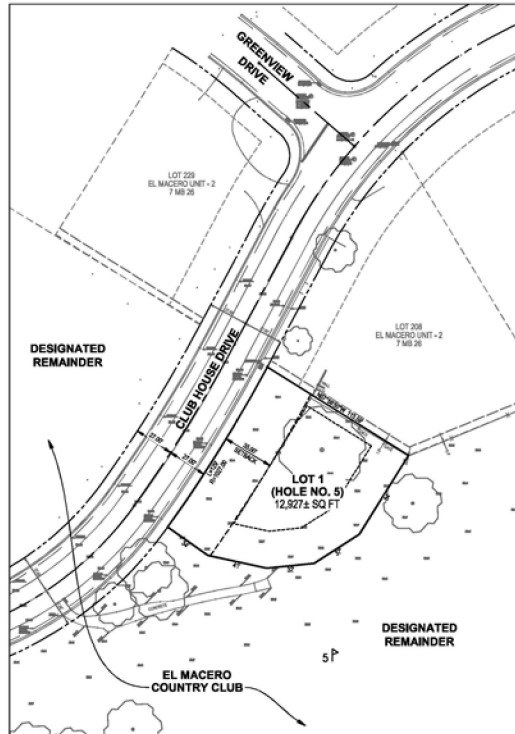
- EXISTING SANITARY SEWER PIPE AND MANHOLE
- EXISTING STORM DRAIN PIPE AND MANHOLE
- EXISTING WATER LINE AND WATER VALVE
- PROPOSED SANITARY SEWER PIPE AND MANHOLE
- PROPOSED BOUNDARY LINE
- EXISTING RIGHT OF WAY
- PROPOSED EASEMENT LINE
- EXISTING EASEMENT LINE
- BUILDING PAD
- EDGE OF WATER FEATURE
- WATER SERVICE
- SEWER SERVICE
- FLOWLINE
- EXISTING UTILITY BOXES
- EXISTING FIRE HYDRANT
- EXISTING STORM DRAIN INLET
- EXISTING ELEVATION
- PROPOSED ELEVATION
- SURVEY MONUMENT
- EXISTING TREE TO REMAIN
- EXISTING TREE TO BE REMOVED
- BUILDING PAD ELEVATION

SERVICE PROVIDERS

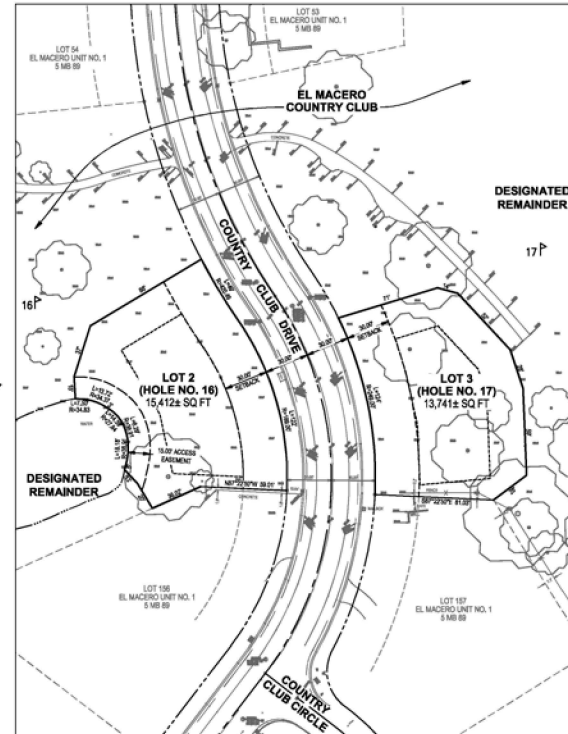
- | | |
|---|--|
| GAS | TELEPHONE |
| PACIFIC GAS AND ELECTRIC (PG&E)
(800) 743-5000 | AT&T
(800) 222-0300 |
| ELECTRICITY | CABLE TELEVISION |
| PACIFIC GAS AND ELECTRIC (PG&E)
(800) 743-5000 | COMCAST
(800) 824-2000 |
| WATER | FIRE DEPARTMENT |
| CITY OF DAVIS PUBLIC WORKS DEPT
(530) 757-5686 | CITY OF DAVIS FIRE DEPT - EAST
DAVIS FIRE PROTECTION DISTRICT
(530) 757-5684 |
| SEWERAGE | U.S.A. |
| CITY OF DAVIS PUBLIC WORKS DEPT
(530) 757-5686 | (800) 227-2690 |
| STORM DRAIN | GARBAGE & RECYCLING |
| CITY OF DAVIS PUBLIC WORKS DEPT
(530) 757-5686 | DAVIS WASTE REMOVAL
(530) 756-4646 |

ABBREVIATIONS:

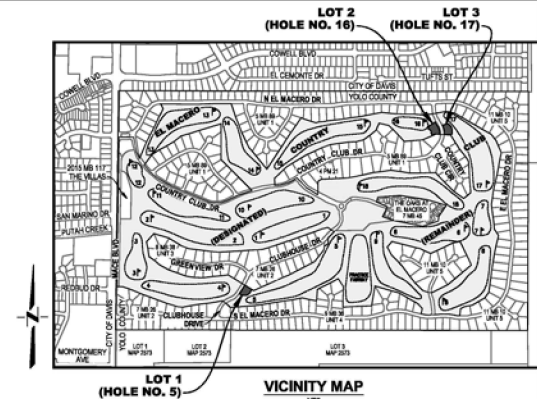
- CL..... CENTERLINE
- D..... DRAIN
- E..... EAST
- ESMT... EASEMENT
- FL..... FLOWLINE
- GB..... GRADE BREAK
- HP..... HIGH POINT
- INV..... INVERT
- LF..... LINEAR FEET
- LP..... LOW POINT
- MAX..... MAXIMUM
- MIN..... MINIMUM
- N..... NORTH
- NTS..... NOT TO SCALE
- PL..... PROPERTY LINE
- PUE..... PUBLIC UTILITY EASEMENT
- S..... SLOPE, SOUTH SEWER
- SSM..... SANITARY SEWER MANHOLE
- TYP..... TYPICAL
- W..... WEST, WATER



**LOT 1
(HOLE NO. 5)**



**LOT 2
(HOLE NO. 16)** **LOT 3
(HOLE NO. 17)**



VICINITY MAP
NTS

SHEET INDEX	
SHEET NAME	SHEET NO.:
TITLE SHEET	1
UTILITY PLAN	2
PROJECT SUMMARY	
TOTAL LOTS	3

PROJECT INFORMATION

OWNER/DEVELOPER:
EL MACERO COUNTRY CLUB
44571 CLUBHOUSE DR
EL MACERO, CA 95618
(530) 753-3363

CIVIL ENGINEER:
CUNNINGHAM ENGINEERING
2940 SPARTAN STREET, SUITE 200
DAVIS, CALIFORNIA 95618
(530) 758-2028

ASSESSORS PARCEL NUMBER:
068-130-010

AREA:
0.966± ACRES

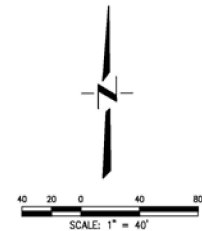
EXISTING ZONING:
P-R PLANNED DEVELOPMENT OVERLAY

PROPOSED ZONING:
R-L PLANNED DEVELOPMENT OVERLAY

EXISTING LAND USE:
PARKS AND RECREATION (PR)

PROPOSED LAND USE:
RESIDENTIAL LOW (RL)

FLOOD ZONE
ZONE X, 061130C0612G & 061130C0620G, JUNE 18, 2010



TENTATIVE PARCEL MAP NO. 5267
2025 EL MACERO LOT ADDITIONS
TITLE SHEET

SHEET
1
 OF
2

DATE: 07/29/2025

JOB NO: 2019-00-04

Project: Planning & Civil Engineering & Landscape Architecture
 Cunningham Engineering
 2940 Spartan Street, Suite 200
 Davis, California 95618
 (530) 758-2028



CIVIL ENGINEER
 STEVEN J. GREENFIELD
 LICENSE NO. 52880
 STATE OF CALIFORNIA

CALIFORNIA

YOLO COUNTY

AS SHOWN

SCALE

DATE

REVISIONS

BY

DATE

CHECKED BY

DRAWN BY

DESIGNED BY

Attachment 7

El Macero Golf Course Biological Resources Report



Biological Resources Assessment

El Macero Golf Course

Yolo County, California

October 2025



Prepared for:

Chris Johnson
El Macero Country Club
44571 Clubhouse Drive
El Macero, CA 95618

Recommended Citation:

Madrone Ecological Consulting, LLC (Madrone). 2025. *Biological Resources Assessment for El Macero Golf Course*. Prepared for Chris Johnson. Published on 24 October 2025.

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El Macero Golf Course**

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Attachments:

Attachment A. El Macero Golf Course Site Plan	
Attachment B. IPaC Trust Resource Report for the Study Area	
Attachment C. CNPS Inventory of Rare and Endangered Plants Query for the “Davis, California” USGS Quadrangle and Eight Surrounding Quadrangles	
Attachment D. Wildlife List	

1.0 INTRODUCTION

This report presents the results of a Biological Resources Assessment (BRA) conducted for the El Macero Golf Course Project (Study Area). The Study Area consists of two parcels within the community of El Macero, located just southwest of the City of Davis in Yolo County (County), California. One parcel (approximately 0.44 acre) is located south of the intersection of Clubhouse Drive and Greenview Drive, and the other parcel (approximately 0.87 acre) is located north of the intersection of Country Club Drive and Country Club Circle. The approximately 1.3-acre (both parcels combined) Study Area is situated within Sections 7 and 18, Township 8 North, Range 3 East (MDB&M) of the "Davis, California" 7.5-Minute Series USGS Topographic Quadrangle (USGS 2021) (Figure 1).

1.1 Project Description

The Proposed Project is the creation of three residential lots within the El Macero community: Lot 1 (approximately 12,927 square feet), Lot 2 (approximately 15,412 square feet), and Lot 3 (approximately 13,741 square feet). The lots will all feature 30 to 35-foot setbacks consistent with the Architectural Review Committee (ARC) Rules. Lot 2 will also include a 15-foot access easement to be reserved by the El Macero Country Club for maintenance purposes. An existing sewer main along Clubhouse Drive will be extended to serve Lot 1. In addition, approximately 10 feet of golf cart path will be removed and replaced with maintained grass within the vicinity of Lot 1. The proposed development area is currently part of the Parks and Recreation (P-R) zoning land use designation, but will require rezoning to the Low Density Residential (R-L) land use designation. The current site plan is included as **Attachment A**.

2.0 REGULATORY SETTING

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

2.1 Federal Regulations

2.1.1 Federal Endangered Species Act

The Federal Endangered Species Act (FESA) of 1973 protects species that are federally listed as endangered or threatened with extinction. FESA prohibits the unauthorized "take" of listed wildlife species. Take includes harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing, or collecting wildlife species or any attempt to engage in such activities. Harm includes significant modifications or degradations of habitats that may cause death or injury to protected species by impairing their behavioral patterns. Harassment includes disruption of normal behavior patterns that may result in injury to or mortality of protected species. Civil or criminal penalties can be levied against persons convicted of unauthorized "take." In addition, FESA prohibits malicious damage or destruction of listed plant species on federal lands or in association with federal actions, and the removal, cutting, digging up, damage, or destruction of listed plant species in violation of state law. FESA does not afford any protections to federally

listed plant species that are not also included on a state endangered species list on private lands with no associated federal action.

2.1.2 Clean Water Act, Section 404

Section 404 of the Federal Clean Water Act requires that a Department of the Army permit be issued prior to the discharge of dredged or fill material into waters of the United States, including some wetlands. The U.S. Army Corps of Engineers (USACE) administers this program, with oversight from the U. S. Environmental Protection Agency. As of the date of this document, waters of the United States (waters of the U.S.) are defined as follows (40 CFR 120.2):

1. Waters which are:
 - i. 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;
 - ii. The territorial seas; or
 - iii. Interstate waters;
2. Impoundments of waters otherwise defined as waters of the United States under this definition, other than impoundments of waters identified under item (5) below;
3. Tributaries of waters identified in items (1) or (2) above that are relatively permanent, standing or continuously flowing bodies of water;
4. Wetlands adjacent to the following waters:
 - i. Waters identified in item (1) of this section; or
 - ii. Relatively permanent, standing or continuously flowing bodies of water identified in items (2) or (3) above and with a continuous surface connection to those waters;
5. Intrastate lakes and ponds not identified in paragraphs (1) through (4) of this section that are relatively permanent, standing or continuously flowing bodies of water with a continuous surface connection to the waters identified in items (1) or (3) above.

Under the current definition of waters of the U.S., “adjacent” means *having a continuous surface connection*.

Waters subject to regulation under Section 404 are referred to as “jurisdictional waters”.

2.1.3 Migratory Bird Treaty Act

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

2.1.4 Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act of 1940 (as amended) provides for the protection of bald eagle and golden eagle by prohibiting the take, possession, sale, purchase, barter, offer to sell, purchase or barter, transport, export or import, of any bald or golden eagle, alive or dead, including any part, nest, or egg, unless allowed by permit [16 USC 668(a); 50 CFR 22]. The USFWS may authorize take of bald eagles and golden eagles for activities where the take is associated with, but not the purpose of, the activity and cannot practicably be avoided (50 CFR 22.26).

2.2 State Regulations

2.2.1 California Environmental Quality Act

The California Environmental Quality Act (CEQA) requires evaluations of project effects on biological resources. Determining the significance of those effects is guided by Appendix G of the CEQA guidelines. These evaluations must consider direct effects on a biological resource within the project site itself, indirect effects on adjacent resources, and cumulative effects within a larger area or region. Effects can be locally important but not significant according to CEQA if they would not substantially affect the regional population of the biological resource. Significant adverse impacts on biological resources would include the following:

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

2.2.2 State Endangered Species Act

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

2.2.3 California Fully Protected Species

The State of California first began to designate species as “fully protected” prior to the creation of the federal and California ESAs. Lists of fully protected species were initially developed to provide protection to those animals that were rare or faced possible extinction and included fish, amphibians and reptiles, birds, and mammals. Most fully protected species have since been listed as threatened or endangered under the federal and/or California ESAs. The regulations that implement the Fully Protected Species Statute (California Fish and Game Code, § 4700 for mammals, § 3511 for birds, § 5050 for reptiles and amphibians, and § 5515 for fish) provide that fully protected species may not be taken or possessed at any time. Furthermore, CDFW prohibits any state agency from issuing incidental take permits for fully protected species. CDFW will issue licenses or permits for take of these species for necessary scientific research or live capture and relocation pursuant to the permit.

2.2.4 California Species of Special Concern

The Species of Special Concern (SSC) are defined by CDFW as a species, subspecies, or distinct population of an animal native to California that are not legally protected under the federal or California ESAs or the California Fish and Game Code, but currently satisfies one or more of the following criteria:

- The species has been completely extirpated from the state or, as in the case of birds, it has been extirpated from its primary seasonal or breeding role.
- The species is listed as federally (but not state) threatened or endangered or meets the state definition of threatened or endangered but has not formally been listed.
- The species has or is experiencing serious (noncyclical) population declines or range retractions (not reversed) that, if continued or resumed, could qualify it for state threatened or endangered status.
- The species has naturally small populations that exhibit high susceptibility to risk from any factor that if realized, could lead to declines that would qualify it for state threatened or endangered status.

SSC are typically associated with habitats that are threatened. Project-related impacts to SSC or state-threatened or endangered species are considered “significant” under CEQA.

2.2.5 Native Plant Protection Act

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

2.2.6 Clean Water Act, Section 401

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

2.2.7 California Water Code, Porter-Cologne Act

Waters that are not considered waters of the U.S. may be considered waters of the State of California (waters of the State) under the Porter-Cologne Water Quality Control Act (Porter-Cologne). Porter-Cologne, from Division 7 of the California Water Code, requires any person discharging waste or proposing to discharge waste that could affect the quality of waters of the state to file a report of waste discharge (RWD) with the RWQCB. The RWQCB can waive the filing of a report, but once a report is filed, the RWQCB must either waive or adopt waste discharge requirements (WDRs). Waters of the State are defined as any surface water or groundwater, including saline waters, within the boundaries of the state of California.

2.2.8 California Fish and Game Code, Section 1600 – Streambed and Lake Alteration

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

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

For the purposes of Section 1602, rivers, streams, and lakes includes those that are dry for periods of time as well as those that flow year-round. If notification is required and CDFW believes the proposed activity is likely to substantially adversely affect fish and wildlife resources, it will require that the parties enter into a Lake or Streambed Alteration Agreement (LSAA).

2.2.9 California Fish and Game Code, Section 3503.5 – Raptor Nests

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

3.0 METHODOLOGY

3.1 Literature Review

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

- California Natural Diversity Database (CNDDDB) (CNDDDB 2025) query of the Study Area and all areas within 5 miles of the Study Area (**Figures 2 and 3**);
- USFWS Information for Planning and Conservation (IPaC) (USFWS 2025) query for the Study Area (**Attachment B**);
- California Native Plant Society (CNPS) Rare and Endangered Plant Inventory (CNPS 2025) query of the “Davis, California” USGS topographic quadrangle, and the eight surrounding quadrangles (**Attachment C**); and
- Western Bat Working Group (WBWG) Species Matrix (WBWG 2025).

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

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

- listed as threatened or endangered, or proposed or candidates for listing by the USFWS or National Marine Fisheries Service;
- listed as threatened or endangered and candidates for listing by CDFW;
- identified as Fully Protected species or species of special concern by CDFW;
- identified as Medium or High priority species by the WBWG (WBWG 2025); and
- plant species considered to be rare, threatened, or endangered in California by the CNPS and CDFW [California Rare Plant Rank (CRPR) 1, 2, and 3]:
 - CRPR 1A: Plants presumed extinct.
 - CRPR 1B: Plants rare, threatened, or endangered in California and elsewhere.
 - CRPR 2A: Plants extirpated in California, but common elsewhere.

- CRPR 2B: Plants rare, threatened, or endangered in California, but more common elsewhere.
- CRPR 3: Plants about which the CNPS needs more information – a review list.

3.2 Field Surveys

Madrone biologist Matt Shaffer conducted a field survey of the Study Area on 7 October 2025 to assess the suitability of habitats on-site to support special-status species. Meandering pedestrian surveys were performed on foot throughout the Study Area. Vegetation communities were classified in accordance with *The Manual of California Vegetation, Second Edition* (Sawyer, Keeler-Wolf and Evens 2009), primarily accessed online (CNPS 2025), and plant taxonomy was based on the nomenclature in the Jepson eFlora (Jepson Flora Project 2025). A list of all wildlife species observed during the field survey is included as **Attachment D**.

Concurrent with the biological resources assessment, Madrone also conducted an aquatic resources delineation. The delineation was conducted in accordance with the *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987), the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0)* (USACE 2008a), *A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States* (USACE 2008b), and the Sacramento District's *Minimum Standards for Acceptance of Preliminary Wetlands Delineations* (USACE 2016). The results of the delineation have been incorporated into this assessment.

4.0 EXISTING CONDITIONS

The Study Area consists of two parcels, both of which are bound on all sides by residential homes and/or the El Macero Country Club golf course. The parcels are situated on relatively level terrain at an approximate elevation of 25 to 35 feet above mean sea level (MSL).

The Study Area consists of portions of the El Macero Country Club golf course and associated infrastructure, including segments of a golf cart path. In addition, the southern parcel includes a portion of Clubhouse Drive along the northeast edge, and the northern parcel is bisected by Country Club Drive, which runs north-south through the center of the site.

4.1 Terrestrial Vegetation Communities

A single terrestrial vegetation community, developed, occurs within the Study Area (**Figure 5**).

4.1.1 Developed

The developed community (totaling approximately 1.3 acres) encompasses the entire Study Area and primarily consists of portions of the El Macero Country Club golf course fairway. This area is dominated by mowed and maintained lawns. Scattered ruderal vegetation occurs predominantly along the margins of the fairway, and includes Bermuda grass (*Cynodon dactylon*), hairy hawkbit (*Leontodon saxatilis*),

cheeseweed (*Malva parviflora*), California burclover (*Medicago polymorpha*), Dallis grass (*Paspalum dilatatum*), prostrate knotweed (*Polygonum aviculare*), and common purslane (*Portulaca oleracea*). Several native and ornamental trees are present along the fairway and adjacent to the residential development within the Study Area, including common fig (*Ficus carica*), non-native pine (*Pinus* sp.), Chinese pistache (*Pistacia chinensis*), western sycamore (*Platanus racemosa*), coast redwood (*Sequoia sempervirens*), valley oak (*Quercus lobata*), and interior live oak (*Quercus wislizeni*). The developed community also includes paved portions of Clubhouse Drive and Country Club Drive, along with other minor infrastructure associated with the golf course and adjacent residential development.

4.2 Aquatic Resources

Madrone conducted an aquatic resources delineation throughout the Study Area in accordance with USACE protocol. No aquatic resources were mapped within the Study Area, including no wetlands or “other waters” (non-wetlands).

4.3 Soils

According to the Natural Resources Conservation Service (NRCS) Soil Survey Database (NRCS 2025), one soil mapping unit occurs within the Study Area (**Figure 4**): (Sp) Sycamore silt loam, drained, 0 percent slopes, MLRA 17. This soil unit does not consist of hydric components, but it does contain hydric inclusions (NRCS 2025).

5.0 RESULTS

Table 1 provides a list of special-status species that were evaluated, including their listing status, habitat associations, and their potential to occur in the Study Area. The following set of criteria was used to determine each species’ potential for occurrence on the site:

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

Table 1. Special-Status Species with Potential to Occur within the El Macero Golf Course Study Area

Scientific Name (Common Name)	Federal Status¹	State Status¹	Habitat Requirements	Potential for Occurrence
<i>Plants</i>				
<i>Astragalus tener</i> var. <i>ferrisiae</i> Ferris' milk-vetch	--	CRPR 1B.1	Occurs in vernal mesic meadows and seeps, and on subalkaline flats in foothill and valley grasslands (elevation 5'-245').	No Habitat Present. The Study Area does not support vernal mesic meadows or subalkaline flats.
<i>Astragalus tener</i> var. <i>tener</i> Alkali milk-vetch	--	CRPR 1B.2	Occurs in playas, valley and foothill grassland (adobe clay), and vernal pools (elevation 5'-195').	No Habitat Present. The Study Area does not support grasslands or vernal pools with adobe clays.
<i>Atriplex cordulata</i> var. <i>cordulata</i> Heartscale	--	CRPR 1B.2	Grows in grasslands with sandy alkaline or saline soils (elevation 0'-1,835').	No Habitat Present. The Study Area does not support sandy alkaline or saline soils.
<i>Atriplex depressa</i> Brittlescale	--	CRPR 1B.2	Prefers meadows or grasslands, chenopod scrub, and vernal pools; in alkaline or saline clay soils (elevation 5'-1,050').	No Habitat Present. The Study Area does not support alkaline or saline soils.
<i>Carex comosa</i> Bristly sedge	--	CRPR 2B.1	Occurs in coastal prairie, margins of marshes and swamps, and valley and foothills grasslands (elevation 0'-2,050').	No Habitat Present. The Study Area does not support marsh or swamp habitat.
<i>Centromadia parryi</i> ssp. <i>Parryi</i> Pappose tarplant	--	CRPR 1B.2	Found on alkaline soils in coastal prairie, meadows, seeps, coastal salt marshes, and valley/foothill grasslands (elevation 0'-1,380').	No Habitat Present. The Study Area does not support alkaline soils.

Table 1. Special-Status Species with Potential to Occur within the El Macero Golf Course Study Area

Scientific Name (Common Name)	Federal Status¹	State Status¹	Habitat Requirements	Potential for Occurrence
<i>Chloropyron palmatum</i> Palmate-bracted bird's-beak	FE	CE, CRPR 1B.1	Found on alkaline soils in chenopod scrub and valley and foothill grasslands, primarily on side slopes adjacent to ditches and other waterways where the hydrology is appropriate (elevation 15'-510'). Most common host plant for this hemiparasite is salt grass (<i>Distichlis spicata</i>).	No Habitat Present. The Study Area does not support alkaline soils.
<i>Eryngium jepsonii</i> Jepson's coyote-thistle	--	CRPR 1B.2	Occurs in vernal pools and other mesic areas in valley and foothill grasslands on clay soils (elevation 10'-985').	No Habitat Present. The Study Area does not support vernal pools.
<i>Extriplex joaquinana</i> San Joaquin spearscale	--	CRPR 1B.2	Found in seasonal alkali wetlands or alkali sink scrub (elevation 5'-2,740').	No Habitat Present. The Study Area does not support alkaline soils.
<i>Fritillaria pluriflora</i> Adobe-lily	--	CRPR 1B.2	Grows in chaparral, cismontane woodland, or foothill grasslands with clay or serpentine soils. (elevation 195'-2,315').	No Habitat Present. The Study Area does not support clay or serpentine soils.
<i>Hibiscus lasiocarpus var. occidentalis</i> Woolly rose-mallow	--	CRPR 1B.2	Occurs in freshwater marshes, including edges. Often in riprap on the sides of levees (elevation 0'-395').	No Habitat Present. The Study Area does not support freshwater marsh habitat.
<i>Lepidium latipes var. heckardii</i> Heckard's pepper-grass	--	CRPR 1B.2	Prefers mesic alkaline flats within valley and foothill grasslands (elevation 5'-655').	No Habitat Present. The Study Area does not support mesic alkaline flats.

Table 1. Special-Status Species with Potential to Occur within the El Macero Golf Course Study Area

Scientific Name (Common Name)	Federal Status¹	State Status¹	Habitat Requirements	Potential for Occurrence
<i>Lessingia hololeuca</i> Woolly-headed lessingia	--	CRPR 3	Occurs in broadleaved upland forest, coastal scrub, lower montane coniferous forest, and valley and foothill grassland; on serpentine clay soils (elevation 50'-1,000').	No Habitat Present. The Study Area does not support serpentine soils.
<i>Lilaeopsis masonii</i> Mason's lilaeopsis	--	CR, CRPR 1B.1	Prefers brackish or freshwater swamps, intertidal marshes, and riparian scrub (elevation 0'-35').	No Habitat Present. The Study Area does not support freshwater or brackish marshes.
<i>Myosurus minimus ssp. apus</i> Little mouse-tail	--	CRPR 3.1	Found in mesic areas in valley and foothill grassland and alkaline vernal pools (elevation 65'-2,100').	No Habitat Present. The Study Area does not support alkaline vernal pools.
<i>Navarretia leucocephala ssp. bakeri</i> Baker's navarretia	--	CRPR 1B.1	Favors vernal pools and other mesic areas in cismontane woodland, lower montane coniferous forest, meadows and seeps, and valley and foothill grasslands (elevation 15'-5,710').	No Habitat Present. The Study Area does not support vernal pool habitat.
<i>Neostapfia colusana</i> Colusa grass	FT	CE, CRPR 1B.1	Found in large vernal pools and other mesic areas in clay soils (elevation 16'-656').	No Habitat Present. The Study Area does not support vernal pool habitat.
<i>Plagiobothrys hystriculus</i> Bearded popcornflower	--	CRPR 1B.1	Often in mesic areas of valley and foothill grassland and vernal pool margins (elevation 0'-900').	No Habitat Present. The Study Area does not support vernal pool habitat.
<i>Puccinellia simplex</i> California alkali grass	--	CRPR 1B.2	Occurs in alkaline, vernal mesic areas in sinks, flats and lake margins in chenopod scrub, meadows and seeps, valley and foothill grassland, and vernal pools (elevation 7'-3,051').	No Habitat Present. The Study Area does not support mesic alkaline habitat.

Table 1. Special-Status Species with Potential to Occur within the El Macero Golf Course Study Area

Scientific Name (Common Name)	Federal Status¹	State Status¹	Habitat Requirements	Potential for Occurrence
<i>Sidalcea keckii</i> Keck's checkerbloom	FE	CRPR 1B.1	Occurs on serpentinite clay soils in cismontane woodland and valley and foothill grasslands (elevation 245'-2,135').	No Habitat Present. The Study Area does not support serpentine soils.
<i>Symphotrichum lentum</i> Suisun Marsh aster	--	CRPR 1B.2	Occurs in fresh and salt water marshes, often associated with blackberries, cattails, and bulrush (elevation 0'-10').	No Habitat Present. The Study Area does not support freshwater/salt marsh habitat.
<i>Trifolium hydrophilum</i> Saline clover	--	CRPR 1B.2	Grows in marshes, swamps, vernal pools, and other mesic areas with alkaline soils (elevation 0'-985').	No Habitat Present. The Study Area does not support marshes or vernal pools with alkaline soils.
<i>Tuctoria mucronata</i> Crampton's Tuctoria	FE	CE, CRPR 1B.1	Found in vernal pools and mesic areas in valley and foothill grasslands (elevation 15'–35').	No Habitat Present. The Study Area does not support vernal pool habitat.
Invertebrates				
<i>Bombus crotchii</i> Crotch's bumble bee	--	CC	Occurs in open grasslands and scrub habitats. This species occurs primarily in California including the Mediterranean region, Pacific Coast, Western Desert, Great Valley, and adjacent foothills through most of southwestern California (Williams et al 2014).	No Habitat Present. The Study Area does not support grassland or scrub habitat.

Table 1. Special-Status Species with Potential to Occur within the El Macero Golf Course Study Area

Scientific Name (Common Name)	Federal Status¹	State Status¹	Habitat Requirements	Potential for Occurrence
<i>Bombus occidentalis</i> Western bumble bee	--	CC	Meadows and grasslands with the blended floral resources are the appropriate habitat for this species. While the Western bumble bee was historically known throughout the mountains and northern coast of California, it is now largely confined to high elevation sites and a small handful of records on the northern California coast (Williams et al. 2014; Xerces Society 2012; Xerces Society 2018).	No Habitat Present. The Study Area is outside of the known range of the species. This species was documented somewhere near Davis in the 1950s and 1960s in the CNDDDB (Occurrence #176) (CNDDDB 2025). However, recent data and range maps indicated that the Study Area is outside of the current range of this species.
<i>Branchinecta conservation</i> Conservancy fairy shrimp	FE	--	Occurs in very large, turbid vernal pools and other similar wetlands.	No Habitat Present. The Study Area does not support vernal pool habitat.
<i>Branchinecta lynchi</i> Vernal pool fairy shrimp	FT	--	Occurs in vernal pools.	No Habitat Present. The Study Area does not support vernal pool habitat.
<i>Danaus plexippus</i> Monarch butterfly	FPT	--	Migratory species; most prevalent in the Central Valley in summer and early fall. Dependent upon milkweed (<i>Asclepias</i> species) plants as their exclusive larval host.	No Habitat Present. No milkweed plants were observed within the Study Area.
<i>Desmocerus californicus dimorphus</i> Valley elderberry longhorn beetle	FT	--	Dependent upon elderberry (<i>Sambucus</i> species) plant as its primary host species.	No Habitat Present. No elderberry shrubs occur within the Study Area.

Table 1. Special-Status Species with Potential to Occur within the El Macero Golf Course Study Area

Scientific Name (Common Name)	Federal Status¹	State Status¹	Habitat Requirements	Potential for Occurrence
<i>Lepidurus packardii</i> Vernal pool tadpole shrimp	FE	--	Occurs in vernal pools.	No Habitat Present. The Study Area does not support vernal pool habitat.
Fish				
<i>Acipenser medirostris</i> pop. 1 Green sturgeon – Southern Distinct Population Segment (DPS)	FT	CSC	Prefers moderately saline water and may be found in major bays and estuaries from San Francisco Bay northward.	No Habitat Present. The Study Area is outside of the geographic range of this species, and suitable aquatic habitat is not present on-site.
<i>Oncorhynchus mykiss irideus</i> pop. 11 Steelhead – Central Valley DPS	FT	CSC	This anadromous species requires freshwater water courses with gravelly substrates for breeding. The young remain in freshwater areas before migrating to estuarine and marine environments.	No Habitat Present. No suitable river/stream habitat is present within the Study Area.
Amphibians				
<i>Ambystoma californiense</i> California tiger salamander	FT	CT	Breeds in ponds or other deeply ponded wetlands and uses gopher holes and ground squirrel burrows in adjacent grasslands for upland refugia/foraging.	No Habitat Present. No ponds, vernal pools, or other suitable aquatic habitat are present within the Study Area.
<i>Spea hammondi</i> Western spadefoot	FPT	CSC	Breeds in vernal pools, seasonal wetlands, and associated swales. Forages and hibernates in adjacent grasslands.	No Habitat Present. No vernal pools or other suitable aquatic habitat are present within the Study Area.
Reptiles				

Table 1. Special-Status Species with Potential to Occur within the El Macero Golf Course Study Area

Scientific Name (Common Name)	Federal Status¹	State Status¹	Habitat Requirements	Potential for Occurrence
<i>Actinemys marmorata</i> Northwestern pond turtle	FPT	CSC	Occurs in ponds, rivers, streams, wetlands, and irrigation ditches with associated marsh habitat.	No Habitat Present. No suitable aquatic habitat is present within the Study Area.
<i>Thamnophis gigas</i> Giant garter snake	FT	CT	Occurs in rivers, canals, irrigation ditches, rice fields, and other aquatic habitats with slow moving water and heavy emergent vegetation.	No Habitat Present. No suitable aquatic habitat is present within the Study Area.
Birds				
<i>Agelaius tricolor</i> Tricolored blackbird	--	CT, CSC	Colonial nester in cattails (<i>Typha</i> spp.), bulrush (<i>Schoenoplectus</i> spp.), or blackberry (<i>Rubus</i> spp.) associated with marsh habitats. Nesting habitat may be as small as 0.01 acres adjacent to suitable foraging habitat such as grazed grasslands, irrigated pasture, shallow wetlands, or agricultural fields (Airola 2024).	No Habitat Present. The Study Area does not support suitable colonial nesting or foraging habitat for this species.
<i>Anarhynchus montanus</i> Mountain plover	--	CSC	Winters primarily in freshly plowed agricultural fields or newly sprouting grain fields. Often associated with short vegetation and bare ground.	No Habitat Present. The Study Area does not support suitable winter foraging habitat for this species.
<i>Anarhynchus nivosus nivosus</i> Western snowy plover	FT	CSC	Occurs in barren to sparsely vegetated open sandy areas near coastal areas and large bodies of water.	No Habitat Present. The Study Area is outside the known range of this species.

Table 1. Special-Status Species with Potential to Occur within the El Macero Golf Course Study Area

Scientific Name (Common Name)	Federal Status¹	State Status¹	Habitat Requirements	Potential for Occurrence
<i>Aquila chrysaetos</i> Golden eagle	--	CFP	Forages in open areas including grasslands, savannahs, deserts, and early successional stages of shrub and forest communities. Nests in large trees and cliffs.	No Habitat Present. The Study Area does not support suitable nesting or foraging habitat for this species.
<i>Asio otus</i> Long-eared owl	--	CSC	Typically nests and roosts in dense woodland areas adjacent to open grasslands or scrublands.	No Habitat Present. The Study Area does not support suitable nesting or foraging habitat for this species.
<i>Athene cunicularia</i> Burrowing owl	--	CC, CSC	Nests in abandoned ground squirrel (<i>Otospermophilus beecheyi</i>) and other mammal burrows associated with open grassland habitats. May also nest in man-made refugia, such as culverts or debris piles.	No Habitat Present. The Study Area lacks ground mammal burrows or other potential refugia, and the site does not provide foraging habitat.
<i>Buteo swainsoni</i> Swainson's hawk	--	CT	Nests in large trees, preferably in riparian areas. Forages in fields, cropland, irrigated pasture, and grasslands near large riparian corridors.	Moderate. Large trees within and adjacent to the Study Area represent potential nesting habitat for this species. The Study Area does not provide potential foraging habitat.
<i>Chlidonias niger</i> Black tern	--	CSC	Nests in freshwater wetlands with extensive marsh vegetation and open water, as well as occasionally in smaller marshes and wet meadows.	No Habitat Present. The Study Area does not support freshwater marsh habitat.

Table 1. Special-Status Species with Potential to Occur within the El Macero Golf Course Study Area

Scientific Name (Common Name)	Federal Status¹	State Status¹	Habitat Requirements	Potential for Occurrence
<i>Circus hudsonius</i> Northern harrier	--	CSC	Nests in emergent wetland/marsh, open grasslands, or savannah habitats. Forages in open areas such as marshes, agricultural fields, and grasslands.	No Habitat Present. The Study Area does not support suitable nesting or foraging habitat for this species.
<i>Contopus cooperi</i> Olive-sided flycatcher	--	CSC	Nests in late-successional conifer forests with open canopies. Mostly associated with edges and openings in otherwise relatively dense forests, but can also occupy semi open forests.	No Habitat Present. No conifer forest habitat is present within the Study Area.
<i>Cypseloides niger</i> Black swift	--	CSC	Nest on ledges or in crevices in steep cliffs, either along the coast or near streams or waterfalls in montane areas. They forage over a wide array of terrain but are local in occurrence, likely limited to regions with suitable nesting sites.	No Habitat Present. The Study Area does not support cliff ledges or crevices.
<i>Elanus leucurus</i> White-tailed kite	--	CFP	Forages in open grasslands, fields, and meadows. Nests in Isolated trees in close proximity to foraging habitat.	Moderate. Trees within and adjacent to the Study Area represent potential nesting habitat for this species. The Study Area does not provide potential foraging habitat.
<i>Geothlypis trichas sinuosa</i> Saltmarsh common yellowthroat	--	CSC	Nests in marshy areas that are usually higher off the ground, where they are safer from flooding. Requires suitable freshwater and salt marshes with nearby willow thickets.	No Habitat Present. No freshwater/salt marsh habitat is present within the Study Area.

Table 1. Special-Status Species with Potential to Occur within the El Macero Golf Course Study Area

Scientific Name (Common Name)	Federal Status¹	State Status¹	Habitat Requirements	Potential for Occurrence
<i>Haliaeetus leucocephalus</i> Bald eagle	--	CE, CFP	Nests in large trees within 1 mile of lakes, rivers, or larger streams.	No Habitat Present. The Study Area does not support suitable nesting or foraging habitat for this species.
<i>Melospiza melodia</i> pop. 1 Song sparrow ("Modesto" population)	--	CSC	Nests in emergent freshwater marshes dominated by cattails (<i>Typha</i> spp.) or bulrushes (<i>Scirpus</i> or <i>Schoenoplectus</i> spp.), as well as riparian willow (<i>Salix</i> spp.) thickets. This species also nests in riparian forests of valley oak (<i>Quercus lobata</i>) with a blackberry (<i>Rubus</i> spp.) understory, along vegetated irrigation canals and levees, and in recently planted valley oak restoration sites (Shuford and Gardali 2008).	No Habitat Present. The Study Area does not support freshwater marsh or riparian habitat.
<i>Melospiza melodia graminea</i> Channel Island song sparrow	--	CSC	Occurs exclusively on San Miguel, Santa Rosa, and Anacapa Island.	No Habitat Present. The Study Area is outside the known range of this species.
<i>Passerculus sandwichensis beldingi</i> Belding's savannah sparrow	--	CE	Resides year-round in coastal salt marshes in southern California.	No Habitat Present. The Study Area is outside the known range of this species.

Table 1. Special-Status Species with Potential to Occur within the El Macero Golf Course Study Area

Scientific Name (Common Name)	Federal Status¹	State Status¹	Habitat Requirements	Potential for Occurrence
<i>Vireo bellii pusillus</i> Least Bell's vireo	FE	CE	Strongly associated with riparian corridors. Generally restricted to lowland willow-dominated riparian areas in southern California. In the Sacramento Valley, the species occurs as a vagrant during the breeding season.	No habitat Present. The Study Area does not support riparian habitat.
Mammals				
<i>Antrozous pallidus</i> Pallid bat	--	CSC, WBWG H	Day and night roosts include crevices in rocky outcrops and cliffs, caves, mines, trees (e.g., basal hollows of coast redwoods [<i>Sequoia sempervirens</i>] and giant sequoia [<i>Sequoiadendron giganteum</i>], bole cavities of oaks [<i>Quercus</i> species], exfoliating Ponderosa pine [<i>Pinus ponderosa</i>] and valley oak [<i>Quercus lobata</i>] 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.	No Habitat Present. The Study Area does not support appropriate roosting habitat for this species.

Table 1. Special-Status Species with Potential to Occur within the El Macero Golf Course Study Area

Scientific Name (Common Name)	Federal Status¹	State Status¹	Habitat Requirements	Potential for Occurrence
<i>Lasionycteris noctivagans</i> Silver-haired bat	--	WBWG M	Roosts in abandoned woodpecker holes, under bark, and occasionally in rock crevices. It forages in open wooded areas near water features.	No Habitat Present. The Study Area does not support appropriate roosting habitat for this species.
<i>Lasiurus frantzii</i> Western red bat	--	CSC, WBWG H	Requires large leaf trees such as cottonwoods (<i>Populus</i> species), willows (<i>Salix</i> species), and fruit/nut trees for daytime roosts. Often associated with wooded habitats that are protected from above and open below. Often found in association with riparian corridors. Requires open space for foraging.	No Habitat Present. The Study Area does not support appropriate roosting habitat for this species.
<i>Lasiurus cinereus</i> Hoary bat	--	WBWG M	Roosts primarily in foliage of both coniferous and deciduous trees at the edges of clearings.	Low. Trees within the Study Area provide marginally suitable roosting habitat for this species.
<i>Taxidea taxus</i> American badger	--	CSC	This species prefers dry open fields, grasslands, and pastures.	No Habitat Present. The Study Area does not support grassland or pasture habitat.

¹Status Codes:

CC - CDFW Candidate for Listing
CRPR - California Rare Plant Rank
Threatened

CE - CDFW Endangered

CR - California Rare

WBWG H - Western Bat Working Group High Threat Rank

CT - CDFW Threatened

FE - Federally Endangered

CFP - CDFW Fully Protected

FT - Federally Threatened

WBWG M - Western Bat Working Group Medium Threat Rank

CSC - CDFW Species of Concern

FPT - Federally Proposed

Figures 2 and 3 are exhibits displaying CNDDDB occurrences within five miles of the Study Area. Below is a discussion of all special-status plant and animal species with potential to occur on the site.

5.1 Birds

5.1.1 Swainson's Hawk

Swainson's hawk (*Buteo swainsoni*) is a raptor species that is not federally listed, but is listed as threatened by CDFW. Breeding pairs typically nest in tall trees associated with riparian corridors, and forage in grassland, irrigated pasture, and cropland with a high density of rodents (Shuford and Gardali 2008). The Central Valley populations breed and nest in late spring through early summer before migrating to Central and South America for the winter (Shuford and Gardali 2008).

Large trees on-site and within the vicinity of the Study Area represent potential nesting habitat for this species. The Study Area does not provide potential foraging habitat. There are 102 documented occurrences of Swainson's hawk within five miles of the Study Area. The nearest occurrence of nesting (CNDDDB Occurrence #410) is located approximately 0.1 mile west of the site, and dates from 2007 (CNDDDB 2025). This species was not observed within the Study Area during the site visit.

5.1.2 White-Tailed Kite

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

Trees on-site and within the vicinity of the Study Area represent potential nesting habitat for this species. The Study Area does not provide potential foraging habitat. There are four documented occurrences of white-tailed kite within five miles of the Study Area. The nearest occurrence of nesting (CNDDDB Occurrence #45) is located approximately 0.4 mile west of the site, and dates from 1993 (CNDDDB 2025). This species was not observed within the Study Area during the site visit.

5.2 Mammals

5.2.1 Hoary Bat

Hoary bat (*Lasiurus cinereus*) is not federally or state listed, but it is classified by the WBWG as a medium priority species. It is also considered to be one of the most widespread of all American bats, with a range extending from Canada to central Chile and Argentina as well as Hawaii. Hoary bats are solitary and roost primarily in foliage of both coniferous and deciduous trees, usually at the edge of a clearing (WBWG 2025). This species is primarily crepuscular or nocturnal and requires open areas to hunt its preferred prey item,

moths. Hoary bat is considered a forest/woodland species, and in California they are often associated with undisturbed riparian or stream corridors (WBWG 2025).

Trees within and adjacent to the Study Area provide marginally suitable roosting habitat for this species. There is one documented occurrence of hoary bat within five miles of the Study Area (CNDDDB Occurrence #136) (CNDDDB 2025). This occurrence dates from 1991 and is located approximately 2.3 miles west of the site, but is non-specific (one-mile accuracy). This species was not observed within the Study Area during the site visit.

6.0 IMPACTS TO SENSITIVE BIOLOGICAL RESOURCES

This section details potential impacts to the biological resources discussed above associated with construction of the Project, as discussed in Section 1.1 and shown in **Attachment A**. For the purposes of this assessment, Madrone is assuming that the entire Study Area will be directly impacted by the Project.

6.1 Birds

6.1.1 Swainson's Hawk

Large trees within and adjacent to the Study Area provide potential Swainson's hawk nesting habitat. If Swainson's hawks were actively nesting within trees that were removed during construction, incidental mortality of individuals of this species could occur. Furthermore, if Swainson's hawks were nesting within the vicinity of the Study Area during construction, construction activities could disturb nesting activity and/or cause nest abandonment. The Project does not support, and is not expected to have any impacts, on potential Swainson's hawk foraging habitat.

6.1.2 White-Tailed Kite

Trees within and adjacent to the Study Area provide potential white-tailed kite nesting habitat. If white-tailed kite were actively nesting within trees that were removed during construction, incidental mortality of individuals of this species could occur. Furthermore, if white-tailed kite were nesting within the vicinity of the Study Area during construction, construction activities could disturb nesting activity and/or cause nest abandonment. The Project does not support, and is not expected to have any impacts, on potential white-tailed kite foraging habitat.

6.1.3 Nesting Raptors and Migratory Birds

In addition to the special-status bird species listed above, other more common bird species protected by the MBTA have the potential to be present and nest within the Study Area. If they were actively nesting within trees, shrubs, or ground nests that were removed during construction, incidental mortality of individuals of this species could occur. Furthermore, birds nesting in avoided areas adjacent to construction could be disturbed by construction, which could result in nest abandonment.

6.2 Mammals

6.2.1 Roosting Bats

Trees within and adjacent to the Study Area provide marginal potential roosting habitat for hoary bat. If special-status bats were roosting in trees to be removed by Project construction, incidental mortality of individuals of these species could occur.

7.0 MITIGATION FOR IMPACTS TO SENSITIVE BIOLOGICAL RESOURCES

The following are mitigation measures that are often required by CEQA lead agencies for impacts to sensitive biological resources that may be associated with construction of the Project.

7.1 Birds

The following nest survey requirements apply if construction activities take place during the typical bird breeding/nesting season (typically 15 February through 31 August, unless otherwise specified).

7.1.1 Swainson's Hawk

No more than 14 days prior to construction, a targeted Swainson's hawk nest survey shall be conducted throughout the Study Area and all accessible areas within 0.25-mile of the proposed construction area in accordance with the *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys In California's Central Valley* (TAC 2000). If active Swainson's hawk nests are found within 0.25-mile of the construction area, construction shall cease within 0.25-mile of the nest until a qualified biologist (Project Biologist) determines that the young have fledged or it is determined that the nesting attempt has failed. The 0.25-mile buffer may be reduced if a smaller, sufficiently protective buffer is proposed by the Project Biologist and approved by CDFW and the County after taking into consideration the natural history of the Swainson's hawk, the proposed activity level adjacent to the nest, the nest occupants' habituation to existing or ongoing activity, nest concealment (i.e., whether there are visual or acoustic barriers between the proposed activity and the nest), and what (if any) nest monitoring is proposed.

7.1.2 Other Birds

A pre-construction survey for other nesting bird species, including white-tailed kite, shall be conducted by a qualified biologist on the Project site and all accessible areas within 500-feet of the Project, no more than 14 days prior to the initiation of construction. If there is a break in construction activity of more than 14 days, then subsequent surveys shall be conducted.

If active raptor nests are found, no construction activities shall take place within 500 feet of the nest until the young have fledged and/or the nest is no longer active. If active songbird nests are found, a 100-foot

no disturbance buffer will be established. These no-disturbance buffers may be reduced if a smaller, sufficiently protective buffer is approved by the County after taking into consideration the natural history of the species of bird nesting, the proposed activity level adjacent to the nest, the nest occupants' habituation to existing or ongoing activity, and nest concealment (i.e., whether there are visual or acoustic barriers between the proposed activity and the nest). A biologist may visit the nest as needed to determine when the young have fledged and are independent of the nest, or the nest can be left undisturbed until the end of the nesting season.

7.2 Mammals

7.2.1 Roosting Bats

Prior to Project implementation, a roosting bat habitat assessment shall be conducted to determine whether bat roosting habitat is identified within the work area. If no habitat is identified, no further mitigation will be necessary.

If bat roosting habitat is identified, pre-construction roosting bat surveys shall be conducted by a qualified biologist within 14 days prior to any tree removal that will occur during the breeding season (April through August). If pre-construction surveys indicate that no roosts of special-status bats are present, or that roosts are inactive or potential habitat is unoccupied, no further mitigation is required. If roosting bats are found, exclusion shall be conducted as recommended by the qualified biologist in coordination with CDFW. Methods may include acoustic monitoring, evening emergence surveys, and the utilization of two-step tree removal supervised by the qualified biologist. Two-step tree removal involves removal of all branches that do not provide roosting habitat on the first day, and then the next day cutting down the remaining portion of the tree. Once the bats have been excluded, tree removal may proceed.

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Figures

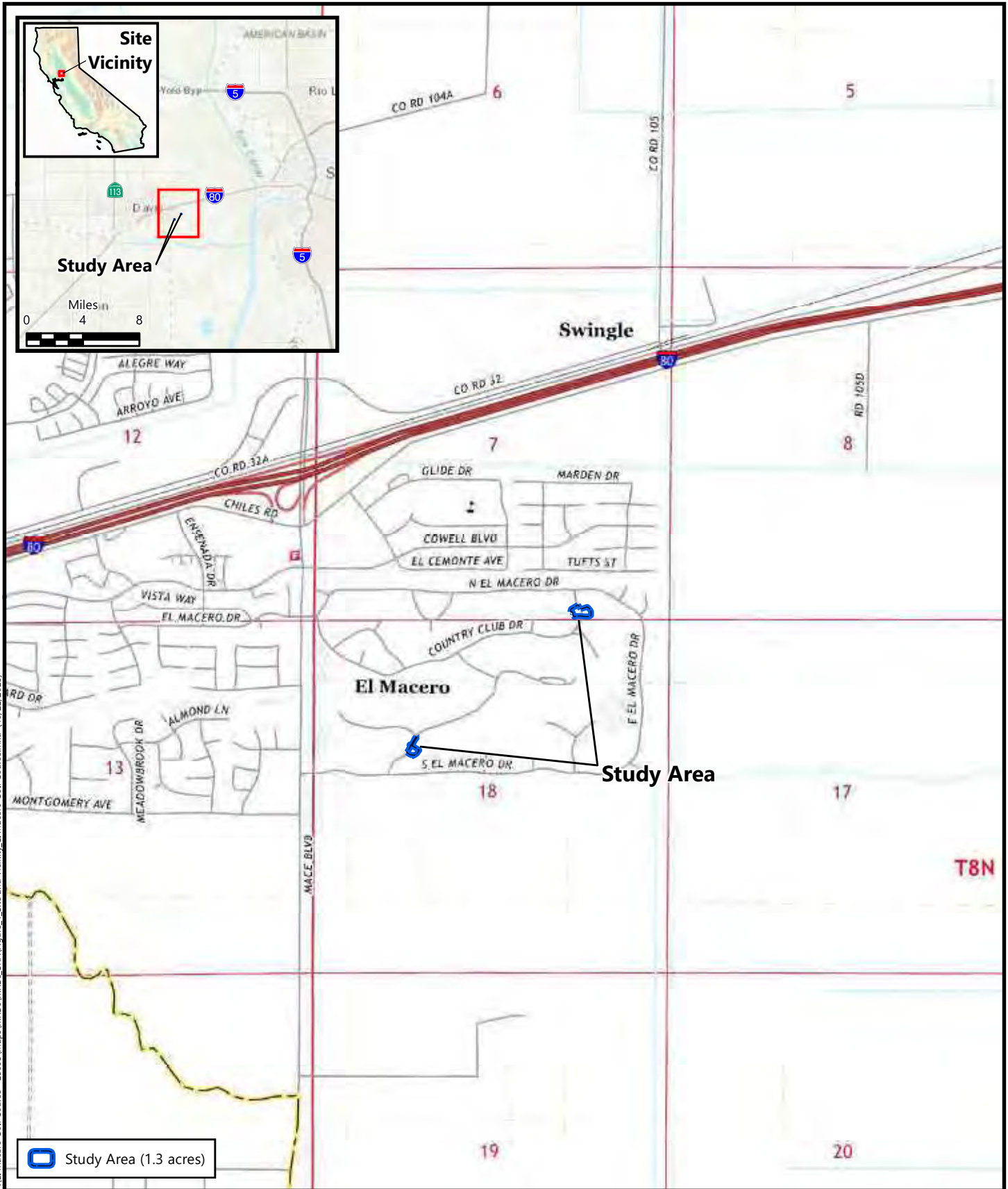
Figure 1. Site and Vicinity

Figure 2. California Natural Diversity Database Occurrences of Special-Status Plant Species and Critical Habitat

Figure 3. California Natural Diversity Database Occurrences of Special-Status Wildlife Species and Critical Habitat

Figure 4. Natural Resources Conservation Service Soils

Figure 5. Vegetation Communities



P:\El Macero Golf Course - 25095\Maps\MXD\MXD\BRA\Figure_1_Site and Vicinity, El Macero Golf Course.mxd (10/22/2025)

Figure 1
Site and Vicinity



El Macero Golf Course
Yolo County, California

Source: United States Geologic Survey, 2021
 "Davis, California" 7.5-Minute Topographic Quadrangle
 Sections 7 and 18, Township 8 North, Range 2 East, MDBM
 Latitude (NAD83): 38.573218°, Longitude (NAD83): -121.722758°

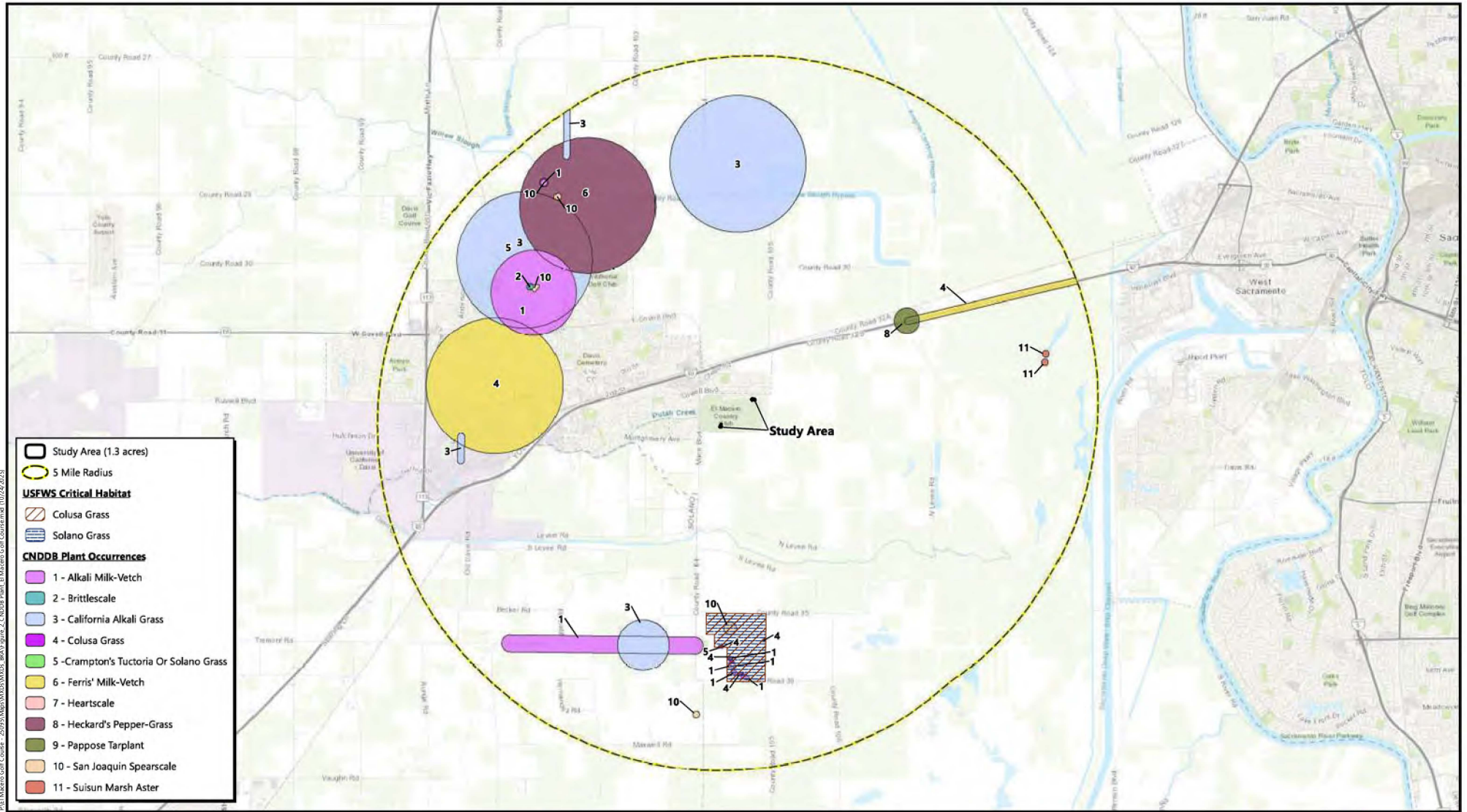


Figure 2
California Natural Diversity Database Occurrences of
Special-Status Plant Species and Critical Habitat

Source: California Department of Fish and Wildlife, October 2025
 Basemap Source: ESRI World Topography

El Macero Golf Course
 Yolo County, California



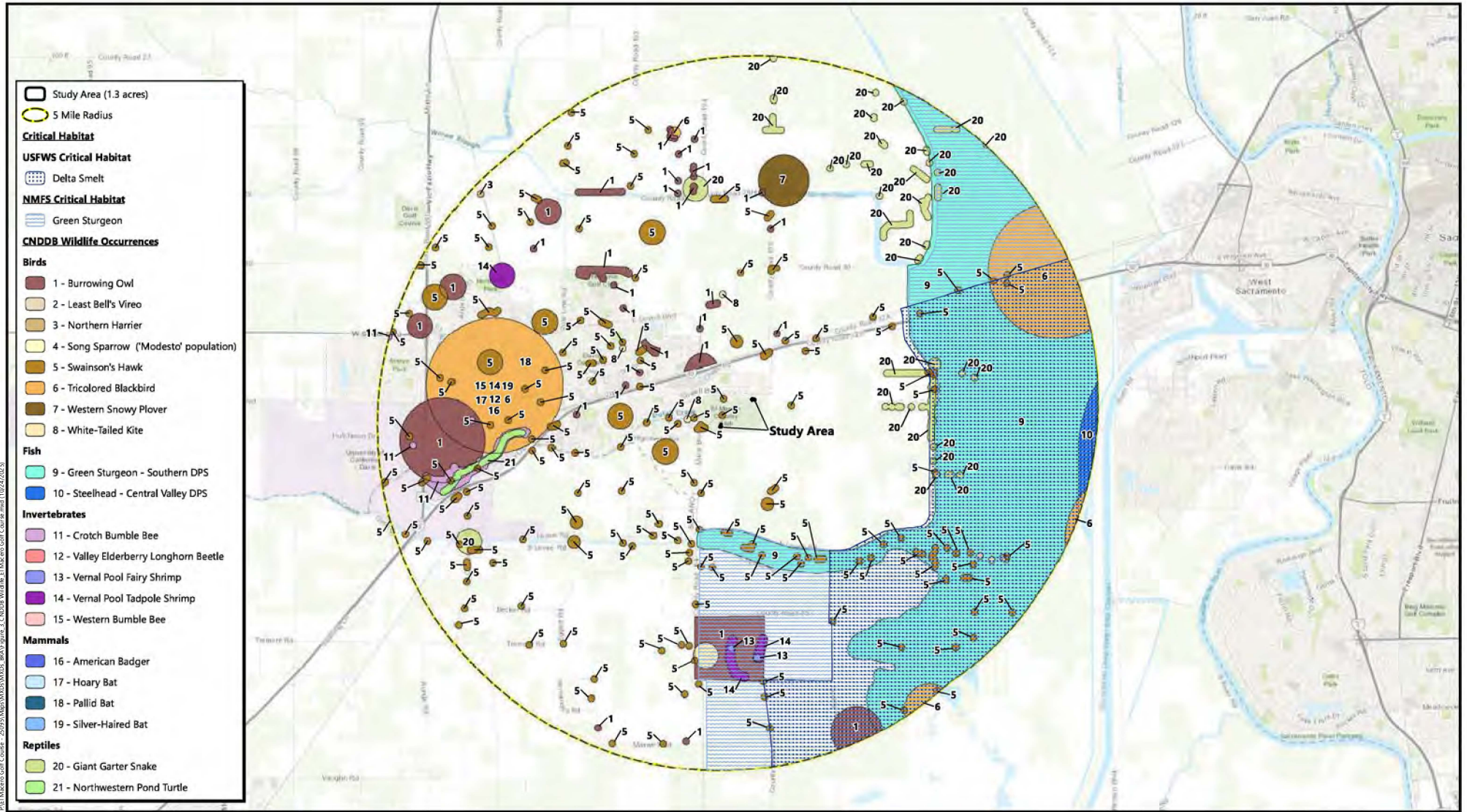


Figure 3
California Natural Diversity Database Occurrences of
Special-Status Wildlife Species and Critical Habitat

Source: California Department of Fish and Wildlife, October 2025
 Basemap Source: ESRI World Topography



File: El Macero Golf Course - 202051\Map\MapDocs\BAYFigure_5_Vegetation Communities, El Macero Golf Course.mxd (10/22/2021)

*Small summation errors may occur due to rounding.
 Aerial Source: ESRI/SACOG, 18 March 2022

Figure 5
Vegetation Communities

El Macero Golf Course
 Yolo County, California



Attachments

Attachment A. El Macero Golf Course Site Plan

Attachment B. IPaC Trust Resource Report for the Study Area

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

Attachment D. Wildlife List

Attachment A

El Macero Golf Course Site Plan

2025 EL MACERO LOT ADDITIONS TENTATIVE PARCEL MAP NO. 5267

COUNTY OF YOLO CALIFORNIA
CUNNINGHAM ENGINEERING
AUGUST 2025

PROPERTY DESCRIPTION

A PORTION OF PARCEL B OF THAT CERTAIN RECORD OF SURVEY FILED IN BOOK 8 OF MAPS & SURVEYS AT PAGE 58, YOLO COUNTY RECORDS, ALSO KNOWN AS "EL MACERO COUNTRY CLUB," WITHIN SECTIONS 7 & 16, T.8N., R.3E., M.C.S.B.M.

NOTES:

- THIS TENTATIVE PARCEL MAP WAS PREPARED UNDER THE DIRECTION OF STEVEN J. GREENFIELD, PCE 52880.
- ALL INFORMATION ON THIS MAP IS DEEMED TO BE OF A PRELIMINARY NATURE AND IS NOT TO BE RELIED ON FOR SURVEY OR PROPERTY LINE INFORMATION.
- THE EXISTING BOUNDARY AND TOPOGRAPHY INFORMATION IS BASED ON A FIELD SURVEY PERFORMED BY MORROW SURVEYING, INC., DATED 06/10/2025.
- THIS TENTATIVE PARCEL MAP CONFORMS WITH ALL REQUIREMENTS OF THE STATE OF CALIFORNIA SUBDIVISION MAP ACT.
- THIS TENTATIVE PARCEL MAP CONFORMS WITH ALL THE REQUIREMENTS OF THE YOLO COUNTY LAND DEVELOPMENT & ZONING ORDINANCE.

BASIS OF BEARINGS

THE BASIS OF BEARINGS FOR THIS MAP IS IDENTICAL WITH THAT OF THE RECORD OF SURVEY RECORDED IN BOOK 8 OF MAPS & SURVEYS, PAGE 58.

LEGEND:

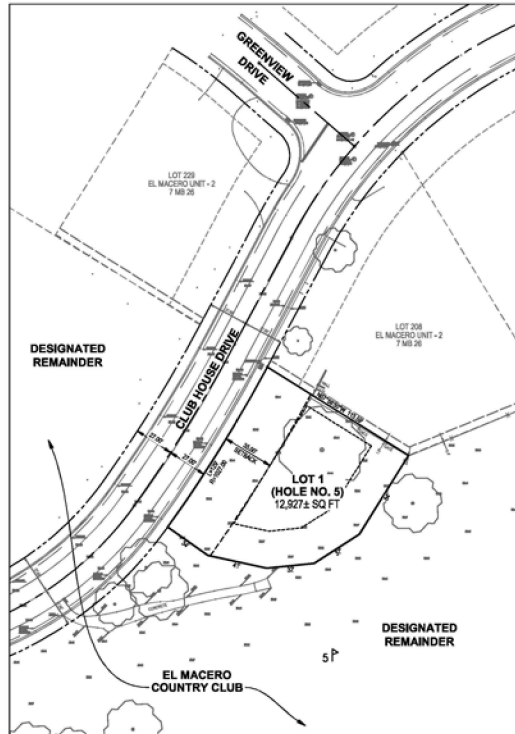
- EXISTING SANITARY SEWER PIPE AND MANHOLE
- EXISTING STORM DRAIN PIPE AND MANHOLE
- EXISTING WATER LINE AND WATER VALVE
- PROPOSED SANITARY SEWER PIPE AND MANHOLE
- PROPOSED BOUNDARY LINE
- EXISTING RIGHT OF WAY
- PROPOSED EASEMENT LINE
- EXISTING EASEMENT LINE
- BUILDING PAD
- EDGE OF WATER FEATURE
- WATER SERVICE
- SEWER SERVICE
- FLOWLINE
- EXISTING UTILITY BOXES
- EXISTING FIRE HYDRANT
- EXISTING STORM DRAIN INLET
- EXISTING ELEVATION
- PROPOSED ELEVATION
- SURVEY MONUMENT
- EXISTING TREE TO REMAIN
- EXISTING TREE TO BE REMOVED
- BUILDING PAD ELEVATION

SERVICE PROVIDERS

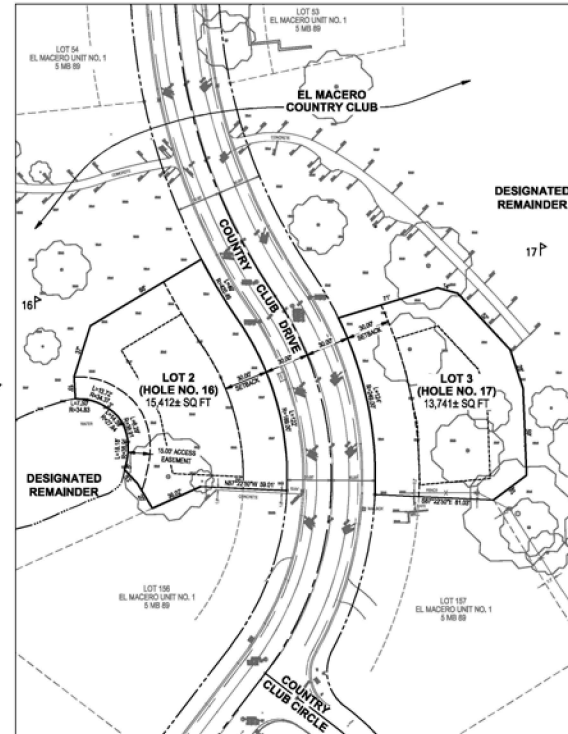
- | | |
|---|--|
| GAS
PACIFIC GAS AND ELECTRIC (PG&E)
(800) 743-5000 | TELEPHONE
AT&T
(800) 222-0300 |
| ELECTRICITY
PACIFIC GAS AND ELECTRIC (PG&E)
(800) 743-5000 | CABLE TELEVISION
COMCAST
(800) 824-2000 |
| WATER
CITY OF DAVIS PUBLIC WORKS DEPT
(530) 757-5686 | FIRE DEPARTMENT
CITY OF DAVIS FIRE DEPT - EAST
DAVIS FIRE PROTECTION DISTRICT
(530) 757-5684 |
| SEWERAGE
CITY OF DAVIS PUBLIC WORKS DEPT
(530) 757-5686 | U.S.A.
(800) 227-2690 |
| STORM DRAIN
CITY OF DAVIS PUBLIC WORKS DEPT
(530) 757-5686 | GARBAGE & RECYCLING
DAVIS WASTE REMOVAL
(530) 756-4646 |

ABBREVIATIONS:

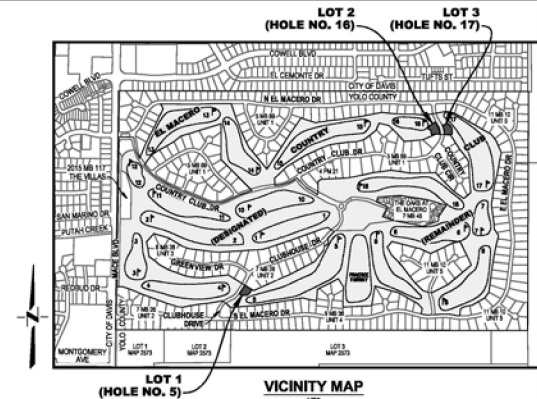
- CL..... CENTERLINE
- D..... DRAIN
- E..... EAST
- ESMT... EASEMENT
- FL..... FLOWLINE
- GB..... GRADE BREAK
- HP..... HIGH POINT
- INV.... INVERT
- LF..... LINEAR FEET
- LP..... LOW POINT
- MAX.... MAXIMUM
- MIN.... MINIMUM
- N..... NORTH
- NTS.... NOT TO SCALE
- PL..... PROPERTY LINE
- PUE.... PUBLIC UTILITY EASEMENT
- S..... SLOPE, SOUTH SEWER
- SSM.... SANITARY SEWER MANHOLE
- TYP.... TYPICAL
- W..... WEST, WATER



**LOT 1
(HOLE NO. 5)**



**LOT 2
(HOLE NO. 16)** **LOT 3
(HOLE NO. 17)**



VICINITY MAP
NTS

SHEET INDEX	
SHEET NAME:	SHEET NO.:
TITLE SHEET	1
UTILITY PLAN	2
PROJECT SUMMARY	
TOTAL LOTS	3

PROJECT INFORMATION

OWNER/DEVELOPER:
EL MACERO COUNTRY CLUB
44571 CLUBHOUSE DR
EL MACERO, CA 95618
(530) 753-3363

CIVIL ENGINEER:
CUNNINGHAM ENGINEERING
2940 SPARTAN STREET, SUITE 200
DAVIS, CALIFORNIA 95618
(530) 758-2028

ASSESSORS PARCEL NUMBER:
068-130-010

AREA:
0.966± ACRES

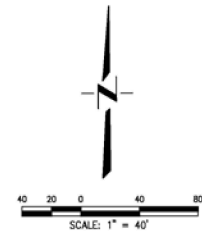
EXISTING ZONING:
P-R PLANNED DEVELOPMENT OVERLAY

PROPOSED ZONING:
R-L PLANNED DEVELOPMENT OVERLAY

EXISTING LAND USE:
PARKS AND RECREATION (PR)

PROPOSED LAND USE:
RESIDENTIAL LOW (RL)

FLOOD ZONE
ZONE X, 06113C0612G & 06113C0620G, JUNE 18, 2010



TENTATIVE PARCEL MAP NO. 5267
2025 EL MACERO LOT ADDITIONS
TITLE SHEET

SHEET
1
 OF
2
 DATE: 07/29/2025
 JOB NO: 2019-00-04

CUNNINGHAM ENGINEERING
 2940 SPARTAN STREET, SUITE 200
 DAVIS, CALIFORNIA 95618
 (530) 758-2028



CALIFORNIA

YOLO COUNTY

AS SHOWN

SCALE

LE

DESIGNED BY

DATE

REVISIONS

BY

CHECKED BY

SCALE

AS SHOWN

Attachment B

IPaC Trust Resource Report for the Study Area

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

Yolo County, California



Local office

Sacramento Fish And Wildlife Office

☎ (916) 414-6600

📅 (916) 414-6713

Federal Building

2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846

NOT FOR CONSULTATION

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species¹ and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries²).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact [NOAA Fisheries](#) for [species under their jurisdiction](#).

1. Species listed under the [Endangered Species Act](#) are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information. IPaC only shows species that are regulated by USFWS (see FAQ).
2. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Birds

NAME	STATUS
Western Snowy Plover <i>Charadrius nivosus nivosus</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/8035	Threatened

Reptiles

NAME	STATUS
Giant Garter Snake <i>Thamnophis gigas</i> Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/4482	Threatened
Northwestern Pond Turtle <i>Actinemys marmorata</i> Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/1111	Proposed Threatened

Amphibians

NAME	STATUS
California Tiger Salamander <i>Ambystoma californiense</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/2076	Threatened
Western Spadefoot <i>Spea hammondi</i> No critical habitat has been designated for this species.	Proposed Threatened

Insects

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> Wherever found There is proposed critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/9743	Proposed Threatened

Valley Elderberry Longhorn Beetle *Desmocerus californicus dimorphus* Threatened

Wherever found

There is **final** critical habitat for this species. Your location does not overlap the critical habitat.

<https://ecos.fws.gov/ecp/species/7850>

Crustaceans

NAME

STATUS

Conservancy Fairy Shrimp *Branchinecta conservatio*

Endangered

Wherever found

There is **final** critical habitat for this species. Your location does not overlap the critical habitat.

<https://ecos.fws.gov/ecp/species/8246>

Vernal Pool Fairy Shrimp *Branchinecta lynchi*

Threatened

Wherever found

There is **final** critical habitat for this species. Your location does not overlap the critical habitat.

<https://ecos.fws.gov/ecp/species/498>

Vernal Pool Tadpole Shrimp *Lepidurus packardii*

Endangered

Wherever found

There is **final** critical habitat for this species. Your location does not overlap the critical habitat.

<https://ecos.fws.gov/ecp/species/2246>

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

There are no critical habitats at this location.

You are still required to determine if your project(s) may have effects on all above listed species.

Bald & Golden Eagles

Bald and Golden Eagles are protected under the Bald and Golden Eagle Protection Act ² and the Migratory Bird Treaty Act (MBTA) ¹. Any person or organization who plans or conducts activities that may result in impacts to Bald or Golden Eagles, or their habitats, should follow appropriate regulations and consider implementing appropriate avoidance and minimization measures, as described in the various links on this page.

Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incident-take-migratory-birds>
- Nationwide avoidance and minimization measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>
- Supplemental Information for Migratory Birds and Eagles in IPaC <https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

There are Bald Eagles and/or Golden Eagles in your [project](#) area.

Measures for Proactively Minimizing Eagle Impacts

For information on how to best avoid and minimize disturbance to nesting bald eagles, please review the [National Bald Eagle Management Guidelines](#). You may employ the timing and activity-specific distance recommendations in this document when designing your project/activity to avoid and minimize eagle impacts. For bald eagle information specific to Alaska, please refer to [Bald Eagle Nesting and Sensitivity to Human Activity](#).

The FWS does not currently have guidelines for avoiding and minimizing disturbance to nesting Golden Eagles. For site-specific recommendations regarding nesting Golden Eagles, please consult with the appropriate Regional [Migratory Bird Office](#) or [Ecological Services Field Office](#).

If disturbance or take of eagles cannot be avoided, an [incidental take permit](#) may be available to authorize any take that results from, but is not the purpose of, an otherwise lawful activity. For assistance making this determination for Bald Eagles, visit the [Do I Need A Permit Tool](#). For assistance making this determination for golden eagles, please consult with the appropriate Regional [Migratory Bird Office](#) or [Ecological Services Field Office](#).

Ensure Your Eagle List is Accurate and Complete

If your project area is in a poorly surveyed area in IPaC, your list may not be complete and you may need to rely on other resources to determine what species may be present (e.g. your local FWS field office, state surveys, your own surveys). Please review the [Supplemental Information](#)

[on Migratory Birds and Eagles](#), to help you properly interpret the report for your specified location, including determining if there is sufficient data to ensure your list is accurate.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to bald or golden eagles on your list, see the "Probability of Presence Summary" below to see when these bald or golden eagles are most likely to be present and breeding in your project area.

Review the FAQs

The FAQs below provide important additional information and resources.

NAME	BREEDING SEASON
<p>Bald Eagle <i>Haliaeetus leucocephalus</i></p> <p>This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.</p>	Breeds Jan 1 to Aug 31
<p>Golden Eagle <i>Aquila chrysaetos</i></p> <p>This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.</p> <p>https://ecos.fws.gov/ecp/species/1680</p>	Breeds Jan 1 to Aug 31

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "[Supplemental Information on Migratory Birds and Eagles](#)", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that

- week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
- To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is $0.25/0.25 = 1$; at week 20 it is $0.05/0.25 = 0.2$.
 - The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (🟡)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

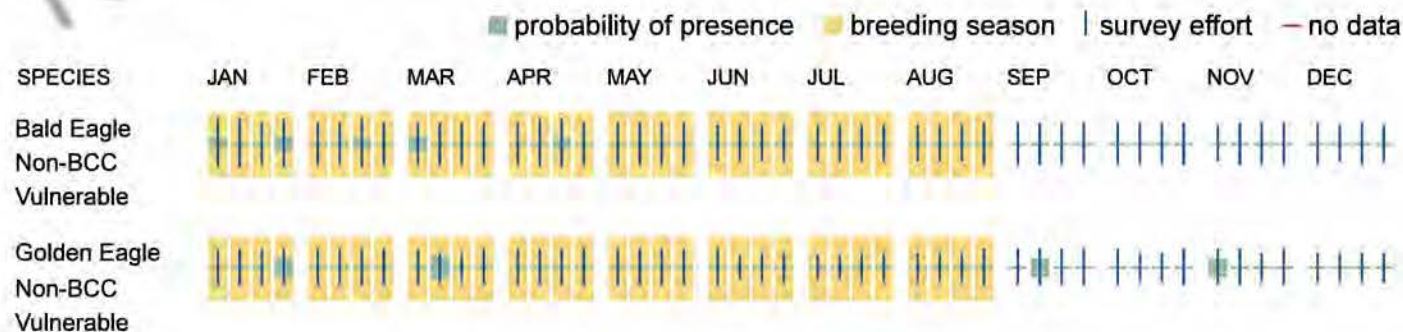
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (—)

A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



Bald & Golden Eagles FAQs

What does IPaC use to generate the potential presence of bald and golden eagles in my specified location?

The potential for eagle presence is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are an eagle ([Bald and Golden Eagle Protection Act](#) requirements may apply).

Proper interpretation and use of your eagle report

On the graphs provided, please look carefully at the survey effort (indicated by the black vertical line) and for the existence of the "no data" indicator (a red horizontal line). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort line or no data line (red horizontal) means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list and associated information help you know what to look for to confirm presence and helps guide you in knowing when to implement avoidance and minimization measures to eliminate or reduce potential impacts from your project activities or get the appropriate permits should presence be confirmed.

How do I know if eagles are breeding, wintering, or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating, or resident), you may query your location using the [RAIL Tool](#) and view the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If an eagle on your IPaC migratory bird species list has a breeding season associated with it (indicated by yellow vertical bars on the phenology graph in your "IPaC PROBABILITY OF PRESENCE SUMMARY" at the top of your results list), there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

Interpreting the Probability of Presence Graphs

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. A taller bar indicates a higher probability of species presence. The survey effort can be used to establish a level of confidence in the presence score.

How is the probability of presence score calculated? The calculation is done in three steps:

The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.

To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is $0.25/0.25 = 1$; at week 20 it is $0.05/0.25 = 0.2$.

The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

Breeding Season ()

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort ()

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data ()

A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

Migratory birds

The Migratory Bird Treaty Act (MBTA) ¹ prohibits the take (including killing, capturing, selling, trading, and transport) of protected migratory bird species without prior authorization by the Department of Interior U.S. Fish and Wildlife Service (Service).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.

Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incident-take-migratory-birds>
- Nationwide avoidance and minimization measures for birds
- Supplemental Information for Migratory Birds and Eagles in IPaC <https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

Measures for Proactively Minimizing Migratory Bird Impacts

Your IPaC Migratory Bird list showcases [birds of concern](#), including [Birds of Conservation Concern \(BCC\)](#), in your project location. This is not a comprehensive list of all birds found in your project area. However, you can help proactively minimize significant impacts to all birds at your project location by implementing the measures in the [Nationwide avoidance and minimization measures for birds](#) document, and any other project-specific avoidance and minimization measures suggested at the link [Measures for avoiding and minimizing impacts to birds](#) for the birds of concern on your list below.

Ensure Your Migratory Bird List is Accurate and Complete

If your project area is in a poorly surveyed area, your list may not be complete and you may need to rely on other resources to determine what species may be present (e.g. your local FWS field office, state surveys, your own surveys). Please review the [Supplemental Information on Migratory](#)

[Birds and Eagles document](#), to help you properly interpret the report for your specified location, including determining if there is sufficient data to ensure your list is accurate.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the "Probability of Presence Summary" below to see when these birds are most likely to be present and breeding in your project area.

Review the FAQs

The FAQs below provide important additional information and resources.

NAME	BREEDING SEASON
<p>Bald Eagle <i>Haliaeetus leucocephalus</i></p> <p>This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.</p>	Breeds Jan 1 to Aug 31
<p>Belding's Savannah Sparrow <i>Passerculus sandwichensis beldingi</i></p> <p>This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/8</p>	Breeds Apr 1 to Aug 15
<p>Black Swift <i>Cypseloides niger</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/8878</p>	Breeds Jun 15 to Sep 10
<p>Black Tern <i>Chlidonias niger surinamensis</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3093</p>	Breeds May 15 to Aug 20
<p>Bullock's Oriole <i>Icterus bullockii</i></p> <p>This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA</p>	Breeds Mar 21 to Jul 25
<p>California Gull <i>Larus californicus</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	Breeds Mar 1 to Jul 31
<p>California Thrasher <i>Toxostoma redivivum</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	Breeds Jan 1 to Jul 31

<p>Cassin's Finch <i>Haemorhous cassinii</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p> <p>https://ecos.fws.gov/ecp/species/9462</p>	Breeds May 15 to Jul 15
<p>Clark's Grebe <i>Aechmophorus clarkii</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	Breeds Jun 1 to Aug 31
<p>Common Yellowthroat <i>Geothlypis trichas sinuosa</i></p> <p>This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA</p> <p>https://ecos.fws.gov/ecp/species/2084</p>	Breeds May 20 to Jul 31
<p>Golden Eagle <i>Aquila chrysaetos</i></p> <p>This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.</p> <p>https://ecos.fws.gov/ecp/species/1680</p>	Breeds Jan 1 to Aug 31
<p>Lawrence's Goldfinch <i>Spinus lawrencei</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p> <p>https://ecos.fws.gov/ecp/species/9464</p>	Breeds Mar 20 to Sep 20
<p>Long-eared Owl <i>asio otus</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p> <p>https://ecos.fws.gov/ecp/species/3631</p>	Breeds Mar 1 to Jul 15
<p>Marbled Godwit <i>Limosa fedoa</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p> <p>https://ecos.fws.gov/ecp/species/9481</p>	Breeds elsewhere
<p>Mountain Plover <i>Charadrius montanus</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p> <p>https://ecos.fws.gov/ecp/species/3638</p>	Breeds elsewhere

- Northern Harrier** *Circus hudsonius* Breeds Apr 1 to Sep 15
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
<https://ecos.fws.gov/ecp/species/8350>
- Nuttall's Woodpecker** *Dryobates nuttallii* Breeds Apr 1 to Jul 20
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
<https://ecos.fws.gov/ecp/species/9410>
- Oak Titmouse** *Baeolophus inornatus* Breeds Mar 15 to Jul 15
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
<https://ecos.fws.gov/ecp/species/9656>
- Olive-sided Flycatcher** *Contopus cooperi* Breeds May 20 to Aug 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
<https://ecos.fws.gov/ecp/species/3914>
- Santa Barbara Song Sparrow** *Melospiza melodia graminea* Breeds Mar 1 to Sep 5
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
<https://ecos.fws.gov/ecp/species/5513>
- Short-billed Dowitcher** *Limnodromus griseus* Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
<https://ecos.fws.gov/ecp/species/9480>
- Tricolored Blackbird** *Agelaius tricolor* Breeds Mar 15 to Aug 10
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
<https://ecos.fws.gov/ecp/species/3910>
- Western Grebe** *aechmophorus occidentalis* Breeds Jun 1 to Aug 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
<https://ecos.fws.gov/ecp/species/6743>

<p>Western Screech-owl <i>Megascops kennicottii cardonensis</i></p> <p>This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA</p>	Breeds Mar 1 to Jun 30
<p>Willet <i>Tringa semipalmata</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	Breeds elsewhere
<p>Wrentit <i>Chamaea fasciata</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	Breeds Mar 15 to Aug 10
<p>Yellow-billed Magpie <i>Pica nuttalli</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p> <p>https://ecos.fws.gov/ecp/species/9726</p>	Breeds Apr 1 to Jul 31

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "[Supplemental Information on Migratory Birds and Eagles](#)", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence ()

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the

maximum of any week of the year. The relative probability of presence on week 12 is $0.25/0.25 = 1$; at week 20 it is $0.05/0.25 = 0.2$.

- The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (🟡)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

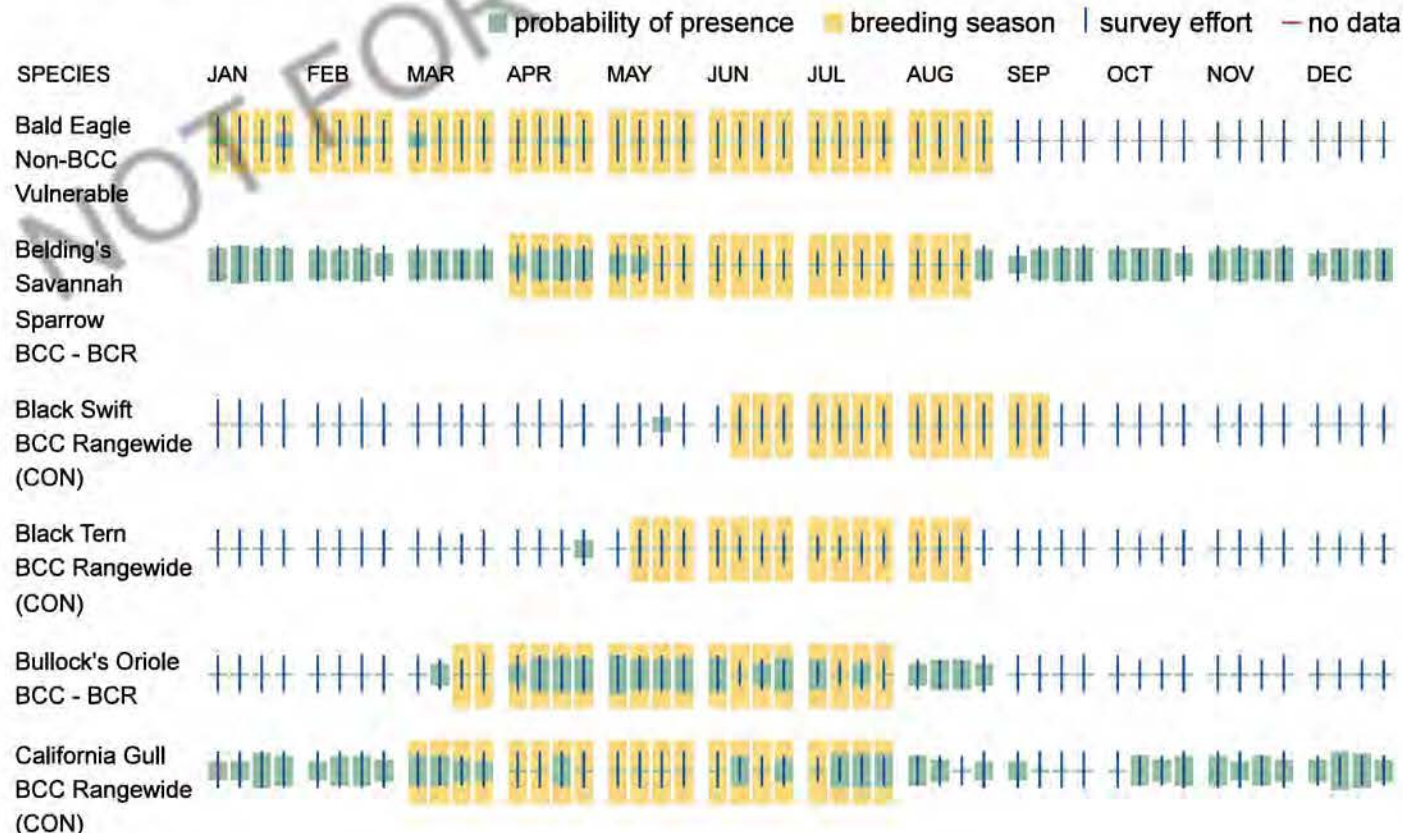
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

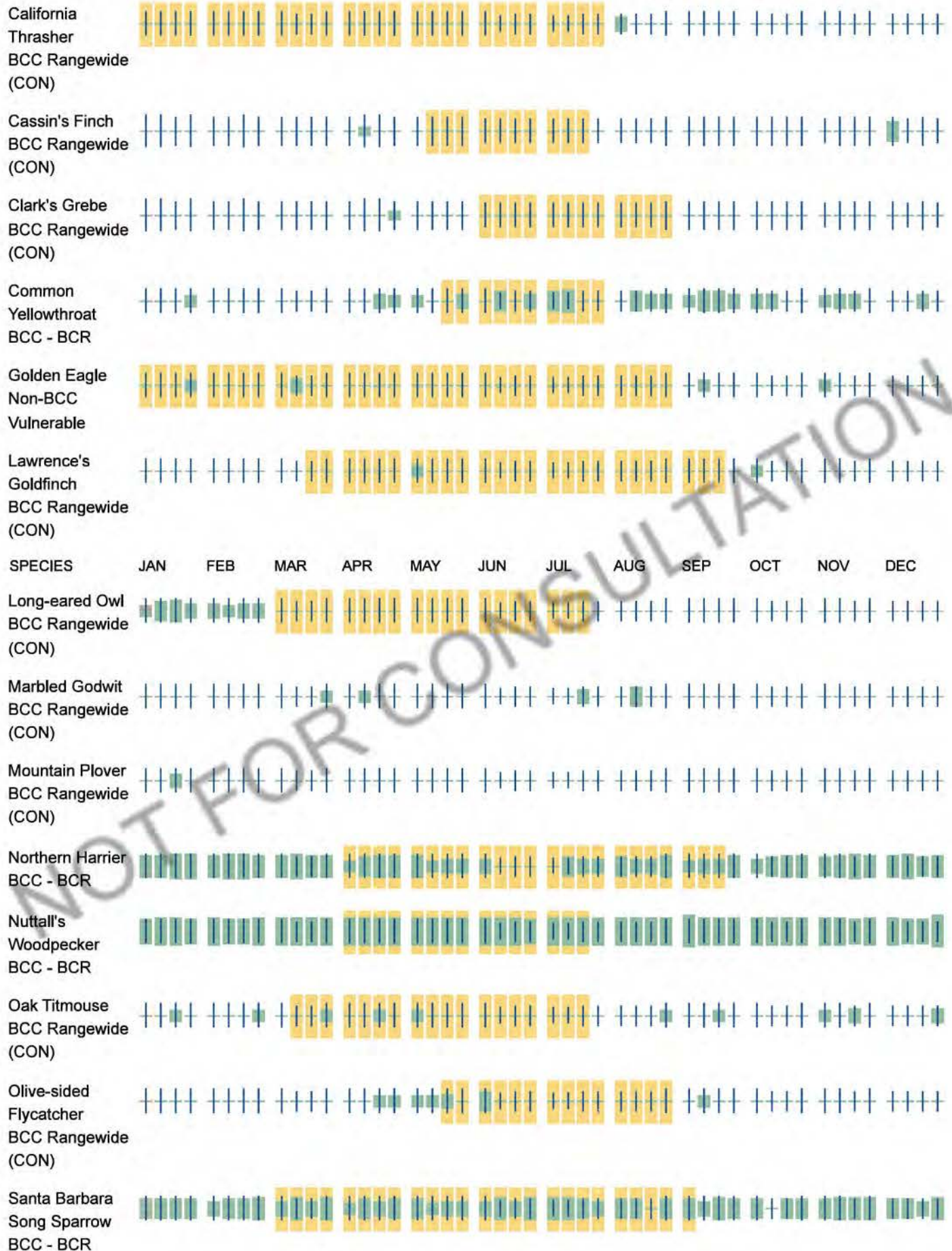
No Data (—)

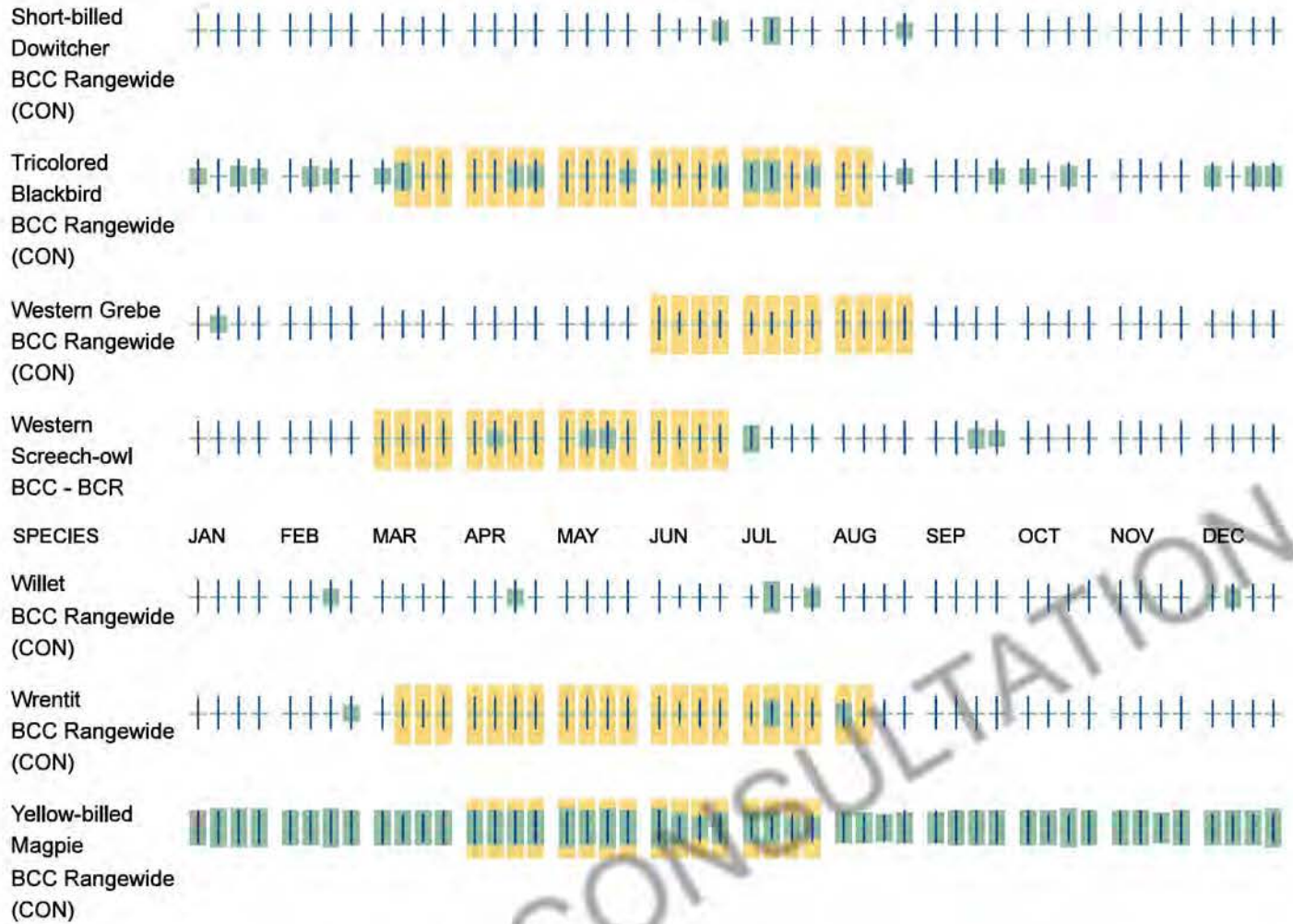
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.







Migratory Bird FAQs

Tell me more about avoidance and minimization measures I can implement to avoid or minimize impacts to migratory birds.

[Nationwide Avoidance & Minimization Measures for Birds](#) describes measures that can help avoid and minimize impacts to all birds at any location year-round. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is one of the most effective ways to minimize impacts. To see when birds are most likely to occur and breed in your project area, view the Probability of Presence Summary. [Additional measures](#) or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?

The Migratory Bird Resource List is comprised of [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location, such as those listed under the Endangered Species Act or the [Bald and Golden Eagle Protection Act](#) and those species marked as "Vulnerable". See the FAQ "What are the levels of concern for migratory birds?" for more information on the levels of concern covered in the IPaC migratory bird species list.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) with which your project intersects. These species have been identified as warranting special attention because they are BCC species in that area, an eagle ([Bald and Golden Eagle Protection Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, and to verify survey effort when no results present, please visit the [Rapid Avian Information Locator \(RAIL\) Tool](#).

Why are subspecies showing up on my list?

Subspecies profiles are included on the list of species present in your project area because observations in the AKN for **the species** are being detected. If the species are present, that means that the subspecies may also be present. If a subspecies shows up on your list, you may need to rely on other resources to determine if that subspecies may be present (e.g. your local FWS field office, state surveys, your own surveys).

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go to the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating, or resident), you may query your location using the [RAIL Tool](#) and view the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your IPaC migratory bird species list has a breeding season associated with it (indicated by yellow vertical bars on the phenology graph in your "IPaC PROBABILITY OF PRESENCE SUMMARY" at the top of your results list), there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Bald and Golden Eagle Protection Act](#) requirements (for eagles) or (for non-eagles) potential

susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially BCC species. For more information on avoidance and minimization measures you can implement to help avoid and minimize migratory bird impacts, please see the FAQ "Tell me more about avoidance and minimization measures I can implement to avoid or minimize impacts to migratory birds".

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Proper interpretation and use of your migratory bird report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please look carefully at the survey effort (indicated by the black vertical line) and for the existence of the "no data" indicator (a red horizontal line). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list does not represent all birds present in your project area. It is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list and associated information help you know what to look for to confirm presence and helps guide implementation of avoidance and minimization measures to eliminate or reduce potential impacts from your project activities, should presence be confirmed. To learn more about avoidance and minimization measures, visit the FAQ "Tell me about avoidance and minimization measures I can implement to avoid or minimize impacts to migratory birds".

Interpreting the Probability of Presence Graphs

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. A taller bar indicates a higher probability of species presence. The survey effort can be used to establish a level of confidence in the presence score.

How is the probability of presence score calculated? The calculation is done in three steps:

The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.

To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability

of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is $0.25/0.25 = 1$; at week 20 it is $0.05/0.25 = 0.2$.

The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

Breeding Season ()

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort ()

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data ()

A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

There are no refuge lands at this location.

Fish hatcheries

There are no fish hatcheries at this location.

Wetlands in the National Wetlands Inventory

(NWI)

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

This location overlaps the following wetlands:

FRESHWATER POND

[PUBHx](#)

A full description for each wetland code can be found at the [National Wetlands Inventory website](#)

NOTE: This initial screening does **not** replace an on-site delineation to determine whether wetlands occur. Additional information on the NWI data is provided below.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate Federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

NOT FOR CONSULTATION

Attachment C

**CNPS Inventory of Rare and Endangered Plants Query for the "Davis, California" USGS
Quadrangle and Eight Surrounding Quadrangles**













CNPS Rare Plant Inventory







Search Results


28 matches found. Click on scientific name for details

Search Criteria: , 9-Quad include [3812155:3812165:3812145:3812147:3812167:3812157:3812166:3812156:3812146]

▲ SCIENTIFIC NAME	COMMON NAME	FAMILY	LIFEFORM	BLOOMING PERIOD	FED LIST	STATE LIST	GLOBAL RANK	STATE RANK	CA RARE PLANT RANK	CA ENDEMIC	DATE ADDED	PHOTO
<i>Astragalus depauperate</i> <i>pauperculus</i>	milk-vetch	Fabaceae	annual herb	Mar-Jun	None	None	G4	S4	4.3	Yes	1974-01-01	 ©2012 Tim Kellison
<i>Astragalus tener</i> var. <i>ferrisiae</i>	Ferris' milk-vetch	Fabaceae	annual herb	Apr-May	None	None	G2T1	S1	1B.1	Yes	1994-01-01	No Photo Available
<i>Astragalus tener</i> var. <i>tener</i>	alkali milk-vetch	Fabaceae	annual herb	Mar-Jun	None	None	G2T1	S1	1B.2	Yes	1994-01-01	No Photo Available
<i>Atriplex cordulata</i> var. <i>cordulata</i>	heartscale	Chenopodiaceae	annual herb	Apr-Oct	None	None	GNRT2	S2	1B.2	Yes	1988-01-01	 © 1994 Robert E. Preston, Ph.D.
<i>Atriplex depressa</i>	brittlescale	Chenopodiaceae	annual herb	Apr-Oct	None	None	G2	S2	1B.2	Yes	1994-01-01	 © 2009 Zoya Akulova
<i>Carex comosa</i>	bristly sedge	Cyperaceae	perennial rhizomatous herb	May-Sep	None	None	G5	S2	2B.1		1994-01-01	 Dean Wm. Taylor 1997

<i>Centromadia parryi</i> ssp. <i>parryi</i>	pappose tarplant	Asteraceae	annual herb	May-Nov	None	None	G3T2	S2	1B.2	Yes	2004-01-01	 © 2016 John Doyen
<i>Centromadia parryi</i> ssp. <i>rudis</i>	Parry's rough tarplant	Asteraceae	annual herb	May-Oct	None	None	G3T3	S3	4.2	Yes	2007-05-22	 © 2019 John Doyen
<i>Chloropyron palmatum</i>	palmete-bracted bird's-beak	Orobanchaceae	annual herb (hemiparasitic)	May-Oct	FE	CE	G1	S1	1B.1	Yes	1974-01-01	No Photo Available
<i>Eryngium jepsonii</i>	Jepson's coyote-thistle	Apiaceae	perennial herb	Apr-Aug	None	None	G2	S2	1B.2	Yes	2016-09-13	No Photo Available
<i>Extriplex joaquinana</i>	San Joaquin spearscale	Chenopodiaceae	annual herb	Apr-Oct	None	None	G2	S2	1B.2	Yes	1988-01-01	No Photo Available
<i>Fritillaria agrestis</i>	stinkbells	Liliaceae	perennial bulbiferous herb	Mar-Jun	None	None	G3	S3	4.2	Yes	1980-01-01	 © 2016 Aaron Schusteff
<i>Fritillaria pluriflora</i>	adobe-lily	Liliaceae	perennial bulbiferous herb	Feb-Apr	None	None	G2G3	S2S3	1B.2	Yes	1974-01-01	 © 2015 Steve Matson
<i>Hesperevax caulescens</i>	hogwallow starfish	Asteraceae	annual herb	Mar-Jun	None	None	G3	S3	4.2	Yes	2001-01-01	 © 2017 John Doyen
<i>Hibiscus lasiocarpus</i> var. <i>occidentalis</i>	woolly rose-mallow	Malvaceae	perennial rhizomatous herb (emergent)	Jun-Sep	None	None	G5T3	S3	1B.2	Yes	1974-01-01	 © 2020 Steven Perry

<i>Lepidium latipes</i> var. <i>heckardii</i>	Heckard's pepper-grass	Brassicaceae	annual herb	Mar-May	None	None	G4T1	S1	1B.2	Yes	1994- 01-01	 2018 Jennifer Buck
<i>Lessingia hololeuca</i>	woolly-headed lessingia	Asteraceae	annual herb	Jun-Oct	None	None	G2G3	S2S3	3	Yes	1994- 01-01	 © 2015 Aaron Schusteff
<i>Lilaeopsis masonii</i>	Mason's lilaeopsis	Apiaceae	perennial rhizomatous herb	Apr-Nov	None	CR	G2	S2	1B.1	Yes	1974- 01-01	No Photo Available
<i>Myosurus minimus</i> ssp. <i>apus</i>	little mousetail	Ranunculaceae	annual herb	Mar-Jun	None	None	G5T2Q	S2	3.1		1980- 01-01	No Photo Available
<i>Navarretia cotulifolia</i>	cotula navarretia	Polemoniaceae	annual herb	May-Jun	None	None	G4	S4	4.2	Yes	2001- 01-01	 © 2020 Zoya Akulova
<i>Navarretia leucocephala</i> ssp. <i>bakeri</i>	Baker's navarretia	Polemoniaceae	annual herb	Apr-Jul	None	None	G4T2	S2	1B.1	Yes	1994- 01-01	 © 2018 Barry Rice
<i>Neostapfia colusana</i>	Colusa grass	Poaceae	annual herb	May-Aug	FT	CE	G1	S1	1B.1	Yes	1974- 01-01	No Photo Available
<i>Plagiobothrys hystriculus</i>	bearded popcornflower	Boraginaceae	annual herb	Apr-May	None	None	G2	S2	1B.1	Yes	1974- 01-01	 © 2006 Robert E. Preston
<i>Puccinellia simplex</i>	California alkali grass	Poaceae	annual herb	Mar-May	None	None	G2	S2	1B.2		2015- 10-15	 © 2017 Chris Winchell

<i>Sidalcea keckii</i>	Keck's checkerbloom	Malvaceae	annual herb	Apr-May(Jun)	FE	None	G2	S2	1B.1	Yes	1974-01-01	No Photo Available
<i>Symphotrichum lentum</i>	Suisun Marsh aster	Asteraceae	perennial rhizomatous herb	(Apr)May-Nov	None	None	G2	S2	1B.2	Yes	1974-01-01	No Photo Available
<i>Trifolium hydrophilum</i>	saline clover	Fabaceae	annual herb	Apr-Jun	None	None	G2	S2	1B.2	Yes	2001-01-01	 © 2005 Dean Wm Taylor
<i>Tuctoria mucronata</i>	Crampton's tuctoria or Solano grass	Poaceae	annual herb	Apr-Aug	FE	CE	G1	S1	1B.1	Yes	1974-01-01	No Photo Available

Showing 1 to 28 of 28 entries

[Go to top](#)**Suggested Citation:**

California Native Plant Society, Rare Plant Program. 2025. Rare Plant Inventory (online edition, v9.5.1). Website <https://www.rareplants.cnps.org> [accessed 17 October 2025].

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Attachment D

Wildlife List

Wildlife Species Observed within the
El Macero Golf Course Study Area
7 October 2025

Species Name	Common name
Birds	
<i>Aphelocoma californica</i>	California scrub jay
<i>Colaptes auratus</i>	Northern flicker
<i>Corvus brachyrhynchos</i>	American crow
<i>Dryobates nuttallii</i>	Nuttall's woodpecker
<i>Haemorhous mexicanus</i>	House finch
<i>Mimus polyglottos</i>	Northern mockingbird
<i>Sayornis nigricans</i>	Black phoebe
<i>Setophaga coronata</i>	Yellow-rumped warbler
<i>Sialia mexicana</i>	Western bluebird
<i>Sitta carolinensis</i>	White-breasted nuthatch
<i>Spinus psaltria</i>	Lesser goldfinch
<i>Sturnus vulgaris</i>	European starling
<i>Turdus migratorius</i>	American robin
<i>Zonotrichia leucophrys</i>	White-crowned sparrow
Mammals	
<i>Sciurus griseus</i>	Grey squirrel

Attachment 8

Description of Anticipated Impacts
to Covered Species

Summary of Anticipated Impacts to Yolo HCP Covered Species

Palmate-Bracted Bird's Beak

None – protocol-level surveys did not detect this species. Presumed absent from Study Area.

Valley Elderberry Longhorn Beetle

None – protocol-level surveys did not detect this species. Presumed absent from Study Area.

Western Pond Turtle

None – no habitat present.

Giant Garter Snake

None- no habitat present.

Swainson's Hawk

Permanent loss of a few marginally suitable nesting trees within and adjacent to the Project Area.
No Swainson's hawk foraging habitat is present.

White-Tailed Kite

Permanent loss of a few marginally suitable nesting trees within and adjacent to the Project Area.
No White-tailed kite foraging habitat is present.

Burrowing Owl

None – no habitat present.

Least Bell's Vireo

None – no habitat present.

Bank Swallow

None – no habitat present.

Tricolored Blackbird

None – no habitat present.

Attachment 9

Description of Compliance with
Avoidance and Mitigation Measures

AMM1: Establish Buffers

There are no sensitive natural communities or aquatic features within the Project area but there is a golf course pond (lacustrine land cover) immediately adjacent to Lot 2 of the Project (west of Country Club Drive). This pond consists of a constructed and maintained golf course water hazard, and does not provide habitat for Yolo HCP Covered Species. The Project has been designed with a 25 foot no development buffer around undeveloped areas surrounding the pond to minimize potential indirect effects to the feature per Yolo HCP requirement.

AMM2: Design Developments to Minimize Indirect Effects at Urban-Habitat Interfaces

The Project has been designed with a 25 foot no development buffer around the manmade golf course pond immediately adjacent to Lot 2 of the Project to minimize indirect effects to the feature. The pond does not provide habitat for Yolo HCP covered species and lacks connectivity to covered species' habitat given the surrounding golf course and residential development.

AMM 3: Confine and Delineate Work Area

Prior to construction, orange construction fencing will be installed along the boundaries of the work area in all land cover types except Urban and Vegetated Corridor. During the Worker Awareness Training (see AMM 6, below), it will be made clear that no construction vehicles, equipment, or personnel will cross the orange construction fencing.

AMM 4: Cover Trenches and Holes during Construction and Maintenance

Workers will cover open trenches and holes associated with construction activities. The construction contractor will inspect open trenches and holes prior to filling and contact a qualified biologist to remove or release any trapped wildlife found in the trenches or holes.

AMM 5: Control Fugitive Dust

Workers will minimize the spread of dust from work sites to natural communities or covered species habitats on adjacent lands.

AMM 6: Conduct Worker Training

A worker awareness training program will be developed that specifically targets the special-status species with potential to occur on the Project site (including Yolo HCP Covered Species) and detailing the Project permits. This training program will be submitted to the Conservancy for approval at least 1 week prior to the planned training date. Following Conservancy approval (or if no response is received in that week), the worker awareness training will be administered by a Yolo HCP qualified biologist to all construction personnel working on the Project. All personnel working on the Project will receive this training until site grading is complete.

AMM 7: Control Nighttime Lighting of Project Construction Sites

Workers will direct all lights for nighttime lighting of project construction sites into the project construction area and minimize the lighting of natural habitat areas adjacent to the project construction area.

AMM 8: Avoid and Minimize Effects of Construction Staging Areas and Temporary Work Areas

The staging area for the Project will be within the permanent impact portion of the Project footprint, or in other adjacent developed areas or areas under construction.

AMM 9: Establish Buffers around Sensitive Natural Communities

No sensitive natural communities or aquatic features are within the Project area but there is a manmade golf course pond (lacustrine land cover) immediately adjacent to Lot 2 of the Project. This feature is a manipulated, unvegetated manmade golf course water hazard feature with no connectivity to a lake, river or stream. The Project has been designed with a 25-foot development set back from the pond to avoid potential impacts per Yolo HCP requirement.

AMM10: Avoid and Minimize Effects on Wetlands and Waters

The Project will comply with stormwater management plans that regulate development as part of compliance with regulations under National Pollutant Discharge Elimination System (NPDES) permit requirements. Covered activities will not result in any fill of waters or wetlands regulated under Section 404 of the Clean Water Act, State Water Resources Control Board (State Board), Fish and Game Code Section 1602, or Regional Board regulations.

AMM14: Minimize Take and Adverse Effects on Habitat of Western Pond Turtle.

The pond (a constructed and maintained/unvegetated golf course water hazard feature) adjacent to Lot 2 of the Project does not provide suitable aquatic habitat for western pond turtle and lacks connectivity to suitable aquatic habitat. The golf course and residential development surrounding the Project also do not provide suitable upland habitat for the species. There is no likelihood of western pond turtle nests within the Project's disturbance area.

AMM 16: Minimize Take and Adverse Effects on Habitat of Swainson's Hawk and White-Tailed Kite.

Numerous potential nest trees for Swainson's hawk and white-tailed kite are present within 1,320 feet of the Project site. Therefore, if construction commences between March 15 and August 30, the project proponent will retain a qualified biologist to conduct preconstruction surveys for active Swainson's hawk and white-tailed kite nests within 15 days prior to the beginning of the construction activity. Surveys will be conducted consistent with the guidelines provided by the

Swainson's Hawk Technical Advisory Committee (2000). The results of the survey will be submitted to the Conservancy and CDFW.

If active nests are found during preconstruction surveys, a 1,320-foot initial temporary nest disturbance buffer shall be established. If project related activities within the temporary nest disturbance buffer are determined to be necessary during the nesting season, then the qualified biologist will monitor the nest and will, along with the project proponent, consult with CDFW to determine the best course of action necessary to avoid nest abandonment or take of individuals. Work may be allowed only to proceed within the temporary nest disturbance buffer if Swainson's hawk or white-tailed kite are not exhibiting agitated behavior, such as defensive flights at intruders, getting up from a brooding position, or flying off the nest, and only with the agreement of CDFW. The designated on-site biologist/monitor shall be on-site daily while construction-related activities are taking place within the 1,320-foot buffer and shall have the authority to stop work if raptors are exhibiting agitated behavior. No active nest tree pruning or removal will occur during the period between March 1 and August 30, unless a qualified biologist determines that the young have fledged and the nest is no longer active.

Appendix C

Air Quality Modeling Outputs

El Macero Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	El Macero
Construction Start Date	1/1/2027
Operational Year	2028
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.00000
Precipitation (days)	35.4000
Location	38.54448034523898, -121.68613655790699
County	Yolo
City	Unincorporated
Air District	Yolo/Solano AQMD
Air Basin	Sacramento Valley
TAZ	315
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.37

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	3.00000	Dwelling Unit	0.97403	5,850.00	35,139.0	—	8.00000	—

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.	9.29186	9.26805	4.56865	6.96015	0.01211	0.16795	22.2655	22.4335	0.15451	2.24413	2.39864	—	1,324.66	1,324.66	0.05333	0.01335	0.62879	1,329.71
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.20267	1.01171	8.72724	9.86215	0.01583	0.39118	14.8543	15.2455	0.35989	3.53032	3.89021	—	1,787.47	1,787.47	0.07120	0.01694	0.00933	1,794.31
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.31527	0.28492	1.48700	2.23399	0.00381	0.05423	1.08994	1.14417	0.04989	0.12113	0.17102	—	416.531	416.531	0.01667	0.00400	0.01575	418.154
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.05754	0.05200	0.27138	0.40770	0.00069	0.00990	0.19891	0.20881	0.00911	0.02211	0.03121	—	68.9615	68.9615	0.00276	0.00066	0.00261	69.2302

2.2. Construction Emissions by Year, Unmitigated

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

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	9.29186	9.26805	4.56865	6.96015	0.01211	0.16795	22.2655	22.4335	0.15451	2.24413	2.39864	—	1,324.66	1,324.66	0.05333	0.01335	0.62879	1,329.71

Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	1.20267	1.01171	8.72724	9.86215	0.01583	0.39118	14.8543	15.2455	0.35989	3.53032	3.89021	—	1,787.47	1,787.47	0.07120	0.01694	0.00933	1,794.31
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.31527	0.28492	1.48700	2.23399	0.00381	0.05423	1.08994	1.14417	0.04989	0.12113	0.17102	—	416.531	416.531	0.01667	0.00400	0.01575	418.154
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.05754	0.05200	0.27138	0.40770	0.00069	0.00990	0.19891	0.20881	0.00911	0.02211	0.03121	—	68.9615	68.9615	0.00276	0.00066	0.00261	69.2302

2.4. Operations Emissions Compared Against Thresholds

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

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.29242	0.27786	0.14022	1.31528	0.00280	0.00395	14.2598	14.2638	0.00381	1.45285	1.45666	1.21999	315.304	316.524	0.13896	0.01335	0.83680	324.813
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.26666	0.25244	0.15842	0.98775	0.00259	0.00387	14.2598	14.2637	0.00375	1.45285	1.45660	1.21999	293.881	295.101	0.14020	0.01436	0.06251	302.949
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.27104	0.25705	0.14778	1.03559	0.00258	0.00386	12.6049	12.6088	0.00373	1.28663	1.29036	1.21999	292.804	294.024	0.13920	0.01357	0.37747	301.926
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.04946	0.04691	0.02697	0.18900	0.00047	0.00070	2.30040	2.30110	0.00068	0.23481	0.23549	0.20198	48.4771	48.6790	0.02305	0.00225	0.06249	49.9874

2.5. Operations Emissions by Sector, Unmitigated

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

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.13645	0.12401	0.11657	1.13540	0.00266	0.00209	14.2598	14.2619	0.00196	1.45285	1.45482	—	271.899	271.899	0.01159	0.01251	0.79490	276.713
Area	0.15339	0.15256	0.00161	0.17050	0.00001	0.00008	—	0.00008	0.00006	—	0.00006	0.00000	0.45506	0.45506	0.00002	< 0.000005	—	0.45666
Energy	0.00258	0.00129	0.02203	0.00938	0.00014	0.00178	—	0.00178	0.00178	—	0.00178	—	42.2627	42.2627	0.00479	0.00033	—	42.4817
Water	—	—	—	—	—	—	—	—	—	—	—	0.20052	0.68680	0.88732	0.02067	0.00050	—	1.55373
Waste	—	—	—	—	—	—	—	—	—	—	—	1.01947	0.00000	1.01947	0.10189	0.00000	—	3.56677
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04190	0.04190
Total	0.29242	0.27786	0.14022	1.31528	0.00280	0.00395	14.2598	14.2638	0.00381	1.45285	1.45666	1.21999	315.304	316.524	0.13896	0.01335	0.83680	324.813
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.12635	0.11343	0.13638	0.97838	0.00245	0.00209	14.2598	14.2619	0.00197	1.45285	1.45482	—	250.932	250.932	0.01285	0.01353	0.02061	255.305
Area	0.13773	0.13773	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Energy	0.00258	0.00129	0.02203	0.00938	0.00014	0.00178	—	0.00178	0.00178	—	0.00178	—	42.2627	42.2627	0.00479	0.00033	—	42.4817
Water	—	—	—	—	—	—	—	—	—	—	—	0.20052	0.68680	0.88732	0.02067	0.00050	—	1.55373
Waste	—	—	—	—	—	—	—	—	—	—	—	1.01947	0.00000	1.01947	0.10189	0.00000	—	3.56677
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04190	0.04190
Total	0.26666	0.25244	0.15842	0.98775	0.00259	0.00387	14.2598	14.2637	0.00375	1.45285	1.45660	1.21999	293.881	295.101	0.14020	0.01436	0.06251	302.949
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.12300	0.11071	0.12495	0.94213	0.00244	0.00204	12.6049	12.6070	0.00192	1.28663	1.28855	—	249.630	249.630	0.01184	0.01274	0.33558	254.057
Area	0.14545	0.14504	0.00079	0.08408	< 0.000005	0.00004	—	0.00004	0.00003	—	0.00003	0.00000	0.22441	0.22441	0.00001	< 0.000005	—	0.22520
Energy	0.00258	0.00129	0.02203	0.00938	0.00014	0.00178	—	0.00178	0.00178	—	0.00178	—	42.2627	42.2627	0.00479	0.00033	—	42.4817
Water	—	—	—	—	—	—	—	—	—	—	—	0.20052	0.68680	0.88732	0.02067	0.00050	—	1.55373
Waste	—	—	—	—	—	—	—	—	—	—	—	1.01947	0.00000	1.01947	0.10189	0.00000	—	3.56677
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04190	0.04190

Total	0.27104	0.25705	0.14778	1.03559	0.00258	0.00386	12.6049	12.6088	0.00373	1.28663	1.29036	1.21999	292.804	294.024	0.13920	0.01357	0.37747	301.926
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.02245	0.02021	0.02280	0.17194	0.00044	0.00037	2.30040	2.30077	0.00035	0.23481	0.23516	—	41.3291	41.3291	0.00196	0.00211	0.05556	42.0621
Area	0.02655	0.02647	0.00015	0.01534	< 0.000005	0.00001	—	0.00001	0.00001	—	0.00001	0.00000	0.03715	0.03715	< 0.000005	< 0.000005	—	0.03729
Energy	0.00047	0.00024	0.00402	0.00171	0.00003	0.00033	—	0.00033	0.00033	—	0.00033	—	6.99708	6.99708	0.00079	0.00006	—	7.03332
Water	—	—	—	—	—	—	—	—	—	—	—	0.03320	0.11371	0.14691	0.00342	0.00008	—	0.25724
Waste	—	—	—	—	—	—	—	—	—	—	—	0.16878	0.00000	0.16878	0.01687	0.00000	—	0.59052
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00694	0.00694
Total	0.04946	0.04691	0.02697	0.18900	0.00047	0.00070	2.30040	2.30110	0.00068	0.23481	0.23549	0.20198	48.4771	48.6790	0.02305	0.00225	0.06249	49.9874

3. Construction Emissions Details

3.1. Demolition (2027) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50582	0.42226	3.94364	5.55013	0.00877	0.11863	—	0.11863	0.10914	—	0.10914	—	851.847	851.847	0.03455	0.00691	—	854.771
Demolition	—	—	—	—	—	—	0.00000	0.00000	—	0.00000	0.00000	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01386	0.01157	0.10804	0.15206	0.00024	0.00325	—	0.00325	0.00299	—	0.00299	—	23.3383	23.3383	0.00095	0.00019	—	23.4184
Demolition	—	—	—	—	—	—	0.00000	0.00000	—	0.00000	0.00000	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00253	0.00211	0.01972	0.02775	0.00004	0.00059	—	0.00059	0.00055	—	0.00055	—	3.86392	3.86392	0.00016	0.00003	—	3.87718
Demolition	—	—	—	—	—	—	0.00000	0.00000	—	0.00000	0.00000	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03607	0.03181	0.03294	0.39690	0.00000	0.00000	12.7232	12.7232	0.00000	1.28236	1.28236	—	97.1910	97.1910	0.00220	0.00403	0.00933	98.4577
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00098	0.00088	0.00079	0.01102	0.00000	0.00000	0.31497	0.31497	0.00000	0.03177	0.03177	—	2.73060	2.73060	0.00005	0.00011	0.00425	2.76900
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00018	0.00016	0.00014	0.00201	0.00000	0.00000	0.05748	0.05748	0.00000	0.00580	0.00580	—	0.45208	0.45208	0.00001	0.00002	0.00070	0.45844
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.3. Site Preparation (2027) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.49174	0.41320	3.43511	5.55625	0.00793	0.16579	—	0.16579	0.15253	—	0.15253	—	858.867	858.867	0.03484	0.00697	—	861.815
Dust From Material Movement	—	—	—	—	—	—	0.53025	0.53025	—	0.05725	0.05725	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00135	0.00113	0.00941	0.01522	0.00002	0.00045	—	0.00045	0.00042	—	0.00042	—	2.35306	2.35306	0.00010	0.00002	—	2.36114
Dust From Material Movement	—	—	—	—	—	—	0.00145	0.00145	—	0.00016	0.00016	—	—	—	—	—	—	—

Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00025	0.00021	0.00172	0.00278	< 0.000005	0.00008	—	0.00008	0.00008	—	0.00008	—	0.38958	0.38958	0.00002	< 0.000005	—	0.39091	
Dust From Material Movement	—	—	—	—	—	—	0.00027	0.00027	—	0.00003	0.00003	—	—	—	—	—	—	—	
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01803	0.01591	0.01647	0.19845	0.00000	0.00000	6.36158	6.36158	0.00000	0.64118	0.64118	—	48.5955	48.5955	0.00110	0.00202	0.00467	49.2288	
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00005	0.00004	0.00004	0.00055	0.00000	0.00000	0.01575	0.01575	0.00000	0.00159	0.00159	—	0.13653	0.13653	< 0.000005	0.00001	0.00021	0.13845	
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00001	0.00001	0.00001	0.00010	0.00000	0.00000	0.00287	0.00287	0.00000	0.00029	0.00029	—	0.02260	0.02260	< 0.000005	< 0.000005	0.00004	0.02292	
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.5. Grading (2027) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.17562	0.98785	8.70254	9.56448	0.01583	0.39118	—	0.39118	0.35989	—	0.35989	—	1,714.58	1,714.58	0.06955	0.01391	—	1,720.46
Dust From Material Movement	—	—	—	—	—	—	5.31194	5.31194	—	2.56855	2.56855	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00644	0.00541	0.04769	0.05241	0.00009	0.00214	—	0.00214	0.00197	—	0.00197	—	9.39496	9.39496	0.00038	0.00008	—	9.42720
Dust From Material Movement	—	—	—	—	—	—	0.02911	0.02911	—	0.01407	0.01407	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.00118	0.00099	0.00870	0.00956	0.00002	0.00039	—	0.00039	0.00036	—	0.00036	—	1.55544	1.55544	0.00006	0.00001	—	1.56078
Dust From Material Movement	—	—	—	—	—	—	0.00531	0.00531	—	0.00257	0.00257	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02705	0.02386	0.02470	0.29767	0.00000	0.00000	9.54237	9.54237	0.00000	0.96177	0.96177	—	72.8932	72.8932	0.00165	0.00303	0.00700	73.8433
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00015	0.00013	0.00012	0.00165	0.00000	0.00000	0.04724	0.04724	0.00000	0.00477	0.00477	—	0.40959	0.40959	0.00001	0.00002	0.00064	0.41535
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00003	0.00002	0.00002	0.00030	0.00000	0.00000	0.00862	0.00862	0.00000	0.00087	0.00087	—	0.06781	0.06781	< 0.000005	< 0.000005	0.00011	0.06877
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.7. Building Construction (2027) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.56653	0.47604	4.55564	6.89930	0.01205	0.16712	—	0.16712	0.15375	—	0.15375	—	1,304.35	1,304.35	0.05291	0.01058	—	1,308.83
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.56653	0.47604	4.55564	6.89930	0.01205	0.16712	—	0.16712	0.15375	—	0.15375	—	1,304.35	1,304.35	0.05291	0.01058	—	1,308.83
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15521	0.13042	1.24812	1.89022	0.00330	0.04579	—	0.04579	0.04212	—	0.04212	—	357.357	357.357	0.01450	0.00290	—	358.583
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02833	0.02380	0.22778	0.34497	0.00060	0.00836	—	0.00836	0.00769	—	0.00769	—	59.1645	59.1645	0.00240	0.00048	—	59.3675
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00425	0.00418	0.00273	0.05701	0.00000	0.00000	1.37410	1.37410	0.00000	0.13849	0.13849	—	11.7655	11.7655	0.00017	0.00041	0.03881	11.9312
Vendor	0.00052	0.00026	0.01028	0.00383	0.00006	0.00012	0.25147	0.25159	0.00012	0.02549	0.02562	—	8.53991	8.53991	0.00025	0.00129	0.01940	8.95113
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00390	0.00344	0.00356	0.04287	0.00000	0.00000	1.37410	1.37410	0.00000	0.13849	0.13849	—	10.4966	10.4966	0.00024	0.00044	0.00101	10.6334
Vendor	0.00050	0.00024	0.01105	0.00395	0.00006	0.00012	0.25147	0.25159	0.00012	0.02549	0.02562	—	8.54567	8.54567	0.00025	0.00130	0.00050	8.94011
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00106	0.00095	0.00086	0.01190	0.00000	0.00000	0.34016	0.34016	0.00000	0.03431	0.03431	—	2.94905	2.94905	0.00005	0.00012	0.00459	2.99052
Vendor	0.00014	0.00007	0.00297	0.00106	0.00002	0.00003	0.06226	0.06230	0.00003	0.00632	0.00636	—	2.34036	2.34036	0.00007	0.00036	0.00230	2.45059
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00019	0.00017	0.00016	0.00217	0.00000	0.00000	0.06208	0.06208	0.00000	0.00626	0.00626	—	0.48825	0.48825	0.00001	0.00002	0.00076	0.49511
Vendor	0.00003	0.00001	0.00054	0.00019	< 0.000005	0.00001	0.01136	0.01137	0.00001	0.00115	0.00116	—	0.38747	0.38747	0.00001	0.00006	0.00038	0.40572
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.9. Paving (2027) - Unmitigated

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

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

Off-Road	0.57535	0.48071	4.15212	5.30895	0.00857	0.16795	—	0.16795	0.15451	—	0.15451	—	823.016	823.016	0.03339	0.00668	—	825.840
Paving	0.00000	0.00000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00788	0.00659	0.05688	0.07273	0.00012	0.00230	—	0.00230	0.00212	—	0.00212	—	11.2742	11.2742	0.00046	0.00009	—	11.3129
Paving	0.00000	0.00000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00144	0.00120	0.01038	0.01327	0.00002	0.00042	—	0.00042	0.00039	—	0.00039	—	1.86657	1.86657	0.00008	0.00002	—	1.87298
Paving	0.00000	0.00000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06891	0.06775	0.04429	0.92382	0.00000	0.00000	22.2655	22.2655	0.00000	2.24413	2.24413	—	190.644	190.644	0.00270	0.00667	0.62879	193.330
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00086	0.00077	0.00069	0.00964	0.00000	0.00000	0.27560	0.27560	0.00000	0.02780	0.02780	—	2.38928	2.38928	0.00004	0.00010	0.00372	2.42287
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00016	0.00014	0.00013	0.00176	0.00000	0.00000	0.05030	0.05030	0.00000	0.00507	0.00507	—	0.39557	0.39557	0.00001	0.00002	0.00062	0.40113
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.11. Architectural Coating (2027) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13715	0.11335	0.83116	1.12539	0.00173	0.01905	—	0.01905	0.01752	—	0.01752	—	133.513	133.513	0.00542	0.00108	—	133.971
Architectural Coatings	9.15386	9.15386	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.00188	0.00155	0.01139	0.01542	0.00002	0.00026	—	0.00026	0.00024	—	0.00024	—	1.82894	1.82894	0.00007	0.00001	—	1.83522
Architectural Coatings	0.12540	0.12540	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00034	0.00028	0.00208	0.00281	< 0.000005	0.00005	—	0.00005	0.00004	—	0.00004	—	0.30280	0.30280	0.00001	< 0.000005	—	0.30384
Architectural Coatings	0.02288	0.02288	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00085	0.00084	0.00055	0.01140	0.00000	0.00000	0.27482	0.27482	0.00000	0.02770	0.02770	—	2.35310	2.35310	0.00003	0.00008	0.00776	2.38624
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00001	0.00001	0.00001	0.00012	0.00000	0.00000	0.00340	0.00340	0.00000	0.00034	0.00034	—	0.02949	0.02949	< 0.000005	< 0.000005	0.00005	0.02991
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.000005	< 0.000005	< 0.000005	0.00002	0.00000	0.00000	0.00062	0.00062	0.00000	0.00006	0.00006	—	0.00488	0.00488	< 0.000005	< 0.000005	0.00001	0.00495
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.13645	0.12401	0.11657	1.13540	0.00266	0.00209	14.2598	14.2619	0.00196	1.45285	1.45482	—	271.899	271.899	0.01159	0.01251	0.79490	276.713
Total	0.13645	0.12401	0.11657	1.13540	0.00266	0.00209	14.2598	14.2619	0.00196	1.45285	1.45482	—	271.899	271.899	0.01159	0.01251	0.79490	276.713
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.12635	0.11343	0.13638	0.97838	0.00245	0.00209	14.2598	14.2619	0.00197	1.45285	1.45482	—	250.932	250.932	0.01285	0.01353	0.02061	255.305
Total	0.12635	0.11343	0.13638	0.97838	0.00245	0.00209	14.2598	14.2619	0.00197	1.45285	1.45482	—	250.932	250.932	0.01285	0.01353	0.02061	255.305
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.02245	0.02021	0.02280	0.17194	0.00044	0.00037	2.30040	2.30077	0.00035	0.23481	0.23516	—	41.3291	41.3291	0.00196	0.00211	0.05556	42.0621
Total	0.02245	0.02021	0.02280	0.17194	0.00044	0.00037	2.30040	2.30077	0.00035	0.23481	0.23516	—	41.3291	41.3291	0.00196	0.00211	0.05556	42.0621

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	14.2940	14.2940	0.00231	0.00028	—	14.4353
Total	—	—	—	—	—	—	—	—	—	—	—	—	14.2940	14.2940	0.00231	0.00028	—	14.4353
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	14.2940	14.2940	0.00231	0.00028	—	14.4353
Total	—	—	—	—	—	—	—	—	—	—	—	—	14.2940	14.2940	0.00231	0.00028	—	14.4353
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	2.36653	2.36653	0.00038	0.00005	—	2.38993
Total	—	—	—	—	—	—	—	—	—	—	—	—	2.36653	2.36653	0.00038	0.00005	—	2.38993

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

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

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

Single Family Housing	0.00258	0.00129	0.02203	0.00938	0.00014	0.00178	—	0.00178	0.00178	—	0.00178	—	27.9688	27.9688	0.00248	0.00005	—	28.0464
Total	0.00258	0.00129	0.02203	0.00938	0.00014	0.00178	—	0.00178	0.00178	—	0.00178	—	27.9688	27.9688	0.00248	0.00005	—	28.0464
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.00258	0.00129	0.02203	0.00938	0.00014	0.00178	—	0.00178	0.00178	—	0.00178	—	27.9688	27.9688	0.00248	0.00005	—	28.0464
Total	0.00258	0.00129	0.02203	0.00938	0.00014	0.00178	—	0.00178	0.00178	—	0.00178	—	27.9688	27.9688	0.00248	0.00005	—	28.0464
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.00047	0.00024	0.00402	0.00171	0.00003	0.00033	—	0.00033	0.00033	—	0.00033	—	4.63055	4.63055	0.00041	0.00001	—	4.64339
Total	0.00047	0.00024	0.00402	0.00171	0.00003	0.00033	—	0.00033	0.00033	—	0.00033	—	4.63055	4.63055	0.00041	0.00001	—	4.64339

4.3. Area Emissions by Source

4.3.1. Unmitigated

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

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Consumer Products	0.12519	0.12519	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.01254	0.01254	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Landscape Equipment	0.01567	0.01483	0.00161	0.17050	0.00001	0.00008	—	0.00008	0.00006	—	0.00006	—	0.45506	0.45506	0.00002	< 0.000005	—	0.45666
Total	0.15339	0.15256	0.00161	0.17050	0.00001	0.00008	—	0.00008	0.00006	—	0.00006	0.00000	0.45506	0.45506	0.00002	< 0.000005	—	0.45666
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Consumer Products	0.12519	0.12519	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.01254	0.01254	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.13773	0.13773	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Consumer Products	0.02285	0.02285	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.00229	0.00229	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.00141	0.00134	0.00015	0.01534	< 0.000005	0.00001	—	0.00001	0.00001	—	0.00001	—	0.03715	0.03715	< 0.000005	< 0.000005	—	0.03729
Total	0.02655	0.02647	0.00015	0.01534	< 0.000005	0.00001	—	0.00001	0.00001	—	0.00001	0.00000	0.03715	0.03715	< 0.000005	< 0.000005	—	0.03729

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	0.20052	0.68680	0.88732	0.02067	0.00050	—	1.55373
Total	—	—	—	—	—	—	—	—	—	—	—	0.20052	0.68680	0.88732	0.02067	0.00050	—	1.55373
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	0.20052	0.68680	0.88732	0.02067	0.00050	—	1.55373
Total	—	—	—	—	—	—	—	—	—	—	—	0.20052	0.68680	0.88732	0.02067	0.00050	—	1.55373
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	0.03320	0.11371	0.14691	0.00342	0.00008	—	0.25724
Total	—	—	—	—	—	—	—	—	—	—	—	0.03320	0.11371	0.14691	0.00342	0.00008	—	0.25724

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

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

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

Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	1.01947	0.00000	1.01947	0.10189	0.00000	—	3.56677
Total	—	—	—	—	—	—	—	—	—	—	—	1.01947	0.00000	1.01947	0.10189	0.00000	—	3.56677
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	1.01947	0.00000	1.01947	0.10189	0.00000	—	3.56677
Total	—	—	—	—	—	—	—	—	—	—	—	1.01947	0.00000	1.01947	0.10189	0.00000	—	3.56677
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	0.16878	0.00000	0.16878	0.01687	0.00000	—	0.59052
Total	—	—	—	—	—	—	—	—	—	—	—	0.16878	0.00000	0.16878	0.01687	0.00000	—	0.59052

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04190	0.04190
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04190	0.04190
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04190	0.04190
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04190	0.04190
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00694	0.00694
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00694	0.00694

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

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

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

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

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

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

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

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

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

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

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

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

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

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

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

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

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

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	1/1/2027	1/15/2027	5.00000	10.00000	—
Site Preparation	Site Preparation	1/16/2027	1/17/2027	5.00000	1.000000	—
Grading	Grading	1/18/2027	1/20/2027	5.00000	2.00000	—
Building Construction	Building Construction	1/21/2027	6/10/2027	5.00000	100.0000	—
Paving	Paving	6/11/2027	6/18/2027	5.00000	5.00000	—
Architectural Coating	Architectural Coating	6/19/2027	6/26/2027	5.00000	5.00000	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Concrete/Industrial Saws	Diesel	Average	1.000000	8.00000	33.0000	0.73000
Demolition	Rubber Tired Dozers	Diesel	Average	1.000000	1.000000	367.000	0.40000
Demolition	Tractors/Loaders/Back hoes	Diesel	Average	2.00000	6.00000	84.0000	0.37000
Site Preparation	Graders	Diesel	Average	1.000000	8.00000	148.000	0.41000
Site Preparation	Tractors/Loaders/Back hoes	Diesel	Average	1.000000	8.00000	84.0000	0.37000
Grading	Graders	Diesel	Average	1.000000	6.00000	148.000	0.41000
Grading	Rubber Tired Dozers	Diesel	Average	1.000000	6.00000	367.000	0.40000

Grading	Tractors/Loaders/Back	Diesel	Average	1.000000	7.00000	84.0000	0.37000
Building Construction	Cranes	Diesel	Average	1.000000	4.00000	367.000	0.29000
Building Construction	Forklifts	Diesel	Average	2.00000	6.00000	82.0000	0.20000
Building Construction	Tractors/Loaders/Back hoes	Diesel	Average	2.00000	8.00000	84.0000	0.37000
Paving	Cement and Mortar Mixers	Diesel	Average	4.00000	6.00000	10.00000	0.56000
Paving	Pavers	Diesel	Average	1.000000	7.00000	81.0000	0.42000
Paving	Rollers	Diesel	Average	1.000000	7.00000	36.0000	0.38000
Paving	Tractors/Loaders/Back hoes	Diesel	Average	1.000000	7.00000	84.0000	0.37000
Architectural Coating	Air Compressors	Diesel	Average	1.000000	6.00000	37.0000	0.48000

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	Worker	10.00000	14.3000	LDA,LDT1,LDT2
Demolition	Vendor	—	8.80000	HHDT,MHDT
Demolition	Hauling	0.00000	20.0000	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	Worker	5.00000	14.3000	LDA,LDT1,LDT2
Site Preparation	Vendor	—	8.80000	HHDT,MHDT
Site Preparation	Hauling	0.00000	20.0000	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	Worker	7.50000	14.3000	LDA,LDT1,LDT2
Grading	Vendor	—	8.80000	HHDT,MHDT
Grading	Hauling	0.00000	20.0000	HHDT
Grading	Onsite truck	—	—	HHDT

Building Construction	Worker	1.08000	14.3000	LDA,LDT1,LDT2
Building Construction	Vendor	0.32070	8.80000	HHDT,MHDT
Building Construction	Hauling	0.00000	20.0000	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	Worker	17.5000	14.3000	LDA,LDT1,LDT2
Paving	Vendor	—	8.80000	HHDT,MHDT
Paving	Hauling	0.00000	20.0000	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	Worker	0.21600	14.3000	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	8.80000	HHDT,MHDT
Architectural Coating	Hauling	0.00000	20.0000	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	11,846.3	3,948.75	0.00000	0.00000	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Demolition	0.00000	0.00000	0.00000	—	0.00000
Site Preparation	—	—	0.50000	0.00000	0.00000

Grading	—	—	1.50000	0.00000	0.00000
Paving	0.00000	0.00000	0.00000	0.00000	0.03306

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Phase Name	Land Use	Area Paved (acres)	% Asphalt
Paving	Single Family Housing	0.03306	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2027	0.00000	203.983	0.03300	0.00400

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMt/Weekday	VMt/Saturday	VMt/Sunday	VMt/Year
Single Family Housing	28.3200	28.6200	25.6500	10,213.2	311.266	314.563	281.920	112,254

5.10. Operational Area Sources

5.10.1. Hearths

Land Use	Hearth Type	Unmitigated (number)	Mitigated (number)
Single Family Housing	Wood Fireplaces	0	0
Single Family Housing	Gas Fireplaces	0	0

Single Family Housing	Propane Fireplaces	0	0
Single Family Housing	Electric Fireplaces	0	0
Single Family Housing	No Fireplaces	3	3
Single Family Housing	Conventional Wood Stoves	0	0
Single Family Housing	Catalytic Wood Stoves	0	0
Single Family Housing	Non-Catalytic Wood Stoves	0	0
Single Family Housing	Pellet Wood Stoves	0	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
11,846.3	3,948.75	0.00000	0.00000	—

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00000
Summer Days	day/yr	180.000

5.11. Operational Energy Consumption

5.11.1. Unmitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Single Family Housing	25,577.1	203.983	0.0330	0.0040	87,270.1

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Single Family Housing	104,644	558,903

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Single Family Housing	1.89162	0.00000

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Single Family Housing	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088.00	0.00225	2.50000	2.50000	10.00000
Single Family Housing	Household refrigerators and/or freezers	R-134a	1,430.00	0.11538	0.60000	0.00000	1.000000

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

5.16.2. Process Boilers

5.17. User Defined

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
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5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
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5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
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6. Climate Risk Detailed Report

6.1. Climate Risk Summary

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

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	26.2300	annual days of extreme heat
Extreme Precipitation	4.65000	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	13.2500	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	0	0	0	N/A
Extreme Precipitation	0	0	0	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	0	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	1	1	1	2
Extreme Precipitation	1	1	1	2
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.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

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

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	35.2707
AQ-PM	18.7554
AQ-DPM	9.69508
Drinking Water	48.6949
Lead Risk Housing	17.7568
Pesticides	82.9655
Toxic Releases	22.3306
Traffic	26.3125
Effect Indicators	—
CleanUp Sites	72.0605
Groundwater	85.3561

Haz Waste Facilities/Generators	55.4203
Impaired Water Bodies	91.8732
Solid Waste	83.2761
Sensitive Population	—
Asthma	29.1127
Cardio-vascular	46.5852
Low Birth Weights	2.29664
Socioeconomic Factor Indicators	—
Education	22.7664
Housing	15.5006
Linguistic	22.1681
Poverty	28.1658
Unemployment	21.1088

7.2. Healthy Places Index Scores

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

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	55.96047735
Employed	68.92082638
Median HI	69.10047479
Education	—
Bachelor's or higher	88.96445528
High school enrollment	100
Preschool enrollment	42.38419094
Transportation	—
Auto Access	94.58488387
Active commuting	75.69613756

Social	—
2-parent households	80.45682022
Voting	82.06082382
Neighborhood	—
Alcohol availability	69.92172462
Park access	29.44950597
Retail density	3.336327473
Supermarket access	37.76466059
Tree canopy	77.47978955
Housing	—
Homeownership	48.80020531
Housing habitability	70.28102143
Low-inc homeowner severe housing cost burden	74.40010266
Low-inc renter severe housing cost burden	58.84768382
Uncrowded housing	71.88502502
Health Outcomes	—
Insured adults	81.62453484
Arthritis	0.0
Asthma ER Admissions	79.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	76.4
Cognitively Disabled	91.4
Physically Disabled	67.1

Heart Attack ER Admissions	74.7
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.1
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	62.5
Elderly	36.3
English Speaking	61.2
Foreign-born	19.7
Outdoor Workers	35.3
Climate Change Adaptive Capacity	—
Impervious Surface Cover	87.2
Traffic Density	39.0
Traffic Access	53.5
Other Indices	—
Hardship	31.6
Other Decision Support	—
2016 Voting	77.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	24.0000
Healthy Places Index Score for Project Location (b)	78.0000
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.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data