Henningsen/ Lotus Road Class I Multi-Use Trail Project

FINAL INITIAL STUDY /
MITIGATED NEGATIVE DECLARATION



May 2025

Henningsen/ Lotus Road Class I Multi-Use Trail Project

Final Initial Study/Mitigated Negative Declaration

Prepared for:

El Dorado County
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Prepared by:

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The Draft Initial Study with Proposed Mitigated Negative Declaration was circulated for public comment from February 28, 2025 to April 2, 2025 (State Clearinghouse Number 2025021136). A public information workshop was held during circulation on Thursday, March 13, 2025. All comments received during the circulation period have been reviewed and addressed by the County and included within Appendix F of the final document. Any changes made to the final document as a result of public comments are notated in a black track changes sidebar

LIST OF ABBREVIATIONS

AB	*Assembly Bill*
APE	*Area of Potential Effects*
ARRA	*American River Recreation Association*
Bargas	*Bargas Environmental Consulting, LLC*
BMPs	*Best Management Practices*
BSA	*Biological Study Area*
CAA	*Clean Air Act*
CAAQS	*California Ambient Air Quality Standards*
CalEPA	*California Environmental Protection Agency*
CAL FIRE	*California Department of Forestry and Fire Protection*
Caltrans	*California Department of Transportation*
CARB	*California Air Resources Board*
CCAA	*California Clean Air Act*
CCR	*California Code of Regulations*
CDFW	*California Department of Fish and Wildlife*
CESA	*California Endangered Species Act*
CEQA	*California Environmental Quality Act*
CFG	*California Fish and Game*
CFR	*Code of Federal Regulation*
CGS	*California Geologic Survey*
CHSC	*California Health and Safety Code Section*
CH_4	*Methane*
CMP	*Conceptual Master Plan*
County	*El Dorado County*
CNDDB	*California Natural Diversity Database*
CNPS	*California Native Plant Society*
CO	*Carbon Monoxide*
CO_2	*Carbon Dioxide*
CRHR	*California Register of Historical Resources*
CUPA	*Certified Unified Program Agency*
CWA	*Clean Water Act*
dBA	*Decibel A-weighted*
DOC	*California Department of Conservation*
DPS	*Distinct Population Segment*
DTSC	*California Department of Toxic Substances Control*

EDCWA	*El Dorado County Water Agency*
EDCTC	*El Dorado County Transportation Commission*
EDR	*Environmental Data Resources*
EDSO	*El Dorado County Sheriff's Office*
EID	*El Dorado Irrigation District*
EMD	*Environmental Management Department*
EO	*Executive Order*
EPA	*Environmental Protection Agency*
°F	*Fahrenheit*
FESA	*Federal Endangered Species Act*
FIRM	*Flood Insurance Rate Map*
FHWA	*Federal Highways Administration*
FMMP	*Farmland Mapping and Monitoring Program*
FYLF	*Foothill yellow-legged frog*
GHG	*Greenhouse gases*
HAPs	*Hazardous Air Pollutants*
HFCs	*Hydrofluorocarbons*
HLP	*Henningsen Lotus Park*
IPaC	*Information for Planning and Consultation*
IS	*Initial Study*
Leq	*Equivalent Continuous Sound Level*
MBTA	*Migratory Bird Treaty Act*
MCAB	*Mountain Counties Air Basin*
MGDSHP	*Marshall Gold Discovery State Historic Park*
MGS	*Midwest Guardrail System*
MMTCO$_2$e	*Million Metric Tons Carbon Dioxide Equivalent*
MLD	*Most Likely Descendent*
MND	*Mitigated Negative Declaration*
MS4	*Municipal Separate Storm Sewer Systems*
MT CO$_2$e	*Metric Tons Carbon Dioxide Equivalent*
MVEB	*Motor Vehicle Emissions Budgets*
NAAQS	*National Ambient Air Quality Standards*
NAHC	*Native American Heritage Commission*
NCIC	*North Central Information Center*
NEPA	*National Environmental Protection Act*
NHPA	*National Historic Preservation Act*
NMFS	*National Marine Fisheries Service*

NPDES	*National Pollutant Discharge Elimination System*
NRCS	*Natural Resource Conservation Service*
N_2O	*Nitrous oxide*
NO_2	*Nitrogen Dioxide*
NO_X	*Nitrogen Oxides*
NOA	*Naturally Occurring Asbestos*
NOAA	*National Oceanic and Atmospheric Administration*
NPDES	*National Pollutant Discharge Elimination System*
NRCS	*Natural Resource Conservation Service*
O_3	*Ozone*
OHP	*Office of Historic Preservation*
OPR	*Office of Planning and Research*
ORMP	*Oak Resources Management Plan*
PFCs	*Perfluorocarbons*
PG&E	*Pacific Gas and Electric Company*
PM	*Particulate Matter*
ppb	*Parts per Billion*
ppm	*Parts per Million*
PRC	*Public Resources Code*
Project	*Henningsen/ Lotus Road Class I Multi-Use Trail Project*
RCEM	*Roadway Construction Emissions Model*
Recs	*Recognized Environmental Conditions*
ROG	*Reactive organic compounds*
ROW	*Right-of-way*
RWQCB	*Regional Water Quality Control Board*
SACOG	*Sacramento Area Council of Governments*
SB	*Senate Bill*
SF	*South Fork*
SFNA	*Sacramento Federal Nonattainment Area*
SF6	*Sulfur hexafluoride*
SHL	*State Historic Landmark*
SHPO	*State Historic Preservation Office*
SIP	*State Implementation Plan*
SLF	*Sacred Lands File*
SMAQMD	*Sacramento Metropolitan Air Quality Management District*
SMARA	*Surface Mining and Reclamation Act*
SO_2	*Sulfur Dioxide*

SPCCP	*Spill Prevention, Control, and Countermeasure Program*
SR	*State Route*
SRA	*State Responsibility Area*
SW/HM	*Solid Waste and Hazardous Management*
SWMP	*Storm Water Management Plan*
SWPPP	*Storm Water Pollution Prevention Plan*
SWRCB	*State Water Resources Control Board*
TACs	*Toxic Air Contaminants*
TCRs	*Tribal Cultural Resources*
TMDLs	*Total Maximum Daily Loads*
UMCP	*University of California Museum of Paleontology*
USACE	*United States Army Corps of Engineers*
USFWS	*United States Fish and Wildlife Service*
USEPA	*United States Environmental Protection Agency*
USGS	*United States Geological Survey*
VMT	*Vehicle miles traveled*
WDRs	*Waste Discharge Requirements*
WRDMP	*Water Resources Development and Management Plan*
WWTP	*Wastewater Treatment Plant*

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1.0 INTRODUCTION

1.1 Purpose and Background of the Initial Study

This document is an Initial Study (IS) with supporting environmental studies, which provides justification for a Mitigated Negative Declaration (MND) pursuant to the California Environmental Quality Act (CEQA) for the Henningsen/ Lotus Road Class I Multi-Use Trail Project (Project).

The purpose of this IS/MND is to evaluate the potential environmental impacts of the proposed Project. Mitigation measures have also been established that reduce or eliminate any identified significant and/or potentially significant impacts.

The IS/MND is a public document to be used by the El Dorado County Department of Transportation (County), acting as the CEQA lead agency, to determine whether the proposed Project may have a significant effect on the environment, pursuant to CEQA. If the lead agency finds substantial evidence that any aspect of the proposed Project, either individually or cumulatively, may have a significant effect on the environment that cannot be mitigated to a less than significant level, regardless of whether the overall effect of the proposed Project is adverse or beneficial, the lead agency is required to prepare an Environmental Impact Report (EIR), use a previously prepared EIR and supplement that EIR, or prepare a subsequent EIR to analyze the Project at hand (Public Resources Code Sections 21080(d), 21082.2(d)).

If the agency finds no substantial evidence that the proposed Project or any of its aspects may cause a significant impact on the environment with mitigation, a MND shall be prepared with a written statement describing the reasons why the proposed Project, which is not exempt from CEQA, would not have a significant effect on the environment, and therefore, why it does not require the preparation of an EIR (State CEQA Guidelines Section 15371).

According to State CEQA Guidelines Section 15070, a Negative Declaration shall be prepared for a project subject to CEQA when either:

1) *The initial study shows there is no substantial evidence, in light of the whole record before the agency, that the project may have a significant effect on the environment, or*

2) *The initial study identifies potentially significant effects, but:*

    a) *Revisions in the project plans or proposals made by, or agreed to by the applicant before the proposed MND and initial study are released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur, and*

    b) *There is no substantial evidence, in light of the whole record before the agency, that the proposed project as revised may have a significant effect on the environment.*

This IS/MND has been prepared in accordance with CEQA, Public Resources Code Section 21000 et seq., and the State CEQA Guidelines Title 14 California Code of Regulations (CCR) Section 15000 et seq.

1.2 Lead Agency

The lead agency is the public agency with primary responsibility over a proposed Project. Where two or more public agencies will be involved with a project, CEQA Guidelines Section 15051 provides criteria for identifying the lead agency. In accordance with CEQA Guidelines Section

15051(b)(1), “The lead agency will normally be the agency with general governmental powers.” The County has initiated preliminary design of the proposed Project, and it requires approval from the El Dorado County Board. Therefore, based on the criteria described above, the lead agency for the proposed Project is the County.

1.3 Technical Studies

Technical studies prepared for the proposed Project and referenced in this IS/MND are listed below. The technical studies are available at the El Dorado County Department of Transportation upon request, please reach out to El Dorado County Department of Transportation Trail Project Coordinator at dotengineering@edcgov.us or (530) 621-5900.

- Hazardous Waste Initial Site Assessment, Henningsen/ Lotus Road Class I Multi-Use Trail Project, Dokken Engineering
- Historic Property Survey Report/Archaeological Survey Report, Henningsen/ Lotus Road Class I Multi-Use Trail Project, Bargas Environmental Consulting, LLC — Please note that due to the inclusion of sensitive and confidential information, the cultural report is not available to the public
- Natural Environment Study, Henningsen/ Lotus Road Class I Multi-Use Trail Project, Dokken Engineering
- Visual Impact Assessment Memorandum, Henningsen/ Lotus Road Class I Multi-Use Trail Project, Dokken Engineering

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2.0 PROJECT DESCRIPTION

2.1 Project Location

The proposed Henningsen/ Lotus Road Class I Multi-Use Trail Project (Project) is located along Lotus Road in the unincorporated community of Lotus, El Dorado County, California. (**Figure 1. Project Vicinity**). The Project begins within the boundary of Henningsen Lotus Park (HLP) and extends northwards within the Lotus Road right-of-way (ROW) to the State Route (SR) 49/ Lotus Road intersection (**Figure 2. Project Location**).

2.2 Project Purpose and Objectives

The County, in cooperation with the California Department of Transportation (Caltrans), proposes to construct pedestrian and bicycle facilities along Lotus Road between Henningsen Lotus Park and State Route (SR) 49 in Lotus, an unincorporated community in El Dorado County. The proposed Project would complete the region's vision to provide multi-modal access to commercial and recreational facilities as shown in the local region mobility and active transportation planning study documents **(Figure 3. Project Features)**. This Project is needed to provide additional opportunity to utilize active modes of transportation separated from roadways, which is considered safest for pedestrian transit, and reduce the number of trips in motorized vehicles.

2.3 Project Description

The proposed Project would involve the installation of a Class I bike and pedestrian trail, boardwalk structures, sidewalks, and additional improvements to enhance connectivity and safety. The Project includes approximately 2,300 linear feet of new Class I trail, improvements to existing pullouts along Lotus Road, and the installation of approximately 1,800 linear feet of guardrail. Work would be conducted within County and Caltrans ROW. The Project is consistent with the Coloma Lotus Mobility Plan and is included in El Dorado County's Active Transportation Plan.

Existing utilities would remain active during Project construction. No extended-time road closures are anticipated to occur, and access to residences and Henningsen Lotus Park will be maintained. There will be no permanent ROW impacts or utility easements. Temporary construction easements and encroachment permits may be needed where the trail passes through private and state-owned parcels along the trail. The County is also currently coordinating with Caltrans regarding potentially including a crosswalk at SR-49 in Caltrans ROW. Construction is anticipated to start in the Spring of 2027 and last approximately six months.

The Project is partially funded using both local and federal Congestion Mitigation and Air Quality (CMAQ) funds and therefore requires compliance with both the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). The lead agency for CEQA compliance is the County and the federal lead agency for NEPA compliance is Caltrans. Caltrans is the designated NEPA lead agency for the proposed Project acting under delegation from the Federal Highways Administration (FHWA).

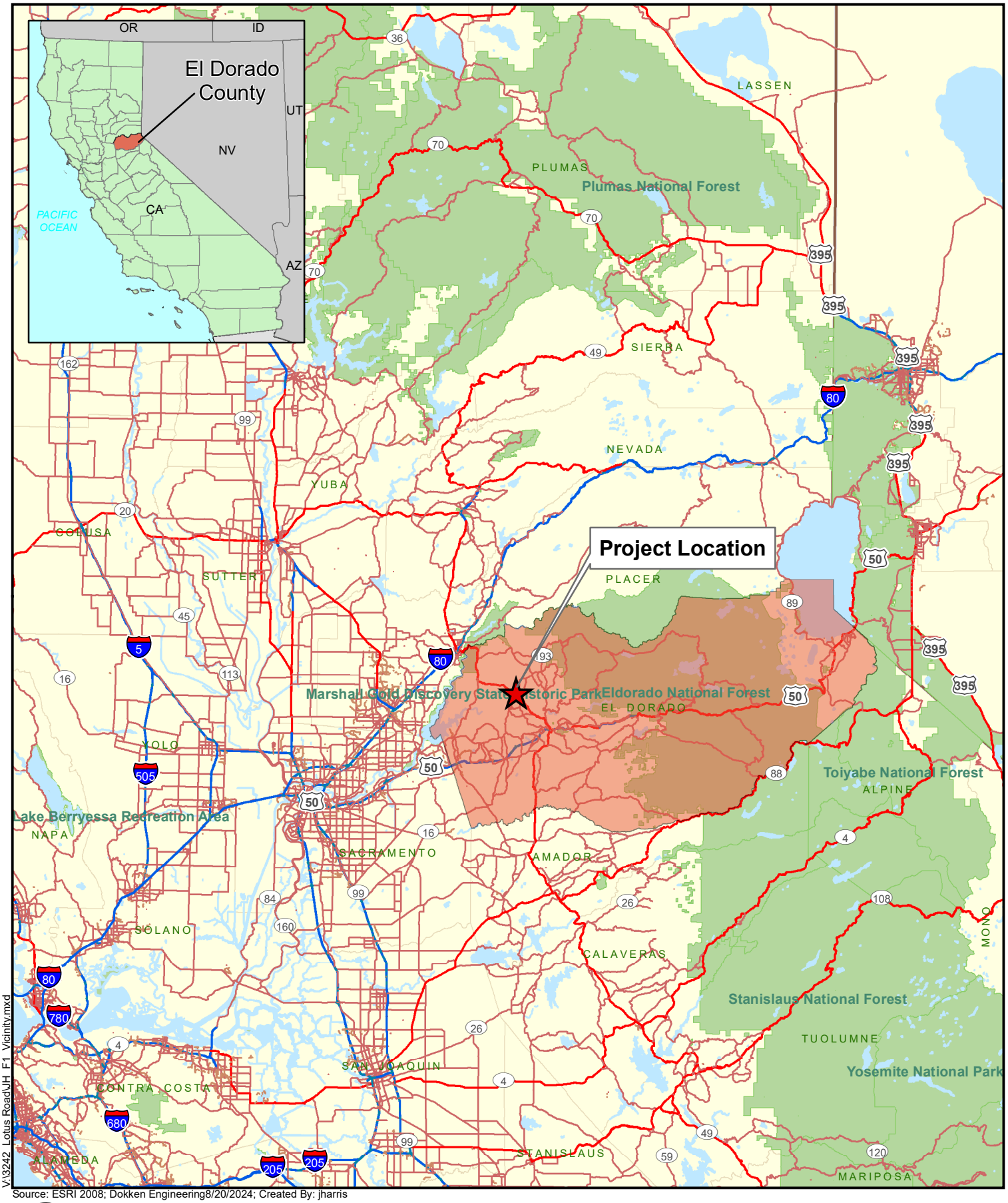
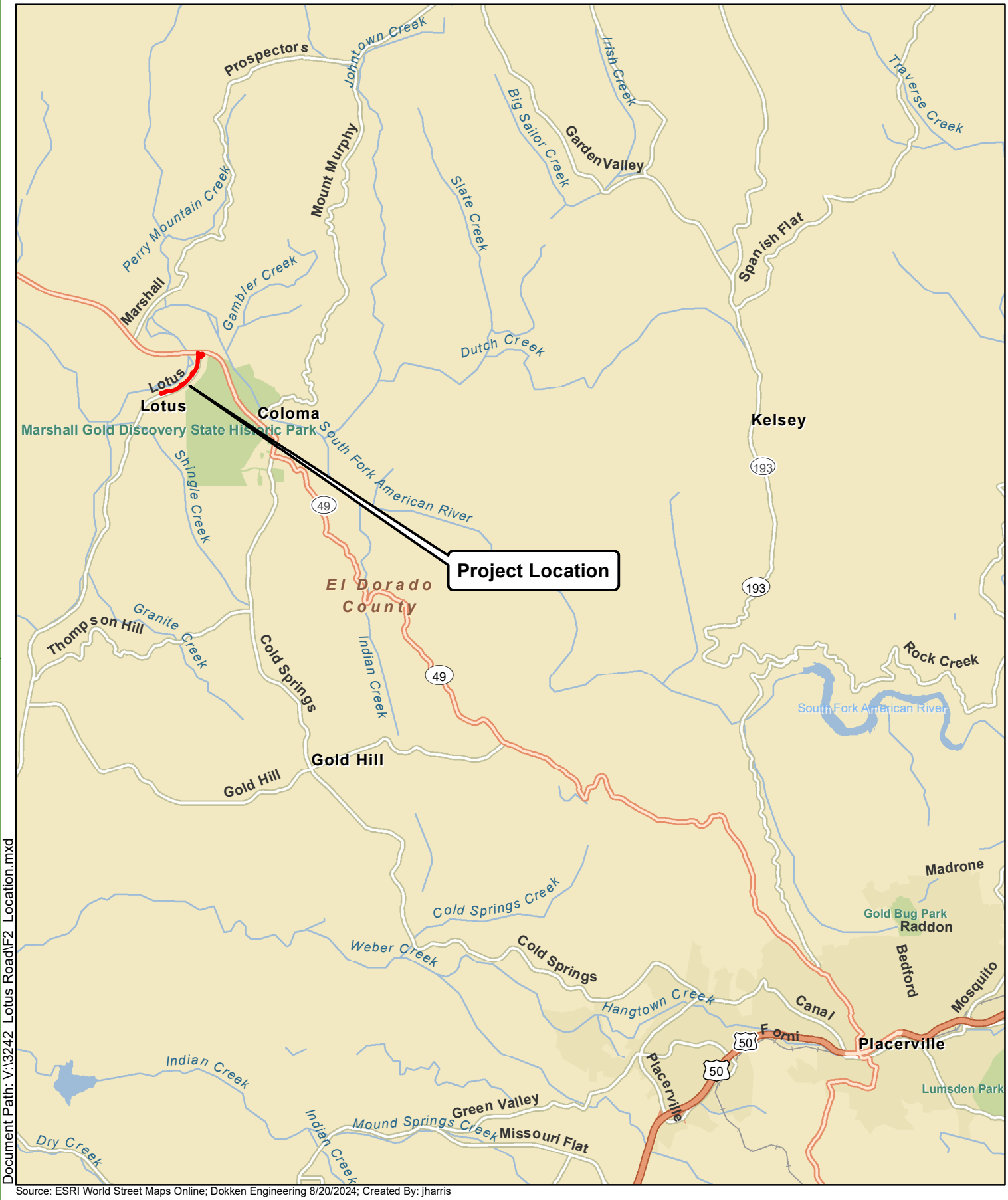


FIGURE 1
Project Vicinity

CML-5925(194)
Henningsen/Lotus Multi-Use Trail Project
Lotus, El Dorado County, California



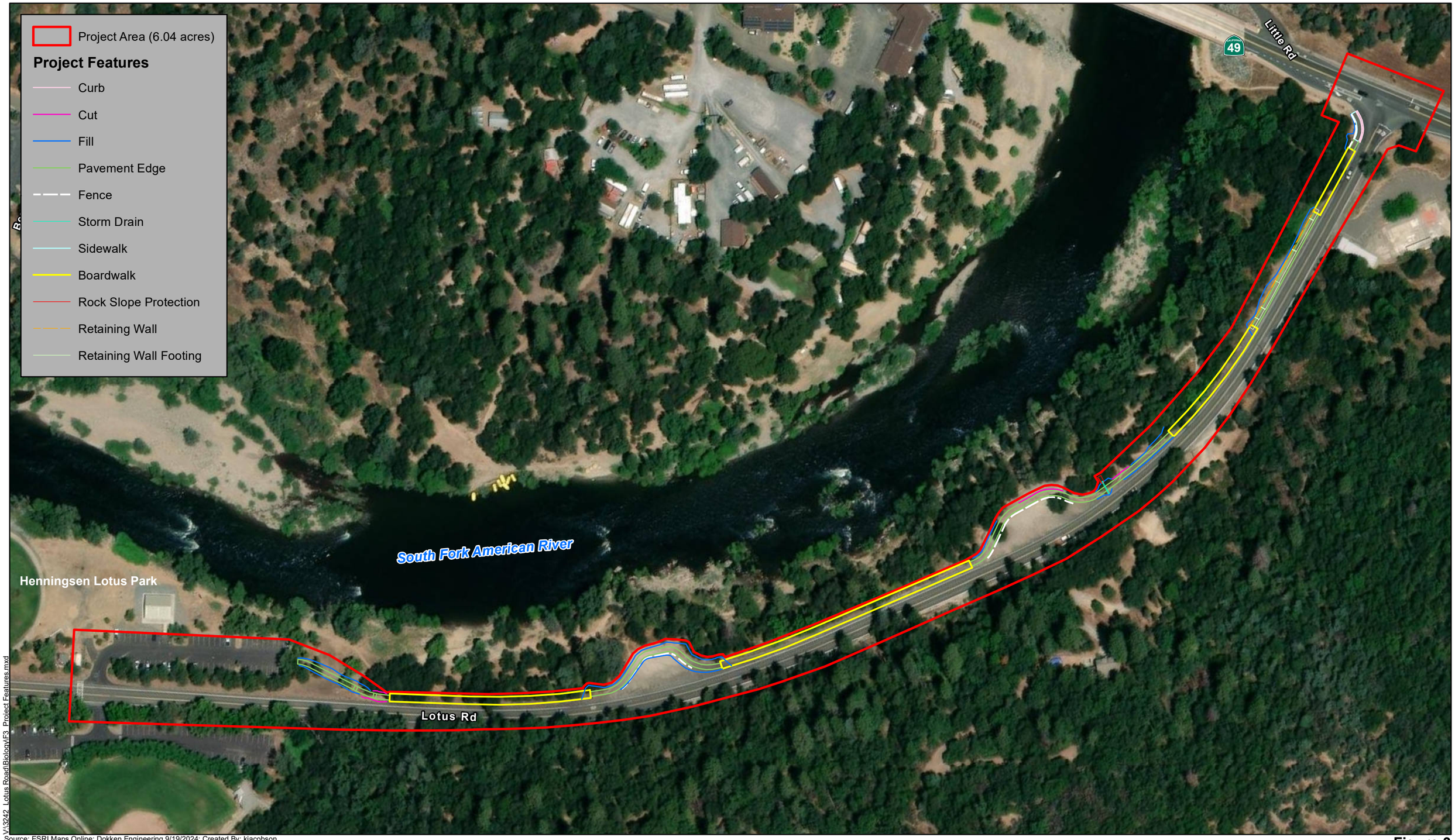
Document Path: V:\3242_Lotus Road\F2_Location.mxd

Source: ESRI World Street Maps Online; Dokken Engineering 8/20/2024; Created By: jharris

0 0.5 1 1.5 2 Miles

FIGURE 2
Project Location

CML-5925(194)
Henningsen/Lotus Multi-Use Trail Project
Lotus, El Dorado County, California



V:\3242_Lotus Road\Biology\F3_Project Features.mxd

Source: ESRI Maps Online; Dokken Engineering 9/19/2024; Created By: kjacobson

1 inch = 150 feet

0 75 150 225 300 375 Feet

Figure 3
Project Features

CML-5925(194)
Henningsen/Lotus Multi-Use Trail Project
Lotus, El Dorado County, California

2.4 Required Project Approvals

To implement the Project, a series of actions and approvals would be required from regulatory and other government agencies. Anticipated Project approvals would include, but are not limited to the following:

Table 1. Required Project Approvals

Agency	Permit/Approval	Status
El Dorado County Board	Adoption of MND and MMRP	Anticipated 2025
Regional Water Quality Control Board	National Pollutant Discharge Elimination System 402 General Permit for Storm Water Discharges Associated with Construction Activity	Will be Obtained Prior to Construction.
Caltrans	Encroachment Permit	Will be obtained prior to construction.

2.5 Public Outreach

The County is dedicated to public and stakeholder outreach and ongoing public communications beyond what is required by CEQA for the Henningsen/Lotus Class I Multi-Use Trail Project. After the CMAQ Grant was awarded in 2022, the County created a public outreach program to share information and obtain feedback to better define the proposed Project. This included creating a publicly accessible page on its website with a list of resources and materials for information regarding the proposed Project:

https://www.eldoradocounty.ca.gov/Land-Use/County-Projects/Trail-Projects/Henningsen-Lotus-Road-Class-I-Multi-Use-Trail-Project

In order to gather feedback from the community regarding a potential trail, County staff coordinated with the Coloma Lotus Advisory Committee and the Parks and Recreation Commission to host a Town Hall meeting on May 12, 2022, to gather public input on the Project. Invitations were sent out to residents, businesses, and interested stakeholders. The proposed Project concept was introduced to members of the public, and initial comments were collected by County staff.

The County used the website to provide updates on upcoming meetings and basic information about the proposed Project. At these meetings, the public submitted questions and comments on comment cards, which were reviewed and considered for integration into Project planning. As of January 2025, six meetings have been held regarding the proposed Project.

1. May 12, 2022 – Town Hall Meeting No. 1
   Gold Trail Grange
   319 State Highway 49
   Coloma, CA
   6:00 p.m.-8:00 p.m.

Representatives from the County Department of Transportation presented the preliminary concept of the potential future project, answered questions, and collected contact information for inclusion in the project outreach database. Key concerns from the public included the removal or expansion of pull-out parking areas along Lotus Road, funding sources, and design features that addressed safety concerns such as lighting and pedestrian crossings. Some members of the public stated that they would like the trail to be aligned along the river where the current nature trail is or for the County to consider an alignment that combined the nature trail alignment with an alignment along Lotus Road.

2. April 6, 2023 – Coloma Lotus Advisory Committee No. 1

Gold Trail Grange
319 State Highway 49
Coloma, CA
6:30 p.m.-7:30 p.m.

Representatives from the County Department of Transportation presented the Project history and alternatives, overview, "look-ahead" and opened the presentation up to questions. The County addressed general questions about the proposed Project, as well as questions regarding safety, alternative alignments for the trail, pedestrian crossings, enhancements, construction and maintenance, and funding.

3. June 15, 2023 – Parks and Recreation Commission

Board of Supervisors Meeting Room
330 Fair Lane, Building A
Placerville, CA
3:00 p.m.-4:00 p.m.

Representatives from the County Department of Transportation presented the Project to the Parks and Recreation Commission on the history and alternatives, overview, "look-ahead" and opened the presentation up to questions from the public. Four people commented on the project. There was also a virtual component to this meeting.

4. November 2, 2023 – Coloma Lotus Advisory Committee No. 2

Gold Trail Grange
319 State Highway 49
Coloma, CA
6:30 p.m.-8:30 p.m.

The committee received and filed a presentation about the status of the Project planning concepts presented by the County.

5. January 17, 2024 – Town Hall Meeting No. 2
Gold Trail Grange
319 State Highway 49
Coloma, CA
6:30 p.m.-8:30 p.m.

The town hall meeting was presented by District IV Supervisor, Department of Transportation Director, and El Dorado County Transportation Commission. Representatives from the County presented the history and preferred alignment. Key concerns from the public included access, the removal or expansion of pull-out parking areas along Lotus Road, and safety features such as pedestrian crossings and lighting.

6. March 13, 2025 – Draft IS/MND Public Information Workshop
Henningsen Lotus Park Pavilion
950 Lotus Road
Lotus, CA 95651
6:00 p.m.-7:00 p.m.

The public information workshop was held during circulation of the Draft IS/MND and presented by the County and Dokken Engineering. Representatives from the County presented the history and proposed project. Key concerns from the public included access, the removal or expansion

of pull-out parking areas along Lotus Road, and safety features such as pedestrian crossings and lighting. A majority of the members of the public in attendance were in support of the proposed Project. Comments received from the public during the workshop and circulation of the Draft IS/MND are included in Appendix F of this document.

2.6 Development of Alternatives

Prior to selection of the Build Alternative, the County evaluated a range of reasonable alternatives to the Project that would feasibly attain most of the basic Project objectives and avoid or substantially lessen significant Project impacts (CEQA Guidelines section 15126.6). In developing the Build Alternative, the County considered a range of potential actions that could meet the Project objectives based on comments received during initial public outreach which included the following:

- Consider an alternative that utilizes the existing unpaved trail by the river;
- Consider an alternative that doesn't reduce parking along Lotus Road shoulder; and
- Consider pedestrian crossings at Lotus Road and SR-49.

Utilizing the Natural Trail

As part of the Henningsen Lotus Conceptual Master Plan (2014), a variety of different alternatives and design features were considered by the County during conceptual design and used during initial public outreach with interested stakeholders, including utilizing the existing unpaved, natural trail extending from Henningsen Lotus Park along the South Fork of the American River that is currently utilized by pedestrians for recreational purposes. However, after further analysis and feedback from the public and stakeholders, this alternative was rejected due to a variety of significant environmental impacts that would occur which made this alternative infeasible. Utilizing the natural trail was rejected for the following reasons:

- Significant Environmental Impacts
    - Impacts to sensitive habitat including habitat for federal and state listed species;
    - Impacts to the South Fork of the American River;
    - Impacts to water quality as a result of drainage from the trail;
    - Impacts to the floodplain;
- Significant grading would be required to accommodate the rocky terrain;
- Steep terrain would compromise line of sight as well as bicycle and ADA access;
- Impacts to river access would occur;
- Annual flood events along the river would compromise public safety as well as degrade new infrastructure, requiring costly repairs in the future; and
- Significant right of way needing to be obtained.

Although this alternative was ultimately rejected, selection of the Build Alternative does not preclude a natural trail from being constructed along the river in the future.

Parking and Pedestrian Crossings

In response to parking concerns and the consideration of pedestrian crossings, the proposed Build Alternative was selected to minimize impacts on parking along the Lotus Road shoulder, preserving two roadside parking areas designated by the Parks and Recreation Commission (Figure 3). The paved parking lots north and south of Lotus Road, located southeast of the trail alignment and associated with Henningsen-Lotus Park will remain unaffected by the proposed trail, providing over 100 parking spots for the public. In addition, the County is currently coordinating with Caltrans to provide a crosswalk, as requested by the public, at SR-49 in Caltrans ROW.

2.6.1 Methods Used to Screen Alternatives

Potential alternatives were screened based on their ability to feasibly attain most of the basic Project objectives and reduce or eliminate any significant environmental impacts of the Build Alternative.

- **Meeting Project Objectives** – The Project objectives are listed in the Project Description. The CEQA Guidelines state that alternatives must feasibly attain most of the basic objectives of the Project (CEQA Guidelines section 15126.6). Alternatives that did not meet the majority of the objectives were screened out and not carried forward for further evaluation in the Initial Study.
- **Feasibility** – Alternatives that are not "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors," (per Public Resource Code Section 21061.1), were not carried forward for further evaluation in the Initial Study.
- **Avoiding or lessening any potentially adverse environmental effect of the Build Alternative** – Consistent with the CEQA Guidelines (section 15126.6), alternatives should avoid or substantially lessen one or more of the significant environmental effects of the Build Alternative. Alternatives that would not lessen or avoid a potentially significant environmental impact, were not carried forward for detailed evaluation in the Initial Study. Environmental impacts associated with the proposed trail include additional earthwork and vegetation removal along the trail alignment.

3.0 INITIAL STUDY CHECKLIST

A. BACKGROUND

1. Project Title:

Henningsen/ Lotus Road Class I Multi-Use Trail Project

2. Lead Agency Name and Address:

El Dorado County
2850 Fairlane Court
Placerville, CA, 95667

3. Contact Information:

Mail: El Dorado County
Department of Transportation
Attn: Trail Project Coordinator
2850 Fairlane Court
Placerville, CA 95667
Email: dotengineering@edcgov.us
Phone: (530) 621-5900
Fax: (530) 626-0387

Project Location:

The proposed Henningsen/ Lotus Road Class I Multi-Use Trail Project is located along Lotus Road in the unincorporated community of Lotus, El Dorado County, California. The Project begins within the boundary of HLP and extends northwards within the Lotus Road ROW to the SR-49/ Lotus Road intersection (**Figures 1 and 2**).

4. Project Applicant's Name and Address:

El Dorado County
2850 Fairlane Court
Placerville, CA, 95667

5. General Plan Designation:

Commercial (C), Rural Residential (RR), and Tourist Residential (TR)

Zoning:

Community Commercial (CC), Estate Residential Ten-acre (RE-10), Recreational Facilities High (RF-H), Recreational Facilities Low (RF-L), and Rural Lands (RL-40)

Description of Project:

The County, in cooperation with Caltrans, proposes to construct pedestrian and bicycle facilities along Lotus Road between Henningsen Lotus Park and SR-49 in Lotus, an unincorporated community in El Dorado County. The proposed Project would complete the region's vision to provide multi-modal access to commercial and recreational facilities as shown in the local region mobility and active transportation planning study documents (**Figure 3**).

The proposed Project would involve the installation of a Class I bike and pedestrian trail, boardwalk structures, sidewalks, and additional improvements to enhance connectivity and safety. The Project includes approximately 2,300 linear feet of new Class I trail, improvements to existing pullouts along Lotus Road, and the installation of approximately 1,800 linear feet of guardrail. All work would be conducted within County and Caltrans ROW. The Project is consistent with the Coloma Lotus Mobility Plan and is included in El Dorado County's Active Transportation Plan.

Existing utilities would remain active during Project construction. No extended-time road closures are anticipated to occur, and access to residences and Henningsen Lotus Park will be maintained. There will be no permanent ROW impacts or utility easements. Temporary construction easements and encroachment permits may be needed where the trail passes through private and state-owned parcels along the trail. The County is also currently coordinating with Caltrans regarding potentially including a crosswalk at SR-49 in Caltrans ROW. Construction is anticipated to start in the Spring of 2027 and last approximately six months.

The Project is partially funded using both local and federal Congestion Mitigation and Air Quality (CMAQ) funds and therefore requires compliance with both the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). The lead agency for CEQA compliance is the County and the federal lead agency for NEPA compliance is Caltrans.

6. Surrounding Land Uses and Setting:

The current land uses within the Project area include Commercial (C), Rural Residential (RR), and Tourist Residential (TR). Community Commercial (CC), Estate Residential Ten-acre (RE-10), Recreational Facilities High (RF-H), Recreational Facilities Low (RF-L), and Rural Lands (RL-40).

Regionally, the Project area is located off California SR-49 and adjacent to Lotus Road within the census designated area of Coloma, in El Dorado County, California. The natural environment consists of the oak woodland and riparian vegetation communities, and views of the SF American River. The oak woodland and riparian corridor along the SF American River also form a visual barrier of the road and trail when viewed from the floodplain and businesses and recreational activities in the SF American River and on the north bank.

B. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below could result in potentially significant impacts if mitigation measures are not implemented. As discussed on the following pages, where potentially significant impacts are identified, feasible mitigation was identified to reduce the impacts to a less than significant level. Therefore, potentially significant impacts that are mitigated to "Less Than Significant" are shown here.

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

C. DETERMINATION

On the basis of this initial evaluation:

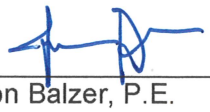
☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

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

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

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

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



04/28/25

Jon Balzer, P.E.
Project Manager
Senior Civil Engineer
Department of Transportation

Date

D. EVALUATION OF ENVIRONMENTAL IMPACTS

Each of the responses in the following environmental checklist considers the whole action involved, including project-level, cumulative, on-site, off-site, indirect, construction, and operational impacts. A brief explanation is provided for all answers and supported by the information sources cited.

1. A “No Impact” answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone).

2. A “Less Than Significant Impact” applies when the proposed project would not result in a substantial and adverse change in the environment. This impact level does not require mitigation measures.

3. A “Less Than Significant Impact With Mitigation Incorporated” applies when the proposed project would not result in a substantial and adverse change in the environment after additional mitigation measures are applied.

4. “Potentially Significant Impact” is appropriate if there is substantial evidence that an effect is significant. If there are one or more “Potentially Significant Impact” entries when the determination is made, an EIR is required.

I. AESTHETICS

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

The Regulatory and Environmental Settings and discussion below are derived from the *Visual Impact Assessment Memorandum* (Dokken 2024a), which is attached to this Initial Study as Appendix A.

REGULATORY SETTING

Federal

National Environmental Policy Act

NEPA requires all federal agencies to consider environmental factors through a systematic interdisciplinary approach before committing to a course of action. The NEPA process is an overall framework for the environmental evaluation of federal actions. Visual impacts are mentioned in NEPA and in the Council on Environmental Quality regulations to implement NEPA under aesthetics. These regulations identify aesthetics as one of the elements or factors in the human environment that must be considered in determining the effects of a project. Further, Title 23, U.S. Code 109(h) cites “aesthetic values” as a matter that must be fully considered in developing a project.

National Scenic Byways

The Project area does not contain or have views of any officially designated National Scenic Byways (Dokken 2024a).

State

California Environmental Quality Act

CEQA, as amended, requires public agencies to regulate activities that may affect the quality of the environment so that major consideration is given to preventing damage to the environment. CEQA includes requirements for the consideration of project impacts to scenic resources and requires that appropriate mitigation measures be included in a project with potential to adversely affect scenic resources, including a scenic highway.

Classified Landscaped Freeway
SR-49 in El Dorado County is not a classified landscaped freeway (Dokken 2024a).

State Scenic Highway
The State Scenic Highway Program was enacted in 1963 to protect and enhance California's natural scenic beauty by identifying sections of the State highway system, in conjunction with adjacent scenic corridors, that require special conservation treatment. A scenic corridor is land that contains scenic and natural features visible from, adjacent to, and outside the highway ROW. The boundary of the corridor is determined by topography, vegetation, viewing distance, and/or jurisdictional lines. In addition to adding to the pleasure of residents, the program encourages the growth of recreation and tourism industries as an important sector of the State's economy. Caltrans is responsible for managing the State Scenic Highway Program by providing guidance to local government agencies, community organizations, and citizens that are pursuing the official designation of a State Scenic Highway (Caltrans 2024).

State Scenic Highway Designation
The Project area does not contain or have views of any state scenic highways (Dokken 2024a). State Route 49, parallel to the proposed Project, is eligible for designation as a State Scenic Highway from Madera County through El Dorado County to Sierra County.

Local

El Dorado County's General Plan was adopted in 2004 and most recently amended in May 2024. The Visual Resources section of the Draft EIR for the General Plan describes the County as possessing a variety of "[r]olling hills dotted with mature oaks and oak woodlands, agricultural land, apple orchards and vineyards, evergreen forests and snow-capped mountains, scenic rivers, alpine lakes, and historic structures all contribute to the visual character found in the county." (Dokken 2024a).

The Draft EIR makes a distinction between scenic views (or landscapes) as compared to specific scenic resources. The Draft EIR says: "Scenic views are elements of the broader viewshed such as mountain ranges, valleys, and ridgelines. They are usually middle ground or background elements of a viewshed that can be seen from a range of viewpoints, often along a roadway or other corridor." Scenic resources are features of a viewshed such as trees, rock outcroppings, etc.

Scenic highways and viewpoints are listed in the Draft EIR Table 5.3-1. SR-49 southbound from Pedro Hill Road in Pilot Hill to Coloma is listed as an "Important Public Scenic Viewpoint" with the American River as both a scenic view and a scenic resource. The South Fork (SF) American River is separately listed as both a scenic view and a scenic resource.

The Draft EIR notes that SR-49 is eligible for designation as a State Scenic Highway but had not been designated at the time of the publication of the Draft EIR. The Draft EIR states that the lower portion of the SF American River from Chili Bar to the Folsom Reservoir is a recreational boating resource.

ENVIRONMENTAL SETTING

Description of Area of Visual Effect

As described in **Appendix A**, the Area of Visual Effect (AVE) for the Project was developed based on perspective views of the trail and from SR-49 and the location of proposed Project features.

Figure 4. Area of Visual Effect presents a map showing the AVE. Lotus is a gold rush era town located on the SF American River approximately two miles downstream of the town of Coloma, where gold was discovered in 1849. Extensive mining occurred during the Gold Rush along the SF American River up- and downstream of Lotus and Coloma. Located on SR-49 about halfway between the cities of Placerville to the south and Auburn in Placer County to the north, the towns of Lotus and Coloma are located along the SF American River. Today, the rural community of Lotus, which includes many river-rafting business, are located on the right, or north, bank of the SF American River.

The community of Lotus has an elevation range between 700 and 800 feet. Nearby hills are between 1,200 and 2,000 feet. The State of California's Marshall Gold Discovery State Historic Park (MGDSHP) in Coloma includes the site of Sutter's Mill, the location of the gold discovery. The western boundary of MGDSHP abuts the HLP along the north end of the HLP where the Park's boundary extends east of Lotus Road and north towards SR-49.

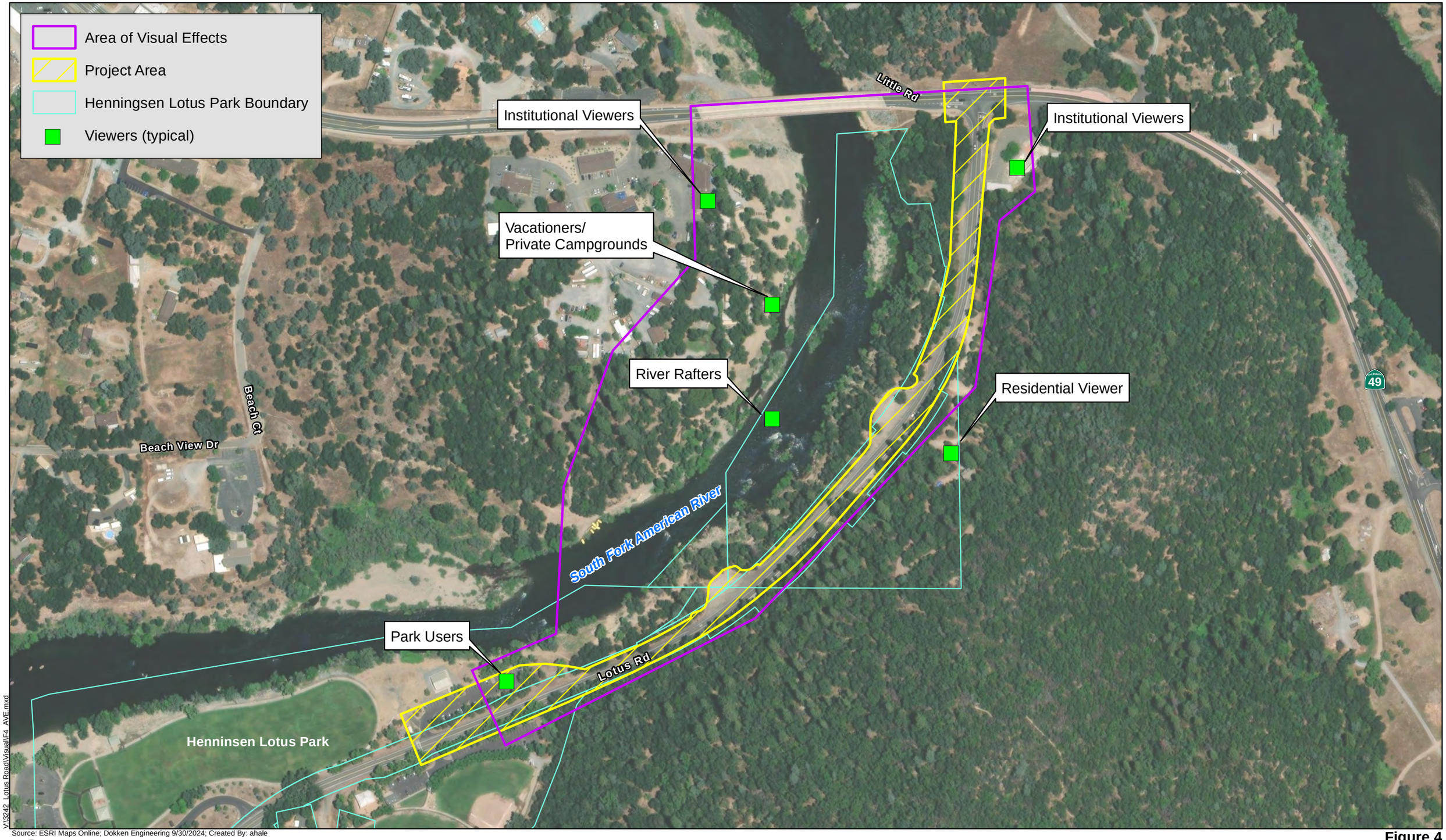
Lotus Road follows the east side of the SF American River on a south to north direction, curving gently towards the east. Lotus Road is cut into the hillside to locate it above and outside the 100-year floodplain of the SF American River. The steep hill rises approximately 1,300 feet above the SF American River.

An oak woodland occurs on both sides of Lotus Road. Glimpses of the SF American River are visible through breaks in the canopy or openings underneath the canopy. The view changes seasonally depending on which trees shed their leaves during the winter. On the east side of Lotus Road, the steep hill cut is visible with mostly herbaceous plant species growing from the toe of the slope vertically up approximately ten feet at which point the oak woodland has regrown.

The Lotus Road shoulders have a variable width. Adjacent to the northbound lane, the shoulder on the east side of the road is narrow as it intersects the hillside cut. The southbound lane has wider shoulders in some locations and narrow shoulders that drop steeply towards the river. Along Lotus Road, there is a split rail fence from its south entrance of the HLP to north of the entrance to the upstream parking lot. The split rail fence is not contiguous along Lotus Road north of the main park facilities. The fence is present at three pullouts on the west side of the road. The view north along the road extends approximately 0.1-mile due to the vertical blocking of the trees, the curve of the road, and the topographic slope. Three twenty-foot-long concrete k-rails are located on the east side of the road at an apparent former hill slip. Moss or lichen covers portions of the k-rails. A gravel driveway is located on the east side of the road approximately 0.12-miles south of SR-49. Overhead utility lines are also located on the east side of Lotus Road from SR-49 south to the driveway but are not present on the west side of Lotus Road in the Project Area. On the southeast corner of the SR-49/Lotus Road intersection is a small commercial building and paved parking lot.

Prior to a major realignment of SR-49 in the 1950s, SR-49 crossed the SF American River at a different location than the modern bridge. The historic alignment crossed the SF American River through the historic mine tailings near the location of the upper parking lot in the present day HLP. From Lotus, SR-49 continued eastward to Coloma paralleling the SF American River on the alignment of what is now Lotus Road.

Caltrans replaced the SR-49 Bridge over SF American River in 2018. The work included road improvements from approximately 2,000 feet west and east of the bridge. SR-49 was repaved and restriped. Improvements to the SR-49/ Lotus Road intersection included the construction of a right-turn pocket from eastbound SR-49 to Lotus Road.



V:\3242_Lotus Road\Visual\F4_AVE.mxd

Source: ESRI Maps Online; Dokken Engineering 9/30/2024; Created By: ahale

1 inch = 250 feet

0 250 500 750 1,000 1,250 Feet

Figure 4
Area of Visual Effects

CML-5925(194)
Henningsen/Lotus Multi-Use Trail Project
Lotus, El Dorado County, California

The 1950's era bridge did not include bike lanes. The new bridge is both wider and it includes bike lanes adjacent to both lanes from Lotus to MGDSHP. The bike lanes are visually distinct from the travelled way of SR-49 as they are a light reddish color. Other improvements associated with the bridge replacement was the construction of a retaining wall with a dry-rock stacked pattern is located on the north side of the intersection. The post-and-cable fence on top of the retaining wall has green tubular metal posts. The intersection is not illuminated with streetlights. The HLP Conceptual Master Plan describes the park as follows:

HLP is located on the site of a former gravel mining operation in the Coloma-Lotus valley. It is bounded by the river on the west/northwest, undeveloped land on the north, residential land and the Lotus Store on the south, and undeveloped land and the Marshall Gold Discovery Historic State Park on the east. A residential in- holding lies within the larger park boundary east of Lotus Road, north of a wetland mitigation area and west of the ball fields. Across the river from the park are the OARS River Park Adventure Campground, the Historic Mother Lode Church, and large lot rural residential properties (Dokken 2024a).

The HLP Conceptual Master Plan discusses an existing, non-improved trail from the parking lot to SR-49:

The existing unpaved trail in the north end of the park needs improvement from the north end of the paved trail to the property boundary. There are a number of topographic constraints as well as boulder structures in this area that limit development of a fully accessible trail; however, the trail should be widened and made more accessible where feasible, starting at the paved trail and working northwards.

The HLP is located on both sides of Lotus Road. The southern half of the HLP includes soccer and baseball field, hard surface paths, and parking lots. The northern portion of the HLP has unimproved trails and river access.

The proposed Project occurs within the Northern Sierra Nevada Foothills Floristic Province (Dokken 2024a). El Dorado County experiences Mediterranean conditions including warm, dry summers and cool, wet winters. The average annual high temperature is approximately 74 degrees Fahrenheit (°F), and the average annual lows reach approximately 44°F, with up to 38.76 inches of precipitation annually (Dokken 2024a). The elevation of the Project area is approximately 720 to 870 feet above mean sea level. The Project area contains the following soil types: Auberry coarse sandy loam, 15 to 30 percent slopes, Auberry very rocky coarse sandy loam, 30 to 50 percent slopes, and tailings.

Land cover within the Project area consists of oak woodland and riparian vegetation as well as the built environment of Lotus Road, the HLP parking lot, SR-49, and road shoulders which together are classified as roadway/urban. The oak woodland habitat borders both sides of the roadways. This habitat community is dominated by native oak species such as interior live oak (*Quercus wislizeni*) black oak (*Quercus kelloggii*) and ponderosa pine (*Pinus ponderosa*) trees, with an understory of short herbaceous grasses and non-native plants such as Himalayan blackberry (*Rubus armeniacus*) and scotch broom (*Cytisus scoparius*).

Riparian habitat occurs along the SF American River outside of the Project area but visible from it. The canopy is dominated by riparian tree species including Fremont's cottonwood (*Populus fremontii*), white alder (*Alnus rhombifolia*), and black locust (*Robinia pseudoacacia*). The understory is comprised of hydrophytic plants such as narrowleaf willow (*Salix exigua*) and mulefat (*Baccharis salicifolia*).

Description of Landscape Visual Character

The existing visual character of the AVE is dominated by transportation facilities, namely Lotus Road and SR-49, and oak woodlands on a hillside. Lotus Road is the central feature within the AVE. The vegetative canopy combined with the hillslope creates a multi-dimensional visual barrier that limits long, scenic views of the SF American River valley. The oak woodland and riparian corridor along the SF American River also form a visual barrier of the road and trail when viewed from the floodplain and businesses and recreational activities in the SF American River and on the north bank.

The natural environment in the AVE consists of the oak woodland, views of the SF American River, and grassy, herbaceous vegetation on the hill cut. The existing lines in the natural environment are irregular and the form is heterogeneous. The vegetation in this area varies from deep greens to browns depending on the season and the texture is rough. Outside the AVE, there are wide open landscape views across the SF American River valley towards small hills that rise over 2,000 feet off the valley floor. Hills to the northeast are dominated by chaparral whereas to the northwest, the hills are grassy, punctuated by mature oak woodlands following drainage courses.

The paved Lotus Road, as well as the HLP parking lot, is a gray color. Double yellow lines and white fog lines to delineate the road. The existing roadway signs vary in shape and are supported by thin gray cylindrical forms, and they are made of galvanized steel with smooth texture. The signs vary in color, either yellow, green, or red and are also made of galvanized steel with smooth texture. The utility poles contain vertical lines and contain brown coloring as well as grey coloring. The utility lines which connect the utility poles are thin horizontal lines with grey and/or black coloring.

The proposed Project introduces a slightly wider paved visual element along a road with limited vertical changes. The MGS guardrail will be the most visually distinct element though the Natina finish will be compatible with the natural colors of the woodland and grass covered hill cut.

While the proposed trail surface color has not been specified, a neutral gray or light brown color would be compatible with the natural environment. If the surface color were selected to match the color of the bike lanes on SR-49, the trail would not be entirely consistent with the natural environment but would be compatible with the cultural/design elements of SR-49. The Project will positively influence the Project environment by introducing an aesthetically pleasing multi-use trail.

Discussion of Landscape Visual Quality

The vividness of the overall landscape and natural environment, which consists of rolling hills on both sides of the SF American River valley, the SF American River, oak woodlands and riparian vegetation, and chaparral covered hills to the north makes the natural landscape memorable.
Intactness is high as the commercial and residential development in the area is not dense nor does it disrupt the landscape character with vertical or colored elements. The commercial and residential development is not dense and much of it is screened by mature trees. The development does not negatively impact the scenic resource of the SF American River. Unity is high since design features of the built environment and natural environment are harmonious with the landscape topography and are balanced with each other.

Viewers

There are two major types of viewer groups for highway projects: neighbors and travelers. Neighbors are people who have views to the road. For this Project neighbors include:

- Residents
- Institutional viewers (workers at the commercial businesses in the vicinity)
- Park users
- River rafters
- Vacationers staying at private campgrounds on the north side of the SF American River

Travelers are people who have views from the road. For this Project travelers include:

- Motorists
- Bicyclists

The Project will construct a Class I multi-use trail in the Lotus Road ROW. The barrier rail will look different but retains a low profile with openings. Since viewer sensitivity is high and viewpoint sensitivity is high, neighbors (people with views to the Project), travelers (people with views from the Project), and viewpoints will be affected by the proposed Project. See below for an analysis regarding viewer and viewpoint sensitivity.

Viewer Sensitivity

To determine viewer sensitivity, three attributes for viewer exposure (proximity, extent or number of viewers, and duration) and three for viewer awareness (attention, focus, and protection) were evaluated.

The neighbors viewer groups would have a moderately high viewer exposure, but this will vary depending on how each viewer group is in proximity to the Project features. There are very few residences near the trail and Lotus Road itself is mostly screened from their viewsheds due to topography, mature trees, and the distance from the residence to the road. The residential viewer group would have a low sensitivity to the visual changes. For institutional viewers, those on the north side of the SF American River have their views of Lotus Road mostly screened by mature trees. These institutional viewers would have a low sensitivity to the visual changes. One institutional viewer is located on the southeast corner of Lotus Road and SR-49. This commercial location will look directly across Lotus Road and see the multi-use trail and MGS guardrail so it is expected that this viewer would have a moderate sensitivity to the visual changes. The vacationers staying at the private campgrounds would have a low sensitivity to the visual changes. They are over 450-ft away from Lotus Road and, like the institutional viewers on the north side of the SF American River, their views are screened by mature trees. River rafters may have closer views of Lotus Road and the trail from a different angle than viewers on the north bank of the SF American River. Nevertheless, the views of the road and trail would be mostly screened by mature riparian and oak woodland vegetation. River rafters would have a low sensitivity to the visual changes. Visitors to the HLP, both those who the upper parking lot and those who walk over the multi-use trail to access the unimproved trails along the river, will see where the southern end of the new trail ties into the existing trail in the park. The park users would have a moderate sensitivity to the visual changes.

For the neighbors viewers group, viewer awareness is low to moderate as individuals in this viewer group are limited in their views of the proposed changes. Broad and general views of the area would result in less sensitivity to visual changes.

For the travelers' viewer group, viewer exposure would be moderately high since they are travelling over the Project features. The extent would be moderately high as the travelers would have views of the Project and duration would be moderately low to low since they are only passing through the area. Viewer awareness would be moderately low since individuals in this viewer group would be preoccupied with other activities, have a broad and general view of the area, but are likely to value the natural setting of the SF American River valley. Travelers on Lotus Road would have a different visual experience compared to travelers on SR-49 as the travelers on Lotus Road would see the trail surface, post-and-cable fence, and MGS guardrails. Travelers eastbound on SR-49 would only see a glance of the trail and guardrail if they looked south. Westbound travelers on SR-49 would see a longer section of guardrail and trail as it connects to the light reddish colored bike lane along SR-49. Overall viewer sensitivity for neighbors and travelers is considered moderate.

Viewpoint Sensitivity

Viewpoint sensitivity is a judgment of the scenic importance of a viewpoint and whether it is part of an identified scenic resource. Sensitive viewpoints can be scenic or visual resources, vistas, landscape, or ocean views important to neighbors or travelers.

The SR-49 eastbound through the Lotus Road intersection is a local, County designated scenic route according to the General Plan EIR (2003). At the intersection of SR-49 and Lotus Road, however, the proposed trail would distract from this resource. Therefore, viewpoint sensitivity is considered moderate.

The South Fork American River is separately listed as both a scenic view and a scenic resource. Viewpoint sensitivity is considered high. As noted in the neighbors viewer group, the views of Lotus Road and the multi-use trail are screened by mature trees.

Viewpoints

Viewpoints can be vistas, open landscape views, ocean views, views of important mountains, views of historic or attractive buildings, rock outcrops, heritage trees, tree groves etc. The importance of each viewpoint is determined by the level of scenic resource designation, the distance of the scenic or visual resource, and the visual quality of the scenic or visual resource.

DISCUSSION OF IMPACTS

a) Have a substantial adverse effect on a scenic vista?

Less than Significant with Mitigation. The El Dorado County General Plan Draft Environmental Impact Report identifies the SF American River as a scenic vista. With the incorporation of the environmental commitment measures **VIS-1** through **VIS-4**, the proposed Project will not have a substantial adverse effect on a scenic vista. No designated state scenic vistas or highways are within the Project site (Dokken 2024a); therefore, no impact would occur.

The following environmental commitments can avoid or minimize negative visual effects and/or improve aesthetics:

VIS-1: Prior to the start of construction activities, the Project limits within environmentally sensitive areas, will be marked with temporary high visibility fencing or staking to ensure construction will not further encroach into sensitive

resources. Environ-mentally sensitive areas will be marked on Project plans (same as Natural Environment Study **BIO-4**).

VIS-2: Vegetation removal will not exceed what is shown on the plans without prior approval from the Project biologist. If trees will be trimmed rather than removed, trimming must comply with ANSI A300 pruning standards and must not:

- leave branch stubs
- make unnecessary heading cuts
- cut off the branch collar (not make a flush cut)
- top or lion's tail trees (stripping a branch from the inside leaving foliage just at the ends)
- remove more than 25 percent of the foliage of a single branch
- remove more than 25 percent of the total tree foliage in a single year
- damage other parts of the tree during pruning
- use wound paint
- climb the tree with climbing spikes (same as Natural Environment Study **BIO-2**)

VIS-3: If mitigation for tree impacts is required per the Oak Removal Management Plan, on-site retention, replacement planting both on-site and off-site, and/or payment of in-lieu fees will be completed in coordination with the County (same as Natural Environment Study **BIO-3).**

VIS-4: The new MGS guardrails and post-and-cable fence will have aesthetic treatments such as a Natina stain as identified by the project engineer.

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

Less than Significant with Mitigation. The Project location and setting provides the context for determining the type of changes to the existing visual environment and potential degradation of the existing visual character or quality of the site. As described above, the Project area and AVE consists of roadway/urban (Lotus Road), oak woodland, and riparian landcover types. The designated zoning within the Project area Community Commercial (CC), Estate Residential Ten-acre (RE-10), Recreational Facilities High (RF-H), Recreational Facilities Low (RF-L), and Rural Lands (RL-40).

Although there are no designated scenic vistas, highways, or historic buildings located within or adjacent the Project AVE (Dokken 2024a); the natural land cover present in the undeveloped areas adjacent to Lotus Road and SF American River, are considered scenic resources as defined by the El Dorado County General Plan. The Project will result in both temporary and permanent impacts to oak woodland habitat within the Project area. Temporary impacts of approximately 0.72 acres are anticipated, due equipment and personnel access. Permanent impacts, covering about 0.24 acres, will result from the installation of a boardwalk, the associated cut and fill construction limits, the placement of RSP near a culvert under Lotus Road to prevent erosion, and the construction of a fence adjacent to the boardwalk.

Therefore, with implementation of Mitigation Measures **VIS-1** through **VIS-4** described above, impacts related to scenic resources would be reduced to less than significant levels.

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 a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Less than Significant Impact with Mitigation. See response to questions **a)** and **b).** Construction of the multi-use trail would permanently remove approximately .24 acres of vegetation; therefore, the Project area will exhibit a decrease in vegetation colors and textures and an increase in grey color and human-made textures.

However, as described above, implementation of **VIS-1** through **VIS-4** would reduce impacts to scenic resources to a less than significant level; therefore, maintaining the visual character of the Project AVE. The proposed Project does not conflict with any applicable zoning or other regulations governing scenic quality.

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

No Impact. As described above, the proposed Project would involve the installation of a Class I bike and pedestrian trail, boardwalk structures, sidewalks, and additional improvements to enhance connectivity and safety. No permanent light sources are proposed as part of the Project and construction would take place during normal daylight hours. Therefore, no impact would occur.

II. AGRICULTURE AND FOREST RESOURCES

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

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation (DOC) as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection (CAL FIRE) regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.

REGULATORY SETTING

Farmland Mapping and Monitoring Program

The Farmland Mapping and Monitoring Program (FMMP) was established in 1982 in response to the critical need for assessing the location, quality, and quantity of agricultural lands and conversion of these lands over time. Important Farmland Maps are prepared by the FMMP pursuant to Section 65570 of the California Government Code. To create maps, FMMP combines current land use information with U.S. Department of Agriculture – Natural Resources Conservation Service (NRCS) soil survey data. According to the 2016 Important Farmland Series for El Dorado County, the majority of the Project area is identified as Grazing Land, whereas the eastern and western terminus of the Project site is listed as Non-Enrolled Land (DOC 2025a).

California Land Conservation Act of 1965

The California Land Conservation Act of 1965 – commonly referred to as the Williamson Act – enables local governments to enter contracts with private landowners for the purpose of restricting

specific parcels of land to agricultural or related open space use (DOC 2025a). The program is voluntary, locally administered and offers preferential property taxes on lands which have enforceable restrictions on their use via the contracts between individual landowners and local governments. According to the California Important Farmland Mapper for El Dorado County, the land within the Project area is listed as Non-Enrolled Land or Urban and Built-Up Land, both of which are considered Non-Williamson Act lands (DOC 2022).

DISCUSSION OF IMPACTS

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

No Impact. The Project site is designated by the FMMP as Other and Urban and Built-Up Land. Implementation of the proposed Project would not result in the conversion of any Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to nonagricultural use. Therefore, no impact to farmland resources would occur due to the proposed Project.

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

No Impact. The Project area is zoned as Community Commercial (CC), Estate Residential Ten-acre (RE-10), Recreational Facilities High (RF-H), Recreational Facilities Low (RF-L), and Rural Lands (RL-40). As described in discussion item **a)**, the Project area is not designated by FMMP for agricultural use. The proposed Project would not conflict with the existing zoning for agricultural use or Williamson Act contract lands; therefore, no impact would occur.

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))?

No Impact. There is no forestland, timberland, or timberland zoned for Timberland Production within the Project area. The Project would not conflict with existing zoning for, or cause rezoning of, forestland, timberland, or timberland zoned Timberland Production; therefore, no impact would occur.

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

Less than Significant. The Project will result in both temporary and permanent impacts to oak woodland habitat within the Project area. Temporary impacts of approximately 0.72 acres are anticipated, due equipment and personnel access. Permanent impacts, covering about 0.24 acres, will result from the installation of a boardwalk, the associated cut and fill construction limits, the placement of RSP near a culvert under Lotus Road to prevent erosion, and the construction of a fence adjacent to the boardwalk. Despite the removal oak woodland, the Project area is not zoned as harvestable Timberland according to the El Dorado General Plan. Therefore, the Project area removal of oak woodland is not considered a loss of forest land or conversion of forest land to non-forest use. A less than significant impact would occur.

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

Less than significant. See response to question **d)**, the proposed Project will result in both temporary and permanent impacts to oak woodland habitat within the Project area. The proposed Project activities would remove approximately 0.24 acres of vegetation out from the Project area. This is a minimal impact that would not result in the conversion of farmland to non-agricultural use, or conversion of forestland to non-forest use; therefore, the impact would be less than significant.

III. AIR QUALITY

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

REGULATORY SETTING

Federal and State

Clean Air Act

The Clean Air Act (CAA) is a federal law established in 1970 that regulates air emissions from both stationary (factories, power plants) and mobile sources (vehicles, airplanes). This law authorizes the United States Environmental Protection Agency (USEPA) to establish National Ambient Air Quality Standards (NAAQS) for criteria pollutants to protect public health and the environment by regulating emissions. The six criteria pollutants that the USEPA has set air quality standards for include:

- Ozone (O_3)
- Coarse Particulate Matter (PM_{10})
- Fine Particulate Matter ($PM_{2.5}$)
- Carbon Monoxide (CO)
- Nitrogen Dioxide (NO_2)
- Sulfur Dioxide (SO_2)

One of the goals of the CAA is to set and achieve NAAQS in every state. To do this, each state must develop State Implementation Plans (SIPs) to achieve and maintain the NAAQS. In California, the California Air Resources Board (CARB) is the primary agency responsible for developing and enforcing the state's SIP. California's SIP details how the state will attain and maintain NAAQS for criteria pollutants to reduce air pollution and protect public health and the environment. Key components of California's SIP include emission inventories, emission control strategies and rules, air quality data analyses, modeling, air quality progress and attainment or maintenance demonstrations.

Both the USEPA and CARB establish ambient air quality standards (AAQS) to regulate common air pollutants, known as the NAAQS and the California Ambient Air Quality Standards (CAAQS), respectively. These standards are designed to protect the health of sensitive groups within communities by defining the maximum allowable concentration of a pollutant in outdoor air, averaged over a specified period, without causing harm to people or the environment (CARB 2025a). **Table 2** provides a summary of the federal and state AAQS for various pollutants.

Table 2. Federal and State Ambient Air Quality Standards

Pollutant	Averaging Time	Federal Primary Standard	State Standard
Ozone (O_3)	1-Hour 8-Hour	- 0.070 ppm	0.09 ppm 0.07 ppm
Coarse Particulate Matter (PM_{10})	24-Hour Annual Average	150 µg/m^3 –	50 µg/m^3 20 µg/m^3
Fine Particulate Matter ($PM_{2.5}$)	24-Hour Annual Average	35 µg/m^3 9.0 µg/m^3	– 12 µg/m^3
Carbon Monoxide (CO)	1-Hour 8-Hour	35 ppm 9.0 ppm	20 ppm 9.0 ppm
Nitrogen Dioxide (NO_2)	1-Hour Annual Average	100ppb 53 ppb	0.18 ppm 0.03 ppm
Sulfur Dioxide (SO_2)	1-Hour 24-Hour Annual Average	75ppb - 10 ppb	0.25 ppm 0.04 ppm --

ppm = parts per million; ppb = parts per billion; micrograms per cubic meter of air (µg/m^3);
Source: CARB 2025a.

CARB is also responsible for coordination and oversight local air pollution control programs and for implementing the California Clean Air Act (CCAA), established in 1988. The CCAA requires that all air districts in the state achieve and maintain CAAQS by the earliest practical date. Air districts in violation of the CAAQS are required to prepare an Air Quality Attainment Plan that includes measures for attaining the standards. CARB also divides the state into air basins that share similar meteorological and topographical features. El Dorado County is located in the Mountain Counties Air Basin (MCAB) which includes all of Plumas, Sierra, Nevada, Amador, Calaveras, Tuolumne and Mariposa counties and portions of Placer and El Dorado counties. The MCAB encompasses approximately 11,000 square miles and is located in the northern Sierra Nevada area with the western boundary extending into the Sacramento Valley. In this region is characterized by a semipermanent, subtropical high-pressure cell. In the summer, temperatures exceeding 100°F in the western portion of the MCAB, coupled with clear skies, contribute to the formation of ozone. In winter, the combination of high-pressure storms and light winds creates low-level temperature inversions and stable atmospheric conditions, leading to high concentrations of carbon monoxide and particulate matter (El Dorado County 2003).

Federal and State Ambient Air Quality Standards

The CAA requires that the USEPA and CARB designate areas as attainment, non-attainment, or unclassified. Areas with air quality that exceed adopted air quality standards are designated as “nonattainment” areas for the relevant air pollutants, while areas that comply with air quality standards are designated as “attainment” areas for the relevant air pollutants. “Unclassified” areas are those with insufficient air quality monitoring data to support a designation of attainment or nonattainment but are generally presumed to comply with the ambient air quality standard.

Local

The El Dorado County Air Quality Management District (EDCAQMD) is responsible for attainment of the NAAQS and CAAQS in El Dorado County through implementation of policies and measures to reduce pollutants and improve air quality within their respective air basins. All projects in the County are subject to the adopted EDCAQMD rules and regulations**. Table 3** provides a summary of the NAAQS and CAAQS attainment status in the vicinity of the Project.

Table 3. NAAQS and CAAQS Attainment Status for El Dorado County

Criteria Pollutants	State Designation	Federal Designation
Ozone	Nonattainment	Nonattainment
PM_{10}	Nonattainment	Unclassified
$PM_{2.5}$	Unclassified	Nonattainment
Carbon Monoxide	Unclassified	Unclassified/Attainment
Nitrogen Dioxide	Attainment	Unclassified/Attainment
Sulfur Dioxide	Attainment	Unclassified/Attainment
Sulfates	Attainment	-
Lead	Attainment	Unclassified/Attainment
Hydrogen Sulfide	Unclassified	-
Visibility Reducing Particles	Unclassified	-

Source: CARB 2023

In February 2002, EDCAQMD published the *Guide to Air Quality Assessment: Determining Significance of Air Quality Impacts under the California Environmental Quality Act*, which outlines significance criteria, methodologies for the estimation of construction and operational emissions, and mitigation measures to reduce such impacts. Based on current attainment status (**Table 2**), lead, sulfates, hydrogen sulfide and visibility reducing particulate matter are not a primary concern in the County in comparison to ozone, PM_{10}, CO, and NO_2 (EDCAQMD 2003).

According to the EDCAQMD, the significance criteria for ozone precursors, reactive organic gases (ROG) and nitrogen oxides (NO_x) is 82 pounds per day. There are no quantitative significance criteria for other criteria pollutants, but a project is considered to have a significant impact on air quality if it will cause or contribute significantly to a violation of the NAAQS or CAAQS outlined in **Table 2** (El Dorado County 2002). If a project is below or meets the applicable screening criteria, it may be assumed to have a less-than-significant impact upon the environment under CEQA. None of the EDCAQMD thresholds are expected to be exceeded over the duration of Project implementation.

EDCAQMD also has several rules addressing air quality that relate to the proposed Project which are summarized below (CARB 2025b):

Rule 202 — Visible Emissions: A person shall not discharge into the atmosphere from any single source of emission whatsoever any air contaminant for a period or periods aggregating more than three minutes in any one hour which is:

a. As dark or darker in shade as that designated as No. 1 on the Ringlemann chart, as published by the United States Bureau of Mines, or
b. Of such opacity as to obscure an observer's view to a degree equal to or greater than does smoke described in subsection (A) of this section.

Rule 205 — Nuisance: A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance or annoyance to any considerable number of persons, or to the public, or which endanger the comfort, repose, health or safety of any such persons, or the public, or which cause to have a natural tendency to cause injury or damage to business or property.

Rule 207 — Particulate Matter: A person shall not release or discharge into the atmosphere from any source or single processing unit, exclusive of sources emitting combustion contaminants only,

particulate matter emissions in excess of 0.1 grains per cubic foot of dry exhaust gas at standard conditions.

Rule 223.1 — Fugitive Dust: The purpose of this rule is to limit fugitive dust emissions from construction, and construction related activities.

Toxic Air Contaminants

Toxic air contaminants (TACs), also called hazardous air pollutants (HAPs) under the CAA, are pollutants that may be expected to result in an increase in mortality or serious illness or that may pose a present or potential hazard to human health. Health effects of TACs include cancer, birth defects, neurological damage, damage to the immune system and diseases. There are many types of TACs with carrying degrees of toxicity. Sources of TACs are commonly associated with industrial processes, commercial operations and motor vehicle exhaust (EDCAQMD 2002). Asbestos is also listed as a TAC by CARB and as a HAP by the USEPA. Asbestos is of special concern in El Dorado County because it occurs naturally in surface deposits of several types of ultramafic minerals. Asbestos emissions can result from the sale or use of asbestos-containing materials, road surfacing with such materials, grading activities, and surface mining (El Dorado County 2003).

El Dorado County General Plan

The Public Health, Safety and Noise Element of the County's General Plan sets forth planning strategies for various factors including seismic hazards, flood hazards, noise and air quality (County 2004a). The air quality section provides, goals, objectives and policies to minimize public exposure to hazardous air pollutants and maintain state and federal AAQS including:

Goal 6.7: Air Quality Maintenance

A. Strive to achieve and maintain ambient air quality standards established by the U.S. Environmental Protection Agency and the California Air Resources Board.
B. Minimize public exposure to toxic or hazardous air pollutants and air pollutants that create unpleasant odors.

Objective 6.7.2: Vehicular Emissions — Reduce motor vehicle air pollution by developing programs aimed at minimizing congestion and reducing the number of vehicle trips made in the County and encouraging the use of clean fuels.

Objective 6.7.4: Project Design and Mixed Uses — Encourage project design that protects air quality and minimizes direct and indirect emissions of air contaminants.

Objective 6.7.7: Construction Related Short-Term Emissions — Reduce construction related, short-term emissions by adopting regulations which minimize their adverse effects.

Policy 6.7.7.1: The County shall consider air quality when planning the land uses and transportation systems to accommodate expected growth, and shall use the recommendations in the most recent version of the El Dorado County Air Quality Management Guide to Air Quality Assessment: Determining Significance of Air Quality Impacts Under the California Environmental Quality Act, to analyze potential air quality impacts (e.g., short-term construction, long-term operations, toxic and odor-related emissions) and to require feasible mitigation requirements for such impacts. The County shall also consider any new information or technology that becomes available prior to periodic updates of the Guide.

DISCUSSION

a) Conflict with or obstruct implementation of the applicable air quality plan?

No Impact. The western portion of El Dorado County, where the proposed Project is located, is within the Sacramento Federal Ozone Nonattainment Area (SFNA). This region was classified as a severe nonattainment area for the 1997 8-hour NAAQS of 84 parts per billion (ppb). In 2013, the regional air districts developed the Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan (Plan) to address how the region would attain the 1997 8-hour standard. This Plan was approved by USEPA effective March 2, 2015 (80 FR 4795) (SMAQMD 2023). In the SFNA, one of the main emissions source categories that contribute to ozone emissions is motor vehicles. The Plan establishes motor vehicle emissions budgets (MVEB) for the milestone years and attainment year to ensure that motor vehicle emissions from regional transportation plans and projects will not interfere with timely attainment of the standard (SMAQMD 2023).

Since the proposed Project involves the installation of a Class I bike and pedestrian trail, it is not anticipated to lead to increased amounts of emissions from motor vehicles. By enhancing multi-modal access to commercial and recreational facilities through the installation of pedestrian-friendly infrastructure, the Project is likely to decrease the amount of people who rely on motorized forms of transportation in the County. Installing a trail provides a safe, convenient, and accessible alternative for walking or cycling, encouraging people to use these non-motorized transportation options instead of driving. This shift from vehicles to walking or biking can help reduce traffic congestion, lower vehicle miles traveled (VMT), and, as a result, decrease the emissions of criteria pollutants, including the precursors to ozone, ROG and NOx. With fewer vehicles on the road, air quality is likely to improve as the demand for motor vehicle use decreases, leading to less vehicle-related emissions that contribute to ozone formation and particulate pollution. Long-term operation of the proposed Project is anticipated to result in overall beneficial air quality impacts and would not conflict with existing or future air quality planning efforts.

Since the Project would not result in an increase in motor vehicle use or VMT, it would not interfere with the attainment of the 8-hour ozone standard outlined in the Plan. The Project is therefore consistent with the goals and policies outlined in the Plan to reduce ozone concentrations below federal and state standards within the SFNA. The Project would not conflict with or obstruct implementation of the applicable air quality plan, therefore there would be no impact.

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?

Less Than Significant Impact. El Dorado County is currently designated as 'attainment for all state and federal AAQS, except for ozone (nonattainment status under state and federal), PM_{10} (nonattainment status under state), and $PM_{2.5}$ (nonattainment status under federal). The current "non-attainment" status for ozone, PM_{10}, and $PM_{2.5}$ signifies that these pollutant concentrations have exceeded the established standards.

In order to evaluate ozone and other criteria pollutant emissions and support attainment goals, EDCAQMD has developed significance thresholds for emissions of ozone precursors as well as other criteria pollutants. If the proposed Project's emissions exceed

the pollutant thresholds outlined in **Table 4**, the Project would have the potential to result in significant effects to air quality and affect the attainment of federal and state AAQS.

Table 4. Maximum Daily Construction Emissions and Local Thresholds of Significance

Thresholds of Significance		
Emissions	**Road Construction Emissions Model Estimates**	**EDCAQMD Construction Phase Mass Emissions Thresholds (pounds per day)**
NO_x	0.54 lbs/day	82 lbs/day
ROG	1.17 lbs/day	82 lbs/day
PM_{10}	3.17 lbs/day (maximum)	None established
$PM_{2.5}$	0.98 lbs/day (maximum)	None established
Source: EDCAQMD 2002		

To support the air quality analysis for the Project, Dokken Engineering completed air quality modeling calculations, included as **Appendix B** to this Final IS/MND. Air quality impacts from the proposed Project's construction were evaluated and quantified, where applicable, using the Sacramento Metropolitan Air Quality Management District (SMAQMD) Roadway Construction Emissions Model (RCEM), Version 9.0.1. Activities during construction that may impact air quality include use of heavy machinery during clearing and grubbing, excavation, grading and paving. These activities will produce emissions of various air pollutants including ROG, NO_x, CO, PM_{10}, and $PM_{2.5}$, potentially causing short-term air quality impacts. **Table 5** provides the results of the Road Construction Emissions Model estimates for the Project construction phase compared to EDCAQMD thresholds of significance.

Based on the construction emissions model, Project's estimated construction emissions are well below the applicable EDCAQMD thresholds. These thresholds were established by EDCAQMD based on existing emission levels and regional attainment designations under the NAAQS and CAAQS. Therefore, the Project's construction-related air quality impact would be less than significant.

c) Expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant Impact. EDCAQMD defines sensitive receptors as people, or facilities that generally house people (schools, hospitals, residences, etc.), that may experience adverse effects from unhealthful concentrations of air pollutants (EDCAQMD 2002). The nearest sensitive receptors in the vicinity of the Project is a private residence located approximately 430 feet northwest of the northern end of the Project area, along Little Road.

Construction activities could temporarily release pollutants such as ROG, NOx, CO, PM_{10}, and $PM_{2.5}$. These emissions primarily stem from off-road equipment exhaust, on-road vehicle exhaust, and dust generated by grubbing, excavation, and material handling. However, the Project is not anticipated to generate a substantial number of pollutants during the construction phase. As shown in **Table 4**, estimated emissions for the Project are far below EDCAQMD thresholds.

Construction activities are expected to involve the use of diesel-powered equipment. In 1998, the CARB classified diesel exhaust as a TAC. Cancer risks linked to diesel exhaust

exposure are generally associated with long-term exposure, typically assuming a 70-year exposure period. While shorter exposure periods can still contribute to elevated cancer risks, short-term exposure (2 to 3 years) to diesel exhaust is not typically expected to pose a significant health risk, as it usually does not result in harmful concentration levels. Health impacts from diesel exhaust during Project construction are anticipated to be less than significant because the construction duration will be much shorter than the 70-year timeframe used in health risk assessments. Furthermore, emissions will be temporary and intermittent, reducing the likelihood of producing TAC levels high enough to pose health risks. Therefore, the proposed Project's construction is not expected to elevate cancer risk for exposed individuals or expose sensitive receptors to significant pollutant concentrations, and the impact would be less than significant.

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

Less Than Significant Impact. Although offensive odors rarely cause physical harm, they can be unpleasant, causing annoyance and discomfort for the public and potentially leading to complaints to local governments and air quality districts. During construction, potential sources of odors include diesel exhaust from construction equipment. However, these odors are expected to be minor and temporary, occurring only during active equipment use. Construction activities will be short-term and will not result in long-term odor impacts, as natural air dispersion will quickly dissipate any odors once equipment is no longer in use. Additionally, adherence to standard construction practices and proper equipment maintenance will further minimize emissions.

Odor and emissions impacts will be strictly limited to the construction period, and once construction is complete, the operation of the trail will not generate any significant emissions or odors. Furthermore, the nearest sensitive receptor is located approximately 430 feet away, providing additional separation that reduces the potential for odor or emission-related impacts. Therefore, due to the short-term nature of construction activities, the effective distance to sensitive receptors, and the absence of operational emissions, any impacts from odors or other emissions are considered less than significant.

IV. BIOLOGICAL RESOURCES

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

This section describes the natural resources present within and immediately surrounding the Project area and includes a discussion of the special status species and sensitive habitats potentially occurring in the Project area. Also included is an analysis of the impacts that could occur to biological resources due to implementation of the proposed Project and appropriate mitigation measures to reduce or avoid significant impacts. The analysis of biological resources presented in this section is based on a review of the current Project description, the Natural Environment Study (**Appendix C**) prepared for the Project, available literature, and surveys conducted by Dokken Engineering biologists on August 13, 2024.

REGULATORY SETTING

This section describes the federal, state, and local plans, policies, and laws that are relevant to biological resources within the Biological Study Area (BSA). Applicable permits and approvals that will be required before construction of the Project are provided in Section 2.4.

Federal

National Environmental Policy Act

The NEPA provides an interdisciplinary framework for environmental planning by federal agencies and contains action-forcing procedures to ensure that federal agency decision makers take environmental factors into account. NEPA applies when a federal agency proposes an action, grants a permit, or agrees to fund or otherwise authorize any other entity to undertake an action that could possibly affect environmental resources.

Federal Endangered Species Act

The Federal Endangered Species Act (FESA) of 1973 (16 United States Code Section 1531 et seq.) provides for the conservation of endangered and threatened species listed pursuant to Section 4 of FESA and the ecosystems upon which they depend. These species and resources have been identified by United States Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS) (FESA 1973).

Clean Water Act

The Clean Water Act (CWA) was enacted as an amendment to the Federal Water Pollutant Control Act of 1972, which outlined the basic structure for regulating discharges of pollutants to Waters of the U.S. The CWA serves as the primary Federal law protecting the quality of the nation's surface waters, including lakes, rivers, and coastal wetlands. The CWA empowers the U.S. Environmental Protection Agency (EPA) to set national water quality standards and effluent limitations and includes programs addressing both point-source and non-point-source pollution. Point-source pollution originates or enters surface waters at a single, discrete location, such as an outfall structure or an excavation or construction site. Non-point-source pollution originates over a broader area and includes urban contaminants in stormwater runoff and sediment loading from upstream areas. The CWA operates on the principle that all discharges into the nation's waters are unlawful unless they are specifically authorized by a permit; permit review is the CWA's primary regulatory tool.

Executive Order 13186: Migratory Bird Treaty Act

Executive Order (EO) 13186 (signed January 10, 2001) directs each federal agency taking actions that could adversely affect migratory bird populations to work with USFWS to develop a Memorandum of Understanding that will promote the conservation of migratory bird populations. Protocols developed under the Memorandum of Understanding will include the following agency responsibilities:

- Avoid and minimize, to the maximum extent practicable, adverse impacts on migratory bird resources when conducting agency actions.
- Restore and enhance habitat of migratory birds, as practicable; and
- Prevent or abate the pollution or detrimental alteration of the environment for the benefit of migratory birds, as practicable.

The EO is designed to assist federal agencies in their efforts to comply with the Migratory Bird Treaty Act (MBTA) (50 Code of Federal Regulations 10 and 21) and does not constitute any legal authorization to take migratory birds. Take is defined under the MBTA as "the action of or attempt to pursue, hunt, shoot, capture, collect, or kill" (50 Code of Federal Regulations 10.12) and includes intentional take (i.e., take that is the purpose of the activity in question).

Executive Order 13112: Invasive Species

On February 3, 1999, President William J. Clinton signed EO 13112 requiring federal agencies to combat the introduction or spread of invasive species in the United States. The order defines invasive species as "any species, including its seeds, eggs, spores, or other biological material capable of propagating that species, that is not native to that ecosystem whose introduction does or is likely to cause economic or environmental harm or harm to human health." FHWA guidance issued August 10, 1999, directs the use of the State's invasive species list, maintained by the Invasive Species Council of California to define the invasive plants that must be considered as part of the NEPA analysis for a proposed project.

Under the EO, federal agencies cannot authorize, fund, or carry out actions that it believes are likely to cause or promote the introduction or spread of invasive species in the United States or

elsewhere unless all reasonable measures to minimize risk of harm have been analyzed and considered.

State

California Environmental Quality Act

CEQA (California Public Resource Code § 21000 et seq) is a statute that requires state and local agencies to identify the significant environmental impacts of their actions and to avoid or mitigate those impacts, if feasible. CEQA applies to certain activities of state and local public agencies. A public agency must comply with CEQA when it undertakes an activity defined by CEQA as a "project." A project is an activity undertaken by a public agency or a private activity which must receive some discretionary approval (meaning that the agency has the authority to deny the requested permit or approval) from a government agency which may cause either a direct physical change in the environment or a reasonably foreseeable indirect change in the environment.

Proposals for physical development in California are subject to the provisions of CEQA, as are many governmental decisions which do not immediately result in physical development (such as adoption of a general or community plan). Development project which requires a discretionary governmental approval will require at least some environmental review pursuant to CEQA, unless an exemption applies. The environmental review required imposes both procedural and substantive requirements. A project may not be approved as submitted if feasible alternatives or mitigation measures are able to substantially lessen the significant environmental effects of the project.

California Endangered Species Act

The California Endangered Species Act (CESA) (California Fish and Game [CFG] Code Section 2050 et seq.) requires California Department Fish and Wildlife (CDFW) to establish a list of endangered and threatened species (Section 2070) and to prohibit the incidental taking of any such listed species except as allowed by the Act (Sections 2080-2089). In addition, CESA prohibits take of candidate species (under consideration for listing).

CESA also requires CDFW to comply with CEQA (Pub. Resources Code Section 21000 et seq.) when evaluating incidental take permit applications (CFG Code Section 2081(b) and California Code Regulations, Title 14, section 783.0 et seq.), and the potential impacts the project or activity for which the application was submitted may have on the environment. CDFW's CEQA obligations include consultation with other public agencies which have jurisdiction over the project or activity [California Code Regulations, Title 14, Section 783.5(d)(3)]. CDFW cannot issue an incidental take permit if issuance would jeopardize the continued existence of the species [CFG Code Section 2081(c); California Code Regulations, Title 14, Section 783.4(b)].

Section 1602: Streambed Alteration Agreement

Under CFG Code 1602, public agencies are required to notify CDFW before undertaking any project that will divert, obstruct, or change the natural flow, bed, channel, or bank of any river, stream, or lake. Preliminary notification and project review generally occurs during the environmental process. When an existing fish or wildlife resource may be substantially adversely affected, CDFW is required to propose reasonable project changes to protect the resources. These modifications are formalized in a Streambed Alteration Agreement that becomes part of the plans, specifications, and bid documents for the project. Should any impacts occur to the riparian habitat adjacent to the proposed trail, a 1602 permit will be obtained prior to construction.

Section 3503 and 3503.5: Bird and Raptors
CFG Code Section 3503 prohibits the destruction of bird nests and Section 3503.5 prohibits the killing of raptor species and destruction of raptor nests. Trees and shrubs are present in and adjacent to the study area and could contain nesting sites.

Section 3513: Migratory Birds
CFG Code Section 3513 prohibits the take or possession of any migratory non-game bird as designated in the MBTA or any part of such migratory non-game bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the MBTA.

Porter Cologne Water Quality Control Act
California's Porter-Cologne Act, enacted in 1969, provides the legal basis for water quality regulation within California. This Act requires a "Report of Waste Discharge" for any discharge of waste (liquid, solid, or gaseous) to land or surface waters that may impair beneficial uses for surface and/or groundwater of the state. It predates the CWA and regulates discharges to waters of the State. Waters of the State include more than waters of the U.S., including groundwater and surface waters not considered waters of the U.S. Additionally, the act prohibits discharges of "waste" as defined; this definition is broader than the CWA definition of "pollutant". Discharges under the Porter-Cologne Act are permitted by Waste Discharge Requirements (WDRs) and may be required even when the discharge is already permitted or exempt under the CWA.

The State Water Resources Control Board (SWRCB) and Regional Water Quality Control Board (RWQCB) are responsible for establishing water quality standards (objectives and beneficial uses) required by the CWA and regulating discharges to ensure compliance with water quality standards. Details regarding water quality standards in a project area are contained in the applicable RWQCB Basin Plan. In California, Regional Boards designate beneficial uses for all water body segments in their jurisdictions, and then set criteria necessary to protect these uses. Consequently, water quality standards developed for particular water segments are based on designated use and vary depending on such use. The SWRCB identifies waters failing to meet standards for specific pollutants, which are then state listed in accordance with CWA Section 303(d). If a state determines that waters are impaired for one or more constituents and the standards cannot be met through point source or non-source point controls (a National Pollutant Discharge Elimination System [NPDES] permits or WDRs), the CWA requires the establishment of total maximum daily loads (TMDLs). TMDLs specify allowable pollutant loads from all sources (point, non-point, and natural) for a given watershed.

Regional Water Quality Control Boards
The SWRCB adjudicates water rights, sets water pollution control policy, and issues water board orders on matters of statewide application, and oversees water quality functions throughout the state by approving Basin Plans, TMDLs, and NPDES permits. RWQBs are responsible for protecting beneficial uses of water resources within their regional jurisdiction using planning, permitting, and enforcement authorities to meet this responsibility.

Local

2004 El Dorado County General Plan
The policies below are excerpted from the El Dorado County General Plan (as amended) (County 2004a). These policies are designed to guide conservation of native and non-native habitats, plants, and animals within the County's jurisdiction.

Policy 7.4.2.8 — Sensitive Species and Habitat Protections
If the Project area includes habitat for sensitive wildlife or plant species, a biological assessment may be needed. Avoidance and mitigation measures will be required if sensitive species are present.

El Dorado County Oak Resources Conservation Ordinance
El Dorado County has an Oak Resources Management Plan (ORMP), Policy 7.4.4.4, adopted to mitigate impacts to oak woodlands and individual oak trees (County 2017). The ordinance requires the preservation of oak woodlands and may require mitigation for the removal of oak trees or impacts to oak woodland habitat. The County's ORMP also requires mitigation of individual native oak trees and greater mitigation (3-to-1 ratio) for Heritage Trees which are 36 inches diameter or greater, measured four feet six inches from ground level. Projects impacting oak woodlands typically need to:

- Avoid impacts where feasible.
- Minimize impacts to oak woodlands.
- Provide mitigation, such as oak woodland restoration, conservation easements, or fees paid to the Oak Resources In-Lieu Fee Program, depending on the significance of the impact:

    - The ORMP requires mitigation for permitted oak tree removal under the ORMP including on-site retention; replacement planting on-site and off-site; and in-lieu fees that will be used to acquire land and/or conservation easements to conserve oak woodlands, and to plant and maintain native oak trees (under the prior General Plan policy, tree canopy retention was the only mitigation option available). All mitigation requires additional permits depending upon the mitigation option chosen.

    - The in-lieu fee for removal of oak woodlands is calculated based on total cost per acre which is currently set at $8,285. The in-lieu fee for removal of individual oak trees is calculated on a total cost per inch which is currently set at $153 for a non-Heritage Tree and $459 per inch for a Heritage Tree at a 3-to-1 ratio. The per-inch fee shall be multiplied by the total number of trunk diameter inches removed. The in-lieu fees collected will be deposited in the County's Oak Woodland Conservation Fund. That fund will be used to acquire land and/or conservation easements to conserve oak woodlands, provide for native oak tree planting, and for ongoing conservation area monitoring and management activities.

Tree trimming and removal along the proposed trail will be required; however, County transportation projects are exempt from needing to obtain a tree removal permit under ORMP Policy 2.1.4. A tree survey and preparation of an Oak Resources Technical Report prepared by a certified arborist will be prepared summarizing all required tree removal and trimming, along with any proposed mitigation for the Project.

El Dorado County Site Planning and Project Design Standards
Title 130 – Article 3 of the El Dorado County Site Planning and Project Design Standards requires protection of wetlands and sensitive riparian habitat. Subsection G establishes standards for avoidance and minimization of impacts to wetlands and sensitive riparian habitat as provided in General Plan Policies 7.3.3.4 (Wetlands) and 7.4.2.5 (Identify and Protect Resources). This include Use Regulation 3a, which states that new ministerial and discretionary development shall avoid or minimize impacts to perennial streams, rivers or lakes, intermittent streams and wetlands, and any sensitive riparian habitat to the maximum extent practicable. Where avoidance and

minimization are not feasible, the county shall make findings, based on documentation provided by the project proponent, that avoidance and minimization are infeasible (Dokken 2024c).

ENVIRONMENTAL SETTING

Online databases from USFWS, Information for Planning and Consultation (IPaC), CDFW, California Natural Diversity Database (CNDDB), California Native Plant Society (CNPS), and NMFS were queried for presence of potential threatened, endangered, rare or special status species within United States Geological Survey (USGS) 7.5-minute quadrangles. These searches identified 43 regional species of special concern with potential to occur in the vicinity of the Project area. After biological surveys were conducted, each species' specific habitat requirements were compared to actual site conditions and the potential for occurrence was then determined. Raw data returned from the database queries is provided in **Appendix C**.

Biological Study Area

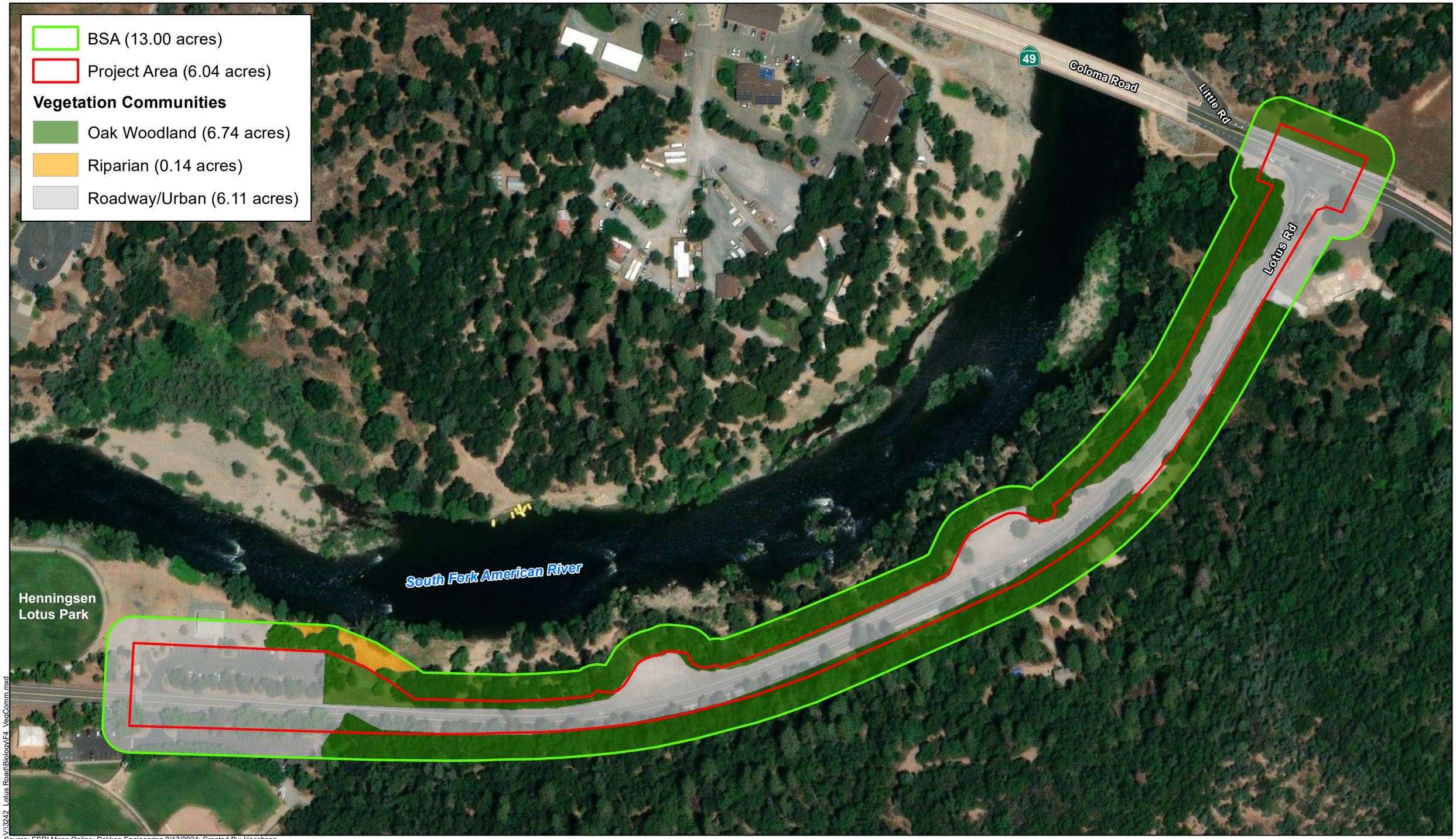
The Project area, defined as the area of direct impact, covers approximately 6.04 acres. Prior to field surveys, the BSA was established to include the area required for Project activities, along with a 50-foot buffer to account for nearby biological resources and potential design modifications. The BSA spans about 0.5 mile of Lotus Road and totals approximately 13.00 acres in size (**Figure 3**).

Physical Conditions

Regionally, the BSA is located off California SR-49 and adjacent to Lotus Road within the census designated area of Coloma, in El Dorado County, California. The BSA occurs within the Northern Sierra Nevada Foothills Floristic Province (Jepson 2024). As described in Section I. Aesthetics, El Dorado County experiences Mediterranean conditions including warm, dry summers and cool, wet winters. The average annual high temperature is approximately 74 degrees °F, and the average annual lows reach approximately 44°F, with up to 38.76 inches of precipitation annually. The elevation of the BSA is approximately 720 to 870 feet above mean sea level. The soil types within the BSA include Auberry coarse sandy loam, 15 to 30 percent slopes (52.9 percent of the BSA), Auberry very rocky coarse sandy loam, 30 to 50 percent slopes (29.6 percent of the BSA), and tailings (17.5 percent of BSA) (Dokken 2024c).

Dominant Land Cover and Vegetative Communities

Vegetation communities within the BSA include oak woodland and riparian. In addition, the BSA encompasses Lotus Road and compacted pullout areas classified as roadway/urban (**Figure 5. Vegetation Communities within the BSA**). Plant and wildlife species observed within the BSA



V:\3242_Lotus Road\Biology\F4_VegComm.mxd

Source: ESRI Maps Online; Dokken Engineering 9/13/2024; Created By: kjacobson

1 inch = 0.03 miles

0 80 160 240 320 400 Feet

Figure 5
Vegetation Communities

CML-5925(194)
Henningsen/Lotus Multi-Use Trail Project
Lotus, El Dorado County, California

during the 2024 biological survey efforts were used to define habitat types based on composition, abundance, and cover (**Table 5. Species Observed**).

Roadway/Urban

The roadway/urban land cover type is defined as areas that are compacted, devoid of vegetation and have been subject to previous or ongoing disturbances such as roads, roadsides, trails, and parking lots. This includes Lotus Road and Coloma Road, and two paved parking lots located at the western edge of the BSA. There are also two barren gravel pullout areas located on the northern edge of Lotus Road within the BSA that are included in this land cover type. The BSA contains approximately 6.11 acres (52 %) of disturbed/urban land.

Oak Woodland

Oak woodland habitat encompasses the outer edges of the BSA bordering the roadway and urban land cover within the BSA. This habitat community is dominated by native oak species such as interior live oak and black oak, and ponderosa pine trees with an understory of short herbaceous grasses and non-native plants such as Himalayan blackberry and scotch broom. Oak woodland habitat can provide suitable habitat for a variety of wildlife species and comprises approximately 6.74 acres (47%) of the BSA.

Riparian

A small patch of riparian habitat, approximately 300 linear feet, occurs in northeastern portion of the BSA along the SF American River. The canopy is dominated by riparian tree species including Fremont's cottonwood, white alder, and black locust. The understory is comprised of hydrophytic plants such as narrowleaf willow and mulefat. Riparian habitat comprises approximately 0.14 acres (1%) of the BSA. Riparian habitat does not extend into the Project area, where Project activities are anticipated, and therefore, no impacts to this habitat community are anticipated.

Table 5. Species Observed and/or Detected

Common Name	Scientific Name	Native (N)/ Non-Native (X) (Cal-IPC Rating)
Plant Species		
Bermuda grass	*Cynodon dactylon*	X (High)
Black locust	*Robinia pseudoacacia*	X (Limited)
Black walnut	*Juglans nigra*	X
Blue oak	*Quercus douglasii*	N
Bur chevril	*Anthriscus caucalis*	X
California black oak	*Quercus kelloggii*	N
California buckeye	*Aesculus californica*	N
California goldenrod	*Solidago velutina ssp. californica*	N
California mugwort	*Artemisia douglasiana*	N
California pipevine	*Aristolochia californica*	N
Common fig	*Ficus carica*	X (Moderate)
Evening primrose	*Oenothera elata*	N
Fremont cottonwood	*Populus fremontii*	N
Gray pine	*Pinus sabiniana*	N
Himalayan blackberry	*Rubus armeniacus*	X (High)
Hogbite	*Chondrilla juncea*	X (Moderate)
Incense cedar	*Calocedrus decurrens*	N
Interior live oak	*Quercus wislizeni*	N
Mule fat	*Baccharis salicifolia*	N
Narrowleaf willow	*Salix exigua*	N
Poison oak	*Toxicodendron diversilobum*	N
Ponderosa pine	*Pinus ponderosa*	N

Rabbitsfoot grass	*Polypogon monspeliensis*	X (Limited)
Ripgut brome	*Bromus diandrus*	X (High)
Rose clover	*Trifolium hirtum*	X (Limited)
Scotch broom	*Cytisus scoparius*	X (High)
Toyon	*Heteromeles arbutifolia*	N
Tree of heaven	*Ailanthus altissima*	X (High)
Turkey mullein	*Croton setiger*	N
Valley oak	*Quercus lobata*	N
Western brackfern	*Pteridium aquilinum*	N
White alder	*Alnus rhombifolia*	N
Wild carrot	*Daucus carota*	X
Wild grape	*Vitis californica*	N
Yarrow	*Achillea millefolium*	N
Yellow star thistle	*Centaurea solstitialis*	X (High)
Wildlife Species		
Acorn woodpecker	*Melanerpes formicivorus*	N
Bushtit	*Psaltriparus minimus*	N
Canada goose	*Branta canadensis*	N
Spotted towhee	*Pipilo maculatus*	N
Turkey vulture	*Cathartes aura*	N
Western fence lizard	*Sceloporus undulatus*	N

Habitat Connectivity

The CDFW Biogeographic Information & Observation System was reviewed to determine if the BSA is located within an Essential Connectivity Area (Dokken 2024b). The BSA is within an area of Terrestrial Connectivity Rank 4 – Conservation Planning Linkages. These are corridors or linkages that have been identified in regional or local conservation plans as critical for maintaining ecological connectivity. Rank 4 linkages might not always be the most immediate priorities for protection (compared to higher-ranked areas), but they are still essential for long-term conservation and maintaining habitat corridors. These linkages ensure that wildlife can move between larger blocks of habitat, access different resources, and adapt to changes in their environment, such as climate shifts. Since the proposed trail will be constructed directly adjacent to Lotus Road, the Project is not anticipated to create a substantial new barrier to wildlife movement. Although the proposed trail and boardwalk may not create a new barrier, it could contribute to an increase in the barrier effect in certain areas. The boardwalk interrupts the surface connection at ground level, which could disrupt wildlife movement, particularly in areas where animals might typically move along the landscape. However, it is important to note that the boardwalk is primarily needed in steep or difficult-to-navigate areas and in areas that are in proximity to vehicle traffic on Lotus Road, where wildlife would not typically travel.

The SF American River corridor is a popular destination for rafting, swimming, and walking, all of which increase human presence and activity in the landscape. These recreational uses may cause disturbances that interrupt wildlife movement, either through direct physical barriers or through noise, human presence, and activity that could deter wildlife from crossing or using certain areas. Since this segment of the American River Corridor serves as a key access point for boaters and rafters, concentrated human presence and noise may disturb sensitive species that require undisturbed environments. While the Project may not create a new permanent barrier, the combined effects of human recreation and infrastructure changes from the installation of the boardwalk may exacerbate existing fragmentation of wildlife habitat, impacting species that rely on the river corridor for migration, feeding, or breeding.

Furthermore, given the proposed location of the sidewalk/boardwalk, extensive land clearing, habitat modification, and or substantial fragmentation is not anticipated. Therefore, implementation of this Project is unlikely to substantially impact habitat connectivity because it consolidates human disturbance in an area where habitat has already been modified due to construction of Lotus Road.

Regional Species and Habitats and Natural Communities of Concern

Plant and wildlife species have special-status if they have been listed as such by federal or state agencies or by one or more special interest groups, such as CNPS. Prior to the field survey, literature searches were conducted using USFWS IPaC, CDFW CNDDB, and CNPS databases to identify regionally sensitive species with potential to occur within the BSA. **Table 2. Special Status Species with Potential to Occur in the Project Vicinity** of **Appendix C** provides the list of regional special-status species returned by the database searches, describes the habitat requirements for each species, and states if the species was determined to have potential to occur within the BSA. There were 21 plant species and 22 wildlife species with the potential to occur in the Project vicinity returned by the database searches No special-status species were found to have the potential to occur within the Project area.

Special-Status Plants

Plants are of special concern based on (1) federal, state, or local laws regulating their development; (2) limited distributions; and/or (3) the presence of habitat required by the special-status plants occurring on-site. Prior to field surveys, a list of regional special-status plant species with potential to occur within the Project vicinity was compiled from database searches. The potential for each species to occur within the BSA was determined by analyzing the habitat requirements of each species and comparing the habitat requirements to available habitat within the BSA. After a careful comparison between habitat requirements and the habitat available within the BSA, no special-status plants were determined to have potential to occur and no Project-related impacts to special-status plant species are anticipated. Furthermore, no special-status plant species were observed within the BSA during the biological survey conducted on August 13, 2024.

Special-Status Wildlife

Wildlife is considered to be of special concern based on (1) federal, state, or local laws regulating their development; (2) limited distributions; and/or (3) the habitat requirements of special-status wildlife occurring on-site. Prior to field surveys, a list of regional special-status wildlife species with potential to occur within the Project vicinity was compiled from database searches. The potential for each species to occur within the BSA was determined by analyzing the habitat requirements of each species and comparing the habitat requirements to available habitat within the BSA. After a careful comparison between habitat requirements and the habitat available within the BSA, no special-status species were found to have the potential to occur within the BSA. Furthermore, no special-status species were observed within the BSA during the biological survey conducted on August 13, 2024.

DISCUSSION OF IMPACTS

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?

Less Than Significant Impact with Mitigation. As described above in the *Environmental Setting*, the USFWS IPac, CDFW CNDDB, and CNPS database queries identified 43 special-status plant and wildlife species with potential to occur within the Project vicinity. After further review, no special-status plants or wildlife were determined to have potential of occurring within the BSA (**Appendix C - Table 2**). As a result, there are no species-specific avoidance and minimization measures to implement.

Invasive Species

In February 1999, EO 13112 was signed, requiring federal agencies to prevent and control the introduction and spread of invasive species. Mitigation Measure **BIO-4** will be incorporated into the Project plans to ensure that invasive species are not introduced or spread.

BIO-4: Prior to arrival at the Project site and prior to leaving the Project site, construction equipment that may contain invasive plants and/or seeds will be cleaned to reduce the spreading of noxious weeds.

Best Management Practices

To minimize and avoid potential environmental impacts of construction, the following measure **BIO-5** through **BIO-7** has been incorporated into the Project design.

BIO-5: To avoid inadvertent entrapment of wildlife during construction:

- Non-entangling erosion control material will be used to reduce the potential for entrapment. Tightly woven fiber netting (mesh size less than 0.25 inch) or similar material will be used to ensure that wildlife is not trapped (no monofilament). Coconut coir matting and fiber rolls containing burlap are examples of acceptable erosion control materials.

- All excavated steep-walled holes and trenches more than 6 inches deep will be covered with plywood (or similar material) or provided with one or more escape ramps constructed of earth fill or wooden planks at the end of each workday or 30 minutes prior to sunset, whichever occurs first. All steep-walled holes and trenches will be inspected each morning to ensure that no wildlife has become entrapped. All construction pipes, culverts, similar structures, construction equipment, and construction debris left overnight within sensitive habitats will be inspected for wildlife prior to being moved.

BIO-6: Work will be restricted to periods of dry weather and low rainfall (less than 0.25 inches within a 24-hour period). The National Weather Service 72-hour forecast will be monitored throughout construction to determine potential rain events. No work will occur during a dry-out period of 24 hours after the above referenced wet weather.

BIO-7: Best Management Practices (BMPs) will be incorporated into Project design and Project management to minimize impacts on the environment including erosion and the release of pollutants (e.g., oils, fuels):

- Exposed soils and material stockpiles would be stabilized, through watering or other measures, to prevent the movement of dust at the Project site caused by wind and construction activities such as traffic and grading activities;
- All vehicle and equipment fueling/maintenance would be conducted outside of any surface waters;
- Equipment used in and around jurisdictional waters must be in good working order and free of dripping or leaking contaminants;
- Raw cement, concrete or concrete washings, asphalt, paint or other coating material, oil or other petroleum products, or any other substances that could be hazardous to aquatic life shall be prevented from contaminating the soil or entering jurisdictional waters;
- All erosion control measures, and storm water control measures would be properly maintained until the site has returned to a pre-construction state;
- All construction materials would be hauled off-site after completion of construction.

General Wildlife

To minimize and avoid potential effects to local wildlife, the following measures **BIO-8** through **BIO-12** have been incorporated into the Project design.

BIO-8: Prior to vegetation removal or initial ground disturbance during the nesting bird season (February 1 – September 30) a pre-construction nesting bird survey must be conducted by a Project Biologist prior to the start of work. The nesting bird survey must include the Project area plus a 300-foot buffer. Within 2 weeks of the nesting bird survey, all vegetated areas that are designated for removal must be cleared by the contractor or a supplemental nesting bird survey is required.

A minimum 100-foot no-disturbance buffer will be established around any active nest of migratory birds and a minimum 300-foot no-disturbance buffer will be established around any nesting raptor species. The contractor must immediately stop work in the buffer area until the appropriate buffer is established, as determined by the Project Biologist. Work may not proceed within the buffer until a Project Biologist determines the young have fledged. A reduced buffer can be established if determined appropriate by the Project Biologist.

BIO-9: Immediately prior to vegetation removal, the Project Biologist(s) will inspect all areas where ground disturbing activity is anticipated. The Project Biologist will oversee all vegetation clearing and grubbing and will have stop work authority

All construction crew members will allow wildlife enough time to escape initial clearing and grubbing activities.

BIO-10: All food-related trash must be disposed into closed containers and must be removed from the Project area daily. Construction personnel must not feed or otherwise attract wildlife to the Project area.

BIO-11: The contractor must not apply rodenticide or herbicide within the Project area during construction.

BIO-12: If any wildlife is encountered during construction, said wildlife shall be allowed to leave the construction area unharmed.

Migratory Birds

Native birds are protected by the MBTA and CFG Code Sections 3513 and 3503. The implementation of measure **BIO-8** would avoid all potential impacts to migratory birds.

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 US Fish and Wildlife Service?

Less Than Significant with Mitigation. Habitats are of special concern based on federal, state, or local laws regulating their development; limited distributions; and/or the habitat requirements of special-status plants or wildlife occurring on-site. Wetlands and Waters of the U.S. are also considered sensitive by both federal and state agencies. Within the BSA, oak woodland habitat has been identified as a natural community of special concern as it has special protections under the County's Oak Resources Conservation Ordinance. Furthermore, a small patch of riparian habitat is present within the BSA, this habitat is a natural community of special concern under the jurisdiction of CDFW pursuant to FGC Section 1602. Riparian habitat does not extend into the Project area, where Project activities are anticipated, and therefore, no impacts to this habitat community are anticipated. Should any design changes to the trail occur which will result in impacts to riparian habitat, a 1602 permit will be obtained prior to construction. **Table 6. Impacts to Sensitive Natural Habitats** and **Figure 5. Project Impacts**, outline the impacts of the Project to oak woodland habitat. Avoidance and minimization, and compensatory mitigation measures regarding oak woodland habitat are discussed below.

Table 6. Impacts to Sensitive Natural Habitats

Impact Type (acres)	Sensitive Natural Habitat	
	Oak Woodland	Riparian Habitat
Temporary	0.72 acres	0 acres
Permanent	0.24 acres	0 acres
Total	**0.96 acres**	**0 acres**

Discussion of Oak Woodland

Oak woodlands are characterized by a mix of oak species, primarily dominated by blue oak, valley oak, and interior live oak. These woodlands occur in the foothill regions of California, often between 500 and 3,000 feet in elevation, in areas with well-drained soils. The terrain is typically composed of rolling hills or foothills, and they are frequently found along the transition between grasslands and denser forested areas.

The canopy is typically open to moderately dense, with scattered trees allowing sunlight to reach the understory. The understory varies but is often composed of native grasses,

forbs, and shrubs such as poison oak (*Toxicodendron diversilo*bum) and buckbrush (*Ceanothus cuneatus*). These woodlands play a crucial role in erosion control, water filtration, and carbon sequestration. They are particularly sensitive to changes in land use, and their preservation is important for maintaining regional biodiversity and ecosystem functions.

Survey Results

Oak woodland habitat encompasses the outer edges of the BSA bordering the roadway/urban land cover. The canopy in this habitat community is dominated by native oak species such as interior live oak, black oak and ponderosa pine (*Pinus ponderosa*) trees, with an understory of short herbaceous grasses and non-native plants such as Himalayan blackberry and Scotch broom. Oak woodland habitat within the BSA has potential to supports a diversity of local wildlife species.

Project Impacts

The Project will result in both temporary and permanent impacts to oak woodland habitat within the BSA. Temporary impacts of approximately 0.72 acres are anticipated, due equipment and personnel access. Permanent impacts, covering about 0.24 acres, will result from the installation of a boardwalk, the associated cut and fill construction limits, the placement of RSP near a culvert under Lotus Road to prevent erosion, and the construction of a fence adjacent to the boardwalk (**Table 3** and **Figure 5**).

Tree trimming and removal along the proposed trail will be required; however, County Road Projects are exempt from needing to obtain a tree removal permit under ORMP Policy 2.1.4. A tree survey and preparation of an Oak Resources Technical Report prepared by a certified arborist will be prepared summarizing all required tree removal and trimming, along with any proposed mitigation for the Project.

Mitigation Measures

The Project has been designed to minimize both temporary and permanent impacts to oak woodland habitat within and adjacent to the Project BSA. Mitigation Measures **BIO-1** and **BIO-2** will be implemented to reduce potential impacts to oak woodland habitat to a less than significant level.

BIO-1: Prior to vegetation removal or initial ground disturbance during the nesting bird season (February 1 – September 30) a pre-construction nesting bird survey must be conducted by a Project Biologist prior to the start of work. The nesting bird survey must include the Project area plus a 300-foot buffer. Within 2 weeks of the nesting bird survey, all vegetated areas that are designated for removal must be cleared by the contractor or a supplemental nesting bird survey is required.

A minimum 100-foot no-disturbance buffer will be established around any active nest of migratory birds and a minimum 300-foot no-disturbance buffer will be established around any nesting raptor species. The contractor must immediately stop work in the buffer area until the appropriate buffer is established, as determined by the Project Biologist. Work may not proceed within the buffer until a Project Biologist determines the young have fledged. A reduced buffer can be established if determined appropriate by the Project Biologist.

BIO-2: Vegetation removal will not exceed what is shown on the plans without prior approval from the Project biologist. If trees will be trimmed rather than removed, trimming must comply with ANSI A300 pruning standards and must not:

- leave branch stubs
- make unnecessary heading cuts
- cut off the branch collar (not make a flush cut)
- top or lion's tail trees (stripping a branch from the inside leaving foliage just at the ends)
- remove more than 25 percent of the foliage of a single branch
- remove more than 25 percent of the total tree foliage in a single year
- damage other parts of the tree during pruning
- use wound paint
- climb the tree with climbing spikes

Compensatory Mitigation

The ORMP mandates mitigation for permitted oak tree removal, which can include on-site retention, replacement planting both on-site and off-site, and/or payment of in-lieu fees. These fees are allocated for acquiring land, securing conservation easements, and planting and maintaining native oak trees. Each mitigation option requires additional permits. To incentivize on-site retention of oak woodlands, the ORMP establishes escalating mitigation ratios based on the extent of woodland removal: a 1-to-1 ratio for up to 50 percent removal, a 1.5-to-1 ratio for up to 75 percent removal, and a 2-to-1 ratio for up to 100 percent removal. The specific form of mitigation for the Project—whether on-site retention, replacement planting, or in-lieu fees—will be determined in accordance with these requirements, with final details established following a comprehensive tree survey within the BSA.

Compensatory mitigation will be completed in compliance with measure **BIO-3** below.

BIO-3: If mitigation for tree impacts is required per the ORMP, payment of in-lieu fees will be completed in coordination with the County.

Cumulative Impacts

Removal of trees from oak woodland habitats can result in disruption of ecological processes that trees support, such as nutrient cycling, water infiltration, and soil stabilization, which could lead to increased soil erosion, altered water cycles, and reduced soil fertility within the BSA.

However, tree removal and trimming associated with the Project will be limited to what is necessary for access during construction and construction of the multi-use trail and boardwalk. Only a minor number of trees along the alignment of the proposed trail will be removed and trees will be trimmed rather than removed where feasible. The majority of oak woodland habitat within the Project area will remain intact and will retain its habitat value. Furthermore, the minor tree removal will open the canopy and may allow the opportunity for other native species to grow in a previous overshaded area.

Measures **BIO-1** through **BIO-3** will be incorporated into the Project to offset impacts to oak woodland habitat and mitigated for tree trimming and removal.

Discussion of Riparian

The riparian corridor within the BSA is considered a natural community of special concern through CDFW. Riparian communities are associated with floodplains and occur as a transitional habitat between wetted areas and upland habitat types. Common plants in

foothill riparian zones include willows, cottonwoods, alders, and various shrubs that thrive in the moist soils along the water's edge. These habitats are of ecological importance as they provide essential habitat and resources for wildlife, including birds, amphibians, insects, and mammals. The riparian habitat in foothill regions plays a key role in maintaining water quality by filtering sediments and pollutants, stabilizing stream banks, and reducing erosion. It also acts as a natural buffer, moderating water temperature through shade and creating a cooler microclimate.

Survey Results

Within the BSA, a small patch of riparian habitat, approximately 300 linear feet, occurs in northeastern portion of the BSA along the South Fork American River. The canopy is dominated by riparian tree species including Fremont's cottonwood (*Populus fremontii*), white alder (*Alnus rhombifolia*), and black locust (*Robinia pseudoacacia*). The understory is comprised of hydrophytic plants such as narrowleaf willow (*Salix exigua*) and mulefat (*Baccharis salicifolia*). Riparian habitat within the BSA has potential to support a diversity of local wildlife species. Riparian habitat comprises approximately 0.14 acres of the BSA.

Project Impacts

Project impacts will be limited to the oak woodland habitat within the BSA. Riparian habitat does not extend into the Project area, where Project activities are anticipated, and therefore, no direct or indirect impacts to this habitat community are anticipated. A less than significant impact would occur. Should any changes in the trail design occur which will result in impacts to riparian habitat, a 1602 permit will be obtained prior to construction.

Mitigation Measures

No temporary or permanent impacts to riparian habitat are anticipated as a result of the proposed Project. Therefore, no avoidance and minimization measures are proposed.

Compensatory Mitigation

No temporary or permanent impacts to riparian habitat are anticipated as a result of the Project. Therefore, no compensatory mitigation is required for riparian habitat.

Cumulative Impacts

No temporary or permanent impacts to riparian habitat are anticipated as a result of the Project. Therefore, no cumulative impacts to riparian habitat are expected to result from construction of the trail.

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

No Impact. The proposed Project would involve the installation of a Class I bike and pedestrian trail, boardwalk structures, sidewalks, and additional improvements to enhance connectivity and safety. As depicted in **Figures 4**, the BSA is adjacent to the SF American River, but direct and/or indirect impacts to this water body are not anticipated. No wetlands or other jurisdictional water features were observed within the Project area during the biological survey conducted on August 13, 2024. As such, the Project will not require permits through regulatory agencies. Furthermore, as stated in the discussion under item **b)**, riparian habitat does not extend into the Project area, where Project activities are anticipated, and therefore, no direct or indirect impacts to this habitat community are

anticipated. No impact to federally protected wetlands as defined by Section 404 of the Clean Water Act would occur.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Less than Significant Impact with Mitigation. As described above under discussion questions **b)** and **c),** the BSA does not include the SF American River that flows parallel to the Project area. Furthermore, as stated in the discussion under question **b)**, riparian habitat does not extend into the Project area, where Project activities are anticipated, and therefore, no direct or indirect impacts to this habitat community are anticipated.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Less than Significant with Mitigation. See discussion under question **b)**. The Project will result in both temporary and permanent impacts to oak woodland habitat within the BSA. Temporary impacts of approximately 0.72 acres are anticipated, due equipment and personnel access. Permanent impacts, covering about 0.24 acres, will result from the installation of a boardwalk, the associated cut and fill construction limits, the placement of RSP near a culvert under Lotus Road to prevent erosion, and the construction of a fence adjacent to the boardwalk (**Table 3** and **Figure 5**).

Tree trimming and removal along the proposed trail will be required; however, County Road Projects are exempt from needing to obtain a tree removal permit under ORMP Policy 2.1.4. A tree survey and preparation of an Oak Resources Technical Report prepared by a certified arborist will be prepared summarizing all required tree removal and trimming, along with any proposed mitigation for the Project.

Mitigation Measures **BIO-1** through **BIO-3** will be implemented into the Project to offset impacts to oak woodland habitat and mitigated for tree trimming and removal. Therefore, impacts will be less than significant with mitigation incorporated.

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?

No Impact. There are no adopted Habitat Conservation Plans, Natural Community Conservation Plans, or other approved local, regional, or state habitat conservation plans within the Project area; therefore, the Project will have no impact or conflict with any habitat conservation plan.

V. CULTURAL RESOURCES

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

This section describes the cultural resources present within and immediately surrounding the Area of Potential Effect (APE). Also included is an analysis of the impacts that could occur to cultural resources due to implementation of the proposed Project and appropriate mitigation measures to reduce or avoid significant impacts. The analysis of cultural resources presented in this section is based on a review of the current Project description, the Historic Property Survey Report/Archaeological Survey Report (Bargas 2025) prepared for the Project, available literature, and an archaeological field survey conducted by Bargas Environmental Consulting (Bargas) archaeologists Katie Sage and Jose Ramirez on August 12 and September 23, 2024. Please note that due to the inclusion of sensitive and confidential information, the Historic Property Survey Report/Archaeological Survey Report is not available to the public.

REGULATORY SETTING

California Environmental Quality Act

CEQA provides statutory requirements for establishing the significance of historical resources in Public Resources Code (PRC) Section 21084.1. The CEQA Guidelines (Section 10564.5[c]) also require consideration of potential Project impacts to "unique" archaeological sites that do not qualify as historical resources. The statutory requirements for unique archaeological sites that do not qualify as historical resources are established in PRC Section 21083.2. These two PRC sections operate independently to ensure that significant potential effects on historical and archaeological resources are considered as part of a Project's environmental analysis. Historical resources, as defined in Section 15064.5 as defined in the CEQA regulations, include 1) cultural resources listed in or eligible for listing in the California Register of Historical Resources (California Register); 2) cultural resources included in a local register of historical resources; 3) any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in one of several historic themes important to California history and development.

Under CEQA, a Project may have a significant effect on the environment if the Project could result in a substantial adverse change in the significance of a historical resource, meaning the physical demolition, destruction, relocation, or alteration of the resource would be materially impaired. This would include any action that would demolish or adversely alter the physical characteristics of an historical resource that convey its historic significance and qualify it for inclusion in the California Register or in a local register or survey that meets the requirements of PRC Section 5020.1(l) and 5024.1(g). PRC Section 5024 also requires state agencies to identify and protect sate-owned resources that meet National Register of Historic Place (National Register) listing criteria. Sections 5024(f) and 5024.5 require state agencies to provide notice to and consult with the State Historic Preservation Officer (SHPO) before altering, transferring, relocation, or demolishing state-

owned historical resources that are listed on or are eligible for inclusion in the National Register or are registered or eligible for registration as California Historical Landmarks.

CEQA and the CEQA Guidelines also recommend provisions be made for the accidental discovery of archaeological sites, historical resources, or Native American human remains during construction (PRC Section 21083.2(i) CCR Section 15064.5[d and f]).

Assembly Bill 52 (PCR Section 21084.2)

Effective July 1, 2015, CEQA was revised to include early consultation with California Native American tribes and consideration of Tribal Cultural Resources (TCRs). These changes were enacted through Assembly Bill (AB) 52. By including TCRs early in the CEQA process, AB 52 intends to ensure that local and Tribal governments, public agencies, and Project proponents would have information available, early in the Project planning process, to identify and address potential adverse impacts to TCRs. The CEQA now establishes that a "Project with an effect that may cause a substantial adverse change in the significance of a TCR is a Project that may have a significant effect on the environment" (PRC § 21084.2).

To help determine whether a Project may have such an adverse effect, the PRC requires a lead agency to consult with any California Native American tribe that requests consultation and is traditionally and culturally affiliated with the geographic area of a proposed project. The consultation must take place prior to the determination of whether a negative declaration, mitigated negative declaration, or environmental impact report is required for a Project (PRC § 21080.3.1). Consultation must consist of the lead agency providing formal notification, in writing, to the tribes that have requested notification for proposed projects within their traditionally and culturally affiliated area. AB 52 stipulates that the Native American Heritage Commission (NAHC) shall assist the lead agency in identifying the California Native American tribes that are traditionally and culturally affiliated within the Project area. If the tribe wishes to engage in consultation on the Project, the tribe must respond to the lead agency within 30 days of receipt of the formal notification. Once the lead agency receives the tribe's request to consult, the lead agency must then begin the consultation process within 30 days. If a lead agency determines that a Project may cause a substantial adverse change to TCRs, the lead agency must consider measures to mitigate that impact.

Consultation concludes when either: 1) the parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a TCR, or 2) a party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached (PRC § 21080.3.2). Under existing law, environmental documents must not include information about the locations of an archaeological site or sacred lands or any other information that is exempt from public disclosure pursuant to the Public Records act. TCRs are also exempt from disclosure. The term "tribal cultural resource" refers to either of the following:

Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:

- Included or determined to be eligible for inclusion in the California Register of Historical Resources
- Included in a local register of historical resources as defined in subdivision (k) of California PRC Section 5020.1
- A resource determined by a California lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of the PRC Section 5024.1.

Discovery of Human Remains

Section 7050.5 of the California Health and Safety Code (CHSC) states the following regarding the discovery of human remains:

a) Every person who knowingly mutilates or disinters, wantonly disturbs, or willfully removes any human remains in or from any location other than a dedicated cemetery without authority of law is guilty of a misdemeanor, except as provided in Section 5097.99 of the [PRC]. The provisions of this subdivision shall not apply to any person carrying out an agreement developed pursuant to subdivision (l) of Section 5097.94 of the [PRC] or to any person authorized to implement Section 5097.98 of the [PRC].

b) In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the human remains are discovered has determined, in accordance with Chapter 10 (commencing with Section 27460) of Part 3 of Division 2 of Title 3 of the California Government Code [CGC], that the remains are not subject to the provisions of Section 27491 of the CGC 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 PRC. The coroner shall make his or her determination within two working days from the time the person responsible for the excavation, or his or her authorized representative, notifies the coroner of the discovery or recognition of the human remains.

c) 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 (NAHC) (CHSC Section 7050.5).

d) Of particular note to cultural resources is subsection (c), which requires the coroner to contact the NAHC within 24 hours if discovered human remains are determined to be Native American in origin. After notification, NAHC will follow the procedures outlined in PRC Section 5097.98, which include notification of most likely descendants (MLDs), if possible, and recommendations for treatment of the remains. The MLD will have 24 hours after notification by the NAHC to make their recommendation (PRC Section 5097.98). In addition, knowing or willful possession of Native American human remains or artifacts taken from a grave or cairn is a felony under State law (PRC Section 5097.99).

ENVIRONMENTAL SETTING

APE

The Area of Potential Effects (APE) was established as the area of direct and indirect impacts and consists of an approximately 5.2-acre area (**Figure 3**). This includes all grading/ground disturbance activities required for vegetation/tree removal, trail segment construction, staging areas, and temporary construction access. The surrounding area is partially developed, including several rural recreational developments, with denser recreational development to the southwest

of the APE. The maximum horizontal extent of the APE is approximately 175 feet wide and 0.52 miles long and maximum vertical depth is 15 feet below ground surface.

Records Search

To determine whether any previously recorded cultural resources were located within the APE, a record search (NCIC File No.: ELD-24-87) for the APE and a 1.0-mile search radius surrounding the APE was obtained from the North Central Information Center (NCIC), California State University, Sacramento, on August 12 and September 23, 2024. The search examined the Office of Historic Preservation (OHP) Historic Properties Directory, OHP Determinations of Eligibility, and the California Inventory of Historical Resources.

The records search results identified thirty-six previously recorded resources within the 1.0-mile radius of the APE. These include 35 historic resources consisting of one monument, one bridge, water conveyance systems, cemeteries, buildings, quarries, tailings, refuse scatters, foundations, walls, road and highway segments, farms and single-family properties; one precontact cultural resource with bedrock milling features; and one multicomponent precontact and historic habitation site with lithic scatters, bedrock milling features, and mid-1800s gold rush mining related structures.

No previously recorded precontact or historic-era archaeological cultural resources are within or overlap the Project area. However, two built environment resources consisting of merged segments of two historic-era road alignments, do overlap the APE: Coloma Road and SR-49 (sometimes also known as The Mother Lode Highway). Segments of Coloma Road that have been previously recorded, but which do not overlap the APE, include P-09-001700, P-34-003897, and P-34-003898. Segments of SR-49 that have been previously recorded but do not overlap the APE include P-29-001515, P-31-006824, and P-58-001775. Coloma Road is listed as a State Historic Landmark (SHL) in Sacramento and El Dorado County (SHL 745, 746, 747, and 748); however, it has not been listed on the California Register. Additionally, SR-49 does not appear to be listed on the California Register. The merged segment which overlaps the APE has been modified significantly since its initial construction. As a result, it is recommended that both roads be considered exempt from National Register evaluation under Property Types 5 and 6 pursuant to the January 2014 First Amended Section 106 PA, Attachment 4.

Property Type 5 pertains to buildings, structures, and objects moved within the past 50 years and states that “properties which have been moved are not usually eligible for the National Register, with the exceptions noted in ‘Criteria Consideration B: Moved Properties’ of National Register Bulletin 15. Therefore, properties that were moved within the past 50 years may be exempted from evaluation.”

Property Type 6 pertains to altered buildings, structures, objects, districts, and sites that appear to be more than 30 years old and states that “properties more than 30 years old that have been substantially altered may be exempted from evaluation. Such properties may include roads and highways with associated features other than bridges…”

Native American Consultation

As part of the identification efforts to determine whether the APE has Native American resources, Bargas contacted the NAHC on August 14, 2024, and requested a search of the NAHC Sacred Lands File (SLF). The NAHC responded on August 27, 2024, that no resources were identified during the SLF search. The NAHC provided a contact list of 18 individuals representing six Native American Tribes that may have knowledge of additional cultural resources within or near the Project.

On October 2, 2024, on behalf of the County and Caltrans, letters which constitute formal AB 52 and Section 106 of the NHPA consultation with Project details and maps were sent by email to the 18 individuals listed below to formally initiate Section 106 pursuant to the NHPA and formal notification of the proposed Project under California Public Resources Code 21080.3.1:

- Pamela Cubbler, Vice Chairperson – Colfax-Todds Valley Consolidated Tribe
- CTVCT Preservation, Cultural Preservation Department – Colfax-Todds Valley Consolidated Tribe
- Clyde Prout, Chairperson – Colfax-Todds Valley Consolidated Tribe
- Dustin Murray, Tribal Administrator – Shingle Springs Band of Miwok Indians
- Regina Cuellar, Chairperson – Shingle Springs Band of Miwok Indians
- Malissa Tayaba, Vice Chairperson; Director of TEK – Shingle Springs Band of Miwok Indians
- Krystal Moreno, TEK Program Manager – Shingle Springs Band of Miwok Indians
- James Sarmento, Executive Director of Cultural Resources – Shingle Springs Band of Miwok Indians
- Kara Perry, Director of Site Protection – Shingle Springs Band of Miwok Indians
- James Moon Jr., Tribal Member – TSI-AKIM Maidu of the Taylorsville Rancheria
- Richard Cunningham, Vice Chairman – TSI-AKIM Maidu of the Taylorsville Rancheria
- Donald Ryberg, Chairman – TSI-AKIM Maidu of the Taylorsville Rancheria
- Ben Cunningham, Tribal Council Member/Cultural Advisor – TSI-AKIM Maidu of the Taylorsville Rancheria
- Gene Whitehouse, Chairperson – United Auburn Indian Community of the Auburn Rancheria
- Matt Moore, Tribal Historic Preservation Officer – United Auburn Indian Community of the Auburn Rancheria
- Darrel Cruz, Cultural Resources Department – Washoe Tribe of Nevada and California
- Cultural Preservation Department – Wilton Rancheria
- Herbert Griffin, Executive Director of Cultural Preservation – Wilton Rancheria

Krystal Moreno, TEK Program Manager for the Shingle Springs Band of Miwok Indians did not receive a letter. On October 21, 2024, phone calls were made to all individuals who had been sent a Project letter and for whom the NAHC had provided a phone number. Kara Perry, Director of Site Protection for the Shingle Springs Band of Miwok Indians stated that the entire landscape within the Project APE is sensitive for tribal cultural resources and requested that archaeological monitors be present during construction activities, copies of the completed ASR and HPSR be provided to the Tribe, and signage be installed along the new trail. Ben Cunningham, Tribal Council Member/Cultural Advisor for the TSI-AKIM Maidu of the Taylorsville Rancheria stated that the APE is outside of the Mountain Maidu tribal area and suggested that tribes more local to the Project be contacted. Bernadette Niato, Tribal Administrator for the Washoe Tribe of Nevada and California stated that the proposed Project is outside of the ancestral lands of the Washoe Tribe of Nevada and California and that they defer to their neighboring Native Nations, who have cultural affiliation. The County is engaged in on-going consultation with the Shingle Springs Band of Miwok Indians pursuant to AB 52 and Section 106 of the NHPA.

Archaeological Survey

On September 12, 2024, qualified Bargas archaeologists Katie Sage and Jose Ramirez conducted an intensive-level pedestrian survey of the 5.2-acre Project APE. Survey methods and field practices met the Secretary of the Interior's Standards and Guidelines. The survey consisted

of linear roadside transects situated parallel to Lotus Road and Coloma Road. Where the APE extended over 15 meters from the paved roadsides, it was surveyed in 15 meter transects parallel to Lotus and Coloma Roads. These larger areas were to the west of the Lotus Road, north of Coloma Road, and at the southeast corner of the APE. Visible inspections of the ground surface were conducted to identify prehistoric- and historic-period cultural material.

Approximately 95 percent of the APE was subject to intensive pedestrian survey. One small area could not be accessed due to dense vegetation and the 30-degree steep, western facing slope on the west side of Lotus Road. The slope extends from the flat area of the road and its associated turnouts past the edge of the APE and towards the SF American River. Ground surface visibility varied throughout the APE, ranging from zero percent in paved areas, to approximately 100 percent within landscaped areas adjacent to the roadside, to approximately 50 percent within the landscaped areas adjacent to the parking lots. Ground visibility was 40 percent in the eastern edge of the APE, where there was less vegetation and 10 percent in the areas with the densest vegetation, along the western and northern edges of the APE. Approximately five percent of the APE was inaccessible; this area was the northwestern corner of the APE. A large blackberry bramble patch and a steep, 30-degree, west facing slope on the west side of Lotus Road prevented full access to this portion of the APE for survey.

The majority of the ground surface of the APE is paved, including Lotus Road and two parking lots. Development of the road includes three graded turnouts on the west side of the road, a modern wooden fence line on the western side, and several roadside accessories located throughout the APE. The roadside accessories include eleven culverts (one concrete, ten galvanized metal), two possible trailheads, one cobblestone retaining wall, one decorative boulder guardrail, one sewer drainage ditch, two underground water facilities, one underground electric facility, and one concrete barricade. The SF American River is approximately 34.8 meters northwest of the APE. A recreation area adjacent to the river is located between it and the western edge of the APE.

The terrain adjacent to the paved roads and parking lots, as well as in the turnouts, was relatively flat from residential/recreational development and grading. The southern portion of the APE had a 10-degree to 20-degree, west-facing slope that extended from the western side of Lotus Road to past the edge of the APE. The western portion of the APE has a steeper, west-facing slope, greater than 30 degrees, which extends from the flat area around Lotus Road and its turnouts, to the recreation area adjacent to the SF American River. The northern edge of the APE is 10 degrees, east/west slope above Coloma Road. The east edge of the APE includes a steep, west-facing slope of greater than 30 degrees that extends from outside the edge of the APE into Lotus Road. An intensive survey of 15 meter transects or less was conducted on each side of Lotus Road, encompassing 95 percent of the APE.

Most of the observed mineral soils in the APE were a light tan, very fine-grained loamy clay with subrounded pebbles, while the soils on the eastern edge of the APE were a light tan sandy loam with small subangular igneous clasts. Due to the development of recreation areas within and adjacent to the APE, these soils are most likely disturbed. The soil adjacent to Lotus Road, on either side, was imported gravel fill from the construction of Lotus Road.

Observed disturbances in the APE mainly consisted of modern typical roadside debris along the road and the parking lots within the APE, including beer bottles and bottle caps. In the southern portion of the APE, west of Lotus Road and north of the parking lot of Henningsen Lotus Park, a pile of soil and large cobbles were observed adjacent to a recreational trail. This is likely modern bulldozer disturbance from the construction of the recreation area adjacent to the SF American

River. Two nondiagnostic objects were observed in the APE, including a braided steel cable and a milled lumber post with nails embedded in it.

20240912-JJR-001-I

One historic isolate (20240912-JJR-001-I) was observed downslope of the intersection of Lotus Road and Coloma Road (SR-49). The isolate consists of three historic-era artifacts, approximately 49.4 feet in diameter, comprised of Dr. Pepper soda can with a pull-tab, one amber glass bottle, and one green glass bottle base. The isolate's location and the presence of modern debris suggest that resource likely represents an accumulation of historic debris as result of roadside dumping. By definition, isolated finds are not eligible for listing to the National Register or the California Register.

Findings and Conclusions

No previously recorded precontact or historic-era archaeological cultural resources were identified within the APE as a result of the records search, literature or historic map review. However, a previously unrecorded merged segment of Coloma Road (P-09-001700, P-34-003897 and P-34-003898) and SR-49 (P-29-001515, P-31-006824, and P-58-001775), a historic-era built environment cultural resource, is located within the APE. Both built environment resources have been previously recorded; however, the segment within the APE has not been previously documented. Given that both Coloma Road and SR-49 have been modified and their alignment has been altered over the years, the portion or segment which overlaps the APE has been modified significantly since its initial construction. As a result, it is recommended that the road segments which overlap the APE be considered exempt from National Register evaluation under Property Types 5 and 6 pursuant to the January 2014 First Amended Section 106 PA Attachment 4.

The NAHC returned a negative SLF finding, however an invitation to formal AB 52 and Section 106 of the NHPA consultation and coordination with local Native American Tribes resulted in the Shingle Springs Band of Miwok Indians identifying the APE and surrounding landscape as sensitive for tribal cultural resources. The Shingle Springs Band of Miwok Indians requested that monitoring occur during all Project-related ground disturbance and that interpretative signage be place along the new Class I trail. The County is engaged in on-going consultation with the Shingle Springs Band of Miwok Indians pursuant to AB 52 and Section 106 of the NHPA.

One isolated cultural resource (20240912-JJR-001-I) was identified within the APE as a result of the pedestrian survey. This resource consists of three historic-era artifacts and given the location and the presence of modern debris it likely represents an accumulation of historic debris as result of roadside dumping. Isolated finds are not eligible for listing to the National Register or the California Register.

While no historic properties, as defined by Section 106 of the NHPA, were identified within the APE, the Shingle Springs Band of Miwok Indians identified the APE as sensitive for tribal cultural resources and recommend that archaeological and tribal monitoring occur during Project-related ground disturbance within native sediments and that interpretive panels be erected along the proposed trail. Consultation with the Shingle Springs Band of Miwok Indians is on-going. If previously unidentified cultural materials are unearthed during construction, work will be halted in that area until a qualified archaeologist can assess the significance of the find. Additional archaeological survey will be needed if scope changes and/or Project limits are extended beyond the present survey limits.

DISCUSSION OF IMPACTS

a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?

Less than Significant with Mitigation. As described in the Environmental Setting above, while no historic properties, as defined by Section 106 of the NHPA, were identified within the APE, the Shingle Springs Band of Miwok Indians identified the APE as sensitive for tribal cultural resources and recommend that archaeological and tribal monitoring occur during Project-related ground disturbance within native sediments and that interpretive panels be erected along the proposed trail. The County will continue to coordinate with the Tribe regarding potential monitoring during construction. With the implementation of Mitigation Measure **CR-1** potential impacts from the Project would be less than significant with mitigation incorporated.

CR-1: If previously unidentified cultural materials are unearthed during construction, work shall be halted within 100 feet of the discovery. An archaeologist will assess the discovery to determine its significance. The archaeologist will develop a plan for documentation, treatment, and removal of resources, if necessary. Should the discovery involve Indigenous cultural resources, a Native American Representative from the federally recognized Shingle Springs Band of Miwok Indians shall be contacted to join the assessment of the discovery. Work in the area(s) of the discovery may only proceed after authorization from the County and the archaeologist and in coordination with Shingle Springs Band of Miwok Indians. Additional archaeological survey will be needed if Project limits are extended beyond the present survey limits.

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

Less than Significant with Mitigation. As described in the Environmental Setting, no previously recorded precontact or historic-era archaeological cultural resources were identified within the APE as a result of the records search, literature or historic map review. However, a previously unrecorded merged segment of Coloma Road (P-09-001700, P-34-003897 and P-34-003898) and SR-49 (P-29-001515, P-31-006824, and P-58-001775), a historic-era built environment cultural resource, is located within the APE. These road segments which overlap the APE are recommended by Bargas archeologists to be considered exempt from the National Register evaluation under Property Types 5 and 6 pursuant to the January 2014 First Amended Section 106 PA Attachment 4.

The NAHC returned a negative SLF finding, however an invitation to formal AB 52 and Section 106 of the NHPA consultation and coordination with local Native American Tribes resulted in the Shingle Springs Band of Miwok Indians identifying the APE and surrounding landscape as sensitive for tribal cultural resources. The Shingle Springs Band of Miwok Indians requested that monitoring occur during all Project-related ground disturbance and that interpretative signage be place along the new Class I trail. The County is engaged in on-going consultation with the Shingle Springs Band of Miwok Indians pursuant to AB 52 and Section 106 of the NHPA.

One isolated cultural resource (20240912-JJR-001-I) was identified within the APE as a result of the pedestrian survey. This resource consists of three historic-era artifacts and given the location and the presence of modern debris it likely represents an accumulation

of historic debris as result of roadside dumping. Isolated finds are not eligible for listing to the National Register or the California Register.

The potential for the APE to have buried cultural resources is considered low; however, with any project, there is always the possibility that unknown cultural resources may be encountered during construction. With the implementation of Mitigation Measure **CR-1** potential impacts from the Project would be less than significant with mitigation incorporated.

c) Disturb any human remains, including those interred outside of dedicated cemeteries?

Less than Significant with Mitigation. See response to questions **a)** and **b).** An invitation to formal AB 52 and Section 106 of the NHPA consultation and coordination with local Native American Tribes resulted in the Shingle Springs Band of Miwok Indians identifying the APE and surrounding landscape as sensitive for tribal cultural resources. The Shingle Springs Band of Miwok Indians requested that monitoring occur during all Project-related ground disturbance and that interpretative signage be place along the new Class I trail. The County is engaged in on-going consultation with the Shingle Springs Band of Miwok Indians pursuant to AB 52 and Section 106 of the NHPA.

If any unmarked burials are unearthed during construction, impacts would be considered less than significant with incorporation of Mitigation Measure **CR-2**.

CR-2: Sections 5097.98 through 5097.993 of the Public Resources Code (PRC) and Section 7050.5 of the California Health and Safety Code protect Native American burials, skeletal remains and grave goods, regardless of age and provide method and means for the appropriate handling of such remains. If human remains are encountered, work shall halt within 100 feet of the discovery and the county coroner should be notified immediately. At the same time, an archaeologist shall be contacted to assist in the evaluation of the situation. If the human remains are of Native American origin, the coroner must notify the Native American Heritage Commission within twenty-four hours of such identification.

Should the Native American Heritage Commission designate Shingle Springs Band of Miwok Indians or one of its representatives as the Most Likely Descendant (MLD), the MLD will assess the discovery and provide recommended treatments to the City, and if the discovery is located on private property, the property owner, within forty-eight hours of being notified. All treatment recommendations made by Shingle Springs Band of Miwok Indians and archaeologists will be documented in the confidential portion of the project record. All parties will consult on the recommended treatments. Work in the area(s) of the discovery may only proceed after authorization from the County and in coordination with Shingle Springs Band of Miwok Indians.

VI. ENERGY

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

ENVIRONMENTAL SETTING

Electricity on the west slope of the County, where the Project is located, is supplied by Pacific Gas and Electric Company (PG&E). PG&E owns and operates electricity infrastructure in the County and throughout Northern California that includes power lines, powerhouses, and substations. Powerhouses are located at Chili Bar on the SF American River and at Forebay Reservoir in Pollock Pines. A total of nine electric substations are located throughout the County. PG&E produces some of its own power and purchases some of its electricity through the Independent System Operator, which in turn obtains electricity from several companies that operate power plants throughout the Western Grid. The Western Grid is a multistate grid that provides electricity from as far away as Washington State and Canada (County 2003). Several General Plan policies were specifically designed to lower per-capita energy consumption in the County, including Measure LU-Q in the Land Use Element. This measure encourages infill development to decrease VMT and enhance energy efficiency by establishing guidelines that prioritize pedestrian-friendly and energy-efficient designs in community plans and design standards. It is also consistent with Goal TC-4 of the Transportation and Circulation Element, which is to provide a safe, continuous, and easily accessible non-motorized transportation system that facilitates the use of the viable alternative transportation modes (County 2003). The proposed Project aligns with these policies by introducing pedestrian-friendly infrastructure in a designated high-need area, as described in the Coloma Sustainable Community Mobility Plan (EDCTC 2019).

DISCUSSION OF IMPACTS

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

Less than Significant. The proposed Project involves constructing a Class I multi-use bike and pedestrian trail linking Henningsen Lotus Park to the existing sidewalk along SR-49. Since the Project does not include any permanent lighting or other features that require energy use, there would be no operational impact on energy resource consumption. Construction of the Project would result in a short-term increase in consumption of oil-based energy products associated with construction equipment; however, consumption of those oil-based energy products necessary for the Project would be used efficiently and in accordance with applicable local, state, and federal laws. Appropriate construction equipment would be used to minimize wasteful or inefficient actions, and construction energy consumption would not cause a significant reduction in available supplies. Therefore, the impact would be less than significant.

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

No Impact. The Project supports several General Plan transportation goals and policies aimed at expanding multi-modal transportation options, improving bicycle accessibility, and bridging gaps in the existing bicycle network including Goal TC-4, Policy TC-4a, Policy TC-4c, Goal TC-5, and Policy TC-3c. By enhancing energy-efficient transportation choices within the County, the Project would have a positive impact on overall energy efficiency. As a result, the Project would not conflict with or hinder any state or local renewable energy plans, and no impact would occur.

VII. GEOLOGY AND SOILS

Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42?	☐	☐	☐	☒
ii) Strong seismic ground shaking?	☐	☐	☐	☒
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☐	☒
iv) Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☒	☐	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☒	☐
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 waste water?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐

REGULATORY SETTING

For geologic and topographic features, the key federal law is the Historic Sites Act of 1935, which establishes a national registry of natural landmarks and protects "outstanding examples of major geological features." Topographic and geologic features are also protected under the CEQA.

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act was passed in 1972 to mitigate the hazard of surface faulting to structures for human occupancy. The main purpose of the law is to prevent the construction of buildings used for human occupancy on the surface trace of active faults. The law only addresses the hazard of surface fault rupture and is not directed toward other earthquake hazards. The Alquist-Priolo Act requires the State Geologist to establish regulatory zones known as "Earthquake Fault Zones" around the surface traces of active faults and to issue appropriate maps. The maps are distributed to all affected cities, counties, and state agencies for their use in planning efforts. Local agencies must regulate most development projects within the zones. Projects include all land divisions and most structures for human occupancy. There are no

Earthquake Fault Zones subject to the Alquist-Priolo Earthquake Fault Zoning Act in El Dorado County.

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act addresses non surface fault rupture earthquake hazards, including liquefaction and seismically induced landslides. Passed by the State Legislature in 1990, this law was codified in the PRC as Division 2, Chapter 7.8A, and became operative in April 1991. The Seismic Hazards Mapping Act resulted in a mapping program that is intended to reflect areas that have the potential for liquefaction, landslide, strong earth ground shaking, or other earthquake and geologic hazards. No Seismic Hazard Zones have been identified in El Dorado County.

This section also discusses geology, soils, and seismic concerns as they relate to public safety and Project design.

ENVIRONMENTAL SETTING

The Project area is situated in the western area of the County, within the Sierra Nevada foothills, characterized by rolling hills, ridges, and valleys, with elevation ranges between 720 to 870 feet above sea level. The Project area is comprised of the following soil types: Auberry coarse sandy loam, 15 to 30 percent slopes (52.9% of Project area), Auberry very rocky coarse sandy loam, 30 to 50 percent slopes (29.6% of Project area), and tailings (17.5% of Project area) (NRCS 2024).

DISCUSSION OF IMPACTS

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

- **i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42?**
- **ii) Strong seismic ground shaking?**
- **iii) Seismic-related ground failure, including liquefaction?**
- **iv) Landslides?**

No Impact. The likelihood of fault rupture in El Dorado County is determined using the California Earthquake Hazards Zone Application developed by the California Geological Survey (CGS) under the Alquist-Priolo Fault Zoning Act (CGS 2025). Earthquake hazard zones identify areas susceptible to three primary types of ground failure: (1) fault rupture, where the ground surface breaks along a fault line; (2) liquefaction, where soil temporarily loses strength and behaves like quicksand, compromising structural stability; and (3) earthquake-induced landslides. These zones generally average about one-quarter mile in width. No part of El Dorado County lies within an Alquist-Priolo Earthquake Fault Zone (CDC 1997), and no active faults have been identified within the county. Based on CGS fault data and mapping, the nearest fault is the late Quaternary-age Rescue fault, located about 5 miles west of the Project area. However, this fault is not considered “active” per CGS criteria (defined as surface displacement within the last 11,700 years). The nearest “active” fault is the Holocene-age West Tahoe fault system, located about 48 miles east of the Project area. Consequently, there is no risk that the project could directly or indirectly cause significant adverse effects due to the rupture of a known earthquake fault. Additionally, no areas in El Dorado County are included in a Seismic Hazard Zone, which refers to regulatory zones designated for areas prone to liquefaction or earthquake-

induced landslides, as defined by the Seismic Hazards Mapping Program (CGS 2025). Therefore, the County is not considered at risk for seismic or liquefaction hazards. While seismic activity can trigger landslides or avalanches, El Dorado County does not contain Seismic Hazard Zones. As a result, the county is not considered to be at risk for seismically induced landslides or avalanches. In addition, three multi-channel seismic refraction surveys were conducted on September 18 and 25, 2023 by Crawford & Associates Inc. In their subsequent Geotechnical Report, they provide design recommendations for the elevated boardwalk and paved trail sections to reduce the risk of seismic hazards (Crawford 2024). Overall, the Project will have no impact on adverse effects related to earthquake faults, seismic shaking and/or landslides.

b) Result in substantial soil erosion or the loss of topsoil?

Less than Significant with Mitigation. Less than Significant with Mitigation. The NRCS Web Soil Survey was used to identify soils within the BSA. Each soil type is described above in "Environmental Setting" (NRCS 2024). The Project will require ground disturbance and tree/vegetation removal along the alignment of the proposed trail, which may cause minor soil erosion and loss of topsoil during construction. Potential impacts to soils would be minimized through soil stabilization measures covered within the required General Construction MS4 Permit and implementation of the SWPPP as discussed in Section 2.4 and Section X. Hydrology and Water Quality erosion control practices outlined in a SWPPP, would reduce any potential impacts of the Project to a less than significant level. In addition, measure **BIO-9** in Section IV. Biological Resources will be incorporated into the Project which will reduce any impacts related to erosion to a less than significant level.

BIO-9: BMPs will be incorporated into Project design and Project management to minimize impacts on the environment including erosion and the release of pollutants (e.g., oils, fuels):

- Exposed soils and material stockpiles would be stabilized, through watering or other measures, to prevent the movement of dust at the Project site caused by wind and construction activities such as traffic and grading activities;
- All vehicle and equipment fueling/maintenance would be conducted outside of any surface waters;
- Equipment used in and around jurisdictional waters must be in good working order and free of dripping or leaking contaminants;
- Raw cement, concrete or concrete washings, asphalt, paint or other coating material, oil or other petroleum products, or any other substances that could be hazardous to aquatic life shall be prevented from contaminating the soil or entering jurisdictional waters;
- All erosion control measures, and storm water control measures would be properly maintained until the site has returned to a pre-construction state;
- All construction materials would be hauled off-site after completion of construction.

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?

Less Than Significant Impact. Refer to response to question **a)**. There are no nearby seismic faults that would create strong seismic ground shaking. Based on CGS fault data and mapping, the nearest "active" fault is the Holocene-age West Tahoe fault system, located about 48 miles east of the Project area. There is also no geologic unit or soil present within the Project area that is unstable or would become unstable as a result of the Project. The Project is also not located within a known area of landslide concern as the Project area is situated on gently sloping topography where the potential for slope failure is minimal to low. Because no known faults occur within the County, there is limited potential for the risk of surface rupture and strong seismic ground shaking that would cause landslides, lateral spreading, subsidence, liquefaction, or collapse; thus, the Project will have a less than significant impact.

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?

Less Than Significant Impact. Less Refer to response to question **a)** and **b)**. The Project will not be located on expansive soils. Generally, soils in western El Dorado County have a low to moderate shrink-swell potential. Data from the digital soil survey indicate that 68% of soils in western El Dorado County have a low or moderate shrink-swell rating, but only 0.01% have a high rating (County 2003). There are no nearby seismic faults that would create strong seismic ground shaking. The nearest "active" fault is the Holocene-age West Tahoe fault system, located about 48 miles east of the Project area. As there are no nearby active faults and no expansive soils present, there is limited potential for the Project to create substantial risks to life or property; thus, the Project would have a less than significant impact.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of waste water?

No Impact. The Project will not utilize septic tanks or an alternative wastewater disposal system on the site. Therefore, the Project would have no impact due to soils incapable of adequately supporting septic systems.

f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less than Significant with Mitigation. Paleontology is the study of fossilized remains of plants and animals, such as dinosaurs and early mammals, and does not include human cultural artifacts or human remains. Fossilized remains are typically found in sedimentary rock formations. El Dorado County's geology, however, is predominantly igneous (volcanic) in nature, with limited sedimentary deposits where such remains might typically be located, making the presence of paleontological resources in the county highly unlikely (County 2003).

The Project is not expected to cause a substantial adverse change in the significance of paleontological resources or directly or indirectly destroy a unique paleontological resource, geological feature, or unique geologic site. A review of the University of California Museum of Paleontology (UCMP) collections database revealed that 22 fossil sites containing plant, invertebrate, and mammalian vertebrate remains have been identified within El Dorado County. However, none of these sites are located near the South Fork American River or the Project area (UCB 2009).

Additionally, planned excavations for the proposed trail are shallow, with a maximum depth of approximately five feet. Given the localized nature and limited depth of these disturbances, the potential to encounter surface-level paleontological resources is considered low. However, with any Project requiring ground disturbance, there is always the possibility that unknown paleontological resources may be unearthed during construction. With the implementation of mitigation measures **PAL-1**, Project impacts regarding direct or indirect impacts to paleontological resources would be less than significant with mitigation.

PAL-1: If paleontological resources (i.e., fossils) are discovered during ground-disturbing activities, the implementing agency will immediately be notified and will ensure that their contractors shall stop work in that area and within 50 feet of the find until a qualified paleontologist can assess the significance of the find and develop appropriate treatment measures. Treatment measures will be made in consultation with the implementing agency.

VIII. GREENHOUSE GAS EMISSIONS

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

REGULATORY SETTING

Greenhouse gas (GHG) emissions are believed to contribute cumulatively to an increased greenhouse effect and exacerbate climate change. Which may result in sea level rise, changes in precipitation, habitat, temperature, wildfires, air pollution levels and changes in the frequency and intensity of weather-related-events. While criteria pollutants and TACs are pollutants of regional and local concern, GHGs are global pollutants (County 2025). GHGs consist of both natural and synthetic gases that trap heat in the atmosphere. These include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and fluorinated gases such as hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride (USEPA 2025). The state CEQA Guidelines (§15364.5) also identify these six gases as GHGs. Each GHG is discussed below:

- CO_2 – Carbon dioxide enters the atmosphere through burning fossil fuels (coal, natural gas, and oil), solid waste, trees and other biological materials, and also as a result of certain chemical reactions (e.g., cement production). Carbon dioxide is removed from the atmosphere (or "sequestered") when it is absorbed by plants as part of the biological carbon cycle.
- CH_4 – Methane is emitted during the production and transport of coal, natural gas, and oil. Methane emissions also result from livestock and other agricultural practices, land use and by the decay of organic waste in solid waste landfills.
- N_2O – Nitrous oxide is emitted during agricultural, land use and industrial activities; combustion of fossil fuels and solid waste, as well as during treatment of wastewater.
- Fluorinated gases – Hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6) are synthetic, powerful greenhouse gases that are emitted from a variety of household, commercial, and industrial applications and processes. Fluorinated gases are typically emitted in smaller quantities than other greenhouse gases, but are still considered potent greenhouse gases.

In September 2006, Governor Arnold Schwarzenegger signed AB 32, the California Climate Solutions Act of 2006 (Stats. 2006, ch. 488) (Health & Safety Code, § 38500 et seq.). AB 32 requires a statewide GHG emissions reduction to 1990 levels by the year 2020. AB 32 requires CARB to implement and enforce the statewide cap. When AB 32 was signed, California's annual GHG emissions were estimated at 600 million metric tons of CO_2 equivalent ($MMTCO_2e$) while 1990 levels were estimated at 427 $MMTCO_2e$. Setting 427 $MMTCO_2e$ as the emissions target for 2020, current (2006) GHG emissions levels must be reduced by 29%. CARB adopted the AB 32 Scoping Plan in December 2008 establishing various actions the state would implement to achieve this reduction. The Scoping Plan recommends a community-wide GHG reduction goal for local governments of 15%. The Scoping Plan was updated in June 2014 and using new information on the global warming potential of GHG's, raised the 2020 emissions target slightly to 431 $MMTCO_2e$.

Senate Bill (SB) 97, enacted in 2007, amended the CEQA statute to establish that GHG emissions and their effects are a prominent environmental issue that requires analysis and identification of feasible mitigation under CEQA. GHG was included in the CEQA Guidelines on March 18, 2010.

In June 2008, the California Governor's Office of Planning and Research's (OPR) issued a Technical Advisory providing interim guidance regarding a proposed project's GHG emissions and contribution to global climate change. In the absence of adopted local or statewide thresholds, OPR recommends the following approach for analyzing GHG emissions: Identify and quantify the project's GHG emissions, assess the significance of the impact on climate change; and if the impact is found to be significant, identify alternatives and/or Mitigation Measures that would reduce the impact to less-than-significant levels.

SB 375, signed in September 2008, aligns regional transportation planning efforts, regional GHG reduction targets, and land use and housing allocations. SB 375 requires Metropolitan Planning Organizations to adopt a Sustainable Communities Strategy or Alternative Planning Strategies, which will prescribe land use allocations in that Metropolitan Planning Organization's Regional Transportation Plan. On April 19, 2012, Sacramento Area Council of Governments (SACOG) adopted its 2035 Metropolitan Transportation Plan and associated Sustainable Communities Strategy to meet the requirements of SB 375 (El Dorado County 2025).

In El Dorado County, the primary source of GHG is fossil fuel combustion mainly in the transportation sector (estimated at 70% of countywide GHG emissions). A distant second are residential sources (approximately 20%), and commercial/industrial sources are third (approximately 7%). The remaining sources are waste/landfill (approximately 3%) and agricultural (<1%) (El Dorado County 2025).

CARB 2022 Climate Change Scoping Plan

As part of its supporting documentation for the 2022 Scoping Plan for Achieving Carbon Neutrality, CARB released an updated version of the GHG inventory for California (2024). **Figure 6** is a graph from that update that shows the total GHG emissions for California for 2022.

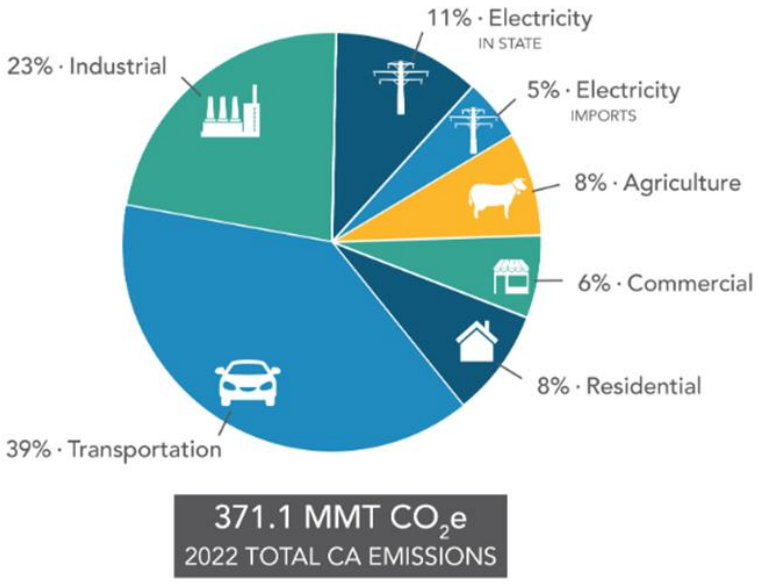


Figure 6. California Greenhouse Gas Inventory
(Taken from: https://ww2.arb.ca.gov/ghg-inventory-data)

DISCUSSION OF IMPACTS

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

GHG emissions from transportation projects can be categorized into emissions generated during construction and those produced during operations. For the proposed Project, construction-related GHG emissions would primarily result from the operation of on-site construction equipment.

There will be no permanent changes resulting from the Project that would significantly impact GHG emissions. Transportation is the leading source of GHG emissions in the County; however, the Project is not expected to alter existing traffic patterns or increase VMT. Instead, the Project aims to promote sustainable transportation options by creating pedestrian-friendly infrastructure designed to encourage walking and cycling over the use of motor vehicles. By enhancing pedestrian and bicycle access to existing facilities, the Project will help reduce overall dependence on automobiles, contributing to a decrease in GHG emissions. As a result, operational emissions are expected to be negligible compared to current conditions, and there will be no long-term GHG impacts from operations.

The EDAQMD, in cooperation with the SMAQMD and other air districts in the region, have adopted guidance recommending that the following emissions levels be used by local agencies as thresholds of significance when evaluating GHG impacts (SMAQMD 2014):

- 10,000 MT CO_2e (metric tons of carbon dioxide equivalent) annually for stationary source projects (such as new industrial operations)
- 1,100 MT CO_2e annually for land development projects (in consideration of both construction and operational emissions)

Construction activities for the Project will result in short-term emissions of CO_2, CH_4, and N_2O due to the operation of heavy equipment and vehicles. The methodology used to calculate GHG emissions generated during construction is the same as described above for air quality (see Section III. Air Quality). Based on RCEM modeling, these sources would emit a total of approximately 215.33 metric tons of carbon dioxide equivalent (MT CO_2e) over the duration of Project construction (**Appendix B**). These estimated emissions are far below the 1,100 MT CO_2e significance threshold for land development projects. Therefore, the Project will not generate GHG emissions that would significantly affect the environment, and the impact is considered less than significant.

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

No Impact. Implementation of the proposed Project would not conflict with or obstruct implementation of any applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases. By design, the proposed improvements are consistent with local mobility and active transportation planning documents, including the Coloma Sustainable Community Mobility Plan (2019), the Henningsen Lotus Park Conceptual Master Plan (2014) and the County's Active Transportation Plan (2020). Transportation systems that support walking and bicycling help reduce reliance on motor vehicles, especially for short trips, resulting in reduced emissions of greenhouse gases and other criteria pollutants. This not only improves air quality but also reduces the

potential for pollutants in stormwater runoff to reach groundwater and local waterways. The proposed Project is identified as a “Proposed Improvement Concept” in the Coloma Sustainable Community Mobility Plan, with the goal of increasing access to Henningsen Lotus Park (EDCTC 2019). In addition, the proposed Project is also consistent with Goal 2 of the Active Transportation Plan: to provide people of all ages and abilities with access to walking and biking facilities to improve health and enhance quality of life. It is also consistent with Objective 2.1 from the Active Transportation Plan: to increase walking and bicycling as transportation modes to improve air quality and public health (EDCTC 2020). The proposed Project would also be consistent with relevant policies outlined in the El Dorado County General Plan. The proposed Project aligns with Objective 6.7.4 of the *Public Health, Safety, and Noise Element* of the El Dorado County General Plan, which encourages project design that protects air quality and minimizes direct and indirect emissions of air contaminants (County 2004a). Since the Project does not involve development conducive to increased motor vehicle use, it will not impact the County’s ability to meet GHG reduction targets outlined by local, state and federal agencies. Construction and operation of the proposed Project would be implemented consistent with applicable regulatory standards and requirements, including consistency with all applicable EDCAQMD rules and thresholds. Therefore, no impact would result from development of the proposed Project.

IX. HAZARDS AND HAZARDOUS MATERIALS

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

REGULATORY SETTING

Hazardous materials and hazardous wastes are regulated by many state and federal laws. These include not only specific statutes governing hazardous waste, but also a variety of laws regulating air and water quality, human health and land use.

Hazardous waste in California is regulated primarily under the authority of the federal Resource Conservation and Recovery Act of 1976, and the California Health and Safety Code. Other California laws that affect hazardous waste are specific to handling, storage, transportation, disposal, treatment, reduction, cleanup and emergency planning.

Worker health and safety and public safety are key issues when dealing with hazardous materials that may affect human health and the environment. Proper disposal of hazardous material is vital if it is disturbed during Project construction.

The environmental setting and discussion below are derived from the *Initial Site Assessment Report* (Geocon 2024), which is attached to this Initial Study as **Appendix D**.

ENVIRONMENTAL SETTING

A record search from Environmental Data Resources (EDR) was conducted in September 2024 which searched federal, state, and local environmental databases for potential Recognized Environmental Conditions (RECs) within the Project area and properties/facilities within one mile

of the Project area. Eighteen properties within 1/4 mile of the Project area are listed on various non-release databases for hazardous material use and storage, hazardous waste disposal, and mining operations. No information was found during database searches that would indicate any of these properties/facilities would have caused an REC at the Project area. The closest REC is on inactive underground storage tank facility, the Lotus Store, located at 986 Lotus Road, approximately 1,250 feet southwest of the Project area. Based on the downgradient location of this facility, any releases are unlikely to have impacted the Project area.

Information available on the California State Water Resources Control Board GeoTracker website (http://geotracker.waterboards.ca.gov), California Department of Toxic Substances Control (DTSC) EnviroStor website (http://www.envirostor.dtsc.ca.gov/public/), and California Environmental Protection Agency Regulated Site Portal/California Environmental Reporting System (CERS) (https://siteportal.calepa.ca.gov/nsite/map/help) online data management systems were also reviewed for information regarding documented environmental assessment and cleanup at the Project area and/or properties/facilities within ¼ mile of the Project area. Only one closed cleanup site was identified across the databases, Riverside Mini-Mart at 7215 Highway 49, located approximately 2,300 feet northwest of the Project area. Based on the distance and case closure status, the release at this facility is unlikely to have impacted the Project area. In addition, a pedestrian survey was completed on October 2, 2024 by John E. Juhrend, Senior Engineer with Geocon.

No documented subsurface contamination or other potential environmental concerns were identified within the Project area other than the potential for ADL along the unpaved roadway shoulder due to historical gasoline-powered vehicle emissions, and mercury due to historical gold dredge mining operations and Naturally Occurring Asbestos (NOA) associated with upstream ultramafic rock formations within the flat lying areas within the western portion of the Project area. Shallow soil sampling and analytical testing should be performed for the unpaved roadway shoulder in areas of planned trail construction excavations to evaluate the potential presence of ADL at regulated concentrations. Shallow soil sampling and analytical testing for mercury and NOA would only be necessary for any construction excavations within the paved parking lot area (none currently planned) in the western portion of the Project area. In addition, any yellow thermoplastic and roadway paint striping that is removed during planned trail improvements (not anticipated) may require special handling and disposal requirements.

DISCUSSION OF IMPACTS

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

Less than Significant with Mitigation. The Project would involve the use of heavy equipment for grading, hauling, and materials handling. Use of this equipment may require the use of fuels and other common materials that have hazardous properties (e.g., fuels are flammable). These materials would be used and stored in accordance with all federal, state, and local applicable laws and regulations, and, if used properly, would not pose a hazard to the public or environment. All refueling of construction vehicles and equipment would occur within the designated staging area for the Project, and away from the SF American River and its associated riparian habitat. The use of hazardous materials would be temporary, only during construction, and the Project would not introduce a permanent use or source of hazardous materials. Mitigation Measures **HAZ-1, HAZ-2,** and **BIO-9** would reduce any potential hazardous material impacts to a less than significant level from temporary construction equipment and activities.

HAZ-1: The contractor shall prepare a Spill Prevention, Control, and Countermeasure Program (SPCCP) prior to the commencement of construction activities. The SPCCP shall include information on the nature of all hazardous materials that shall be used on-site. The SPCCP shall also include information regarding proper handling of hazardous materials, and clean-up procedures in the event of an accidental release. The phone number of the agency overseeing hazardous materials and toxic clean-up shall be provided in the SPCCP.

HAZ-2: Prior to construction, shallow soil sampling and analytical testing shall be performed for the unpaved roadway shoulder in areas of planned trail construction excavations to evaluate the presence of ADL at regulated concentrations.

BIO-9: BMPs will be incorporated into Project design and Project management to minimize impacts on the environment including erosion and the release of pollutants (e.g., oils, fuels):

- Exposed soils and material stockpiles would be stabilized, through watering or other measures, to prevent the movement of dust at the Project site caused by wind and construction activities such as traffic and grading activities;
- All vehicle and equipment fueling/maintenance would be conducted outside of any surface waters;
- Equipment used in and around jurisdictional waters must be in good working order and free of dripping or leaking contaminants;
- Raw cement, concrete or concrete washings, asphalt, paint or other coating material, oil or other petroleum products, or any other substances that could be hazardous to aquatic life shall be prevented from contaminating the soil or entering jurisdictional waters;
- All erosion control measures, and storm water control measures would be properly maintained until the site has returned to a pre-construction state;
- All construction materials would be hauled off-site after completion of construction.

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?

Less than Significant with Mitigation. With any project conducting ground disturbance, there is a potential for unknown contaminates or accident conditions involving the release of hazardous materials into the environment, as well as upset or accident relating to machinery. The El Dorado County Department of Environmental Management (EDCDEM), Hazardous Waste Division is the Certified Unified Program Agency (CUPA) for the incorporated and unincorporated areas within El Dorado County, including the Project area. EDCDEM oversees the safe management, regulation, and disposal of hazardous waste in the County. Their programs aim to protect public health, safety, and the environment by ensuring that hazardous materials and waste are properly handled by businesses and the public. If a hazardous waste spill occurs on a construction site, the EDCDEM coordinates with local fire departments, the California Environmental Protection Agency (CalEPA), and other agencies to ensure an appropriate response. This can include securing the site, controlling the spill, and cleaning up contaminated areas. The handling, use, and storage of hazardous materials during construction would be required to be compliant with EDCDEM standards, and with the implementation of **HAZ-1** impacts are considered less than significant with mitigation incorporated.

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

Less than Significant with Mitigation. The construction phase of the proposed Project has the potential to result in emissions of TACs/HAPs in the form of diesel particulate matter emissions from the operation of diesel-fueled construction equipment. However, there are no existing or proposed schools within one-quarter mile of the Project area. The nearest school to the Project area is the Coloma Outdoor Discovery School, located approximately 0.75 miles southeast of the Project area. Any emissions generated during construction of the trail are not anticipated to impact this school due to the distance as well as the barrier provided by SR-49 and the South Fork American River. In addition, EDCAQMD rules addressing Air Quality presented in Section III will be implemented as part of the proposed Project, which will reduce any potential emissions to a less than significant level. Implementation of BMPs and state-specific instructions for handling of construction equipment such as limiting idle times to a maximum of five minutes (CCR Tit. 13, §2485) along with frequent maintenance of the equipment will further limit the amount of emissions. Additionally, the construction activities would be temporary and intermittent which would further reduce any potential impact.

Hazardous materials used during construction would be typical of common construction activities and would be handled by the contractor in accordance with applicable federal, state, and local regulation for hazardous substances. Additionally, the amount of these materials needed for on-site equipment maintenance would not be enough to cause a significant hazard to the public, or any nearby schools, if released since the quantity of these hazardous materials on-site at any one given time would only amount to a refueling truck and the construction equipment. The nearest school is approximately 0.75 miles away from the disturbance area, so no impacts to the school are anticipated. However, measure **HAZ-1** will be implemented to require the contractor to prepare an accidental-spill prevention and response plan which would include BMPs to control for the accidental release of hazardous materials into the environment. Therefore, with the implementation

of **HAZ-1** the Project would have a less than significant with mitigation incorporated related to emitting or handling of hazardous waste within one-quarter mile of an existing school.

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

No Impact. Government Code Section 65962.5 requires the CalEPA to maintain a list of hazardous waste and substance sites, called the Cortese List, which is consulted during land-use planning and development processes. The Cortese List does not include any sites within El Dorado County (DTSC 2025a). A review of EDR, GeoTracker (SWRCB 2025) and EnviroStor (DTSC 2025b) databases indicated that there are no open or active hazardous waste cleanup sites, facilities, or other sites located within or adjacent to the Project area. Four closed/inactive sites were listed within 1,250-2,600 feet of the Project area, however, based on the distance and case closure status of the sites, no impacts related to hazardous materials are anticipated to occur. Therefore, the Project would not create a significant hazard to the public or environment and no impact would result from Project implementation.

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

No Impact. The Project would not result in a safety hazard for people residing or working in the Project area as the Project is not within the vicinity of an airport land use plan or within two miles of a public airport or public use airport. The nearest airport to the Project area is the Georgetown Airport, located approximately 7.8 miles northeast. Therefore, there would be no impact related to safety or noise of the public in the Project area.

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

No Impact. No road closures or temporary detour routes will be required along Lotus Road during construction of the Project. Access to SR-49, Lotus Road, and Henningsen Lotus Park will remain open throughout Project implementation. The Project would not block the roadway for extending periods of time or interfere with any emergency evacuation plan. The trail would be constructed along the barren shoulder/oak woodland area adjacent to Lotus Road, where it would not impair or alter any existing emergency response plan or emergency evacuation plan; therefore, no impact would occur.

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

Less Than Significant with Mitigation. According to the California Fire Hazard Severity Zone Viewer, the Project area is within a 'Very High Fire Hazard Severity Zone' as identified by CAL FIRE (CAL FIRE 2024). The Project area is bordered by dense oak woodland habitat along the SF American River to the northwest and thick, mature foothill woodland habitat to the southeast both of which can serve as potential wildfire fuel.

The El Dorado County Fire Protection District and CAL FIRE provide wildfire protection to the Coloma-Lotus communities. Structural firefighting resources are available at the Lotus

Fire Department, though it is periodically staffed. Additional fire and ambulance services are located approximately 10-20 minutes away in Cool, Garden Valley, Rescue, and Placerville. The closest CAL FIRE stations are located at Greenwood and Pilot Hill, approximately 15 minutes away by County Road, and air support is available from CAL FIRE's Grass Valley airport for larger fires (EDCFSC 2022).

The Project will require tree trimming and removal for several trees located within the proposed trail alignment directly adjacent to Lotus Road which will reduce the number of fuels potentially contributing to wildfire. In addition, the Project involves installation of a Class I bike and pedestrian trail, boardwalk structures, sidewalks, and additional improvements to enhance pedestrian connectivity and safety. It does not include any design elements that would expose people or structures to significant risk of loss, injury, or death involving wildland fire.

The following fire safety regulations are applicable to the proposed Project and would be implemented:

- CalFire's State Responsibility Area Fire Safe Regulations (CAL FIRE 2016):
    - §1276.02. Disposal of Flammable Vegetation and Fuels: Disposal, including chipping, burying, burning or removal to a landfill site approved by the local jurisdiction, of flammable vegetation and fuels caused by site development and construction, road and driveway construction, and fuel modification shall be completed prior to completion of road construction or final inspection of a building permit.

- El Dorado County Regional Fire Protection Standards (County 2024):
    - Vehicular Access During Construction: The development and each phase shall have at least two (2) points of vehicular access for Fire Department and other emergency vehicles as well as for routes of egress for evacuations. Fire Access Roads shall be constructed and approved prior to combustibles being brought onto the site. Temporary "NO PARKING FIRE LANE" signs shall be posted during construction as needed. All construction shall comply with Fire Apparatus Access during Construction Standard F004.
    - Provide a fire access roadway of not less than twenty (20) feet unobstructed width and thirteen feet six inches (13'6") vertical clearance.
    - Roadway shall be of an all-weather surface capable of supporting a minimum of 75,000 lbs. gross vehicle weight (minimum of 3 inches of AC over 8 inches of Compacted AB rock).
    - No ditches or obstacles shall be placed in or around the fire access roadway which would impair or disrupt this access in any way

Furthermore, the following Mitigation Measures **WF-1** through **WF-3** would be implemented to reduce impacts to a less than significant level.

WF-1: The contractor shall prepare a Traffic Management Plan that includes a Project schedule with specific information on when vehicle restrictions during construction including if/when limitation to fire equipment access would occur.

WF-2: Hot work (welding, cutting, or any activity that involves open flames or produces sparks) shall cease during Red Flag Warning periods declared by the National Weather Service.

WF-3: The contractor shall prepare an Emergency Plan that includes emergency operational procedures for wildland fires, EMS emergencies, and flood emergencies.

With the implementation of these regulations and Mitigation Measures **WF-1** through **W-3**, the Project is not anticipated to expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires. Therefore, the impact is considered less than significant.

X. HYDROLOGY AND WATER QUALITY

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

REGULATORY SETTING

Clean Water Act

The CWA was enacted as an amendment to the Federal Water Pollutant Control Act of 1972, which outlined the basic structure for regulating discharges of pollutants to Waters of the U.S. The CWA serves as the primary federal law protecting the quality of the nation's surface waters, including lakes, rivers, and coastal wetlands. The CWA empowers the USEPA to set national water quality standards and effluent limitations and includes programs addressing both point source and nonpoint source pollution. Point source pollution originates or enters surface waters at a single, discrete location, such as an outfall structure or an excavation or routine maintenance site. Nonpoint source pollution originates over a broader area and includes urban contaminants in storm water runoff and sediment loading from upstream areas. The CWA operates on the principle that all discharges into the nation's waters are unlawful unless they are specifically authorized by a permit; permit review is CWA's primary regulatory tool.

Section 401

The RWQCB has jurisdiction under Section 401 of CWA and regulates any activity which may result in a discharge to surface waters. Typically, the areas subject to jurisdiction of the RWQCB coincide with those of USACE (i.e., waters of the U.S. including any wetlands). The RWQCB also asserts authority over "Waters of the State" under waste discharge requirements pursuant to the Porter-Cologne Water Quality Control Act.

Section 404
The USACE regulates discharges of dredged or fill material into waters of the U.S. These waters include wetlands and non-wetland bodies of water that meet specific criteria, including a direct or indirect connection to interstate commerce. The USACE regulatory jurisdiction pursuant to Section 404 of the CWA is founded on a connection, or nexus, between the water body in question and interstate commerce. This connection may be direct (through a tributary system linking a stream channel with traditional navigable waters used in interstate or foreign commerce) or may be indirect (through a nexus identified in USACE regulations).

Section 402
Section 402 of the CWA establishes the NPDES permit for the discharge of any pollutant into waters of the United States. The USEPA has delegated administration of the NPDES program to the SWRCB and nine RWQCBs. The SWRCB has issued statewide general NPDES storm water permits for designated types of construction and industrial activities and has adopted a statewide permit applicable to all small municipalities, including Western El Dorado County.

El Dorado County manages stormwater discharges through Municipal Separate Storm Sewer System (MS4) permits, as mandated by the NPDES. The unincorporated areas of El Dorado County's west slope are regulated under a Phase II MS4 permit, effective since July 1, 2013. This permit requires the county to manage stormwater runoff from new development and redevelopment projects during and after construction. The proposed Project will take place in the community of Lotus, an unincorporated community in the western portion of the County, which falls within the west slope region of the County's NPDES program.

In 2004, the County developed a Storm Water Management Plan (SWMP) for the purpose of describing the procedures and practices the County uses to reduce the discharge of pollutants in runoff from storm drainage systems owned or operated by the County. The SWMP addresses storm water pollution control related to project planning, design, construction and maintenance activities throughout the unincorporated area of Western El Dorado County (that portion of El Dorado County within the jurisdiction of the Central Valley Regional Water Quality Control Board, excluding the Tahoe Basin). In addition, the SWMP addresses assignment of responsibilities within the County for implementing storm water management procedures and practices as well as training, public education and outreach, monitoring and research, program evaluation, and reporting activities (County 2004b).

ENVIRONMENTAL SETTING

Hydrology

Regionally, the Project area is located off of California SR-49 and adjacent to Lotus Road within the unincorporated community of Lotus, in El Dorado County, California. It is within the United States Geological Survey Coloma 7.5-minute topographic quadrangle. The Project area is directly off SR-49 and encompasses approximately a half mile section of Lotus Road. The Project is in the 850-square-mile SF Watershed which originates in the high Sierra in the El Dorado National Forest. The river flows west, receiving Silver Creek, a major tributary, and flows past the town of Coloma where it then turns southwest and continues into Folsom Reservoir (ARRA 2024). The SF American River is directly adjacent to the Project area, however, no direct and/or indirect impacts to this water body are not anticipated. No wetlands or other jurisdictional water features were observed within the Project area during the biological survey conducted on August 13, 2024.

Groundwater

Groundwater data for the unincorporated community of Lotus is limited. Most rural areas in the west slope of the County, where the Project is located, are served from groundwater wells by either small private water companies or are self-supplied. In addition to the major water purveyors, there are many small water systems owned and operated by various entities and communities that provide water supply with mostly groundwater from generally low-yield fractured rock aquifers (EDCWA 2024). The proposed Project is within the American River Groundwater Basin, which is part of the larger Sacramento River Hydrologic Region. This basin encompasses the American River and its tributaries, including the SF American River, which flows through Coloma. The American River Groundwater Basin is characterized by alluvial deposits and foothill areas, contributing to the region's water supply. The proposed Project is within the American River Groundwater Basin, which is part of the larger Sacramento River Hydrologic Region. This basin encompasses the American River and its tributaries, including the SF American River, which flows through Coloma. The American River Groundwater Basin is characterized by alluvial deposits and foothill areas, contributing to the region's water supply.

Flooding

The Federal Emergency Management Agency Flood Insurance Rate Map (FIRM) designates the Project area within two zones: Zone X, and Zone A. Zone X signifies a minimal flood hazard area with a 0.2% annual chance of flooding. Zone A designates areas that are within the 100-year base flood zone and have a 1% annual chance of flooding and a 26% chance of flooding over the life of a 30-year mortgage. (**Appendix E, FEMA FIRMette Map**).

Additional Impervious Surfaces

The Project will introduce approximately 0.21 acres of new impervious surfaces due to the construction of a paved trail and sidewalk, slightly reducing the natural soil area available for absorbing rainfall and runoff. This change could lead to increased sediment runoff during storm events, potentially affecting the quality of nearby water bodies, including the SF American River. If not properly managed, stormwater runoff containing sediment and contaminants could enter drainage systems, which discharge into rivers, agricultural ditches, sloughs, and channels, ultimately degrading water quality. However, these impacts will be mitigated through the trail's design, which primarily features an elevated boardwalk. Elevating the boardwalk above the natural ground will allow stormwater runoff to continue to naturally infiltrate the soil below, maintaining existing drainage patterns and reducing the risk of polluted runoff reaching the SF American River. Additionally, the boardwalk will be constructed with a permeable surface, further allowing water to absorb into the ground beneath. To further mitigate runoff, an existing drainpipe crossing beneath Lotus Road will be extended under a section of the proposed trail. This extension will accommodate the slight increase in stormwater runoff associated with the minor increase in impervious surface area. The drainpipe will allow runoff from the roadway to be conveyed underneath the trail and into the natural ground, offsetting any increases in stormwater runoff caused by the Project's new impervious surfaces.

DISCUSSION OF IMPACTS

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality? Less than Significant with Mitigation.

Less than Significant. The SF American River is directly adjacent to the construction area for the Project; however, no impacts to this jurisdictional water are anticipated. Construction work will be confined to the barren and oak woodland areas northeast of Lotus Road and will not encroach on any aquatic resources. The Project's compliance with County and state water quality and stormwater BMP's will ensure the Project avoids potential water quality impacts to the greatest extent practicable.

In addition, the Project will disturb greater than one acre of soil, therefore a Construction Storm Water General Permit is required, issued by the SWRQB to address storm water runoff. The permit will address clearing, grading, grubbing, and disturbances to the ground, such as stockpiling, or excavation. This permit will also require the Project's contractor to prepare and implement a SWPPP with the intent of keeping all products of erosion from moving off site into receiving waters. The SWPPP includes BMPs to prevent construction pollutants from entering storm water runoff. Therefore, the Project will not violate any water quality standards or waste discharge requirements or substantially degrade surface or groundwater quality, and the impact would be less than significant.

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

No Impact. The Project would not directly or indirectly result in the construction of uses that would utilize groundwater supplies. However, the Project is currently designed with an impervious surface for the trail and sidewalk (totaling approximately 0.21 acres of impervious surface), which may alter the rate of infiltration at the Project site. Proposed impervious surface impacts to groundwater resources would be minimal, as the proposed Project does not contain elements that would add to or draw from groundwater supplies. Additionally, the proposed Project would not be constructed immediately above a preexisting well, nor would areas known to contain wells be disturbed by construction of the proposed Project. Therefore, the Project would not significantly affect groundwater recharge or hinder sustainable groundwater management in the basin and would have no impact on groundwater supply or recharge.

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?

Less than Significant with Mitigation. Construction of the proposed Project will cause minor vegetation loss and general soil disturbance within the Project area. Additionally, about 0.21 acres of impervious surface will be added through the installation of a trail and sidewalk along the northeast shoulder of Lotus Road. The removal of vegetation and soil, combined with the introduction of impervious surfaces, may accelerate erosion and increase the risk of sediment entering the SF American River. To address this, an existing drainpipe will be extended beneath one of the trail sections to manage the increased stormwater runoff, preventing significant changes to the site's existing drainage patterns or causing substantial erosion or siltation on- or off-site. A small amount of RSP will also be placed at the drainpipe's outfall to stabilize the surface and prevent erosion from increased runoff. Furthermore, most of the trail will consist of an elevated boardwalk, made of permeable materials allowing water to drain naturally through and beneath it, thereby preserving the Project area's existing drainage patterns. In addition, the Project would be subject to Chapter 15.14 of the El Dorado County Municipal Code Grading, Erosion and

Sediment Control Ordinance, which mandates that construction projects implement measures to prevent soil erosion and sediment runoff, thereby protecting water quality and the environment. Compliance with Chapter 15.4 of the Municipal Code would reduce potential impacts associated with erosion and siltation. The Project would also require a Construction Storm Water General Permit, which will require the Project's contractor to prepare and implement a SWPPP with the intent of keeping all products of erosion from moving off site into receiving waters. The SWPPP also includes BMPs to prevent construction pollutants from entering storm water runoff. With adherence to the County's Municipal Code and permit requirements, the Project would not substantially alter the existing drainage pattern of the site that would result in substantial erosion or siltation on- or off-site. Finally, measure **BIO-9** will be incorporated into the Project which will reduce any impacts related to erosion to a less than significant level.

BIO-9: BMPs will be incorporated into Project design and Project management to minimize impacts on the environment including erosion and the release of pollutants (e.g., oils, fuels):

- Exposed soils and material stockpiles would be stabilized, through watering or other measures, to prevent the movement of dust at the Project site caused by wind and construction activities such as traffic and grading activities;
- All vehicle and equipment fueling/maintenance would be conducted outside of any surface waters;
- Equipment used in and around jurisdictional waters must be in good working order and free of dripping or leaking contaminants;
- Raw cement, concrete or concrete washings, asphalt, paint or other coating material, oil or other petroleum products, or any other substances that could be hazardous to aquatic life shall be prevented from contaminating the soil or entering jurisdictional waters;
- All erosion control measures, and storm water control measures would be properly maintained until the site has returned to a pre-construction state;
- All construction materials would be hauled off-site after completion of construction.

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: (ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite or (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?

Less than Significant with Mitigation. The proposed Project will introduce approximately 0.21 acres of impervious surface due to the pavement of the trail and sidewalk. This minor increase is not anticipated to significantly elevate the rate or volume of surface runoff that could lead to flooding on- or off-site. To effectively manage this runoff, an existing drainpipe that crosses underneath Lotus Road will be extended beneath a section of the trail to channel water from the roadway into the natural area west of the proposed trail. This drainpipe is specifically designed to accommodate the slight increase in stormwater generated by the Project, ensuring that the capacity of the existing and

proposed drainage systems remains sufficient. Additionally, any excess runoff from the new impervious surfaces will either pass beneath the elevated boardwalk or be directed through the extended drainpipe into adjacent natural areas, where it will be naturally absorbed by vegetation or percolate into the soil. The Project is not expected to substantially alter existing drainage patterns or impact the course of any stream or river, including the nearby SF American River. Compliance with Chapter 15.14 of the El Dorado County Municipal Code, along with adherence to state and regional water quality standards, will further reduce potential erosion and siltation impacts associated with the slight increase in runoff. Moreover, the Project will require coverage under a Construction Storm Water General Permit, mandating the preparation and implementation of a SWPPP by the contractor. The SWPPP will include BMPs to control erosion and prevent construction-related pollutants from entering stormwater runoff. Implementation of BIO-9 and BIO-11 will also ensure that construction-related pollutants remain outside of water bodies, including the SF American River. Therefore, with these measures in place, the Project's impact on surface runoff and water quality would be less than significant.

BIO-11: The contractor must not apply rodenticide or herbicide within the Project area during construction.

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: (iv) impede or redirect flood flows?

Less than Significant. The Project will add approximately 0.21 acres of impervious surface from the construction of the paved trail and sidewalk, resulting in a minor increase in stormwater runoff during storm events. However, this increase is not expected to substantially alter the existing drainage patterns of the area. Stormwater will continue to flow off Lotus Road and naturally drain southeast into the foothill woodland or northwest into the oak woodland habitat, where it will be absorbed by vegetation or percolate into the soil. The Project's design, including the elevated boardwalk and the extension of an existing drainpipe, will ensure that stormwater flows are neither impeded nor redirected by the new paved surfaces. These features will maintain the natural drainage flow and prevent any obstruction of floodwaters. Additionally, compliance with applicable stormwater management regulations and the use of BMPs will further minimize potential impacts. Since the Project is not anticipated to substantially alter the existing drainage pattern of the site of impede or redirect flows, impacts are considered less than significant.

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

Less than Significant with Mitigation. The Project area is within an inland region and is not susceptible to risks associated with tsunamis or seiches. The Federal Emergency Management Agency FIRM designates the Project area within two zones: Zone X, and Zone A. Zone X signifies a minimal flood hazard area with a 0.2% annual chance of flooding. Zone A designates areas that are within the 100-year base flood zone and have a 1% annual chance of flooding and a 26% chance of flooding over the life of a 30-year mortgage. The proposed Project would construct a Class I multi-use path along the shoulder of Lotus Road featuring paved trail sections, a sidewalk, and elevated boardwalks. The Project is in the proximity of the SF American River but is not anticipated to substantially degrade water quality within the river nor is it anticipated to substantially degrade water quality of groundwater beneath the site. The Project may have short-term construction-related impacts associated with potential sediment and/or pollutant run off

during excavation, grading and construction. To mitigate the potential for flood-related pollutant release, the Project will adhere to regulations set by the west slope region of the County's NPDES program. The implementation of measures **HAZ-1**, **BIO-9** and **BIO-11** will further ensure that construction-related pollutants are kept out of water bodies, including the SF American River. Additionally, the Project will be covered under a Construction Storm Water General Permit, which requires the contractor to prepare and implement a SWPPP. This plan will incorporate BMPs to control erosion and prevent construction-related pollutants from entering stormwater runoff. With these regulatory measures and mitigation strategies in place, potential impacts from the release of pollutants due to Project inundation will be less than significant.

HAZ-1: The contractor shall prepare a Spill Prevention, Control, and Countermeasure Program (SPCCP) prior to the commencement of construction activities. The SPCCP shall include information on the nature of all hazardous materials that shall be used on-site. The SPCCP shall also include information regarding proper handling of hazardous materials, and clean-up procedures in the event of an accidental release. The phone number of the agency overseeing hazardous materials and toxic clean-up shall be provided in the SPCCP.

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Less than Significant. The Project must adhere to the MS4 and NPDES permit for the west slope Region which includes water quality and watershed protection measures necessary for proper storm water management. The Project would not obstruct implementation of the MS4 or any groundwater management plan. Additionally, the Project design includes an elevated boardwalk structure and an extended drainpipe to maintain natural drainage patterns and support groundwater infiltration, aligning with sustainable water management practices. These features are consistent with the goals of the El Dorado County Water Resources Development and Management Plan (WRDMP), which emphasizes watershed protection, stormwater management, and groundwater sustainability (2024). The Project also aligns with the Central Valley Regional Water Quality Control Board's (CVRWQCB) Sacramento and San Joaquin River Basins Water Quality Control Plan (Basin Plan) by incorporating measures to prevent erosion and protect water bodies from contamination, ensuring compliance with regional, state, and federal water quality standards (2019). Furthermore, by avoiding disruption to natural drainage systems and implementing proper stormwater controls, the Project will not conflict with the County's SWMP, which outlines strategies for controlling runoff and protecting water quality. With the proposed design features and adherence to regulatory requirements, the Project will not conflict with or obstruct the implementation of any water quality control or stormwater management plans. Therefore, impacts would be less than significant.

XI. LAND USE AND PLANNING

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

REGULATORY SETTING

El Dorado County General Plan

On July 19, 2004, the El Dorado County Board of Supervisors adopted a new General Plan for the County, which serves as the basic planning document and is the vehicle through which the County addresses and balances the competing needs and interests of its residents.

The Land Use Element was last amended in September of 2018, which establishes a land use development pattern that makes the most efficient and feasible use of existing infrastructure and public services, provides guidelines for new and existing development that promotes a sense of community, defines those characteristics which make the county rural and provides strategies for preserving these characteristics, as well as providing opportunities for positive economic growth, greater capture of tourism, increased retail sales, and high technology industries (County 2022).

El Dorado County Zoning Ordinance

The County's Development Code (Title 130 of the County Code of Ordinances) provides the basis for current zoning designations and development regulations in unincorporated areas. While the General Plan establishes policies to guide the County's land use decision making, the Zoning Ordinance consists of enforceable regulations on the use of land in the county. The unincorporated area is broken into various residential, commercial, industrial, agricultural, and other "zones," and the Zoning Ordinance describes the standards and regulations applicable to each particular zone. Zoning maps illustrate how the zoning districts are distributed throughout the county.

ENVIRONMENTAL SETTING

The current land use designations within the Project area include Commercial (C), Rural Residential (RR) and Tourist Residential (TR). The current zoning designations within the Project area include Community Commercial (CC), Estate Residential Ten-acre (RE-10), Recreational Facilities High (RF-H), Recreational Facilities Low (RF-L), and Rural Lands (RL-40).

As described in Section I. Aesthetics, the land cover in the surrounding area primarily consists of oak woodland and riparian vegetation as well as the built environment of Lotus Road, the HLP parking lot, SR-49, and road shoulders which together are classified as roadway/urban. The oak woodland habitat borders both sides of the roadways. This habitat community is dominated by native oak species such as interior live oak, black oak, and ponderosa pine trees, with an understory of short herbaceous grasses and non-native plants such as Himalayan blackberry and scotch broom.

Riparian habitat occurs along the SF American River outside of the Project area but visible from it. The canopy is dominated by riparian tree species including Fremont's cottonwood, white alder and black locust. The understory is comprised of hydrophytic plants such as narrowleaf willow and mulefat.

DISCUSSION OF IMPACTS

a) Physically divide an established community?

No Impact. The Project would not divide an established community. The proposed Project would construct a Class I multi-use trail along Lotus Road. No barriers to movement through the local communities would be installed. The proposed Project would improve the off-street multiuse trail connectivity in the area. Therefore, no impact would occur.

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?

No Impact. The proposed Project is consistent with the County's General Plan and comprehensive planning documents. Therefore, the proposed Project would not conflict or cause a significant impact due to a conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project. No impact would occur.

XII. MINERAL RESOURCES

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

ENVIRONMENTAL SETTING

The Surface Mining and Reclamation Act (SMARA) of 1975 requires the state geologist (California Geological Survey [CGS]) to inventory and classify selected mineral resources in California. The following is a description of SMARA mineral resource classifications:

- MRZ-1: Areas where adequate geologic information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence.
- MRZ-2a: Areas underlain by mineral deposits where geologic data show that significant measured or indicated resources are present.
- MRZ-2b: Areas underlain by mineral deposits where geologic information indicates that significant inferred resources are present.
- MRZ-3a: Areas containing known mineral deposits that may qualify as mineral resources
- MRZ-3b: Areas containing inferred mineral deposits that may qualify as mineral resources.
- MRZ-4: Areas where geologic information does not rule out either the presence or absence of mineral resources.
- SZ Areas: Contain unique or rare occurrences of rocks, minerals, or fossils that are of outstanding scientific significance.
- IRA Areas: County- or state-identified areas where production and information indicates that significant minerals are present.

El Dorado County contains a diverse range of mineral resources. Metallic mineral deposits in particular, such as gold, are considered the most significant extractive mineral resource. It was gold, discovered in El Dorado County, that initiated the 1849 California “Gold Rush”. Other metallic minerals found in the county include silver, copper, nickel, chromite, zinc, tungsten, mercury, titanium, platinum, and iron. Nonmetallic mineral resources include building stone, limestone, slate, clay, marble, soapstone, sand, and gravel (County 2003).

DISCUSSION OF IMPACTS

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?

No Impact. The proposed Project would not result in the use or extraction of any mineral or energy resources and would not restrict access to known mineral resource areas. Furthermore, the proposed Project would not result in the loss of availability of a known mineral resource. Therefore, no impact would occur.

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?

No Impact. Refer to response to question **a)**, above. The proposed Project would have no impact on mineral resources. No impact would occur.

XIII. NOISE

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

Since operation of the proposed Project does not include any motor vehicle transportation uses, this section focuses on the regulatory setting as it relates to construction-related noise.

REGULATORY SETTING

Federal

For highway transportation projects with federal involvement, the Federal-Aid Highway Act of 1970 and the associated implementing regulations (23 CFR 772) govern the analysis and abatement of traffic noise impacts.

State

California Environmental Quality Act

CEQA requires a baseline versus build analysis to assess whether a proposed project will result in a noise impact. If a proposed project is determined to cause a substantial increase in noise levels, CEQA requires that feasible mitigation measures be incorporated into the project.

Local

El Dorado County General Plan

Policies and standards for noise exposures at noise sensitive land uses during construction are outlined in the 2004 County General Plan Public Health, Safety, and Noise Element (amended in December 2015). Noise-sensitive land uses are generally considered to include those uses that would result in noise exposure that could cause health-related risks to individuals. Places where quiet is essential are also considered noise-sensitive uses. Residential dwellings are of primary concern because of the potential for increased and prolonged exposure of individuals to both interior and exterior noise levels. Other land uses such as parks, historic sites, cemeteries, and recreation areas are also considered sensitive to increases in exterior noise levels. School classrooms, places of assembly, hotels, libraries, and other places where low interior noise levels are essential are also considered noise-sensitive land uses. County General Plan Tables 6-3, 6-4, and 6-5 outline noise standards for non-transportation noise sources which apply to construction noise in community regions/ adopted plan areas, rural centers, and rural regions. **Table 7 Maximum Allowable Noise Exposure for Construction Noise in Rural Centers and Rural Regions** below summarizes County General Plan Tables 6-3, 6-4, and 6-5. The Project is

in a rural center east of the SF American River. The construction noise standards for rural regions and centers are included in **Table 7**.

El Dorado County Ordinance Code

Chapter 9.16, Noise, of the El Dorado County Ordinance Code, defines and prohibits "loud and raucous noise." Pursuant to the code, the production of loud and raucous noise that unreasonably interferes with the peace and quiet of private property is prohibited.

ENVIRONMENTAL SETTING

Noise-sensitive land uses generally include those uses where exposure to noise would result in adverse effects, as well as uses where quiet is an essential element of their intended purpose. The County's General Plan does not define noise-sensitive land uses, but typical noise-sensitive land uses include receptors such as residences, parks, schools, and/or hospitals. There are existing sensitive receivers within 500 feet of the proposed construction activity, including an existing residence east of Lotus Road. Motor vehicles traveling on Lotus Road and SR-49 are the primary contributor to the existing noise environment in and around the vicinity of the Project area.

Table 7. Maximum Allowable Noise Exposure for Construction Noise in Rural Centers and Rural Regions

Land Use Designation	Time Period	Noise Level (db)			
		Rural Center		Rural Region	
		Leq	Lmax	Leq	Lmax
All Residential	7 a.m.–7 p.m. 7 p.m.–10 p.m. 10 p.m.–7 a.m.	**55** **50** **40**	**75** **65** **55**	**50** **45** **40**	**60** **55** **50**
Commercial, Recreation, and Public Facilities	7 a.m.–7 p.m. 7 p.m.–7 a.m.	65 60	75 70	65 60	70 75
Industrial	Any time	70	80	-	-
Open Space	7 a.m.–7 p.m. 7 p.m.–7 a.m.	55 50	75 65	- -	- -
Rural Land, Natural Resources, Open Space, and Agricultural Lands	7 a.m.–7 p.m. 7 p.m.–7 a.m.	- -	- -	65 60	70 75

Source: El Dorado County 2004, Table 6-4 and 6-5.

DISCUSSION OF IMPACTS

The Project components include a recreational facility that would not produce substantial noise during operation and would not contribute substantially to the ambient noise environment. Implementation of the proposed Project would not result in the construction or operation of any transportation uses or stationary noise sources; therefore, this section focuses on construction-related noise impacts.

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?

Less than Significant with Mitigation. Construction noise typically occurs intermittently and varies depending upon the nature or phase (e.g., demolition/land clearing, grading and excavation) of construction. Noise generated by construction equipment, including earth movers, material handlers, and portable generators, can reach high levels. Typical noise levels for individual pieces of construction equipment are summarized in **Table 8. Typical Construction Equipment Noise Levels.**

Table 8. Typical Construction Equipment Noise Levels

Type of Equipment	Typical Noise Level (dBA) 50 feet from Source
Dozer	85
Excavator	88
Concrete Mixer	85
Compactor	82
Loader	85
Backhoe	80
Grader	85
Crane	83
Generator	81
Truck	88

During construction, noise from equipment would cause short-term localized increases in ambient noise levels. The actual noise levels at any particular location would depend on a variety of factors, including the type of construction equipment or activity involved, distance to the source of the noise, obstacles to noise that exist between the receptor and the source, time of day, and similar factors. Construction of the proposed Project would result in a temporary, periodic increase in ambient noise levels that would exceed the County noise standards. However, this increase would be temporary, intermittent, and limited to daytime hours. Further, mitigation is available that would require limits to the hours of construction, appropriate locations for staging areas, noise-reduction intake and exhaust mufflers and engine shrouds for construction equipment, and minimization of construction equipment idling, which would reduce impacts to less than significant. Implementation of mitigation measures **NOI-1** through **NOI-4** will reduce impacts to less than significant by limiting the hours of noise-generating construction operations to daytime hours, locating construction equipment and staging areas away from sensitive land uses, requiring construction equipment to be equipped with noise-reduction intake and exhaust mufflers and engineer shrouds, and prohibiting the idling of motorized construction equipment when not in use.

NOI-1: Noise-generating construction operations shall be limited to between the hours of 7 a.m. and 7 p.m. within proximity to residential uses, commercial, recreation, and public facilities in accordance with the El Dorado County General Plan Noise Ordinance.

NOI-2: Construction equipment and equipment staging areas shall be located at the farthest distance possible from adjacent sensitive land uses.

NOI-3: Construction equipment shall be properly maintained and equipped with noise-reduction intake and exhaust mufflers and engine shrouds, in accordance with manufacturer recommendations. Equipment engine shrouds shall be closed during equipment operation.

NOI-4: When not in use, motorized construction equipment shall not be left idling.

b) Generation of excessive groundborne vibration or groundborne noise levels?

Less than Significant with Mitigation. No groundborne vibration or noise levels would be generated during use of the trail segment. Groundborne vibration and noise levels would be generated during construction of the Project. Construction would be temporary

and would occur between the hours of 7 a.m. and 7 p.m. on weekdays in accordance with El Dorado County Code of Ordinances, or between the hours of 7 a.m. and 7 p.m. on weekdays where adjacent to residential uses in accordance with El Dorado General Plan and as specified in **NOI-1**. Pile driving or other activities commonly associated with vibration may occur. Impacts would be less than significant with incorporation of mitigation measures **NOI-1** through **NOI-4** by limiting the hours of noise-generating construction operations to daytime hours, locating construction equipment and staging areas away from sensitive land uses, requiring construction equipment to be equipped with noise-reduction intake and exhaust mufflers and engineer shrouds, and prohibiting the idling of motorized construction equipment when not in use. Therefore, Project impacts would be less than significant with mitigation.

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

No Impact. The proposed Project is not located in the vicinity of a private airstrip, airport land use plan, or within two miles of a public airport or public use airport. Therefore, no impact would occur.

XIV. POPULATION AND HOUSING

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

ENVIRONMENTAL SETTING

The proposed Project is located within the unincorporated community of Lotus in El Dorado County, California. Following the discovery of gold by James Marshall in 1948, the "Gold Rush" led to extensive mining along the SF American River in what is now the neighboring town of Coloma, located approximately 1 mile east of Lotus. Founded shortly thereafter in 1849, at its peak population, Lotus (formerly Marshall and later Uniontown), was estimated to have between 8,000 to 10,000 residents. However, according to the 2020 Decennial Census, Lotus' population has significantly declined, estimated to be 763 persons (USCB 2020).

DISCUSSION OF IMPACTS

a) Induce substantial 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)?

No Impact. The proposed Project does not include the construction of new homes or businesses, nor does it include extension or construction of new roadways which could potentially induce growth. Therefore, the Project would have no potential to induce substantial population growth in the area, either directly or indirectly. No impact would occur.

b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

No Impact. The Project will not displace any number of existing housing or necessitate the construction of replacement housing. No impact would occur.

XV. PUBLIC SERVICES

Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
a) Fire protection?	☐	☐	☒	☐
b) Police protection?	☐	☐	☒	☐
c) Schools?	☐	☐	☐	☒
d) Parks?	☐	☐	☐	☒
e) Other public facilities?	☐	☐	☐	☒

ENVIRONMENTAL SETTING

Fire Protection

As previously described in Section IX. Hazards and Hazardous Materials, the El Dorado County Fire Protection District and CAL FIRE provide wildfire protection to the Coloma-Lotus communities. Structural firefighting resources are available at the Lotus Fire Department, though it is periodically staffed. Additional fire and ambulance services are located approximately 10-20 minutes away in Cool, Garden Valley, Rescue, and Placerville. The closest CAL FIRE stations are located at Greenwood and Pilot Hill, approximately 15 minutes away by County Road, and air support is available from CAL FIRE's Grass Valley airport for larger fires (EDCFSC 2022).

Police Protection

The El Dorado County Sheriff's Office (EDSO) provides service to the unincorporated areas of the County. EDSO operates four offices (El Dorado Hills, Georgetown, Placerville, and Pollock Pines) on the west slope, and one in the Lake Tahoe Basin (County 2003).

Schools

There are 15 school districts in the County. Fourteen of these school districts are located on the west slope, including one high school district, one K-12 school district, and 12 small- to moderate-sized K-8 school districts that contribute to the El Dorado Union High School District (County 2003).

DISCUSSION OF IMPACTS

a-b) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause

significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

- **Fire Protection, Police Protection?**

Less than Significant Impact. Development of the proposed Project would not result in increased population and residential structures; however, fire and police services could be required for users of the trail segment. As the proposed Project is located within portions of the County already serviced by police and fire services, it is anticipated that the County would be able to provide police and fire protection services for the proposed Project while continuing to maintain acceptable service ratios, response times, and performance objectives. For these reasons, a less than significant impact to police and fire protection is anticipated.

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

- **Schools, Parks?**

No Impact. The proposed Project does not include new development for habitation, nor does it include development of new businesses. Therefore, the proposed Project would not induce population growth and furthermore, does not include any components that would result in any schools or parks. Establishment of additional facilities to maintain acceptable service ratios for the public would not be necessary. Therefore, no impact would occur.

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

- **Other Public Facilities?**

No Impact. The Project was previously planned for and is included in numerous comprehensive planning documents including El Dorado County's Parks and Trails Master Plan, Henningsen Lotus Park Conceptual Master Plan, River Management Plan, and Coloma Sustainable Community Mobility Plan. Construction and operation of the Project would not result in a need for the creation of additional facilities. No Impact would occur.

XVI. RECREATION

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

REGULATORY SETTING

El Dorado County General Plan

The Parks and Recreation Element of the County General Plan guides the establishment and maintenance of parks, recreation facilities, and trails within unincorporated El Dorado County (County 2004a). The Parks and Recreation Element policy section addresses conservation and promotion of waterways for recreation and other purposes, and contains goals, objectives, and policies applicable to recreation resources within and near the Project area.

Goal 9.1 Parks and Recreation Facilities — addresses provision of adequate recreation opportunities and facilities for the residents and visitors of El Dorado County.

Objective 9.1.4 Rivers and Waterways — aims to "conserve and promote the waterways of El Dorado County, particularly the South Fork American River, as recreational and economic assets."

Goal 9.3 Recreation and Tourism — seeks "greater opportunities to capitalize on the recreational resources of the county through tourism and recreational based businesses and industries."

Objective 9.3.1 Recreational and Tourist Uses — is to "protect and maintain existing recreational and tourist based assets such as Apple Hill, State historic parks, the Lake Tahoe Basin, wineries, South Fork of the American River, and other water sport areas and resorts and encourage the development of additional recreation/tourism business and industries."

El Dorado County Parks and Trails Master Plan

As directed by the Parks and Recreation Element of the 2004 El Dorado County General Plan, County Parks and Trails Master Plan has been developed to provide long term vision and direction for the planning, implementation, and management of west slope park and trail resources provided by El Dorado County for the benefit of residents and visitors. The purpose of the El Dorado County Parks and Trails Master Plan is to provide direction and implementation strategies to guide the acquisition, development, and operation of County-owned parks and trails in the Plan Area. It addresses parks and trails currently owned and/or operated by the County; the provision of parks and trails to serve areas not otherwise served by local park and trail providers; and opportunities to collaborate and assist other regional providers to enhance the availability and recreational value of parks and trails for residents and visitors.

El Dorado County Henningsen Lotus Park Conceptual Master Plan

HLP is one of western El Dorado County's most visited recreation facilities. Park visitors enjoy the unique combination of access to the SF American River, play structures, sports fields, improved walking paths, picnic areas, a pavilion, rest rooms, and parking. In 2011 additional uses and facilities were suggested for this 48-acre park as part of the community input to the El Dorado County Parks and Trails Master Plan. The purpose of the HLP Concept Plan is to reexamine these suggestions, solicit additional community input, and identify conceptual improvements to HLP for future implementation as funding becomes available. This Plan is conceptual in nature and is intended to be followed by more detailed and in-depth design and/or technical studies as may be as needed to implement individual recommendations (County 2014).

El Dorado County River Management Plan

The El Dorado County River Management Plan identifies whitewater recreation along the 20.7-mile segment of the SF American River between the Chili Bar Dam, near State Highway 193, and the confluence of the Folsom Lake State Recreation Area (County 2022). Since 2002 the County has continued implementation of the River Management plan without changes. In 2012, the County decided to conduct a more comprehensive review and update of the River Management Plan to address changes to the content and context of the river management program over the past 33 years.

The River Management Plan update is based on what management actions the County has determined to be logical, supportive of safe river use, effective in minimizing conflicts between river users, and consistent with the County's environmental protection commitments. The River Management Plan addresses these current conditions by recognizing that some past River Management Plan tasks and monitoring elements are now obsolete to the County's stated river management.

ENVIRONMENTAL SETTING

There are four main recreational facilities in or adjacent to the Project area: the MGDSHP, HLP, Ponderosa RV Resort, and the SF American River.

Marshall Gold Discovery State Historic Park

The MGDSHP is publicly owned and managed and open to the public. The MGDSHP is the primary regional tourist attraction in the Project area. The MGDSHP is owned and operated by the California Department of Parks and Recreation, and it is subject to the Park Preservation Act. In 1848, James W. Marshall discovered gold on the SF American River, initiating the "Gold Rush" to California. Today, the park is a popular attraction for school-age children on academic fieldtrips and for families to learn about the history of mining gold in California (County 2022). The MGDSHP attracts visitors through other recreational opportunities, including hiking, fishing, using the beach area and picnic areas, visiting the museum, and boating. The MGDSHP includes interpretive exhibits and a visitor center. Hiking trails are accessible east of Lotus Road across from the Project area.

Henningsen Lotus Park

The HLP is publicly owned and managed and offers active and passive recreational opportunities, such as boat launching, beach area, soccer field, and a lighted softball field. The 51-acre park

has a pavilion that is a venue for events (County 2022). HLP is located directly adjacent and south of the Project area.

Ponderosa RV Resort: The Ponderosa RV Resort is a privately-owned facility that offers RV camping. Recreational opportunities at the Resort include horseshoes, hiking trails, swimming pool, fishing, and a beach area along the SF American River. The park is located approximately 1/4-mile west of the Project area.

SF American River

The SF American River is a recreational resource that is located immediately west of the Project area. The Project area provides access to this river for visitors to fish, raft, wade, and enjoy the scenic habitat value.

DISCUSSION OF IMPACTS

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

Less than Significant Impact. The proposed Project would construct a Class I multi-use trail along Lotus Road. The trail segment will increase the accessibility to recreational facilities nearby, namely Henningsen Lotus Park, to nearby residents. However, residents already have access to parks in the area under existing conditions; thus substantial physical deterioration of local parks and other recreational facilities is not expected to result from the proposed Project. Although the proposed Project involves the extension of a multiuse trail for recreational purposes, it does not include a residential or commercial component that would increase human presence in the area which could result in increased use of existing parks or recreational facilities as the primary purpose of the Project is to provide safer alternative transportation Therefore, impacts are considered less than significant.

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

Less than Significant Impact. The proposed Project is consistent with the existing land use of the Project area and surrounding areas. Furthermore, the proposed Project is consistent with the County's General Plan and has been included in the following comprehensive planning documents: El Dorado County's Parks and Trails Master Plan, Henningsen Lotus Park Conceptual Master Plan, River Management Plan, and Coloma Sustainable Community Mobility Plan. The proposed improvements will not impact the usability of the trail during construction, as there is currently no bicycle or pedestrian trail at this location. The proposed Project does not anticipate any permanent or adverse physical impacts; therefore, impacts are considered less than significant.

XVII. TRANSPORTATION

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

REGULATORY SETTING

Federal

No federal plans, policies, regulations, or laws related to transportation/traffic apply to the Project.

State

On September 27, 2013, Governor Brown signed Senate Bill 743 (SB 743) and started a process intended to fundamentally change transportation impact analysis as part of CEQA compliance. These changes include the elimination of auto delay, level of service, and other similar measures of vehicle capacity or traffic congestion as a basis for determining significant impacts. The Governor's Office of Planning and Research (OPR) has issued final guidance entitled, Proposed Updates to the CEQA Guidelines covering the specific changes to the CEQA guidelines. The final guidance recommends elimination of auto delay and level of service for CEQA purposes and the use of Vehicle Miles Traveled, or VMT, as the preferred CEQA transportation metric.

2019 CEQA Update: Section 15064.3(b)(2) - Determining the Significance of Transportation Impacts

Pursuant to CEQA section 15064.3(b)(2), transportation projects that reduce, or have no impact on, vehicle miles traveled should be presumed to cause a less than significant transportation impact. For roadway capacity projects, agencies have discretion to determine the appropriate measure of transportation impact consistent with CEQA and other applicable requirements. To the extent that such impacts have already been adequately addressed at a programmatic level, a lead agency may tier from that analysis as provided in Section 15152.

Local

El Dorado County and City of Placerville SB 743 Implementation Plan

The EDCTC contracted with the firm of Fehr & Peers to prepare the El Dorado County and City of Placerville SB 743 Implementation Plan. The purpose of this project was to help EDCTC partner agencies understand the specific questions that need to be addressed when making these determinations and to provide research, analysis, and other evidence to support their final SB 743 implementation decisions. The data collected by Fehr & Peers for the implementation plan indicates that the use of the west slope of the unincorporated County as a boundary supports the VMT reduction goals of SB 743 by promoting development in designated areas with facilities and

services and thus would result in shortened trip lengths, lower VMT, and reduced GHG emissions (EDTC 2020b).

ENVIRONMENTAL SETTING

The proposed Project involves the construction of a multi-use path along the shoulder of Lotus Road to improve access to HLP for pedestrians and cyclists. This path will provide a safe and accessible route for active transportation users, promoting increased connectivity between the communities of Lotus and Coloma. Additionally, the Project is not expected to increase VMT, as it does not introduce new vehicle trips or significantly alter traffic patterns. Therefore, the Project will have no impact on VMT and will support sustainable, non-motorized transportation options within the County.

DISCUSSION OF IMPACTS

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

No Impact. The proposed Project includes the installation of a Class I bike and pedestrian trail, boardwalk structures, sidewalks, and other related improvements along Lotus Road. The primary objective of the Project is to improve connectivity and enhance safety for pedestrians in the communities of Lotus and Coloma. The Project does not involve the construction of a new public roadway or substantial physical modifications to an existing roadway. Furthermore, it is not anticipated to generate additional traffic, as it does not include the development of residential, commercial, or other traffic-inducing facilities. The Project would not conflict with any relevant plans, ordinances, or policies related to the circulation system, nor would it interfere with a congestion management program, alter air traffic levels, or impact air traffic patterns. No permanent modifications or design changes are proposed for existing roads, and the Project does not include above-ground structures. Additionally, it would not conflict with any applicable plan, ordinance, or policy for evaluating the performance of the circulation system. The proposed improvements align with local mobility and active transportation planning efforts, including the Coloma Sustainable Community Mobility Plan (2019), the HLP Conceptual Master Plan (2014), and the County's Active Transportation Plan (2020a). In addition, the Project is consistent with the goals and policies outlined in the Transportation and Circulation Element of the County's General Plan (2004), including Goal TC-5: To provide safe, continuous, and accessible sidewalks and pedestrian facilities as a viable alternative transportation mode. As a result, the Project would have no impact.

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

No Impact. The proposed Project does not involve construction of a new public roadway or significant physical alteration of an existing roadway and would have no impact on an established VMT threshold. The Project consists solely of constructing a multi-use path along an existing roadway, which is considered exempt from VMT analysis. Therefore, the Project would not conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b), and no impact would occur.

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

No Impact. The proposed Project would be designed in accordance with the standards and

guidelines set forth in the El Dorado County Design and Improvements Standards Manual and the El Dorado County Parks and Trails Master Plan, particularly in Chapter 10.4, which provides specific guidelines for safe and effective trail design. There are no hazardous design features or potential incompatible uses associated with the proposed trail which would increase hazards in the area. Therefore, no impact would occur.

d) Result in inadequate emergency access?

Less than Significant with Mitigation. No road closures or temporary detour routes will be necessary along Lotus Road during the construction of the Project. Access to SR 49, Lotus Road, and Henningsen Lotus Park will be maintained throughout the entire Project implementation. The Project will not block the roadway for extended periods or interfere with any emergency evacuation plans, nor will it result in inadequate emergency access. The trail will be constructed along the existing barren shoulder/oak woodland area adjacent to Lotus Road, ensuring that it does not disrupt or alter any emergency response or evacuation plans.

To ensure the proposed Project will not result in inadequate emergency access during construction, Mitigation Measures **WF-1** shall be implemented. Once construction is completed, emergency access will remain unchanged from existing conditions. Therefore, the proposed Project would not result in inadequate emergency access and impacts are considered less than significant.

WF-1: The contractor shall prepare a Traffic Management Plan that includes a Project schedule with specific information on when vehicle restrictions during construction including if/when limitation to fire equipment access would occur.

XVIII. TRIBAL CULTURAL RESOURCES

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

This section describes the tribal cultural resources (TCRs) present within and immediately surrounding the APE. Also included is an analysis of the impacts that could occur to tribal cultural resources due to implementation of the proposed Project and appropriate mitigation measures to reduce or avoid significant impacts. Similarly described in Section V. Cultural Resources, the analysis of tribal cultural resources presented in this section is based on a review of the current Project description, the Historic Property Survey Report/Archaeological Survey Report (Bargas 2025) prepared for the Project, available literature, and an archaeological field survey conducted by Bargas Environmental Consulting (Bargas) archaeologists Katie Sage and Jose Ramirez on August 12 and September 23, 2024. Please note that due to the inclusion of sensitive and confidential information, the Historic Property Survey Report/Archaeological Survey Report is not available to the public.

REGULATORY SETTING

CEQA provides statutory requirements for establishing the significance of historical resources in Public Resources Code (PRC) Section 21084.1. The CEQA Guidelines (Section 10564.5[c]) also require consideration of potential Project impacts to "unique" archaeological sites that do not qualify as historical resources. The statutory requirements for unique archaeological sites that do not qualify as historical resources are established in PRC Section 21083.2. These two PRC sections operate independently to ensure that significant potential effects on historical and archaeological resources are considered as part of a Project's environmental analysis. Historical resources, as defined in Section 15064.5 as defined in the CEQA regulations, include 1) cultural resources listed in or eligible for listing in the California Register of Historical Resources (California Register); 2) cultural resources included in a local register of historical resources; 3) any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in one of several historic themes important to California history and development.

Under CEQA, a Project may have a significant effect on the environment if the Project could result in a substantial adverse change in the significance of a historical resource, meaning the physical demolition, destruction, relocation, or alteration of the resource would be materially impaired. This would include any action that would demolish or adversely alter the physical characteristics of an historical resource that convey its historic significance and qualify it for inclusion in the California Register or in a local register or survey that meets the requirements of PRC Section 5020.1(l) and 5024.1(g). PRC Section 5024 also requires state agencies to identify and protect sate-owned

resources that meet National Register of Historic Place (National Register) listing criteria. Sections 5024(f) and 5024.5 require state agencies to provide notice to and consult with the State Historic Preservation Officer (SHPO) before altering, transferring, relocation, or demolishing state-owned historical resources that are listed on or are eligible for inclusion in the National Register or are registered or eligible for registration as California Historical Landmarks.

CEQA and the CEQA Guidelines also recommend provisions be made for the accidental discovery of archaeological sites, historical resources, or Native American human remains during construction (PRC Section 21083.2(i) CCR Section 15064.5[d and f]).

ENVIRONMENTAL SETTING

APE

The Area of Potential Effects (APE) was established as the area of direct and indirect impacts and consists of an approximately 5.2-acre area (**Figure 3**). This includes all grading/ground disturbance activities required for vegetation/tree removal, trail segment construction, staging areas, and temporary construction access. The surrounding area is partially developed, including several rural recreational developments, with denser recreational development to the southwest of the APE. The maximum horizontal extent of the APE is approximately 175 feet wide and 0.52 miles long and maximum vertical depth is 15 feet below ground surface.

Records Search

To determine whether any previously recorded cultural resources were located within the APE, a record search (NCIC File No.: ELD-24-87) for the APE and a 1.0-mile search radius surrounding the APE was obtained from the North Central Information Center (NCIC), California State University, Sacramento, on August 12 and September 23, 2024. The search examined the Office of Historic Preservation (OHP) Historic Properties Directory, OHP Determinations of Eligibility, and the California Inventory of Historical Resources.

The records search results identified thirty-six previously recorded resources within the 1.0-mile radius of the APE. These include 35 historic resources consisting of one monument, one bridge, water conveyance systems, cemeteries, buildings, quarries, tailings, refuse scatters, foundations, walls, road and highway segments, farms and single-family properties; one precontact cultural resource with bedrock milling features; and one multicomponent precontact and historic habitation site with lithic scatters, bedrock milling features, and mid-1800s gold rush mining related structures.

No previously recorded precontact or historic-era archaeological cultural resources are within or overlap the Project area. However, two built environment resources consisting of merged segments of two historic-era road alignments, do overlap the APE: Coloma Road and SR-49 (sometimes also known as The Mother Lode Highway). Segments of Coloma Road that have been previously recorded, but which do not overlap the APE, include P-09-001700, P-34-003897, and P-34-003898. Segments of SR-49 that have been previously recorded but do not overlap the APE include P-29-001515, P-31-006824, and P-58-001775. Coloma Road is listed as a State Historic Landmark (SHL) in Sacramento and El Dorado County (SHL 745, 746, 747, and 748); however, it has not been listed on the California Register. Additionally, SR-49 does not appear to be listed on the California Register. The merged segment which overlaps the APE has been modified significantly since its initial construction. As a result, it is recommended that both roads be considered exempt from National Register evaluation under Property Types 5 and 6 pursuant to the January 2014 First Amended Section 106 PA, Attachment 4.

Property Type 5 pertains to buildings, structures, and objects moved within the past 50 years and states that “properties which have been moved are not usually eligible for the National Register, with the exceptions noted in ‘Criteria Consideration B: Moved Properties’ of National Register Bulletin 15. Therefore, properties that were moved within the past 50 years may be exempted from evaluation.”

Property Type 6 pertains to altered buildings, structures, objects, districts, and sites that appear to be more than 30 years old and states that “properties more than 30 years old that have been substantially altered may be exempted from evaluation. Such properties may include roads and highways with associated features other than bridges…”

Native American Consultation

As part of the identification efforts to determine whether the APE has Native American resources, Bargas contacted the Native American Heritage Commission (NAHC) on August 14, 2024, and requested a search of the NAHC Sacred Lands File (SLF). The NAHC responded on August 27, 2024, that no resources were identified during the SLF search. The NAHC provided a contact list of 18 individuals representing six Native American Tribes that may have knowledge of additional cultural resources within or near the Project.

On October 2, 2024, on behalf of the County and Caltrans, letters which constitute formal Assembly Bill (AB) 52 and Section 106 of the NHPA consultation with Project details and maps were sent by email to the 18 individuals listed below to formally initiate Section 106 pursuant to the NHPA and formal notification of the proposed Project under California Public Resources Code 21080.3.1:

- Pamela Cubbler, Vice Chairperson – Colfax-Todds Valley Consolidated Tribe
- CTVCT Preservation, Cultural Preservation Department – Colfax-Todds Valley Consolidated Tribe
- Clyde Prout, Chairperson – Colfax-Todds Valley Consolidated Tribe
- Dustin Murray, Tribal Administrator – Shingle Springs Band of Miwok Indians
- Regina Cuellar, Chairperson – Shingle Springs Band of Miwok Indians
- Malissa Tayaba, Vice Chairperson; Director of TEK – Shingle Springs Band of Miwok Indians
- Krystal Moreno, TEK Program Manager – Shingle Springs Band of Miwok Indians
- James Sarmento, Executive Director of Cultural Resources – Shingle Springs Band of Miwok Indians
- Kara Perry, Director of Site Protection – Shingle Springs Band of Miwok Indians
- James Moon Jr., Tribal Member – TSI-AKIM Maidu of the Taylorsville Rancheria
- Richard Cunningham, Vice Chairman – TSI-AKIM Maidu of the Taylorsville Rancheria
- Donald Ryberg, Chairman – TSI-AKIM Maidu of the Taylorsville Rancheria
- Ben Cunningham, Tribal Council Member/Cultural Advisor – TSI-AKIM Maidu of the Taylorsville Rancheria
- Gene Whitehouse, Chairperson – United Auburn Indian Community of the Auburn Rancheria
- Matt Moore, Tribal Historic Preservation Officer – United Auburn Indian Community of the Auburn Rancheria
- Darrel Cruz, Cultural Resources Department – Washoe Tribe of Nevada and California
- Cultural Preservation Department – Wilton Rancheria
- Herbert Griffin, Executive Director of Cultural Preservation – Wilton Rancheria

Krystal Moreno, TEK Program Manager for the Shingle Springs Band of Miwok Indians did not receive a letter. On October 21, 2024, phone calls were made to all individuals who had been sent a Project letter and for whom the NAHC had provided a phone number. Kara Perry, Director of Site Protection for the Shingle Springs Band of Miwok Indians stated that the entire landscape within the Project APE is sensitive for tribal cultural resources and requests that archaeological monitors be present during construction activities, copies of the completed ASR and HPSR be provided to the Tribe, and signage be installed along the new trail. Ben Cunningham, Tribal Council Member/Cultural Advisor for the TSI-AKIM Maidu of the Taylorsville Rancheria stated that the APE is outside of the Mountain Maidu tribal area and suggested that tribes more local to the Project be contacted. Bernadette Niato, Tribal Administrator for the Washoe Tribe of Nevada and California stated that the proposed Project is outside of the ancestral lands of the Washoe Tribe of Nevada and California and that they defer to their neighboring Native Nations, who have cultural affiliation. The County is engaged in on-going consultation with the Shingle Springs Band of Miwok Indians pursuant to AB 52 and Section 106 of the NHPA.

Archaeological Survey

On September 12, 2024, qualified Bargas archaeologists Katie Sage and Jose Ramirez conducted an intensive-level pedestrian survey of the 5.2-acre Project APE. Survey methods and field practices met the Secretary of the Interior's Standards and Guidelines. The survey consisted of linear roadside transects situated parallel to Lotus Road and Coloma Road. Where the APE extended over 15 meters from the paved roadsides, it was surveyed in 15 meter transects parallel to Lotus and Coloma Roads. These larger areas were to the west of the Lotus Road, north of Coloma Road, and at the southeast corner of the APE. Visible inspections of the ground surface were conducted to identify prehistoric- and historic-period cultural material.

Approximately 95 percent of the APE was subject to intensive pedestrian survey. One small area could not be accessed due to dense vegetation and the 30-degree steep, western facing slope on the west side of Lotus Road. The slope extends from the flat area of the road and its associated turnouts past the edge of the APE and towards the SF American River. Ground surface visibility varied throughout the APE, ranging from zero percent in paved areas, to approximately 100 percent within landscaped areas adjacent to the roadside, to approximately 50 percent within the landscaped areas adjacent to the parking lots. Ground visibility was 40 percent in the eastern edge of the APE, where there was less vegetation and 10 percent in the areas with the densest vegetation, along the western and northern edges of the APE. Approximately five percent of the APE was inaccessible; this area was the northwestern corner of the APE. A large blackberry bramble patch and a steep, 30-degree, west facing slope on the west side of Lotus Road prevented full access to this portion of the APE for survey.

The majority of the ground surface of the APE is paved, including Lotus Road and two parking lots. Development of the road includes three graded turnouts on the west side of the road, a modern wooden fence line on the western side, and several roadside accessories located throughout the APE. The roadside accessories include eleven culverts (one concrete, ten galvanized metal), two possible trailheads, one cobblestone retaining wall, one decorative boulder guardrail, one sewer drainage ditch, two underground water facilities, one underground electric facility, and one concrete barricade. The SF American River is approximately 34.8 meters northwest of the APE. A recreation area adjacent to the river is located between it and the western edge of the APE.

The terrain adjacent to the paved roads and parking lots, as well as in the turnouts, was relatively flat from residential/recreational development and grading. The southern portion of the APE had

a 10-degree to 20-degree, west-facing slope that extended from the western side of Lotus Road to past the edge of the APE. The western portion of the APE has a steeper, west-facing slope, greater than 30 degrees, which extends from the flat area around Lotus Road and its turnouts, to the recreation area adjacent to the SF American River. The northern edge of the APE is 10 degrees, east/west slope above Coloma Road. The east edge of the APE includes a steep, west-facing slope of greater than 30 degrees that extends from outside the edge of the APE into Lotus Road. An intensive survey of 15 meter transects or less was conducted on each side of Lotus Road, encompassing 95 percent of the APE.

Most of the observed mineral soils in the APE were a light tan, very fine-grained loamy clay with subrounded pebbles, while the soils on the eastern edge of the APE were a light tan sandy loam with small subangular igneous clasts. Due to the development of recreation areas within and adjacent to the APE, these soils are most likely disturbed. The soil adjacent to Lotus Road, on either side, was imported gravel fill from the construction of Lotus Road.

Observed disturbances in the APE mainly consisted of modern typical roadside debris along the road and the parking lots within the APE, including beer bottles and bottle caps. In the southern portion of the APE, west of Lotus Road and north of the parking lot of Henningsen Lotus Park, a pile of soil and large cobbles were observed adjacent to a recreational trail. This is likely modern bulldozer disturbance from the construction of the recreation area adjacent to the SF American River. Two nondiagnostic objects were observed in the APE, including a braided steel cable and a milled lumber post with nails embedded in it.

20240912-JJR-001-I

One historic isolate (20240912-JJR-001-I) was observed downslope of the intersection of Lotus Road and Coloma Road (SR-49). The isolate consists of three historic-era artifacts, approximately 49.4 feet in diameter, comprised of Dr. Pepper soda can with a pull-tab, one amber glass bottle, and one green glass bottle base. The isolate's location and the presence of modern debris suggest that resource likely represents an accumulation of historic debris as result of roadside dumping. By definition, isolated finds are not eligible for listing to the National Register or the California Register.

Findings and Conclusions

No previously recorded precontact or historic-era archaeological cultural resources were identified within the APE as a result of the records search, literature or historic map review. However, a previously unrecorded merged segment of Coloma Road (P-09-001700, P-34-003897 and P-34-003898) and SR-49 (P-29-001515, P-31-006824, and P-58-001775), a historic-era built environment cultural resource, is located within the APE. Both built environment resources have been previously recorded; however, the segment within the APE has not been previously documented. Given that both Coloma Road and SR-49 have been modified and their alignment has been altered over the years, the portion or segment which overlaps the APE has been modified significantly since its initial construction. As a result, it is recommended that the road segments which overlap the APE be considered exempt from National Register evaluation under Property Types 5 and 6 pursuant to the January 2014 First Amended Section 106 PA Attachment 4.

The NAHC returned a negative SLF finding, however an invitation to formal AB 52 and Section 106 of the NHPA consultation and coordination with local Native American Tribes resulted in the Shingle Springs Band of Miwok Indians identifying the APE and surrounding landscape as sensitive for tribal cultural resources. The Shingle Springs Band of Miwok Indians requested that

monitoring occur during all Project-related ground disturbance and that interpretative signage be place along the new Class I trail. The County is engaged in on-going consultation with the Shingle Springs Band of Miwok Indians pursuant to AB 52 and Section 106 of the NHPA.

One isolated cultural resource (20240912-JJR-001-I) was identified within the APE as a result of the pedestrian survey. This resource consists of three historic-era artifacts and given the location and the presence of modern debris it likely represents an accumulation of historic debris as result of roadside dumping. Isolated finds are not eligible for listing to the National Register or the California Register.

While no historic properties, as defined by Section 106 of the NHPA, were identified within the APE, the Shingle Springs Band of Miwok Indians identified the APE as sensitive for tribal cultural resources and recommend that archaeological and tribal monitoring occur during Project-related ground disturbance within native sediments and that interpretive panels be erected along the proposed trail. Consultation with the Shingle Springs Band of Miwok Indians is on-going.
If previously unidentified cultural materials are unearthed during construction, it is Caltrans' policy that work be halted in that area until a qualified archaeologist can assess the significance of the find. Additional archaeological survey will be needed if scope changes and/or Project limits are extended beyond the present survey limits.

DISCUSSION OF IMPACTS

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

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

Less than Significant with Mitigation. No TCR was identified during identification and consultation efforts conducted for the Project. As such, the Project is not anticipated to cause a substantial adverse change in the significance of a TCR listed or eligible for listing in the California Register of Historical Resources, or in a local register of historic resources as defined in Public Resources Code section 5020.1(k). No impacts are anticipated for the Project related to TCRs; however, with any Project requiring ground disturbance, there is always the possibility that unmarked TCRs may be unearthed during construction. Furthermore, the Shingle Springs Band of Miwok Indians identified the APE as sensitive for tribal cultural resources and recommend that archaeological and tribal monitoring occur during Project-related ground disturbance within native sediments and that interpretive panels be erected along the proposed trail. The County will continue to coordinate with the Tribe regarding potential monitoring during construction. This impact would be considered potentially significant. Implementation of Mitigation Measures **CR-1** and **CR-2** (listed in section V. Cultural Resources) would reduce this impact to a less than significant level.

CR-1: If previously unidentified cultural materials are unearthed during construction, work shall be halted within 100 feet of the discovery. An archaeologist will assess the discovery to determine its significance. The archaeologist will develop a plan for documentation, treatment, and removal of resources, if necessary. Should the discovery involve Indigenous cultural resources, a Native American Representative from the federally recognized Shingle Springs

Band of Miwok Indians shall be contacted to join the assessment of the discovery. Work in the area(s) of the discovery may only proceed after authorization from the County and the archaeologist and in coordination with Shingle Springs Band of Miwok Indians. Additional archaeological survey will be needed if Project limits are extended beyond the present survey limits.

CR-2: Sections 5097.98 through 5097.993 of the Public Resources Code (PRC) and Section 7050.5 of the California Health and Safety Code protect Native American burials, skeletal remains and grave goods, regardless of age and provide method and means for the appropriate handling of such remains. If human remains are encountered, work shall halt within 100 feet of the discovery and the county coroner should be notified immediately. At the same time, an archaeologist shall be contacted to assist in the evaluation of the situation. If the human remains are of Native American origin, the coroner must notify the Native American Heritage Commission within twenty-four hours of such identification.

Should the Native American Heritage Commission designate Shingle Springs Band of Miwok Indians or one of its representatives as the Most Likely Descendant (MLD), the MLD will assess the discovery and provide recommended treatments to the City, and if the discovery is located on private property, the property owner, within forty-eight hours of being notified. All treatment recommendations made by Shingle Springs Band of Miwok Indians and archaeologists will be documented in the confidential portion of the project record. All parties will consult on the recommended treatments. Work in the area(s) of the discovery may only proceed after authorization from the County and in coordination with Shingle Springs Band of Miwok Indians.

b) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:
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 Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?

Less than Significant with Mitigation. The Project is not anticipated to cause a substantial adverse change to a TCR pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. As described in response to question **a)**, while no impacts to TCRs are anticipated for the Project, with any Project requiring ground disturbance, there is always the possibility that unmarked cultural resources may be unearthed during construction. Furthermore, the Shingle Springs Band of Miwok Indians identified the APE as sensitive for tribal cultural resources and recommend that archaeological and tribal monitoring occur during Project-related ground disturbance within native sediments and that interpretive panels be erected along the proposed trail. This impact would be considered potentially significant. Implementation of Mitigation Measures **CR-1** and **CR-2** (listed in section V. Cultural Resources) would reduce this impact to a less than significant level.

XIX. UTILITIES AND SERVICE SYSTEMS

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

ENVIRONMENTAL SETTING

Water

The El Dorado County Water Agency's (EDCWA) was created by the California State Legislature in 1959 to ensure that an adequate water supply is available for any present or future beneficial use or uses of lands or inhabitants of El Dorado County. Such uses beneficial may include irrigation, domestic, fire protection, municipal, commercial, industrial, and recreational purposes. The EDCWA executes numerous responsibilities related to the construction, operation, and maintenance of projects to control, conserve, divert, and the transmit water throughout the County. With the assistance of each of the County's water purveyors, EDCWA conducts comprehensive and long-range water planning. El Dorado Irrigation District (EID) is the largest water provider, serving a considerable portion of the west slope of El Dorado County, which includes the proposed Project area. EID's service area encompasses approximately 220 square miles and is generally bounded by Sacramento County to the west, the SF American River to the north, the Eldorado National Forest to the east, and the North Fork Cosumnes River and Latrobe to the south (County 2003).

Wastewater Service

There are two Wastewater Treatment Plants (WWTP) on the County's west slope, owned and operated by EID: El Dorado Hills WWTP and Deer Creek WWTP. The El Dorado Hills WWTP service area encompasses approximately 30 square miles, from the Sacramento County line east to Bass Lake Road, north to Folsom Reservoir, and south to 3 miles beyond U.S. 50. Deer Creek WWTP service area encompasses 24 square miles. Wastewater is conveyed by 95 miles of pipelines to the Deer Creek WWTP, which is located 2 miles south of U.S. 50 in the Cameron Park area (County 2003). Wastewater is not anticipated to be generated by the proposed Project.

Solid Waste Service

The Solid Waste and Hazardous Materials Division (SW/HM) of the County's Environmental Management Department (EMD) is responsible for the comprehensive planning of solid waste reduction, recycling, and resource recovery in the County (County 2003). El Dorado County is divided into two waste management regions: the Tahoe Basin and the west slope. Most west slope residents and businesses are served by Waste Management, Inc. Within the City of Placerville, El Dorado Hills Community Services District, and Cameron Park Community Services District franchise areas, residential pickup is mandatory. These areas account for approximately 40% of the County's population. Residential pickup, as well as commercial garbage collection, is not mandatory for the remaining areas of the County.

There are no solid waste disposal sites in El Dorado County. Once collected, solid waste generated on the west slope (including recyclable materials) is taken to the MRF/transfer station at Diamond Springs. Recyclable materials are separated from the waste stream at the MRF. From the MRF, unrecyclable solid waste is taken to Lockwood Landfill in Nevada for disposal (County 2003).

DISCUSSION OF IMPACTS

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

Less than Significant. The proposed Project would construct a Class I multi-use trail along Lotus Road. and would not increase population in the Project vicinity; therefore, there would be no additional wastewater flows as a result of Project development; or result in expanded wastewater treatment or stormwater drainage treatment.

As described in section X. Hydrology and Water Quality, the Project will add approximately 0.21 acres of impervious surface from the construction of the paved trail and sidewalk, resulting in a minor increase in stormwater runoff during storm events. However, this increase is not expected to substantially alter the existing drainage patterns of the area. Stormwater will continue to flow off Lotus Road and naturally drain southeast into the foothill woodland or northwest into the oak woodland habitat, where it will be absorbed by vegetation or percolate into the soil. The Project's design, including the elevated boardwalk and the extension of an existing drainpipe, will ensure that stormwater flows are neither impeded nor redirected by the new paved surfaces. These features will maintain the natural drainage flow and prevent any obstruction of floodwaters. Additionally, compliance with applicable stormwater management regulations and the use of BMPs will further minimize potential impacts.

The proposed Project is not anticipated to generate excessive runoff, and the proposed Project would not include construction of new stormwater drainage facilities, or expansion of existing facilities. Therefore, impacts would be less than significant.

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

No Impact. The Project would not result in the need for new or expanded water supplies. There may be a temporary need for water during construction to control dust; however, it

is not anticipated to result in the need for water supply beyond what is currently available, and no increase in demand for long-term water supply would be generated by the Project. No impact would occur.

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?

No Impact. The Project would not include the construction of any wastewater-generating uses. The Project would not increase population in the Project vicinity, and there would be no additional wastewater flows as a result of the proposed Project; therefore, the Project would not result in the need for new or expanded wastewater facilities. No impact would occur.

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?

Less Than Significant. The Project would not generate solid waste during operation. Solid waste would be generated during construction only and the amount will not exceed landfill capacities. As described in the Environmental Setting, there are no solid waste disposal sites in El Dorado County. Solid waste is taken to the MRF/transfer station at Diamond Springs. From the MRF, unrecyclable solid waste is taken to Lockwood Landfill in Nevada for disposal. Solid waste generated by the proposed Project would be temporary during construction. Therefore, impacts would be considered less than significant.

e) Comply with federal, state, and local statutes and regulations related to solid waste?

No Impact. The Project would comply with all applicable federal, state, and local statutes and regulations related to solid waste including the California Integrated Waste Management Act of 1989 (AB 939) and the California Solid Waste Re-Use and Recycling Access Act of 1991 (§42900-42911 of the Public Resources Code). No impact would occur.

XX. WILDFIRE

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

REGULATORY SETTING

As described in Section IX. Hazards and Hazardous Materials question **g)**, the following fire safety regulations are applicable to the proposed Project.

CAL FIRE's State Responsibility Area Fire Safe Regulations

§1276.02. Disposal of Flammable Vegetation and Fuels: Disposal, including chipping, burying, burning or removal to a landfill site approved by the local jurisdiction, of flammable vegetation and fuels caused by site development and construction, road and driveway construction, and fuel modification shall be completed prior to completion of road construction or final inspection of a building permit.

El Dorado County Regional Fire Protection Standards

- Vehicular Access During Construction: The development and each phase shall have at least two (2) points of vehicular access for Fire Department and other emergency vehicles as well as for routes of egress for evacuations. Fire Access Roads shall be constructed and approved prior to combustibles being brought onto the site. Temporary "NO PARKING FIRE LANE" signs shall be posted during construction as needed. All construction shall comply with Fire Apparatus Access during Construction Standard F004.
- Provide a fire access roadway of not less than twenty (20) feet unobstructed width and thirteen feet six inches (13'6") vertical clearance.
- Roadway shall be of an all-weather surface capable of supporting a minimum of 75,000 lbs. gross vehicle weight (minimum of 3 inches of AC over 8 inches of Compacted AB rock).
- No ditches or obstacles shall be placed in or around the fire access roadway which would impair or disrupt this access in any way.

ENVIRONMENTAL SETTING

Based on maps produced by the California Department of Forestry and Fire Protection (CAL FIRE), the Project area is located within a State Responsibility Area (SRA) and Federal Responsibility AREA (FRA) (CAL FIRE 2024a). A SRA is the area of the state where the State of California is financially responsible for the prevention and suppression of wildfires. Similarly, an area that is within a FRA, the federal government is financially responsible for the prevention and suppression of wildfires. SRAs and FRAs do not include lands within city boundaries. As described in section IX. Hazards and Hazardous Materials, according to CAL FIRE's Fire Hazard Severity Zone Viewer, the Project area is within is within a 'Very High Fire Hazard Severity Zone' (CAL FIRE 2024a).

The Project area is bordered by dense oak woodland habitat along the SF American River to the northwest and thick, mature foothill woodland habitat to the southeast both of which can serve as potential wildfire fuel.

The El Dorado County Fire Protection District and CAL FIRE provide wildfire protection to the Coloma-Lotus community. Structural firefighting resources are available at the Lotus Fire Department, though it is periodically staffed. Additional fire and ambulance services are located approximately 10-20 minutes away in Cool, Garden Valley, Rescue, and Placerville. The closest CalFire stations are located at Greenwood and Pilot Hill, approximately 15 minutes away by County Road, and air support is available from CAL FIRE's Grass Valley airport for larger fires (EDCFSC 2022).

DISCUSSION OF IMPACTS

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

Less than Significant with Mitigation. The Project has been designed in accordance with County Road and improvement standards, thereby ensuring that adequate emergency access could be provided to the proposed uses. As described in the Regulatory Setting, the proposed Project will comply with CAL FIRE's State Responsibility Area Fire Safe Regulations (CAL FIRE 2016) and El Dorado County Regional Fire Protection Standards (County 2016). Furthermore, Mitigation Measures **WF-1** through **WF-3** would be implemented to reduce impacts that could potentially impair an adopted emergency response plan or emergency evacuation plan to a less than significant level.

WF-1: The contractor shall prepare a Traffic Management Plan that includes a Project schedule with specific information on when vehicle restrictions during construction including if/when limitation to fire equipment access would occur.

WF-2: Hot work (welding, cutting, or any activity that involves open flames or produces sparks) shall cease during Red Flag Warning periods declared by the National Weather Service.

WF-3: The contractor shall prepare an Emergency Plan that includes emergency operational procedures for wildland fires, EMS emergencies, and flood emergencies.

b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

Less than Significant with Mitigation. The proposed Project would construct a Class I multi-use trail along Lotus Road. A portion of the Project would be constructed on a slope and is located within a very high fire hazard severity zone; however, the trail would be used for intermittent and temporary use only and would not permanently expose Project occupants to pollutant concentrations from wildfire. Long-term operational use of the trail would not cause an increase in the potential for uncontrolled spread of wildfire as motorized vehicles will be prohibited. However, during construction activities wildfire risk could increase.

The Project will require tree trimming and removal for several trees located within the proposed trail alignment directly adjacent to Lotus Road. which will reduce the number of fuels potentially contributing to wildfire. In addition, the Project involves installation of a Class I bike and pedestrian trail, boardwalk structures, sidewalks, and additional improvements to enhance pedestrian connectivity and safety. It does not include any design elements that would exacerbate wildfire risks, and thereby expose Project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.

As described in the Regulatory Setting, the proposed Project will comply with CAL FIRE's State Responsibility Area Fire Safe Regulations (CAL FIRE 2016) and El Dorado County Regional Fire Protection Standards (County 2016). Furthermore, Mitigation Measures **WF-1** through **WF-3** as described above would be implemented to reduce impacts to a less than significant level.

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?

Less than Significant. The proposed Project would construct a Class I multi-use trail along Lotus Road that will require ongoing maintenance; however, these maintenance activities would not exacerbate fire risk. Impacts would be less than significant.

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?

Less than Significant with Mitigation. As described in sections IV. Biological Resources, IX. Hazards and Hazardous Materials, and X. Hydrology and Water Quality, the proposed Project would implement standard BMPs as part of the NDPDES permit and Mitigation Measures **BIO-9** and **HAZ-1** to reduce risk of downslope or downstream flooding or landslides within the Project area. Impacts would be Less than Significant with Mitigation.

BIO-9: BMPs will be incorporated into Project design and Project management to minimize impacts on the environment including erosion and the release of pollutants (e.g., oils, fuels):

- Exposed soils and material stockpiles would be stabilized, through watering or other measures, to prevent the movement of dust at the

Project site caused by wind and construction activities such as traffic and grading activities;

- All vehicle and equipment fueling/maintenance would be conducted outside of any surface waters;
- Equipment used in and around jurisdictional waters must be in good working order and free of dripping or leaking contaminants;
- Raw cement, concrete or concrete washings, asphalt, paint or other coating material, oil or other petroleum products, or any other substances that could be hazardous to aquatic life shall be prevented from contaminating the soil or entering jurisdictional waters;
- All erosion control measures, and storm water control measures would be properly maintained until the site has returned to a pre-construction state;
- All construction materials would be hauled off-site after completion of construction.

HAZ-1: The contractor shall prepare a Spill Prevention, Control, and Countermeasure Program (SPCCP) prior to the commencement of construction activities. The SPCCP shall include information on the nature of all hazardous materials that shall be used on-site. The SPCCP shall also include information regarding proper handling of hazardous materials, and clean-up procedures in the event of an accidental release. The phone number of the agency overseeing hazardous materials and toxic clean-up shall be provided in the SPCCP.

XXI. MANDATORY FINDINGS OF SIGNIFICANCE

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

DISCUSSION OF IMPACTS

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

Less Than Significant with Mitigation Incorporated. Implementation of the Project would have the potential to degrade the quality of the existing environment. Potential impacts have been identified related to Aesthetics (Section I), Biological Resources (Section IV), Cultural Resources (Section V), Geology and Soils (Section VII), Hazards and Hazardous Waste (Section IX), Hydrology and Water Quality (Section X), Noise (Section XIII), Tribal Cultural Resources (Section XVIII), and Wildfire (Section XX).

Mitigation measures **BIO-1** through **BIO-12** would reduce impacts to biological resources to a less than significant level. The potential for discovery or disturbance of historical, archaeological, human remains, TCRs, or paleontological resources is not anticipated. However, implementation of mitigation measure **CR-1** and**CR-2** and **PAL-1** would reduce impacts to a less than significant level by ensuring that appropriate protocol is followed (see Chapter 4 Summary of Avoidance, Minimization, and Mitigation Measures).

Project impacts to Hazards and Hazardous Waste, Hydrology and Water Quality, Noise, Transportation, and Wildfire would primarily consist of temporary impacts related to construction of the Project. These impacts would be reduced to a less than significant level through implementation and incorporation of, **HAZ-1**, **BIO-9, NOI-1** through **NOI-4**, and **WF-1** through **WF-3** respectively (see Chapter 4 Summary of Avoidance, Minimization, and Mitigation Measures).

See Chapter 4, Summary of Avoidance, Minimization, and Mitigation Measures, for a summary of all mitigation measures, timing of implementation, and responsible party.

Implementation of mitigation measures would reduce the level of all Project-related impacts to less than significant levels. Therefore, impacts are considered less than significant with mitigation incorporated.

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

Less than Significant. CEQA Guidelines Section 15064(h) states that a lead agency shall consider whether the cumulative impact of a project is significant and whether the effects of the project are cumulatively considerable. The assessment of the significance of the cumulative effects of a project must therefore be conducted in connection with the effects of past projects, or other current projects, and probable future projects.

The proposed Project includes the installation of a Class I bike and pedestrian trail, boardwalk structures, sidewalks, and other related improvements along Lotus Road. The primary objective of the Project is to improve connectivity and enhance safety for pedestrians in the communities of Lotus and Coloma. The Project does not involve the construction of a new public roadway or substantial physical modifications to an existing roadway. Furthermore, it is not anticipated to generate additional traffic, as it does not include the development of residential, commercial, or other traffic-inducing facilities. The Project would not conflict with any relevant plans, ordinances, or policies related to the circulation system, nor would it interfere with a congestion management program, alter air traffic levels, or impact air traffic patterns. No permanent modifications or design changes are proposed for existing roads, and the Project does not include above-ground structures. Additionally, it would not conflict with any applicable plan, ordinance, or policy for evaluating the performance of the circulation system. The proposed improvements align with local mobility and active transportation planning efforts, including the Coloma Sustainable Community Mobility Plan (2019), the HLP Conceptual Master Plan (2014), and the County's Active Transportation Plan (2020a).

The Project would make no significant contribution to cumulatively adverse impacts associated with existing or proposed development projects in the County as the Project would not directly generate vehicle trips. Construction of the proposed Project along with other construction in El Dorado County would contribute to cumulative environmental impacts. However, the proposed Project's contribution would be minimal considering the highly developed land uses in the area. Therefore, impacts of the proposed Project related to cumulatively considerable impacts in El Dorado County are considered less than significant.

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

Less than Significant with Mitigation. The Project would not cause significant or unavoidable adverse effects to human beings, either directly or indirectly with mitigation incorporated. See Chapter 4, Summary of Avoidance, Minimization, and Mitigation Measures, for a summary of all mitigation measures, timing of implementation, and responsible party. All potentially significant impacts have been reduced to a less than significant level by mitigation measures related to individual resource-specific impacts:

- Aesthetics (VIS-1 through VIS-4)
- Biological Resources (BIO-1 through BIO-12),
- Cultural Resources (CR-1 and CR-2),
- Geology and Soils (PAL-1)
- Hazards and Hazardous Materials (HAZ-1)
- Hydrology and Water Quality (HAZ-1 and BIO-9),
- Noise (NOI-1 through NOI-4),
- Transportation (WF-1)
- Tribal Cultural Resources (CR-1 and CR-2) and
- Wildfire (WF-1 through WF-3).

Therefore, impacts are considered less than significant with mitigation incorporated (see Chapter 4 Summary of Avoidance, Minimization, and Mitigation Measures).

4.0 SUMMARY OF AVOIDANCE, MINIMIZATION, AND MITIGATION MEASURES

4.1 Summary of Mitigation Measures

Aesthetics (Section I)

VIS-1: Prior to the start of construction activities, the Project limits within environmentally sensitive areas, will be marked with temporary high visibility fencing or staking to ensure construction will not further encroach into sensitive resources. Environmentally sensitive areas will be marked on Project plans (same as Natural Environment Study BIO-4).

Timing/Implementation: *Prior to and During Project Construction*

Enforcement/Monitoring: *Contractor*

VIS-2: Vegetation removal will not exceed what is shown on the plans without prior approval from the Project biologist. If trees will be trimmed rather than removed, trimming must comply with ANSI A300 pruning standards and must not:

- leave branch stubs
- make unnecessary heading cuts
- cut off the branch collar (not make a flush cut)
- top or lion's tail trees (stripping a branch from the inside leaving foliage just at the ends)
- remove more than 25 percent of the foliage of a single branch
- remove more than 25 percent of the total tree foliage in a single year
- damage other parts of the tree during pruning
- use wound paint
- climb the tree with climbing spikes (same as Natural Environment Study **BIO-2**)

Timing/Implementation: *During Project Construction*

Enforcement/Monitoring: *Project biologist*

VIS-3: If mitigation for tree impacts is required per the Oak Removal Management Plan, on-site retention, replacement planting both on-site and off-site, and/or payment of in-lieu fees will be completed in coordination with the County (same as Natural Environment Study BIO-3).

Timing/Implementation: *During Project Construction*

Enforcement/Monitoring: *County*

VIS-4: The new MGS guardrails and post-and-cable fence will have aesthetic treatments such as a Natina stain as identified by the project engineer.

Timing/Implementation: *During Project Construction*

Enforcement/Monitoring: *Contractor*

Biological Resources (Section IV)

BIO-1: Prior to vegetation removal or initial ground disturbance during the nesting bird season (February 1 – September 30) a pre-construction nesting bird survey must be conducted by a Project Biologist prior to the start of work. The nesting bird survey must include the Project area plus a 300-foot buffer. Within 2 weeks of the nesting bird survey, all vegetated areas that are designated for removal must be cleared by the contractor or a supplemental nesting bird survey is required.

A minimum 100-foot no-disturbance buffer will be established around any active nest of migratory birds and a minimum 300-foot no-disturbance buffer will be established around any nesting raptor species. The contractor must immediately stop work in the buffer area until the appropriate buffer is established, as determined by the Project Biologist. Work may not proceed within the buffer until a Project Biologist determines the young have fledged. A reduced buffer can be established if determined appropriate by the Project Biologist.

Timing/Implementation: *Prior to and During Project construction*

Enforcement/Monitoring: *Project biologist*

BIO-2: Vegetation removal will not exceed what is shown on the plans without prior approval from the Project biologist. If trees will be trimmed rather than removed, trimming must comply with ANSI A300 pruning standards and must not:

- leave branch stubs
- make unnecessary heading cuts
- cut off the branch collar (not make a flush cut)
- top or lion's tail trees (stripping a branch from the inside leaving foliage just at the ends)
- remove more than 25 percent of the foliage of a single branch
- remove more than 25 percent of the total tree foliage in a single year
- damage other parts of the tree during pruning
- use wound paint
- climb the tree with climbing spikes

Timing/Implementation: *During Project construction*

Enforcement/Monitoring: *Project biologist*

BIO-3: If mitigation for tree impacts is required per the ORMP, payment of in-lieu fees will be completed in coordination with the County.

Timing/Implementation: *Prior to and During Project construction*

Enforcement/Monitoring: *County*

BIO-4: Prior to arrival at the Project site and prior to leaving the Project site, construction equipment that may contain invasive plants and/or seeds will be cleaned to reduce the spreading of noxious weeds.

Timing/Implementation: *During Project Construction*

Enforcement/Monitoring: *Contractor*

BIO-5: To avoid inadvertent entrapment of wildlife during construction:

- Non-entangling erosion control material will be used to reduce the potential for entrapment. Tightly woven fiber netting (mesh size less than 0.25 inch) or similar material will be used to ensure that wildlife is not trapped (no monofilament). Coconut coir matting and fiber rolls containing burlap are examples of acceptable erosion control materials.
- All excavated steep-walled holes and trenches more than 6 inches deep will be covered with plywood (or similar material) or provided with one or more escape ramps constructed of earth fill or wooden planks at the end of each workday or 30 minutes prior to sunset, whichever occurs first. All steep-walled holes and trenches will be inspected each morning to ensure that no wildlife has become entrapped. All construction pipes, culverts, similar structures, construction equipment, and construction debris left overnight within sensitive habitats will be inspected for wildlife prior to being moved.

Timing/Implementation: *During Project Construction*

Enforcement/Monitoring: *Contractor*

BIO-6: Work will be restricted to periods of dry weather and low rainfall (less than 0.25 inches within a 24-hour period). The National Weather Service 72-hour forecast will be monitored throughout construction to determine potential rain events. No work will occur during a dry-out period of 24 hours after the above referenced wet weather.

Timing/Implementation: *During Project Construction*

Enforcement/Monitoring: *Contractor*

BIO-7: Best Management Practices (BMPs) will be incorporated into Project design and Project management to minimize impacts on the environment including erosion and the release of pollutants (e.g., oils, fuels):

- Exposed soils and material stockpiles would be stabilized, through watering or other measures, to prevent the movement of dust at the Project site caused by wind and construction activities such as traffic and grading activities;
- All vehicle and equipment fueling/maintenance would be conducted outside of any surface waters;

- Equipment used in and around jurisdictional waters must be in good working order and free of dripping or leaking contaminants;
- Raw cement, concrete or concrete washings, asphalt, paint or other coating material, oil or other petroleum products, or any other substances that could be hazardous to aquatic life shall be prevented from contaminating the soil or entering jurisdictional waters;
- All erosion control measures, and storm water control measures would be properly maintained until the site has returned to a pre-construction state;
- All construction materials would be hauled off-site after completion of construction

Timing/Implementation: *During Project Construction*

Enforcement/Monitoring: *Contractor*

BIO-8: Prior to vegetation removal or initial ground disturbance during the nesting bird season (February 1 – September 30) a pre-construction nesting bird survey must be conducted by a Project Biologist prior to the start of work. The nesting bird survey must include the Project area plus a 300-foot buffer. Within 2 weeks of the nesting bird survey, all vegetated areas that are designated for removal must be cleared by the contractor or a supplemental nesting bird survey is required.

A minimum 100-foot no-disturbance buffer will be established around any active nest of migratory birds and a minimum 300-foot no-disturbance buffer will be established around any nesting raptor species. The contractor must immediately stop work in the buffer area until the appropriate buffer is established, as determined by the Project Biologist. Work may not proceed within the buffer until a Project Biologist determines the young have fledged. A reduced buffer can be established if determined appropriate by the Project Biologist.

Timing/Implementation: *Prior to Project Construction*

Enforcement/Monitoring: *Project Biologist*

BIO-9: Immediately prior to vegetation removal, the Project Biologist(s) will inspect all areas where ground disturbing activity is anticipated. The Project Biologist will oversee all vegetation clearing and grubbing and will have stop work authority.

All construction crew members will allow wildlife enough time to escape initial clearing and grubbing activities.

Timing/Implementation: *During Project Construction*

Enforcement/Monitoring: *Contractor*

BIO-10: All food-related trash must be disposed into closed containers and must be removed from the Project area daily. Construction personnel must not feed or otherwise attract wildlife to the Project area.

Timing/Implementation: *During Project Construction*

Enforcement/Monitoring: *Contractor*

BIO-11: The contractor must not apply rodenticide or herbicide within the Project area during construction.

Timing/Implementation: *During Project Construction*

Enforcement/Monitoring: *Contractor*

BIO-12: If any wildlife is encountered during construction, said wildlife shall be allowed to leave the construction area unharmed.

Timing/Implementation: *During Project Construction*

Enforcement/Monitoring: *Contractor*

Cultural Resources (Section V) and Tribal Cultural Resources (Section XVIII)

CR-1: If previously unidentified cultural materials are unearthed during construction, work shall be halted within 100 feet of the discovery. An archaeologist will assess the discovery to determine its significance. The archaeologist will develop a plan for documentation, treatment, and removal of resources, if necessary. Should the discovery involve Indigenous cultural resources, a Native American Representative from the federally recognized Shingle Springs Band of Miwok Indians shall be contacted to join the assessment of the discovery. Work in the area(s) of the discovery may only proceed after authorization from the County and the archaeologist and in coordination with Shingle Springs Band of Miwok Indians. Additional archaeological survey will be needed if Project limits are extended beyond the present survey limits.

Timing/Implementation: *During Project Construction*

Enforcement/Monitoring: *El Dorado County and Contractor*

Timing/Implementation: *During Project Construction*

Enforcement/Monitoring: *El Dorado County and Contractor*

CR-2: Sections 5097.98 through 5097.993 of the Public Resources Code (PRC) and Section 7050.5 of the California Health and Safety Code protect Native American burials, skeletal remains and grave goods, regardless of age and

provide method and means for the appropriate handling of such remains. If human remains are encountered, work shall halt within 100 feet of the discovery and the county coroner should be notified immediately. At the same time, an archaeologist shall be contacted to assist in the evaluation of the situation. If the human remains are of Native American origin, the coroner must notify the Native American Heritage Commission within twenty-four hours of such identification.

Should the Native American Heritage Commission designate Shingle Springs Band of Miwok Indians or one of its representatives as the Most Likely Descendant (MLD), the MLD will assess the discovery and provide recommended treatments to the City, and if the discovery is located on private property, the property owner, within forty-eight hours of being notified. All treatment recommendations made by Shingle Springs Band of Miwok Indians and archaeologists will be documented in the confidential portion of the project record. All parties will consult on the recommended treatments. Work in the area(s) of the discovery may only proceed after authorization from the County and in coordination with Shingle Springs Band of Miwok Indians.

Timing/Implementation: *During Project Construction*

Enforcement/Monitoring: *El Dorado County and Contractor*

Geology and Soils (Section VII)

PAL-1: If paleontological resources (i.e., fossils) are discovered during ground-disturbing activities, the implementing agency will immediately be notified and will ensure that their contractors shall stop work in that area and within 50 feet of the find until a qualified paleontologist can assess the significance of the find and develop appropriate treatment measures. Treatment measures will be made in consultation with the implementing agency.

Timing/Implementation: *Prior to Project Construction*

Enforcement/Monitoring: *El Dorado County and Contractor*

Hazards and Hazardous Waste (Section IX)

HAZ-1: The contractor shall prepare a Spill Prevention, Control, and Countermeasure Program (SPCCP) prior to the commencement of construction activities. The SPCCP shall include information on the nature of all hazardous materials that shall be used on-site. The SPCCP shall also include information regarding proper handling of hazardous materials, and clean-up procedures in the event of an accidental release. The phone number of the agency overseeing hazardous materials and toxic clean-up shall be provided in the SPCCP.

Timing/Implementation: *Prior to Project Construction*

Enforcement/Monitoring: *Contractor*

HAZ-2: Prior to construction, shallow soil sampling and analytical testing shall be performed for the unpaved roadway shoulder in areas of planned trail construction excavations to evaluate the presence of ADL at regulated concentrations.

Timing/Implementation: *Prior to Project Construction*

Enforcement/Monitoring: *County*

WF-1: The contractor shall prepare a Traffic Management Plan that includes a Project schedule with specific information on when vehicle restrictions during construction including if/when limitation to fire equipment access would occur.

Timing/Implementation: *During Project Construction*

Enforcement/Monitoring: *Contractor*

WF-2: Hot work (welding, cutting, or any activity that involves open flames or produces sparks) shall cease during Red Flag Warning periods declared by the National Weather Service.

Timing/Implementation: *During Project Construction*

Enforcement/Monitoring: *Contractor*

WF-3: The contractor shall prepare an Emergency Plan that includes emergency operational procedures for wildland fires, EMS emergencies, and flood emergencies.

Timing/Implementation: *During Project Construction*

Enforcement/Monitoring: *Contractor*

Hydrology and Water Quality (Section X)

BIO-9: Immediately prior to vegetation removal, the Project Biologist(s) will inspect all areas where ground disturbing activity is anticipated. The Project Biologist will oversee all vegetation clearing and grubbing and will have stop work authority.

All construction crew members will allow wildlife enough time to escape initial clearing and grubbing activities.

Timing/Implementation: *During Project Construction*

Enforcement/Monitoring: *Contractor*

HAZ-1: The contractor shall prepare a Spill Prevention, Control, and Countermeasure Program (SPCCP) prior to the commencement of construction activities. The SPCCP shall include information on the nature of all hazardous materials that shall be used on-site. The SPCCP shall also

include information regarding proper handling of hazardous materials, and clean-up procedures in the event of an accidental release. The phone number of the agency overseeing hazardous materials and toxic clean-up shall be provided in the SPCCP.

Timing/Implementation: *Prior to Project Construction*

Enforcement/Monitoring: *Contractor*

Noise (Section XIII)

NOI-1: Noise-generating construction operations shall be limited to between the hours of 7 a.m. and 7 p.m. within proximity to residential uses, commercial, recreation, and public facilities in accordance with the El Dorado County General Plan Noise Ordinance.

Timing/Implementation: During Project Construction

Enforcement/Monitoring: *Contractor*

NOI-2: Construction equipment and equipment staging areas shall be located at the farthest distance possible from adjacent sensitive land uses.

Timing/Implementation: *During Project Construction*

Enforcement/Monitoring: *Contractor*

NOI-3: Construction equipment shall be properly maintained and equipped with noise-reduction intake and exhaust mufflers and engine shrouds, in accordance with manufacturer recommendations. Equipment engine shrouds shall be closed during equipment operation.

Timing/Implementation: *During Project construction*

Enforcement/Monitoring: *Contractor*

NOI-4: When not in use, motorized construction equipment shall not be left idling.

Timing/Implementation: *During Project Construction*

Enforcement/Monitoring: *Contractor*

Transportation (Section XVII)

WF-1: The contractor shall prepare a Traffic Management Plan that includes a Project schedule with specific information on when vehicle restrictions during construction including if/when limitation to fire equipment access would occur.

Timing/Implementation: *During Project Construction*

Enforcement/Monitoring: *Contractor*

WF-3: The contractor shall prepare an Emergency Plan that includes emergency operational procedures for wildland fires, EMS emergencies, and flood emergencies.

Timing/Implementation: *During Project Construction*

Enforcement/Monitoring: *Contractor*

Wildfire (Section XX)

WF-1: The contractor shall prepare a Traffic Management Plan that includes a Project schedule with specific information on when vehicle restrictions during construction including if/when limitation to fire equipment access would occur.

Timing/Implementation: *During Project Construction*

Enforcement/Monitoring: *Contractor*

WF-2: Hot work (welding, cutting, or any activity that involves open flames or produces sparks) shall cease during Red Flag Warning periods declared by the National Weather Service.

Timing/Implementation: *During Project Construction*

Enforcement/Monitoring: *Contractor*

WF-3: The contractor shall prepare an Emergency Plan that includes emergency operational procedures for wildland fires, EMS emergencies, and flood emergencies.

Timing/Implementation: *During Project Construction*

Enforcement/Monitoring: *Contractor*

5.0 LIST OF PREPARERS

5.1 List of Preparers

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Appendix A:
Visual Impact Assessment Memorandum

Visual Impact Assessment Memorandum

Henningsen/ Lotus Road Class I Multi-Use Trail Project

District 3–ELD
CML–5925(194)

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Statement of Compliance: Produced in compliance with National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA) requirements, as appropriate, to meet the level of analysis and documentation that has been determined necessary for this project.

Per Exhibit D, Article XVIII, Section A. (1) of the contract: (c) 2020 California Department of Transportation.

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List of Acronyms and Abbreviations

AVE	Area of Visual Effect
Caltrans	California Department of Transportation
CEQA	California Environmental Quality Act
FHWA	Federal Highway Administration
Handbook	*Caltrans 2023 VIA Handbook*
NEPA	National Environmental Policy Act
PM	Post mile
Project	Henningsen/Lotus Road Class I Multi-Use Trail Project
VIA	Visual Impact Assessment

1 Introduction

1.1 Purpose of Report and Assessment Methodology

The purpose of this Visual Impact Assessment (VIA) memorandum is to document potential visual change in the Area of Visual Effect (AVE). This memorandum follows the guidance outlined in the publication *Guidelines for the Visual Impact Assessment of Highway Projects*, published by the Federal Highway Administration (FHWA) in January 2015. The formatting of this template is aligned with the directions and examples included in the *Caltrans 2023 VIA Handbook* (*Handbook*), available at: https://dot.ca.gov/programs/design/lap-visual-impact-assessment

2 Establishment Phase

2.1 Project Location and Setting

The Henningson/ Lotus Road Class I Multi-Use Trail Project (Project) location and setting provide the context for determining the type of changes to the existing visual environment. The proposed Project is along Lotus Road in the community of Lotus in the Sierra Nevada foothills of western El Dorado County, California (**Figure 1. Project Vicinity** and **Figure 2. Project Location**). The Project begins in the Henningsen Lotus Park (HLP) and extends northwards in the Lotus Road right-of-way to the State Route (SR) 49/ Lotus Road intersection.

The major landscape feature of the Coloma-Lotus Valley is the South Fork (SF) American River. Mature riparian vegetation grows on both sides of the River and transitions to oak woodlands, grasslands, and chaparral on the adjacent rolling hills. The region is rural with some commercial activity in the Lotus community mostly associated with recreation and river rafting activities.

2.2 Project Description

The County of El Dorado (County), in coordination with the California Department of Transportation (Caltrans), proposes to construct pedestrian facilities along Lotus Road between Henningsen Lotus Park and State Route (SR) 49 in Lotus, an unincorporated community in El Dorado County as part of the Henningsen/Lotus Class I Multi-Use Trail Project (Project). The Project will complete the County's vision to provide multi-modal access to commercial and recreational facilities as shown in the County's Community Mobility Plan.

The Project will involve the installation of a Class I bike and pedestrian trail, boardwalk structures, sidewalks, and additional improvements to enhance connectivity and safety. The Project includes approximately 2,300 linear feet of new Class I trail, improvements to existing pullouts along Lotus Road, and the installation of approximately 1,800 linear feet of guardrail (**Figure 3. Project Features**). All work will be conducted within County right-of-way. The Project is consistent with the Coloma Lotus Mobility Plan (2019) and is included in El Dorado County's Active Transportation Plan.

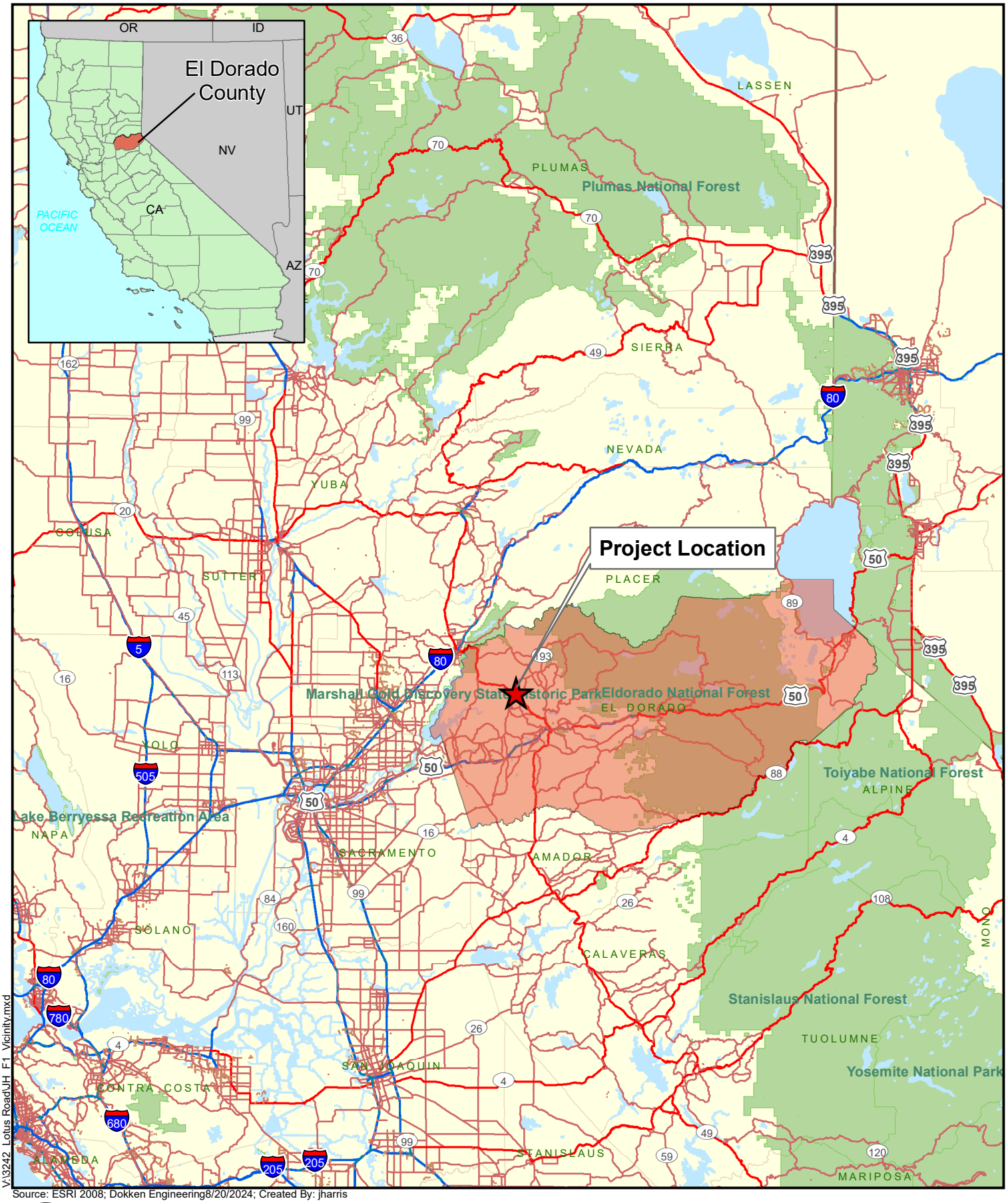
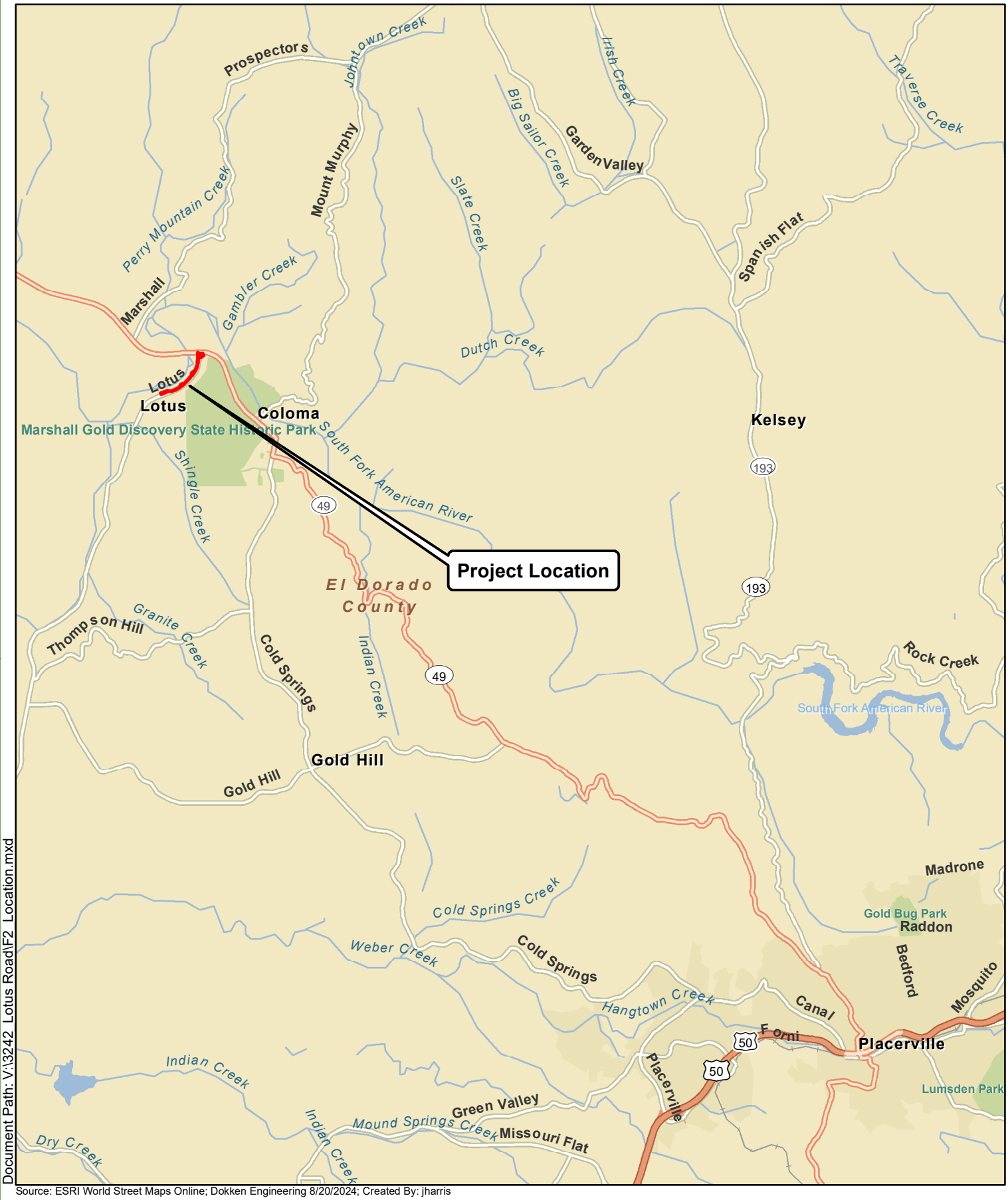


FIGURE 1
Project Vicinity

CML-5925(194)
Henningsen/Lotus Multi-Use Trail Project
Lotus, El Dorado County, California



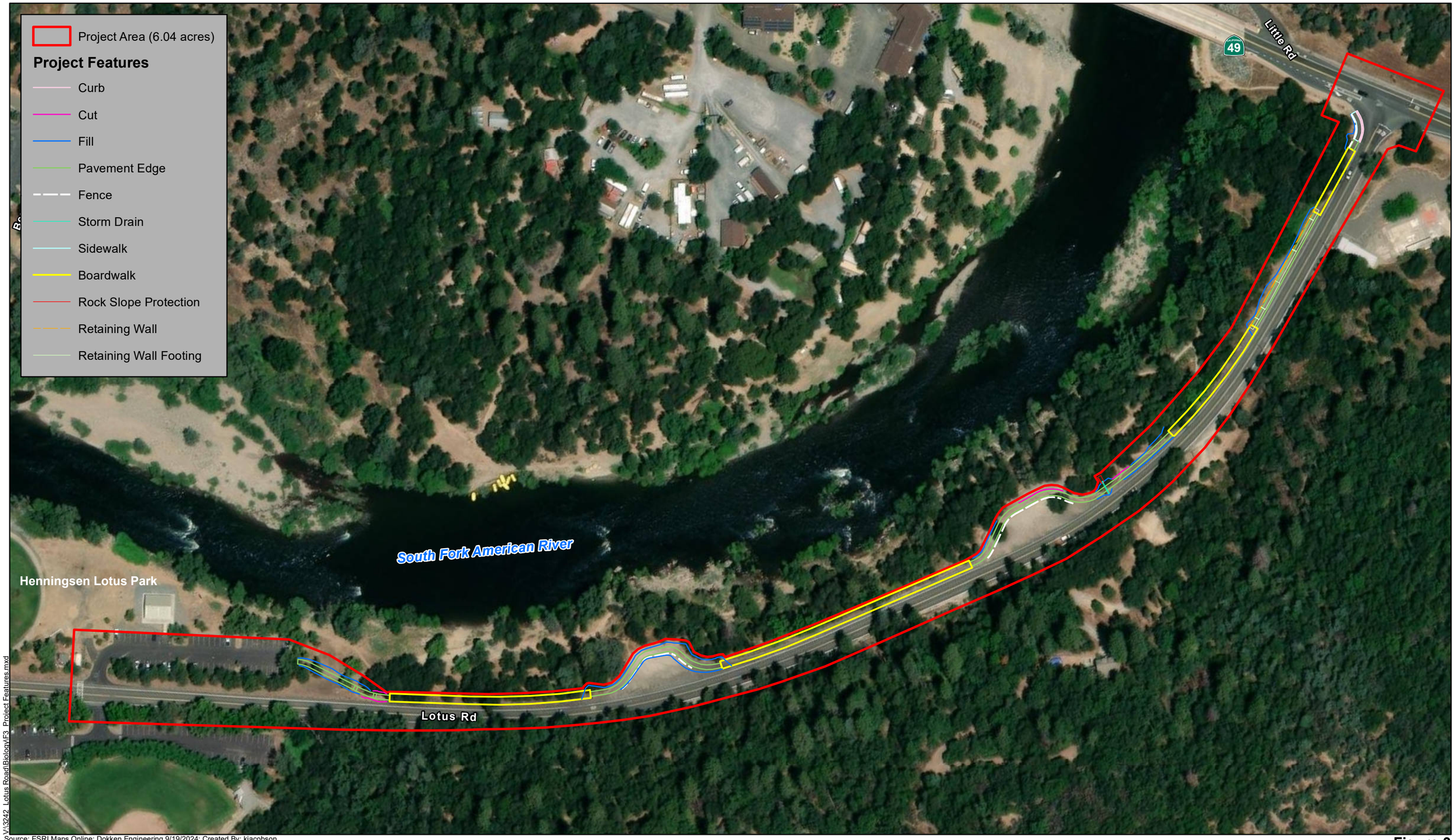
Document Path: V:\3242_Lotus Road\F2_Location.mxd

Source: ESRI World Street Maps Online; Dokken Engineering 8/20/2024; Created By: jharris

0 0.5 1 1.5 2 Miles

FIGURE 2
Project Location

CML-5925(194)
Henningsen/Lotus Multi-Use Trail Project
Lotus, El Dorado County, California



V:\3242_Lotus Road\Biology\F3_Project Features.mxd

Source: ESRI Maps Online; Dokken Engineering 9/19/2024; Created By: kjacobson

1 inch = 150 feet

0 75 150 225 300 375 Feet

Figure 3
Project Features

CML-5925(194)
Henningsen/Lotus Multi-Use Trail Project
Lotus, El Dorado County, California

No streetlights or other forms of illumination are proposed. Existing utilities will remain active during construction. No extended-time road closures are anticipated to occur, and access to residences and Henningsen Lotus Park will be maintained. There will be no permanent right-of-way impacts or utility easements. It is anticipated that backhoes, dozers, dump trucks, concrete trucks, drill rigs and concrete pumps will be required to construct the trail. Temporary construction easements and encroachment permits may be needed where the trail passes through private and state-owned parcels along the trail. Construction is anticipated to start in the Spring of 2027 and last approximately six months.

This Project is funded through both local and federal funds and is subject to compliance with the California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA). The lead agency for CEQA compliance is the County and the NEPA lead agency is Caltrans.

2.3 Description of Area of Visual Effect

The AVE for the Project was developed based on perspective views of the trail and from SR-49 and the location of proposed Project features. **Figure 4** presents a map showing the AVE.

Lotus is a gold rush era town located on the SF American River approximately two miles downstream of the town of Coloma, where gold was discovered in 1849. Extensive mining occurred during the Gold Rush along the SF American River up- and downstream of Lotus and Coloma. Located on SR-49 about halfway between the cities of Placerville to the south and Auburn in Placer County to the north, the towns of Lotus and Coloma are located along the SF American River. Today, the rural community of Lotus, which includes many river-rafting business, are located on the right, or north, bank of the SF American River.

The community of Lotus has an elevation range between 700-800 feet. Nearby hills are between 1,200 and 2,000 feet. The State of California's Marshall Gold Discovery State Historic Park (MGDSHP) in Coloma includes the site of Sutter's Mill, the location of the gold discovery. The western boundary of MGDSHP abuts the HLP along the north end of the HLP where the Park's boundary extends east of Lotus Road and north towards SR-49.

Lotus Road follows the east side of the SF American River on a south to north direction, curving gently towards the east. Lotus Road is cut into the hillside to locate it above and outside the 100-year floodplain of the SF American River. The steep hill rises approximately 1,300' above the River.

An oak woodland occurs on both sides of Lotus Road. Glimpses of the SF American River are visible through breaks in the canopy or openings underneath the canopy. The view changes seasonally depending on which trees shed their leaves during the winter. On the east side of Lotus Road, the steep hill cut is visible with mostly herbaceous plant species growing from the toe of the slope vertically up approximately ten feet at which point the oak woodland has regrown.

The Lotus Road shoulders have a variable width. Adjacent to the northbound lane, the shoulder on the east side of the road is narrow as it intersects the hillside cut. The southbound lane has wider shoulders in some locations and narrow shoulders that drop steeply towards the river. Along Lotus Road, there is a split rail fence from its south entrance of the HLP to north of the entrance to the upstream parking lot. The split rail fence is not contiguous along Lotus Road north of the main park facilities. The fence is present at three pullouts on the west side of the road. The view north along the road extends approximately 0.1-mile due to the vertical blocking of the trees, the curve of the road, and the topographic slope. Three twenty-foot-long concrete k-rails are located on the east side of the road at an apparent former hill slip. Moss or lichen covers portions of the k-rails. A gravel driveway is located on the east side of the road approximately 0.12-miles south of SR-49. Overhead utility lines are also located on the east side of Lotus Road from SR-49 south to the driveway but are not present on the west side of Lotus Road in the project area. On the southeast corner of the SR-49/Lotus Road intersection is a small commercial building and paved parking lot.

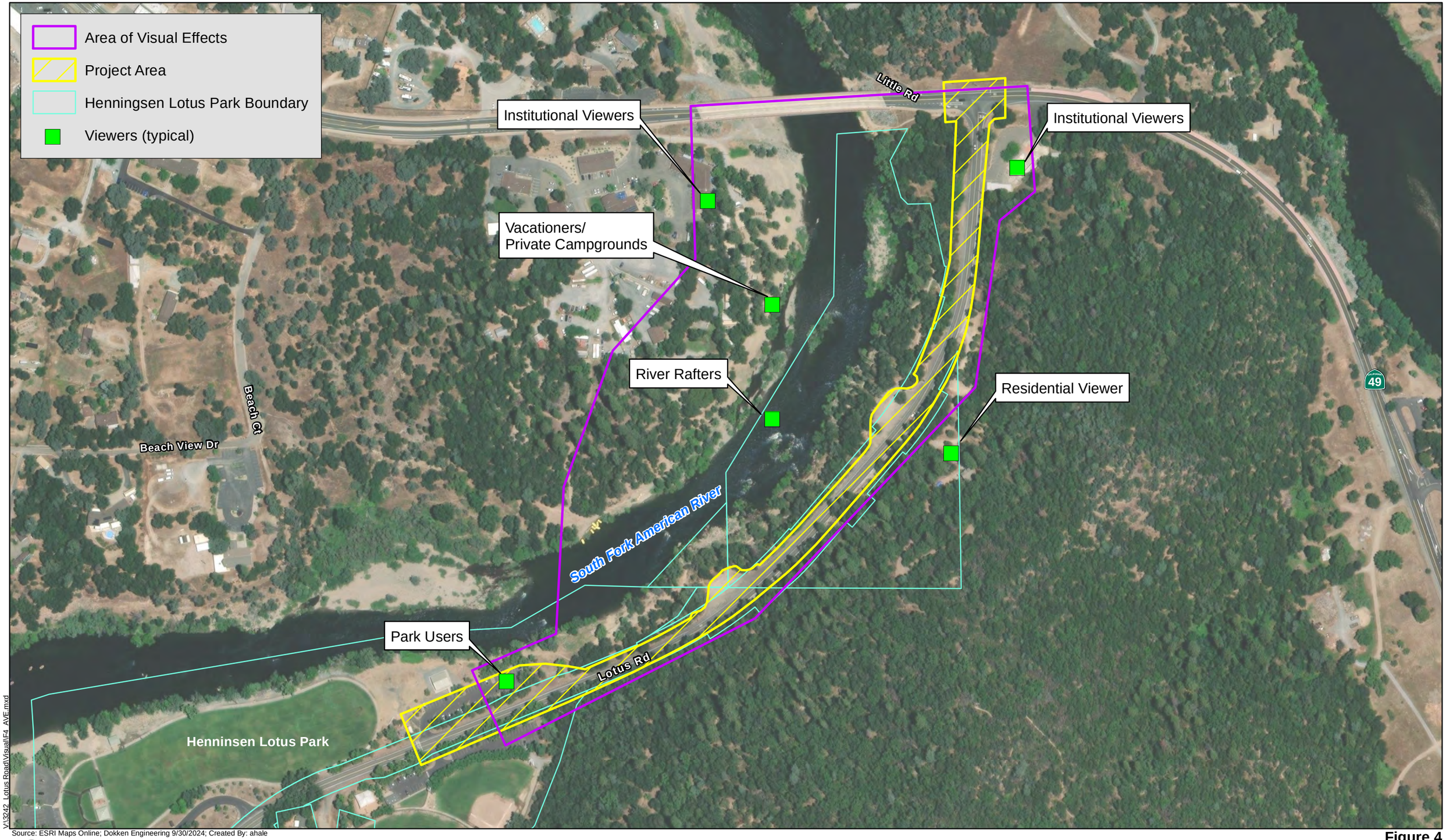
Prior to a major realignment of SR-49 in the 1950s, SR-49 crossed the SF American River at a different location than the modern bridge. The historic alignment crossed the River through the historic mine tailings near the location of the upper parking lot in the present day Henningsen Lotus Park (HLP). From Lotus, SR-49 continued eastward to Coloma paralleling the SF American River on the alignment of what is now Lotus Road.

Caltrans replaced the SR-49 Bridge over South Fork American River in 2018. The work included road improvements from approximately 2,000 feet west and east of the bridge. SR-49 was repaved and restriped. Improvements to the SR-49/ Lotus Road intersection included the construction of a right-turn pocket from eastbound SR-49 to Lotus Road.

The 1950’s era bridge did not include bike lanes. The new bridge is both wider and it includes bike lanes adjacent to both lanes from Lotus to MGDSHP. The bike lanes are visually distinct from the travelled way of SR-49 as they are a light reddish color. Other improvements associated with the bridge replacement was the construction of a retaining wall with a dry-rock stacked pattern is located on the north side of the intersection. The post-and-cable fence on top of the retaining wall has green tubular metal posts. The intersection is not illuminated with streetlights.

The Henningsen Lotus Park (HLP) Conceptual Master Plan (CMP; 2014) describes the park as follows:

> Henningsen Lotus Park is located on the site of a former gravel mining operation in the Coloma-Lotus valley. It is bounded by the river on the west/northwest, undeveloped land on the north, residential land and the Lotus Store on the south, and undeveloped land and the Marshall Gold Discovery Historic State Park on the east. A residential in- holding lies within the larger park boundary east of Lotus Road, north of a wetland mitigation area and west of the ball fields. Across the river from the park are the OARS River Park Adventure Campground, the Historic Mother Lode Church, and large lot rural residential properties (HLP CMP p.15).



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Source: ESRI Maps Online; Dokken Engineering 9/30/2024; Created By: ahale

1 inch = 250 feet

0 250 500 750 1,000 1,250 Feet

Figure 4
Area of Visual Effects

CML-5925(194)
Henningsen/Lotus Multi-Use Trail Project
Lotus, El Dorado County, California

The HLP CMP discusses an existing, non-improved trail from the parking lot to SR-49:

> The existing unpaved trail in the north end of the park needs improvement from the north end of the paved trail to the property boundary. There are a number of topographic constraints as well as boulder structures in this area that limit development of a fully accessible trail; however, the trail should be widened and made more accessible where feasible, starting at the paved trail and working northwards.

The HLP is located on both sides of Lotus Road. The southern half of the HLP includes soccer and baseball field, hard surface paths, and parking lots. The northern portion of the HLP has unimproved trails and river access.

The proposed Project occurs within the Northern Sierra Nevada Foothills Floristic Province (Jepson 2024). El Dorado County experiences Mediterranean conditions including warm, dry summers and cool, wet winters. The average annual high temperature is approximately 74 degrees Fahrenheit (°F), and the average annual lows reach approximately 44°F, with up to 38.76 inches of precipitation annually (U.S. Climate Data 2024). The elevation of the study area is approximately 720-870 feet above mean sea level. The study area contains the following soil types: Auberry coarse sandy loam, 15 to 30 percent slopes, Auberry very rocky coarse sandy loam, 30 to 50 percent slopes, and tailings.

Land cover within the Project area consists of oak woodland and riparian vegetation as well as the built environment of Lotus Road, the HLP parking lot, SR-49, and road shoulders which together are classified as roadway/urban. The oak woodland habitat borders both sides of the roadways. This habitat community is dominated by native oak species such as interior live oak (*Quercus wislizeni*) black oak (*Quercus kelloggii)* and ponderosa pine (*Pinus ponderosa*) trees, with an understory of short herbaceous grasses and non-native plants such as Himalayan blackberry (*Rubus armeniacus*) and scotch broom (*Cytisus scoparius*).

Riparian habitat occurs along the South Fork American River outside of the project footprint but visible from it. The canopy is dominated by riparian tree species including Fremont's cottonwood (*Populus fremontii*), white alder (*Alnus rhombifolia*), and black locust (*Robinia pseudoacacia*). The understory is comprised of hydrophytic plants such as narrowleaf willow (*Salix exigua*) and mulefat (*Baccharis salicifolia*).

2.4 Visual Resources and Scenic Resources

Scenic resource and visual resource identification during the Establishment Phase was conducted based on a desktop search of available maps, regional and local plans, and other databases. In the context discussed in this memo, "scenic resources" are those officially designated by federal, state, regional, tribal, or local authorities; "visual resources" are those that exist in the Project AVE without having official recognition.

National Scenic Byway Designation

The Project site does not contain or have views of any officially designated National Scenic Byways (FHWA, 2024).

State Scenic Highway Designation

The Project site does not contain or have views of any state scenic highways (Caltrans, 2024). State Route 49, parallel to the proposed Project, is eligible for designation as a State Scenic Highway from Madera County through El Dorado County to Sierra County.

Classified Landscaped Freeway

State Route 49 in El Dorado County is not a classified landscaped freeway (Caltrans, 2024).

Local Scenic Resources

El Dorado County's General Plan was adopted in 2004 and most recently amended in May 2024. The Visual Resources section of the Draft EIR for the General Plan describes the County as possessing a variety of "[r]olling hills dotted with mature oaks and oak woodlands, agricultural land, apple orchards and vineyards, evergreen forests and snow-capped mountains, scenic rivers, alpine lakes, and historic structures all contribute to the visual character found in the county." (EDC DEIR Visual Element p.5.3-2, 2003).

The Draft EIR makes a distinction between scenic views (or landscapes) as compared to specific scenic resources. The Draft EIR says: "Scenic views are elements of the broader viewshed such as mountain ranges, valleys, and ridgelines. They are usually middle ground or background elements of a viewshed that can be seen from a range of viewpoints, often along a roadway or other corridor." Scenic resources are features of a viewshed such as trees, rock outcroppings, etc.

Scenic highways and viewpoints are listed in the Draft EIR Table 5.3-1. U.S. 49 southbound from Pedro Hill Road in Pilot Hill to Coloma is listed as an "Important Public Scenic Viewpoint" with the American River as both a scenic view and a scenic resource. The South Fork American River is separately listed as both a scenic view and a scenic resource.

The Draft EIR notes that SR-49 is eligible for designation as a state scenic highway but had not been designated at the time of the publication of the Draft EIR.

The Draft EIR states that the lower portion of the SF American River from Chili Bar to the Folsom Reservoir is a recreational boating resource.

3 Inventory Phase

3.1 Description of Landscape Visual Character

The existing visual character of the AVE is dominated by transportation facilities, namely Lotus Road and SR-49, and oak woodlands on a hillside. Lotus Road is the central feature within the AVE. The vegetative canopy combined with the hillslope creates a multi-dimensional visual barrier that limits long, scenic views of the SF American River valley. The oak woodland and riparian corridor along the River also

form a visual barrier of the road and trail when viewed from the floodplain and businesses and recreational activities in the River and on the north bank.

The natural environment in the AVE consists of the oak woodland, views of the SF American River, and grassy, herbaceous vegetation on the hill cut. The existing lines in the natural environment are irregular and the form is heterogeneous. The vegetation in this area varies from deep greens to browns depending on the season and the texture is rough. Outside the AVE, there are wide open landscape views across the SF American River valley towards small hills that rise over 2,000 feet off the valley floor. Hills to the northeast are dominated by chaparral whereas to the northwest, the hills are grassy, punctuated by mature oak woodlands following drainage courses.

The paved Lotus Road, as well as the HLP parking lot, is a gray color. Double yellow lines and white fog lines to delineate the road. The existing roadway signs vary in shape and are supported by thin gray cylindrical forms, and they are made of galvanized steel with smooth texture. The signs vary in color, either yellow, green, or red and are also made of galvanized steel with smooth texture. The utility poles contain vertical lines and contain brown coloring as well as grey coloring. The utility lines which connect the utility poles are thin horizontal lines with grey and/or black coloring.

The proposed Project introduces a slightly wider paved visual element along a road with limited vertical changes. The MGS guardrail will be the most visually distinct element though the Natina finish will be compatible with the natural colors of the woodland and grass covered hill cut.

While the proposed trail surface color has not been specified, a neutral gray or light brown color would be compatible with the natural environment. If the surface color were selected to match the color of the bike lanes on SR-49, the trail would not be entirely consistent with the natural environment but would be compatible with the cultural/design elements of SR-49. The Project will positively influence the Project environment by introducing an aesthetically pleasing multi-use trail.

3.2 Description of Landscape Visual Quality

The vividness of the overall landscape and natural environment, which consists of rolling hills on both sides of the SF American River valley, the SF American River, oak woodlands and riparian vegetation, and chaparral covered hills to the north makes the natural landscape memorable.

Intactness is high as the commercial and residential development in the area is not dense nor does it disrupt the landscape character with vertical or colored elements. The commercial and residential development is not dense and much of it is screened by mature trees. The development does not negatively impact the scenic resource of the SF American River.

Unity is high since design features of the built environment and natural environment are harmonious with the landscape topography and are balanced with each other.

3.3 Viewers

There are two major types of viewer groups for highway projects: neighbors and travelers.

Neighbors are people who have views *to* the road. For this Project neighbors include:

- Residents
- Institutional viewers (workers at the commercial businesses in the vicinity)
- Park users
- River rafters
- Vacationers staying at private campgrounds on the north side of the River

Travelers are people who have views *from* the road. For this Project travelers include:

- Motorists
- Bicyclists

The Project will construct a Class I multi-use trail in the Lotus Road ROW. The barrier rail will look different but retains a low profile with openings. Since viewer sensitivity is high and viewpoint sensitivity is high, neighbors (people with views *to* the transportation project), travelers (people with views *from* the transportation project), and viewpoints will be affected by the proposed Project. See below for an analysis regarding viewer and viewpoint sensitivity.

Viewer Sensitivity

To determine viewer sensitivity, three attributes for viewer exposure (proximity, extent or number of viewers, and duration) and three for viewer awareness (attention, focus, and protection) were evaluated.

The neighbors viewer groups would have a moderately high viewer exposure, but this will vary depending on how each viewer group is in proximity to the Project features. There are very few residences near the trail and Lotus Road itself is mostly screened from their viewsheds due to topography, mature trees, and the distance from the residence to the road. The residential viewer group would have a low sensitivity to the visual changes. For institutional viewers, those on the north side of the SF American River have their views of Lotus Road mostly screened by mature trees. These institutional viewers would have a low sensitivity to the visual changes. One institutional viewer is located on the southeast corner of Lotus Road and SR-49. This commercial location will look directly across Lotus Road and see the multi-use trail and MGS guardrail so it is expected that this viewer would have a moderate sensitivity to the visual changes. The vacationers staying at the private campgrounds would have a low sensitivity to the visual changes. They are over 450-ft away from Lotus Road and, like the institutional viewers on the north side of the SF American River, their views are screened by mature trees. River rafters may have closer views of Lotus Road and the trail from a different angle than viewers on the north bank of the River. Nevertheless,

the views of the road and trail would be mostly screened by mature riparian and oak woodland vegetation. River rafters would have a low sensitivity to the visual changes. Visitors to the HLP, both those who the upper parking lot and those who walk over the multi-use trail to access the unimproved trails along the river, will see where the southern end of the new trail ties into the existing trail in the park. The park users would have a moderate sensitivity to the visual changes.

For the neighbors viewers group, viewer awareness is low to moderate as individuals in this viewer group are limited in their views of the proposed changes. Broad and general views of the area would result in less sensitivity to visual changes.

For the travelers' viewer group, viewer exposure would be moderately high since they are travelling over the Project features. The extent would be moderately high as the travelers would have views of the Project and duration would be moderately low to low since they are only passing through the area. Viewer awareness would be moderately low since individuals in this viewer group would be preoccupied with other activities, have a broad and general view of the area, but are likely to value the natural setting of the SF American River valley. Travelers on Lotus Road would have a different visual experience compared to travelers on SR-49 as the travelers on Lotus Road would see the trail surface, post-and-cable fence, and MGS guardrails. Travelers eastbound on SR-49 would only see a glance of the trail and guardrail if they looked south. Westbound travelers on SR-49 would see a longer section of guardrail and trail as it connects to the light reddish colored bike lane along SR-49. Overall viewer sensitivity for neighbors and travelers is considered to be moderate.

Viewpoint Sensitivity

Viewpoint sensitivity is a judgment of the scenic importance of a viewpoint and whether it is part of an identified scenic resource. Sensitive viewpoints can be scenic or visual resources, vistas, landscape, or ocean views important to neighbors or travelers.

The SR-49 eastbound through the Lotus Road intersection is a local, County designated scenic route according to the General Plan EIR (2003). At the intersection of SR-49 and Lotus Road, however, the proposed trail would distract from this resource. Therefore, viewpoint sensitivity is considered moderate.

The South Fork American River is separately listed as both a scenic view and a scenic resource. Viewpoint sensitivity is considered high. As noted in the neighbors viewer group, the views of Lotus Road and the multi-use trail are screened by mature trees.

3.4 Viewpoints

Viewpoints can be vistas, open landscape views, ocean views, views of important mountains, views of historic or attractive buildings, rock outcrops, heritage trees, tree groves etc. The importance of each viewpoint is determined by the level of scenic resource designation, the distance of the scenic or visual resource, and the visual quality of the scenic or visual resource. See section 3.3 for more information regarding viewpoint sensitivity.

4 Analysis Phase

4.1 Evaluation of Visual Impact

Visual impact is determined by combining visual change and visual sensitivity, which are analyzed below:

Visual Change

After analyzing visual compatibility and visual contrast (described below), visual change was determined. The overall visual change in the existing natural, cultural and Project environments created by the proposed Project will be moderately-low.

Visual Compatibility

The existing visual character is dominated by the rolling hills, mature oak woodland, and the SF American River channel with its riparian vegetation. The Project would permanently remove approximately 0.24 acres of vegetation along the edge of Lotus Road and convert portions of the existing, wide road shoulder into a trail. The Project will add a narrow band of additional hardscape along the side of Lotus Road which will increase grey and brown colors and human-made textures of the trail.

The removal of 0.24 acres of oak woodland vegetation is a small percentage of vegetation that contributes to the visual character of the area. Temporary impacts to these habitats are also anticipated. Impacts would be minimized and avoided with implementation of **VIS-1**, **VIS-2,** and **VIS-3**.

To further minimize visual impacts, aesthetic treatments will be applied to all features to compliment the visual character of the area. The Project would have an adversely low effect on visual character. The Project would have no effect on intactness since the new human made features are added to an existing road corridor.

Overall, with implementation of the recommended environmental commitments, the visual compatibility of the proposed Project with the existing natural, cultural, and Project environments will have no adverse effect.

Visual Contrast

Currently, vividness of the overall landscape is high as the dominate visual elements are memorable, unity is high, and the natural environment is balanced. Both the horizontal (wider hardscaped surface) and vertical elements (post-and-cable fence and MGS guardrail) of the trail are narrow and low and compatible with Lotus Road and existing fences and signage. The proposed Project will convert portions of the existing, wide road shoulder into a trail. The visual elements added by the proposed Project would result in an adversely low effect to the viewshed as seen from Lotus Road.

Applying aesthetic treatments on the guardrail and post-and-cable fence such as a Natina stain, per **VIS-4**, will ensure that the new features are visually compatible with the existing environment. The permanent removal of 0.24 acres of vegetation would impact a small percentage of vegetation that contributes to the vividness and

memorability of the area. Aesthetic treatments on the MGS guardrails and post-and-cable fence would ensure that the vividness of the existing environments would not further decrease. The unity of the SF American River valley would not decrease. Overall, with implementation of the recommended environmental commitments, the visual contrast of the proposed Project with the existing natural, cultural and Project environments will have no adverse effect.

Visual Sensitivity

As discussed in section 3.3, the overall visual sensitivity to the proposed Project in the existing natural, cultural, and Project environments will be moderate.

Visual Impact

Overall visual impact was evaluated using descriptive values listed in section 4 of the *Handbook*. As visual change and sensitivity are of equal importance, the overall visual impact of the proposed Project on the existing natural, cultural, and Project environments will be a very low adverse impact.

CEQA Checklist Aesthetics questions:

Would the project:

a) Have a substantial adverse effect on a scenic vista?

The El Dorado County General Plan Draft Environmental Impact Report identifies the SF American River as a scenic vista. With the incorporation of the environmental commitment measures **VIS-1** through **VIS-4**, the proposed Project will not have a substantial adverse effect on a scenic vista.

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

According to the State Scenic Highway Map and the El Dorado County General Plan Draft Environmental Impact Report, there are no officially state designated scenic highways within the proposed Project footprint. Therefore, there would be no impact.

c) In nonurbanized 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?

The Project is in the community of Lotus, which is a rural area. The multi-use trail would not substantially degrade the existing visual character or quality of public views of the site and its surroundings. Aesthetic treatments would be applied to Project features to minimize visual impacts.

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

The proposed Project will not install any lighting. Therefore, there would be no impact.

5 Mitigation Phase (Environmental Commitments)

5.1 Recommendations for Environmental Commitment Measures

Environmental commitments have been proposed to lessen the visual impact of the Project, which may also help generate public acceptance of a Project. Environmental commitments will be designed and implemented with the concurrence of the District Landscape Architect.

The following environmental commitments can avoid or minimize negative visual effects and/or improve aesthetics:

VIS-1: Prior to the start of construction activities, the Project limits within environmentally sensitive areas, will be marked with temporary high visibility fencing or staking to ensure construction will not further encroach into sensitive resources. Environmentally sensitive areas will be marked on Project plans (same as Natural Environment Study BIO-4).

VIS-2: Vegetation removal will not exceed what is shown on the plans without prior approval from the Project biologist. If trees will be trimmed rather than removed, trimming must comply with ANSI A300 pruning standards and must not:

- leave branch stubs
- make unnecessary heading cuts
- cut off the branch collar (not make a flush cut)
- top or lion's tail trees (stripping a branch from the inside leaving foliage just at the ends)
- remove more than 25 percent of the foliage of a single branch
- remove more than 25 percent of the total tree foliage in a single year
- damage other parts of the tree during pruning
- use wound paint
- climb the tree with climbing spikes (same as Natural Environment Study BIO-2)

VIS-3: If mitigation for tree impacts is required per the Oak Removal Management Plan, on-site retention, replacement planting both on-site and off-site, and/or payment of in-lieu fees will be completed in coordination with the County (same as Natural Environment Study BIO-3).

VIS-4: The new MGS guardrails and post-and-cable fence will have aesthetic treatments such as a Natina stain as identified by the project engineer.

6 Conclusions

The proposed Project is on Lotus Road in the community of Lotus in El Dorado County, California. There would be no substantial impacts on scenic highways, scenic vistas, or eligible or listed historic structures. Project construction activities would result in only temporary visual changes which would not negatively affect viewers.

With implementation of **VIS-1** thorough **VIS-4**, visual impacts will be minimized. As part of the Project, aesthetic treatments will be applied to the MGS guardrail and fence posts. Visual impact was determined to be very low adverse.

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Appendix A: Scoping Questionnaire

Questionnaire to Determine Visual Impact Assessment (VIA) Level

Use the following questions and subsequent score as a guide to help determine the appropriate level of VIA documentation. This questionnaire assists the VIA preparer (i.e. Landscape Architect) in estimating the probable visual impacts of a proposed project on the environment and in understanding the degree and breadth of the possible visual issues. The goal is to develop a suitable document strategy that is thorough, concise and defensible.

Enter the project name and consider each of the twelve questions below. Select the response that most closely applies to the proposed project and corresponding number on the right side of the table. Points are automatically computed at the bottom of the table and the total score should be matched to one of the four groups of scores at the end of the questionnaire that include recommended levels of VIA study and associated annotated outlines (i.e., memo, standard, advanced).

This scoring system should be used as a preliminary guide and should not be used as a substitute for objective analysis on the part of the preparer. Although the total score may recommend a certain level of VIA document, circumstances associated with any one of the ten question-areas may indicate the need to elevate the VIA to a greater level of detail. For projects done by others on the State Highway System, the District Landscape Architect should be consulted when scoping the VIA level and provide concurrence on the level of analysis used.

The Standard Environmental Reference, Environmental Handbook, Volume I: Chapter 27-Visual & Aesthetics Review lists preparer qualifications for conducting the visual impact assessment process. Landscape Architects receive formal training in the area of visual resource management and can appropriately determine which VIA level is appropriate.

Preparer Qualifications:

> "Scenic Resource Evaluations and VIA's are performed under the direction of licensed Landscape Architects. Landscape Architects receive formal training in the area of visual resource management with a curriculum that emphasizes environmental design, human factors, and context sensitive solutions. When recommending specific visual mitigation measures, Landscape Architects can appropriately weigh the benefits of these different measures and consider construction feasibility and maintainability."

Calculate VIA Level Score

Project Information

Project Name

Henningsen Lotus Road Class I Multi-use Trail

Project Identification #

CML-5925(194)

Project Location (Dist-Co-Rte-PM)

El Dorado County

Preparer Name and CA LA License Number

Enter Preparer Name and CA LA License No

Caltrans District Landscape Architect (DLA)

For projects on State Highway System Only, Name of Caltrans District Landscape Architect (DLA) providing VIA Questionnaire Score Concurrence - if different than above.

For Projects on State Highway System Only, Enter DLA Name

Visual Features of Project and its Alternative(s)

Riparian vegetation on eastern bank of South Fork American River

Additional Visual Context Remarks

Enter Additional Visual Context

Regulatory Framework

Potential Agencies that may have to be Involved

- [x] **Federal**
- [x] **State**
- [x] **Local**
- [ ] **Tribal**
- [ ] **Other**

Visual Change and Sensitivity

Landscape Observations

- [x] **Water**
- [ ] **Visually dominant landforms**
- [x] **Natural vegetation**
- [ ] **Visually Appealing Structures**
- [ ] **Other features of interest**

Impact of Project on Natural, Cultural, and Existing Project Environments

- [x] **Highly compatible**
- [ ] **Moderately compatible**
- [ ] **Not compatible**
- [ ] **Other**

Landscape Context and Development Patterns

- [x] **Natural/Undeveloped**
- [x] **Rural**
- [ ] **Suburban**
- [ ] **Urban**

Scenic, Visual and Historic Resource(s) within the Area of Visual Effect

- [ ] **Officially designated State Scenic Highway**
- [ ] **Eligible Scenic Highway**
- [x] **Visual resources**
- [ ] **Federally (or otherwise) designated historic, scenic resource**

Expected Agency Involvement

Caltrans, CDFW, UWFWS

Expected Public Feedback

- [ ] **Scenic resources identified as important**
- [x] **Not important**
- [ ] **No public feedback**

Change to Visual Environment

1. **Does the project's aesthetic approach appear to be consistent with applicable laws, ordinances, regulations, policies, or standards?**

Although the State is not required to comply with regional and local planning ordinances and other regulations, these documents are critical in understanding the importance that communities place on visual resources. The Caltrans Environmental Planning branch may have copies of the planning documents that pertain to the project. If not, this information can be obtained by contacting the local planning department.

High Consistency (2 point)

2. **Will permits be required by outside regulatory agencies (i.e., federal, state, or local)?**

Permit requirements can have an unintended consequence on the visual environment. Anticipated permits, as well as specific permit requirements may be determined by talking with the project Environmental Planner and Project Engineer. Note: coordinate with the Caltrans representative responsible for obtaining the permit prior to communicating directly with any permitting agency.

Yes, either federal, or state, or federal and local, or state and local (3 poin

3. **Will the project character be compatible with the visual character of the existing landscape?**

Consider the types of adverse changes to the scenic integrity of the landscape caused by the project. Evaluate the scale and extent of the project features compared to the surrounding scale of the community. Is the project likely to give an urban appearance to an existing rural or suburban community?

High Compatibility (1 points)

4. **Will the project contrast adversely with the memorability (vividness), natural harmony and/or cultural order (unity) of the existing landscape?**

Evaluate the scale and extent of the project features compared to the scale of the visual elements within the surroundings. Is the project likely to change the appearance in a way that is contrasting with the line, color, form, and texture of the existing landscape visual character?

Low Adverse Contrast (2 point)

5. **Will the project, when viewed together with other past or foreseeable projects, result in a cumulative adverse change in the visual quality or character of the existing landscape?**

Identify any projects in the area (both Caltrans' and others') that have been recently constructed and/or are reasonably foreseeable and/or currently planned for future construction. The window of time and the extent of area applicable to possible cumulative impacts should be based on a reasonable anticipation of the viewing public's awareness of cumulative change.

Project will not result in cumulative impacts (1 point)

6. **Will the project produce a new source of substantial light or glare, which will adversely affect daytime or nighttime views within the area?**

Identify new sources of lighting and glare and how day- and nighttime visual conditions may change.

No potential for adverse effects (1 point)

7. **What is the potential that the project proposal will be controversial within the community?**

Assess the level of public concern by talking with local agency management and staff familiar with the affected community's sentiments as evidenced by past projects and/or current information.

Low Potential that project will be controversial (2 points)

8. **How sensitive are potential viewer groups likely to be regarding visible changes proposed by the project?**

Consider among other factors who the viewer groups represent, the number of viewers within the group, probable viewer expectations, activities, viewing duration, and orientation. The expected viewer sensitivity level may be scoped by applying professional judgment, and by soliciting information from other Caltrans staff, local agencies and community stakeholders familiar with the affected community's sentiments and demonstrated concerns..

No Sensitivity (1 point)

9. **What level of local concern is there for the types of specific project features (e.g., bridge structures, large excavations, sound barriers, or median planting removal) and construction impacts that are proposed?**

Certain project improvements can be of special interest to local citizens, causing a heightened level of public concern, and requiring a more focused visual analysis.

Low Level of Concern (2 points)

10. **Are there federally, state, locally designated scenic or historic resources, or other visual resources within the project area of visual effect (i.e., viewshed)?**

For example: protected viewsheds, visually sensitive public use areas, national historic/scenic trails, historic sites or structures, scenic designated viewpoints, wild and scenic rivers, state scenic highways or federal scenic byways, or potential visual resources such as stands of trees, rock outcroppings, etc.

One potential visual resource (2 points)

11. **Will the project sponsor or public benefit from a more detailed visual analysis in order to help reach consensus on a course of action to address potential visual impacts?**

Consider the proposed project features, possible visual impacts, and probable environmental commitments.

No Benefit (1 point)

12. **Will the project likely require design changes to reduce the extent of visual resource impacts?**

Consider design changes and enhancements such as realignment, additional alignment alternatives, vertical profile adjustments, extensive landscaping, architectural treatment, color and texture treatments and/or lighting of aboveground structures.

No design changes (1 point)

Assumptions/Issues

Assumptions/Issues

Calculate Total

It is recommended that you print a copy of these calculations for the project file.

Project Score: 19

Select An Outline Based Upon Project Score

The total score will indicate the recommended VIA level for the project. In addition to considering circumstances relating to any one of the 12 questions that would justify elevating the VIA level, also consider any other project factors that would influence level selection.

Score 12-18 VIA Questionnaire

No visual resource related regulatory requirements. No or negligible visual changes to the environment are proposed. None or minimal public concern has been identified. This Questionnaire with rationale for selected responses to questions in the available spaces after each question along with a statement of no visual resource impact is appropriate and provides a sufficient rationale why a technical study is not required.

Score 19-28 VIA Memorandum

Very limited visual resource related regulatory requirements. Minor visual changes to the environment are proposed. Minor public concern from the public may be expected. A VIA Memorandum is appropriate in this case. The VIA Memorandum should briefly describe project features, impacts and any environmental commitment measures. Visual simulations are not necessary. Go to the Directions for using and accessing VIA Memorandum Annotated Outline (website link).

Score 29-38 Standard VIA Report

Several visual resource related regulatory requirements. Moderately noticeable visual changes to the environment are proposed. Moderate public concern may be expected. A fully developed Standard VIA Report is appropriate. The report should describe in detail the project's visual attributes, its visual impact and potential environmental commitment measures. Visual simulations are recommended. This report will likely receive public review. Go to the Directions for using and accessing the Standard VIA Annotated Outline (website link).

Score 39-48 Advanced VIA Report

Extensive visual resource related regulatory requirements and clearly noticeable changes to the environment are proposed. Moderate to high public concern may be expected. A fully developed Advanced VIA Report is appropriate. The report should describe in detail and numerically score the project's visual change and sensitivity, its visual impact and any environmental commitments proposed. Visual simulations are required. It is appropriate to alert the Project Development Team to the potential for

Appendix B:
Road Construction Emissions Model Results

Road Construction Emissions Model, Version 8.1.0

Daily Emission Estimates for -> Henningsen/ Lotus Road Class I Multi-Use Trail Project

Project Phases (Pounds)	ROG (lbs/day)	CO (lbs/day)	NOx (lbs/day)	Total PM10 (lbs/day)	Exhaust PM10 (lbs/day)	Fugitive Dust PM10 (lbs/day)	Total PM2.5 (lbs/day)	Exhaust PM2.5 (lbs/day)	Fugitive Dust PM2.5 (lbs/day)	SOx (lbs/day)	CO2 (lbs/day)	CH4 (lbs/day)	N2O (lbs/day)	CO2e (lbs/day)
Grubbing/Land Clearing	0.33	5.94	2.74	2.64	0.14	2.50	0.64	0.12	0.52	0.01	1,067.51	0.27	0.01	1,078.06
Grading/Excavation	1.17	13.49	10.79	3.17	0.67	2.50	0.98	0.46	0.52	0.06	5,967.18	0.67	0.14	6,024.75
Drainage/Utilities/Sub-Grade	0.86	8.62	7.83	2.87	0.37	2.50	0.83	0.31	0.52	0.02	2,278.00	0.57	0.02	2,299.52
Paving	0.64	10.22	5.77	0.31	0.31	0.00	0.26	0.26	0.00	0.02	1,808.01	0.46	0.02	1,825.30
Maximum (pounds/day)	1.17	13.49	10.79	3.17	0.67	2.50	0.98	0.46	0.52	0.06	5,967.18	0.67	0.14	6,024.75
Total (tons/construction project)	0.06	0.70	0.54	0.17	0.03	0.14	0.05	0.02	0.03	0.00	235.10	0.04	0.00	237.36

Notes:

Project Start Year ->	2025
Project Length (months) ->	6
Total Project Area (acres) ->	13
Maximum Area Disturbed/Day (acres) ->	0
Water Truck Used? ->	Yes

	Total Material Imported/Exported Volume (yd^3/day)		Daily VMT (miles/day)			
Phase	Soil	Asphalt	Soil Hauling	Asphalt Hauling	Worker Commute	Water Truck
Grubbing/Land Clearing	0	0	0	0	160	40
Grading/Excavation	530	113	810	180	680	40
Drainage/Utilities/Sub-Grade	0	0	0	0	560	40
Paving	0	0	0	0	400	40

PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.

Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns G and H. Total PM2.5 emissions shown in Column I are the sum of exhaust and fugitive dust emissions shown in columns J and K.

CO2e emissions are estimated by multiplying mass emissions for each GHG by its global warming potential (GWP), 1 , 25 and 298 for CO2, CH4 and N2O, respectively. Total CO2e is then estimated by summing CO2e estimates over all GHGs.

Total Emission Estimates by Phase for -> Henningsen/ Lotus Road Class I Multi-Use Trail Project

Project Phases (Tons for all except CO2e. Metric tonnes for CO2e)	ROG (tons/phase)	CO (tons/phase)	NOx (tons/phase)	Total PM10 (tons/phase)	Exhaust PM10 (tons/phase)	Fugitive Dust PM10 (tons/phase)	Total PM2.5 (tons/phase)	Exhaust PM2.5 (tons/phase)	Fugitive Dust PM2.5 (tons/phase)	SOx (tons/phase)	CO2 (tons/phase)	CH4 (tons/phase)	N2O (tons/phase)	CO2e (MT/phase)
Grubbing/Land Clearing	0.00	0.04	0.02	0.02	0.00	0.02	0.00	0.00	0.00	0.00	7.05	0.00	0.00	6.45
Grading/Excavation	0.03	0.36	0.28	0.08	0.02	0.07	0.03	0.01	0.01	0.00	157.53	0.02	0.00	144.29
Drainage/Utilities/Sub-Grade	0.02	0.20	0.18	0.07	0.01	0.06	0.02	0.01	0.01	0.00	52.62	0.01	0.00	48.19
Paving	0.01	0.10	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.90	0.00	0.00	16.39
Maximum (tons/phase)	0.03	0.36	0.28	0.08	0.02	0.07	0.03	0.01	0.01	0.00	157.53	0.02	0.00	144.29
Total (tons/construction project)	0.06	0.70	0.54	0.17	0.03	0.14	0.05	0.02	0.03	0.00	235.10	0.04	0.00	215.33

PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.

Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns G and H. Total PM2.5 emissions shown in Column I are the sum of exhaust and fugitive dust emissions shown in columns J and K.

CO2e emissions are estimated by multiplying mass emissions for each GHG by its global warming potential (GWP), 1 , 25 and 298 for CO2, CH4 and N2O, respectively. Total CO2e is then estimated by summing CO2e estimates over all GHGs.

The CO2e emissions are reported as metric tons per phase.

Appendix C:
Natural Environment Study



Natural Environment Study

Discussion of Biological Resources, Project Impacts, and Mitigation

El Dorado County, California

District 3 – ELD

CML–5925(194)

February 2025

Caltrans
CALIFORNIA DEPARTMENT OF TRANSPORTATION

Natural Environment Study

Discussion of Biological Resources, Project Impacts, and Mitigation

El Dorado County, California
District 3 – ELD
CML–5925(194)
February 2025
STATE OF CALIFORNIA
Department of Transportation

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Acronyms List

BMPs	Best Management Practices
BSA	Biological Study Area
Caltrans	California Department of Transportation
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFG	California Fish and Game
CMAQ	Congestion Mitigation and Air Quality
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
County	El Dorado County
CWA	Clean Water Act
DPS	Distinct Population Segment
EPA	Environmental Protection Agency
EO	Executive Order
°F	Fahrenheit
FESA	Federal Endangered Species Act
FGC	Fish and Game Code
FHWA	Federal Highway Administration
FYLF	Foothill yellow-legged frog
IPaC	Information for Planning and Consultation
MBTA	Migratory Bird Treaty Act
NEPA	National Environmental Policy Act
NES	Natural Environment Study
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
ORMP	Oak Resources Management Plan
Project	Henningsen/Lotus Multi-Use Trail Project
RSP	Rock Slope Protection
RWQCB	Regional Water Quality Control Board
SR	State Route
TMDLs	Total maximum daily loads
SCOTUS	Supreme Court of the United States
SWRCB	State Water Resources Control Board
USACE	United States Army Corps of Engineers
USFWS	United States Fish and Wildlife Service

Summary

The County of El Dorado (County), in coordination with the California Department of Transportation (Caltrans), proposes to construct pedestrian facilities along Lotus Road between Henningsen Lotus Park and State Route (SR) 49 in Lotus, an unincorporated community in El Dorado County as part of the Henningsen/Lotus Multi-Use Trail Project (Project). The Project will complete the County's vision to provide multi-modal access to commercial and recreational facilities as shown in the County's Community Mobility Plan.

The Project will involve the installation of a Class I bike lane, boardwalk structure, sidewalks, and additional improvements to enhance connectivity and safety. The Project includes approximately 2,300 linear feet of new Class I trail, improvements to existing pullouts along Lotus Road, and the installation of approximately 1,800 linear feet of guardrail. All work will be conducted within County right-of-way. The Project is consistent with the Coloma Lotus Mobility Plan and is included in El Dorado County's Active Transportation Plan.

This Natural Environment Study (NES) provides a review and evaluation of the potential impacts to threatened, endangered, listed, or special-status species and protected habitat resources as a result of the proposed Project. Field surveys were conducted within the Biological Study Area (BSA). The BSA was defined as the area required for Project features, including staging and access, plus an approximate 50-foot buffer to account for adjacent biological resources and potential changes in Project design.

During a biological survey conducted on August 13, 2024, two natural habitat community types were observed within the BSA: oak woodland and riparian. Most of the BSA, however, consists of hardscape, primarily classified as roadway/urban.

The Project would temporarily impact approximately 0.72 acres of oak woodland habitat due to equipment access, staging, and temporary construction easements. Additionally, the Project will result in permanent impacts to 0.24 acres of oak woodland habitat for the installation of the boardwalk structure, sidewalks, and other improvements aimed at enhancing connectivity and safety, such as a retaining wall and Rock Slope Protection (RSP) to prevent erosion.

For the purposes of this analysis, "special-status species" includes any species that has been afforded special recognition by federal, state or local resources agencies (e.g., U.S. Fish and Wildlife Service [USFWS], California Department of Fish and Wildlife [CDFW], etc.), and/or resource conservation organizations (e.g., California Native Plant Society [CNPS]). Literature research, habitat assessments, and biological surveys determined that no state or federally listed species have the potential to occur within the Project area. The Project will have *No Effect* on all federally listed species as listed on the USFWS Information for Planning and Consultation (IPaC) species list generated for the Project.

The Project will not result in impacts to jurisdictional habitats, including riparian habitat present within the BSA. Therefore, regulatory permits and coordination with permitting agencies is not required for the Project.

This Project includes local funds, as well as federal funds through the Congestion Mitigation and Air Quality (CMAQ) program. Therefore, the Project requires compliance with both the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). The CEQA lead agency is the County and the NEPA lead agency is Caltrans.

Chapter 1: Introduction

The County, in coordination with the Caltrans, proposes to construct pedestrian facilities along Lotus Road between Henningsen Lotus Park and SR-49 in Lotus, an unincorporated community in El Dorado County. This Project will complete the County's vision to provide multi-modal access to commercial and recreational facilities as shown in the County's Community Mobility Plan.

This NES was prepared for the Project and describes the existing biological resources within the BSA.

Project History

Project Purpose and Need

Purpose

The purpose of the Project is to enhance pedestrian and bicycle connectivity and safety along Lotus Road between Henningsen Lotus Park and SR-49. This is aligned with the region's long-term vision to provide multi-modal access to key commercial and recreational facilities, improving overall mobility within the area. The Project will install a Class I bike and pedestrian trail, boardwalk structures, sidewalks, and guardrails to improve the functionality of the road corridor. These improvements are consistent with local mobility and active transportation planning documents, including the Coloma Lotus Mobility Plan and the County's Active Transportation Plan.

Need

The need for the Project arises from the current lack of safe and accessible pedestrian and bicycle facilities along Lotus Road, which hinders multi-modal transportation and safe access to recreational and commercial areas. The region experiences significant traffic due to tourism and recreational activities associated with the American River, creating a need for enhanced infrastructure to improve safety and mobility for non-motorized users. The proposed Project will address this gap by providing a dedicated Class I trail, improving roadside pullouts, and installing safety features like guardrails to ensure safer interactions between motorized and non-motorized traffic.

Project Description

The County, in coordination with the Caltrans, proposes to construct pedestrian and bicycle facilities along Lotus Road between Henningsen Lotus Park and SR-49 in Lotus, an unincorporated community in El Dorado County (**Figure 1. Project Vicinity** and **Figure 2. Project Location**). This Project will complete the region's vision to provide multi-modal access to commercial and recreational facilities as shown in the local region mobility and active transportation planning study documents.

The Project will involve the installation of a Class I bike and pedestrian trail, boardwalk structures, sidewalks, and additional improvements to enhance connectivity and safety.

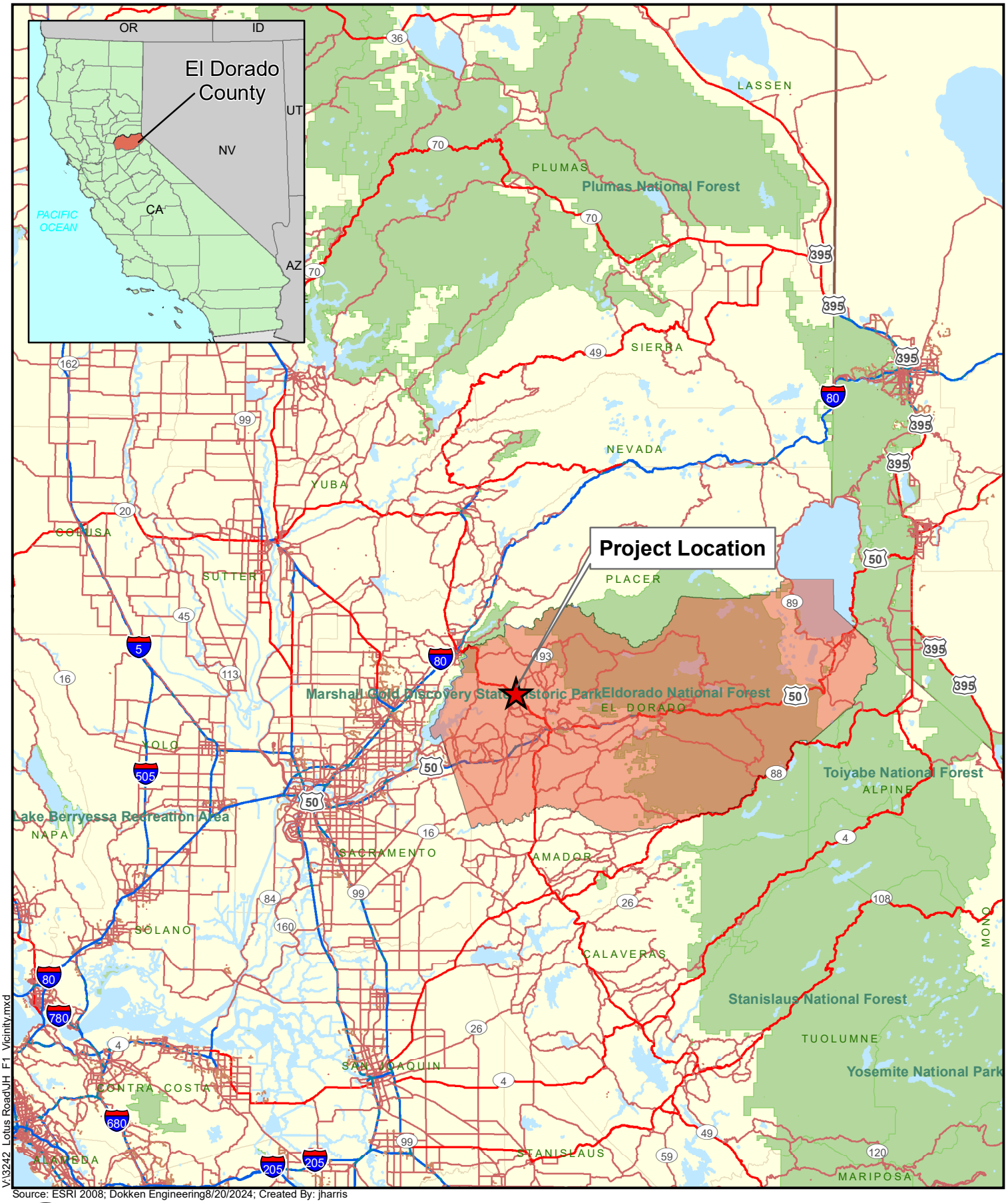
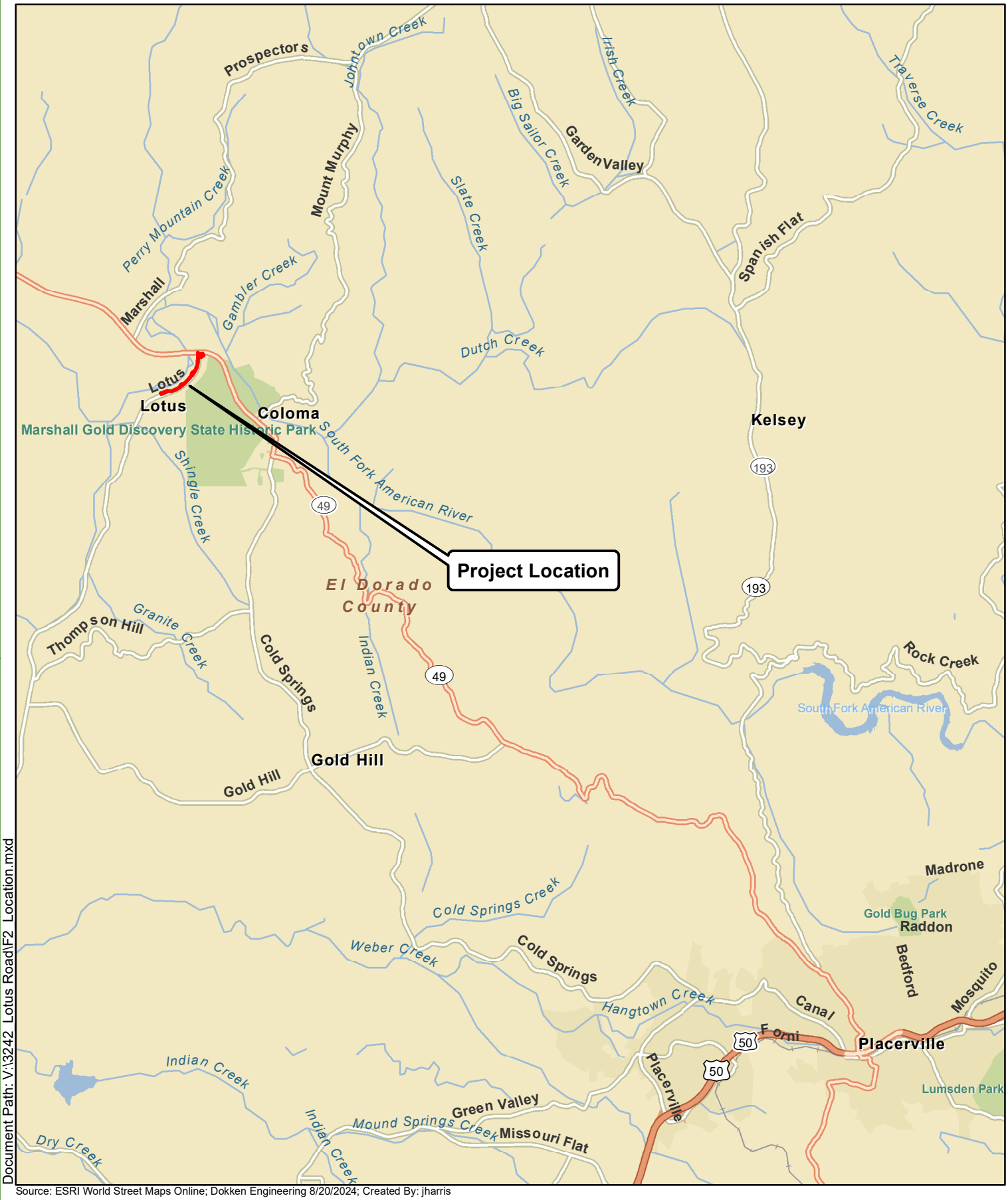


FIGURE 1
Project Vicinity

CML-5925(194)
Henningsen/Lotus Multi-Use Trail Project
Lotus, El Dorado County, California



Document Path: V:\3242_Lotus Road\F2_Location.mxd

Source: ESRI World Street Maps Online; Dokken Engineering 8/20/2024; Created By: jharris

0 0.5 1 1.5 2 Miles

FIGURE 2
Project Location

CML-5925(194)
Henningsen/Lotus Multi-Use Trail Project
Lotus, El Dorado County, California

The Project includes approximately 2,300 linear feet of new Class I trail, improvements to existing pullouts along Lotus Road, and the installation of approximately 1,800 linear feet of guardrail. All work will be conducted within County right-of-way. The Project is consistent with the Coloma Lotus Mobility Plan and is included in El Dorado County's Active Transportation Plan.

Existing utilities will remain active during Project construction. No extended-time road closures are anticipated to occur, and access to residences and Henningsen Lotus Park will be maintained. There will be no permanent right-of-way impacts or utility easements. Temporary construction easements and encroachment permits may be needed where the trail passes through private and state-owned parcels along the trail. Construction is anticipated to start in the Spring of 2027 and last approximately six months.

This Project is partially funded by local and federal CMAQ funds and therefore requires compliance with both the NEPA and the CEQA. The CEQA lead agency is the County and the federal lead agency is Caltrans.

Chapter 2 – Study Methods

Regulatory Requirements

This section describes the general federal, state, and local plans, policies, and laws that are relevant to biological resources within the BSA. Applicable approvals that could be required before construction of the Project are provided in Chapter 5.

Federal Regulations

National Environmental Policy Act

The NEPA provides an interdisciplinary framework for environmental planning by federal agencies and contains action-forcing procedures to ensure that federal agency decision makers take environmental factors into account. NEPA applies when a federal agency proposes an action, grants a permit, or agrees to fund or otherwise authorize any other entity to undertake an action that could possibly affect environmental resources. Caltrans is the designated NEPA lead agency for the proposed Project, acting under delegation from the Federal Highways Administration (FHWA).

Federal Endangered Species Act

The Federal Endangered Species Act (FESA) of 1973 (16 U.S. Code Section 1531 et seq.) provides for the conservation of endangered and threatened species listed pursuant to Section 4 of FESA and the ecosystems upon which they depend. These species and resources have been identified by USFWS and the National Marine Fisheries Service (NMFS) (FESA 1973). Section 7 of FESA requires federal agencies, in consultation with and with the assistance of the Secretary of the Interior or of Commerce, as appropriate, to ensure that actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of threatened or endangered species or result in the destruction or adverse modification of critical habitat for these species. The USFWS and NMFS share responsibilities for administering the FESA.

Section 9 of FESA prohibits activities that result in “take” of threatened or endangered species. “Take” generally includes killing, harming, or harassing listed species. “Harm” has been further defined to include killing or injuring an individual of a listed species by significant obstruction of essential behavior patterns (e.g., breeding, feeding, or sheltering) through significant habitat modification or degradation.

No species listed as endangered under FESA have the potential to occur within the BSA.

Clean Water Act

The Clean Water Act (CWA) was enacted as an amendment to the Federal Water Pollutant Control Act of 1972, which outlined the basic structure for regulating discharges of pollutants to Waters of the U.S. The CWA serves as the primary federal law protecting the quality of the nation’s surface waters, including lakes, rivers, and coastal wetlands. The CWA empowers the U.S. Environmental Protection Agency (EPA) to set national water quality standards and effluent limitations and includes programs addressing both

point source and nonpoint source pollution. Point source pollution originates or enters surface waters at a single, discrete location, such as an outfall structure or an excavation or construction site. Nonpoint source pollution originates over a broader area and includes urban contaminants in stormwater runoff and sediment loading from upstream areas. The CWA operates on the principle that all discharges into the nation's waters are unlawful unless they are specifically authorized by a permit; permit review is the CWA's primary regulatory tool.

The Regional Water Quality Control Board (RWQCB) has jurisdiction under Section 401 of the CWA and regulates any activity which may result in a discharge to surface waters. Typically, the areas subject to jurisdiction of the RWQCB coincide with those of U.S. Army Corps of Engineers (USACE) (i.e., waters of the U.S. including any wetlands). The RWQCB also asserts authority over "waters of the state" under waste discharge requirements pursuant to the Porter-Cologne Water Quality Control Act. The proposed Project is located within the jurisdiction of the Sacramento office of the Central Valley RWQCB.

The USACE regulates discharges of dredged or fill material into waters of the U. S. These waters include wetlands and non-wetland bodies of water that meet specific criteria, including a direct or indirect connection to interstate commerce. USACE regulatory jurisdiction pursuant to Section 404 of the CWA is founded on a connection, or nexus, between the water body in question and interstate commerce. This connection may be direct (through a tributary system linking a stream channel with traditional navigable waters used in interstate or foreign commerce) or may be indirect (through a nexus identified in USACE regulations).

On May 25, 2023, the Supreme Court of the U.S. (SCOTUS) issued a unanimous ruling limiting the federal government's jurisdiction over wetland and tributaries. In Sackett v. EPA, the Court expressly endorsed the test articulated in the Rapanos plurality opinion and outright rejected Justice Kennedy's "significant nexus" test. Therefore, the Sackett v. EPA decision limits the definition of waters of the U.S. to relatively permanent bodies of navigable waters, and to assert jurisdiction over an adjacent wetland or tributary under the CWA, a party must establish "first, that the adjacent [body of water constitutes] . . . 'water[s] of the United States' (i.e., "only those relatively permanent, standing or continuously flowing bodies of water 'forming geographic[al] features' connected to traditional interstate navigable waters); and second, that the wetland or tributary has a continuous surface connection with that water, making it difficult to determine where the 'water' ends and the 'wetland' begins." (SCOTUS 2023).

Migratory Bird Treaty Act

Executive Order (EO) 13186 (signed January 10, 2001) directs each federal agency taking actions that could adversely affect migratory bird populations to work with USFWS to develop a Memorandum of Understanding that will promote the conservation of migratory bird populations. Protocols developed under the Memorandum of Understanding will include the following agency responsibilities:

- avoid and minimize, to the maximum extent practicable, adverse impacts on migratory bird resources when conducting agency actions;
- restore and enhance habitat of migratory birds, as practicable; and
- prevent or abate the pollution or detrimental alteration of the environment for the benefit of migratory birds, as practicable.

The EO is designed to assist federal agencies in their efforts to comply with the Migratory Bird Treaty Act (MBTA) (50 Code of Federal Regulations 10 and 21) and does not constitute any legal authorization to take migratory birds. Take is defined under the MBTA as “the action of or attempt to pursue, hunt, shoot, capture, collect, or kill” (50 Code of Federal Regulations 10.12) and includes intentional take (i.e., take that is the purpose of the activity in question).

Executive Order 13112 – Invasive Species

On February 3, 1999, President William J. Clinton signed EO 13112 requiring federal agencies to combat the introduction or spread of invasive species in the U.S. The order defines invasive species as “any species, including its seeds, eggs, spores, or other biological material capable of propagating that species, that is not native to that ecosystem whose introduction does or is likely to cause economic or environmental harm or harm to human health." FHWA guidance issued on August 10, 1999 directs the use of the state’s invasive species list, maintained by the Invasive Species Council of California to define the invasive plants that must be considered as part of the NEPA analysis for a proposed project.

Under the EO, federal agencies cannot authorize, fund, or carry out actions that it believes are likely to cause or promote the introduction or spread of invasive species in the U.S. or elsewhere unless all reasonable measures to minimize risk of harm have been analyzed and considered.

State Regulations

California Environmental Quality Act

CEQA (California Public Resource Code § 21000 et seq) is a statute that requires state and local agencies to identify the significant environmental impacts of their actions and to avoid or mitigate those impacts, if feasible. CEQA applies to certain activities of state and local public agencies. A public agency must comply with CEQA when it undertakes an activity defined by CEQA as a "project." A project is an activity undertaken by a public agency or a private activity which must receive some discretionary approval (meaning that the agency has the authority to deny the requested permit or approval) from a government agency which may cause either a direct physical change in the environment or a reasonably foreseeable indirect change in the environment.

Proposals for physical development in California are subject to the provisions of CEQA, as are many governmental decisions which do not immediately result in physical development (such as adoption of a general or community plan). Development project which requires a discretionary governmental approval will require at least some

environmental review pursuant to CEQA, unless an exemption applies. The environmental review required imposes both procedural and substantive requirements. A project may not be approved as submitted if feasible alternatives or mitigation measures are able to substantially lessen the significant environmental effects of the project. The County is the CEQA lead agency for the proposed Project.

California Endangered Species Act

The California Endangered Species Act (CESA) (California Fish and Game [CFG] Code Section 2050 et seq.) requires CDFW to establish a list of endangered and threatened species (Section 2070) and to prohibit the incidental taking of any such listed species except as allowed by CESA (Sections 2080-2089). In addition, CESA prohibits take of candidate species (under consideration for listing).

CESA also requires CDFW to comply with CEQA (Pub. Resources Code Section 21000 et seq.) when evaluating incidental take permit applications (CFG Code Section 2081(b) and California Code Regulations, Title 14, section 783.0 et seq.), and the potential impacts the project or activity for which the application was submitted may have on the environment. CDFW's CEQA obligations include consultation with other public agencies which have jurisdiction over the project or activity [California Code Regulations, Title 14, Section 783.5(d)(3)]. CDFW cannot issue an incidental take permit if issuance would jeopardize the continued existence of the species [CFG Code Section 2081(c); California Code Regulations, Title 14, Section 783.4(b)]. No species listed as endangered under CESA have the potential to occur within the BSA.

Section 1602: Streambed Alteration Agreement

Under CFG Code 1602, public agencies are required to notify CDFW before undertaking any project that will divert, obstruct, or change the natural flow, bed, channel, or bank of any river, stream, or lake. Preliminary notification and project review generally occurs during the environmental process. When an existing fish or wildlife resource may be substantially adversely affected, CDFW is required to propose reasonable project changes to protect the resources. These modifications are formalized in a Streambed Alteration Agreement that becomes part of the plans, specifications, and bid documents for the project.

Section 3503 and 3503.5: Birds and Raptors

CFG Code Section 3503 prohibits the destruction of bird nests and Section 3503.5 prohibits the killing of raptor species and destruction of raptor nests. Trees and shrubs are present within and adjacent to the project and could contain nesting sites.

Section 3513: Migratory Birds

CFG Code Section 3513 prohibits the take or possession of any migratory non-game bird as designated in the MBTA or any part of such migratory non-game bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the MBTA.

Porter Cologne Water Quality Control Act

California's Porter-Cologne Act, enacted in 1969, provides the legal basis for water quality regulation within California. This act requires a "Report of Waste Discharge" for any discharge of waste (liquid, solid, or gaseous) to land or surface waters that may impair beneficial uses for surface and/or groundwater of the state. It predates the CWA and regulates discharges to waters of the state. Waters of the state include more than waters of the U.S., including groundwater and surface waters not considered waters of the U.S. Additionally, the act prohibits discharges of "waste" as defined; this definition is broader than the CWA definition of "pollutant". Discharges under the Porter-Cologne Act are permitted by Waste Discharge Requirements and may be required even when the discharge is already permitted or exempt under the CWA.

The State Water Resources Control Board (SWRCB) and RWQCB are responsible for establishing water quality standards (objectives and beneficial uses) required by the CWA and regulating discharges to ensure compliance with water quality standards. Details regarding water quality standards in a project area are contained in the applicable RWQCB Basin Plan. In California, Regional Boards designate beneficial uses for all water body segments in their jurisdictions, and then set criteria necessary to protect these uses. Consequently, water quality standards developed for particular water segments are based on designated use and vary depending on such use. The SWRCB identifies waters failing to meet standards for specific pollutants, which are then state listed in accordance with CWA Section 303(d). If a state determines that waters are impaired for one or more constituents and the standards cannot be met through point source or nonpoint source controls (a National Pollutant Discharge Elimination System (NPDES) permits or Waste Discharge Requirements), the CWA requires the establishment of total maximum daily loads (TMDLs). TMDLs specify allowable pollutant loads from all sources (point, nonpoint, and natural) for a given watershed.

Regional Water Quality Control Boards

The SWRCB adjudicates water rights, sets water pollution control policy, and issues water board orders on matters of statewide application, and oversees water quality functions throughout the state by approving Basin Plans, TMDLs, and NPDES permits. RWQBs are responsible for protecting beneficial uses of water resources within their regional jurisdiction using planning, permitting, and enforcement authorities to meet this responsibility.

Local Regulations

El Dorado County General Plan

Policy 7.4.2.8 – Sensitive Species and Habitat Protections
If the project area includes habitat for sensitive wildlife or plant species, a biological assessment may be needed. Avoidance and mitigation measures will be required if sensitive species are present.

El Dorado County Oak Resources Conservation Ordinance

El Dorado County has an Oak Resources Management Plan (ORMP), Policy 7.4.4.4, adopted to mitigate impacts to oak woodlands and individual oak trees (El Dorado County 2017). The ordinance requires the preservation of oak woodlands and may require mitigation for the removal of oak trees or impacts to oak woodland habitat. The County's ORMP also requires mitigation of individual native oak trees and greater mitigation (3-to-1 ratio) for Heritage Trees which are 36 inches diameter or greater, measured four feet six inches from ground level. Projects impacting oak woodlands typically need to:

- Avoid impacts where feasible.
- Minimize impacts to oak woodlands.
- Provide mitigation, such as oak woodland restoration, conservation easements, or fees paid to the Oak Resources In-Lieu Fee Program, depending on the significance of the impact.
    - The ORMP requires mitigation for permitted oak tree removal under the ORMP including on-site retention; replacement planting on-site and off-site; and in-lieu fees that will be used to acquire land and/or conservation easements to conserve oak woodlands, and to plant and maintain native oak trees. (Under the prior General Plan Policy tree canopy retention was the only mitigation option available.) All mitigation requires additional permits depending upon the mitigation option chosen.
    - The in-lieu fee for removal of oak woodlands is calculated based on total cost per acre which is currently set at $8,285. The in-lieu fee for removal of individual oak trees is calculated on a total cost per inch which is currently set at $153 for a non-Heritage Tree and $459 per inch for a Heritage Tree at a 3-to-1 ratio. The per-inch fee shall be multiplied by the total number of trunk diameter inches removed. The in-lieu fees collected will be deposited in the County's Oak Woodland Conservation Fund. That fund will be used to acquire land and/or conservation easements to conserve oak woodlands, provide for native oak tree planting, and for ongoing conservation area monitoring and management activities.

Tree trimming and removal along the proposed trail will be required; however, County Road Projects are exempt from needing to obtain a tree removal permit under ORMP Policy 2.1.4. A tree survey and preparation of an Oak Resources Technical Report prepared by a certified arborist will be prepared summarizing all required tree removal and trimming, along with any proposed mitigation for the project.

El Dorado County Site Planning and Project Design Standards

Title 130 – Article 3 of the El Dorado County Site Planning and Project Design Standards requires protection of wetlands and sensitive riparian habitat. Subsection G establishes standards for avoidance and minimization of impacts to wetlands and sensitive riparian habitat as provided in General Plan Policies 7.3.3.4 (Wetlands) and 7.4.2.5 (Identify and Protect Resources). This include Use Regulation 3a, which states that new ministerial and discretionary development shall avoid or minimize impacts to perennial streams,

rivers or lakes, intermittent streams and wetlands, and any sensitive riparian habitat to the maximum extent practicable. Where avoidance and minimization are not feasible, the county shall make findings, based on documentation provided by the project proponent, that avoidance and minimization are infeasible (El Dorado County 2015).

Studies Required

Literature Search

Prior to fieldwork, literature research was conducted through the following government databases; the USFWS IPaC list (**Appendix A**), CDFW's California Natural Diversity Database (CNDDB) (**Appendix B**), and the CNPS Electronic Inventory of Rare and Endangered Plants (**Appendix C**) in order to identify habitats and special-status species having the potential to occur within the BSA. This Project is located outside of National Oceanic and Atmospheric Administration (NOAA) Fisheries jurisdiction; therefore, a NOAA Fisheries species list was not queried.

Field Reviews

Prior to field surveys, the BSA was defined as the Project impact area plus an approximate 50-foot buffer to facilitate construction access and capture potential biological resources adjacent to Project limits. Habitat assessment and analysis of historic occurrences were conducted to determine the potential for each of the species in the lists referenced above to occur within the BSA.

Survey Methods

Biological surveys and habitat assessment methods included walking meandering transects through the entire BSA, observing vegetation communities, compiling notes on observed flora and fauna, and assessing the potential for existing habitat to support sensitive plants and wildlife. All plant and wildlife observations were recorded and are discussed in Chapter 3.

Personnel and Survey Dates

General biological surveys and habitat assessments were conducted by Dokken Engineering biologists, Hanna Sheldon and Jeff Harris on August 13, 2024. The surveys consisted of a general assessment of biological conditions of the Project area, with special attention given to sensitive plant and wildlife species that were determined by the literature assessment to have a potential of occurring within the Project vicinity. Methodology involved walking meandering transects throughout the BSA and recording observed vegetation and wildlife species as well as categorizing existing habitat communities.

Agency Coordination and Professional Contacts

United States Fish and Wildlife

An official species list was obtained from USFWS IPaC on February 14, 2024, to determine federally listed species that may have potential to occur in the Project vicinity. An updated USFWS species list was obtained on September 13, 2024 (**Appendix A**).

California Department of Fish and Wildlife

An official species list was obtained from CDFW's CNDDB on February 14, 2024, to determine state listed species that may have potential to occur in the Project vicinity. An updated CNDDB species list was obtained on September 13, 2024 (**Appendix B**).

California Native Plant Society

On February 14, 2024, a nine-quadrangle list of plant species with potential to occur in the Project vicinity was obtained from the CNPS Inventory of Rare and Endangered Plants of California. An updated list was obtained on September 13, 2024 (**Appendix C**).

Limitations That May Influence Results

Sensitive wildlife species with the potential to occur in the BSA may be cryptic (difficult to detect) or transient, migratory species. The population size and locations of sensitive species may fluctuate through time. Because of this, the data collected for this biological resource technical report represents a "snapshot" in time and may not reflect actual future conditions. The collection of biological field data is normally subject to environmental factors that cannot be controlled or reliably predicted. Consequently, the interpretation of field data must be conservative and consider the uncertainties and limitations imposed by the environment. However, this limitation is not expected to severely influence the results or alter the findings. Surveys were conducted during appropriate weather and temperature conditions.

Chapter 3 – Results: Environmental Setting

Description of the Existing Physical and Biological Conditions

Study Area

The Project area, defined as the area of direct impact, covers approximately 6.04 acres. Prior to field surveys, the BSA was established to include the area required for Project activities, along with a 50-foot buffer to account for nearby biological resources and potential design modifications. The BSA spans about 0.5 mile of Lotus Road and totals approximately 13.00 acres in size (**Figure 3. Project Features**).

Physical Conditions

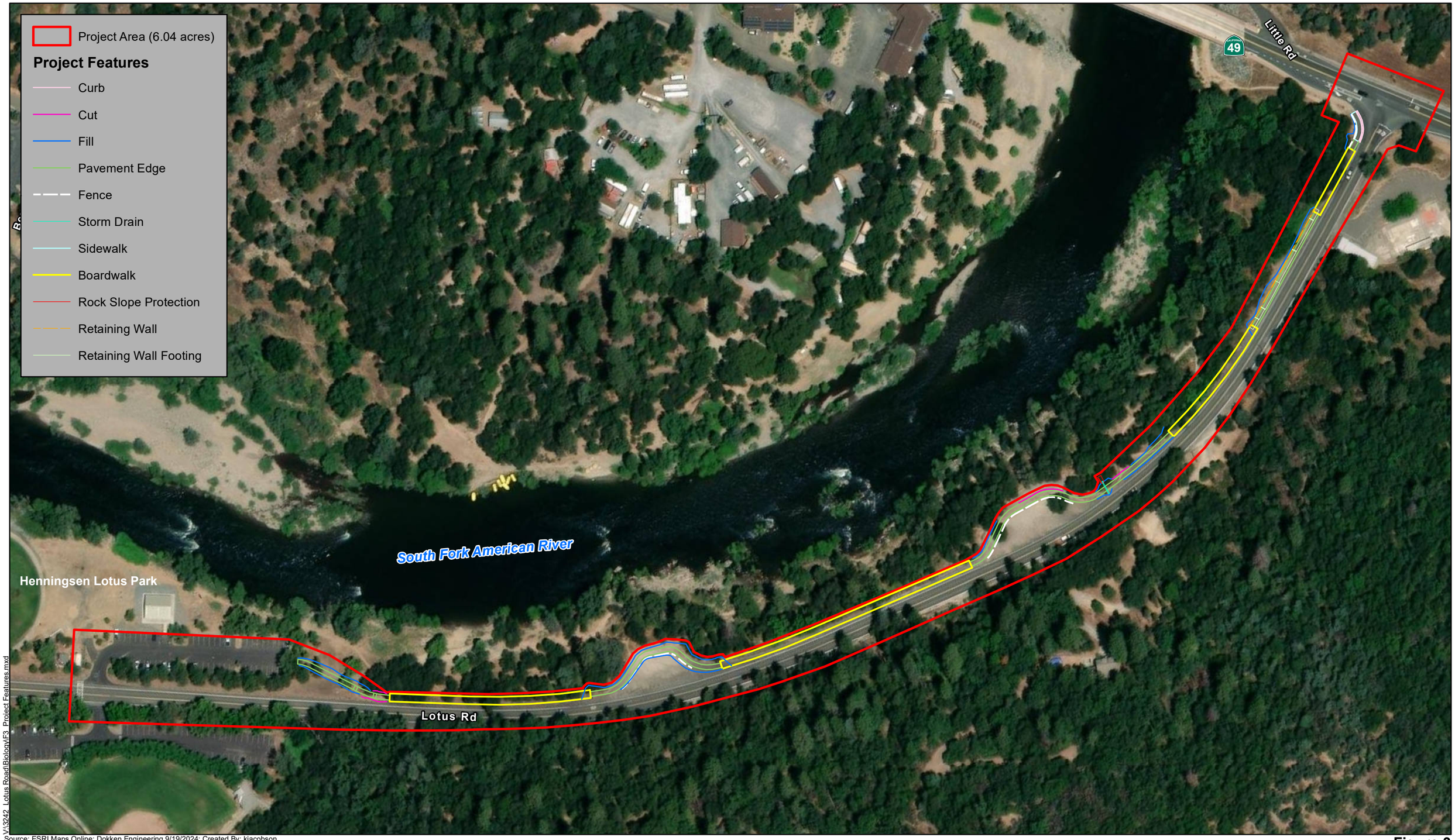
Regionally, the BSA is located off California SR-49 and adjacent to Lotus Road within the census designated area of Coloma, in El Dorado County, California. The BSA occurs within the Northern Sierra Nevada Foothills Floristic Province (Jepson 2024). El Dorado County experiences Mediterranean conditions including warm, dry summers and cool, wet winters. The average annual high temperature is approximately 74 degrees Fahrenheit (°F), and the average annual lows reach approximately 44°F, with up to 38.76 inches of precipitation annually (U.S. Climate Data 2024). The elevation of the BSA is approximately 720 to 870 feet above mean sea level. The soil types within the BSA include Auberry coarse sandy loam, 15 to 30 percent slopes (52.9% of BSA), Auberry very rocky coarse sandy loam, 30 to 50 percent slopes (29.6% of BSA), and tailings (17.5% of BSA) (Natural Resource Conservation Service [NRCS] 2024; **Appendix D**).

Biological Conditions

Vegetation communities within the BSA include oak woodland and riparian, in addition the BSA encompasses Lotus Road and compacted pullout areas classified as roadway/urban (**Figure 4. Vegetation Communities**). Plant and wildlife species observed within the BSA during the 2024 biological survey efforts were used to define habitat types based on composition, abundance, and cover (**Table 1. Species Observed**).

<u>Roadway/Urban</u>

The roadway/urban land cover type is defined as areas that are compacted, devoid of vegetation and have been subject to previous or ongoing disturbances such as roads, roadsides, trails, culverts, and parking lots. This includes Lotus Road and Coloma Road, and two paved parking lots located at the western edge of the BSA. Multiple culverts along Lotus Road convey stormwater runoff, which drains into the riparian corridor west of the road. These culverts do not directly connect to the South Fork of the American River. Because the riparian corridor is not classified as a jurisdictional area under the CWA, and the water in the culverts has no direct connection to the South Fork of the American River, the water flowing through the culverts is considered non-jurisdictional. There are also two barren gravel pullout areas located on the northern edge of Lotus



V:\3242_Lotus Road\Biology\F3_Project Features.mxd

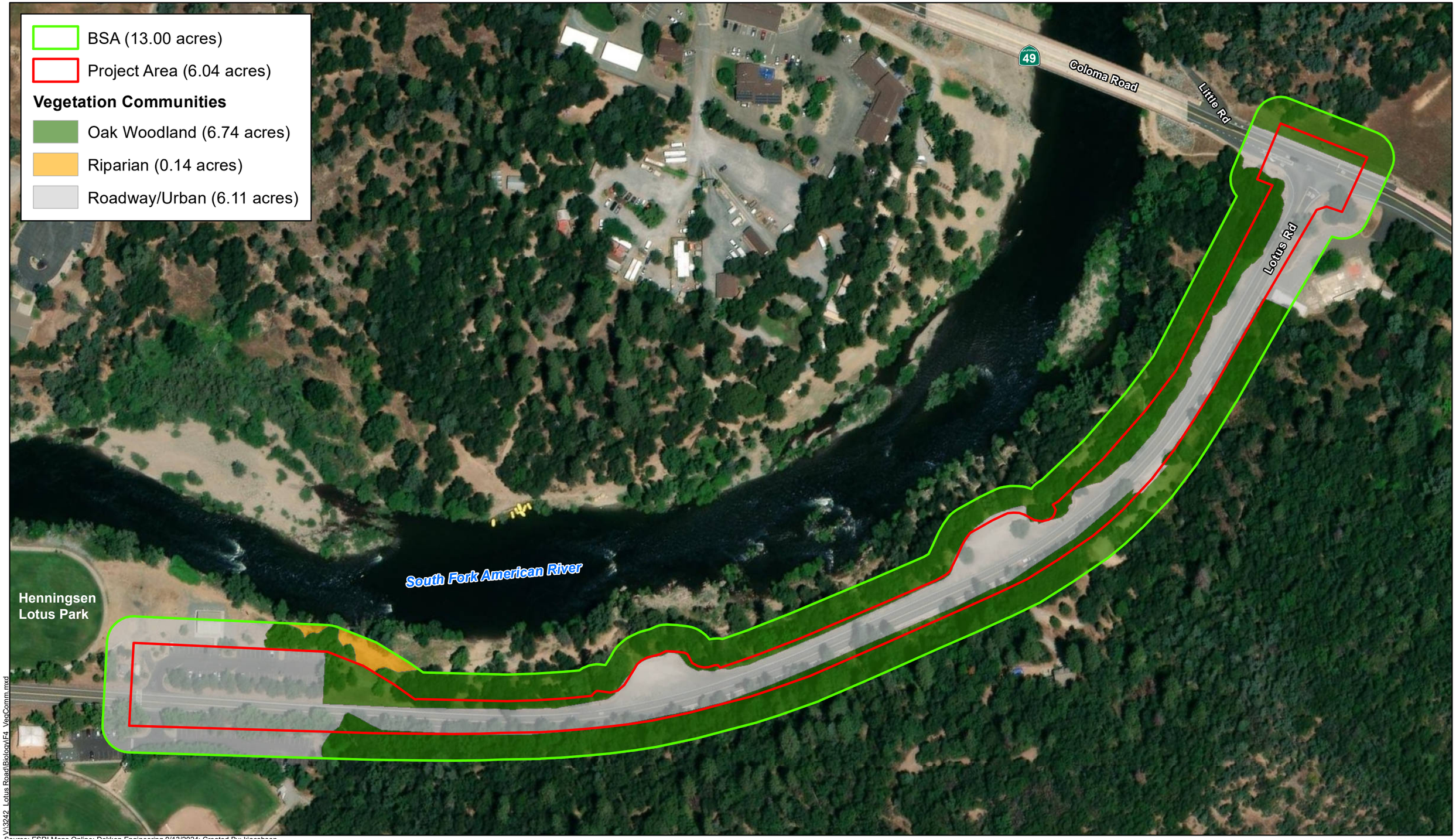
Source: ESRI Maps Online; Dokken Engineering 9/19/2024; Created By: kjacobson

1 inch = 150 feet

0 75 150 225 300 375 Feet

Figure 3
Project Features

CML-5925(194)
Henningsen/Lotus Multi-Use Trail Project
Lotus, El Dorado County, California



V:\3242_Lotus Road\Biology\F4_VegComm.mxd

Source: ESRI Maps Online; Dokken Engineering 9/13/2024; Created By: kjacobson

1 inch = 0.03 miles

0 80 160 240 320 400 Feet

Figure 4
Vegetation Communities

CML-5925(194)
Henningsen/Lotus Multi-Use Trail Project
Lotus, El Dorado County, California

Road within the BSA that are included in this land cover type. The BSA contains approximately 6.11 acres (52%) of disturbed/urban land.

Oak Woodland

Oak woodland habitat encompasses the outer edges of the BSA bordering the roadway and urban land cover within the BSA. This habitat community is dominated by native oak species such as interior live oak (*Quercus wislizeni*) black oak (*Quercus kelloggii)* and ponderosa pine (*Pinus ponderosa*) trees, with an understory of short herbaceous grasses and non-native plants such as Himalayan blackberry (*Rubus armeniacus*) and scotch broom (*Cytisus scoparius*). Oak woodland habitat can provide suitable habitat for a variety of wildlife species and comprises approximately 6.74 acres (47%) of the BSA.

Riparian

A small patch of riparian habitat, approximately 300 linear feet, occurs in northeastern portion of the BSA along the South Fork American River. The canopy is dominated by riparian tree species including Fremont's cottonwood (*Populus fremontii*), white alder (*Alnus rhombifolia*), and black locust (*Robinia pseudoacacia*). The understory is comprised of hydrophytic plants such as narrowleaf willow (*Salix exigua*) and mulefat (*Baccharis salicifolia*). Riparian habitat comprises approximately 0.14 acres (1%) of the BSA. Riparian habitat does not extend into the Project area, where Project activities are anticipated, and therefore, no impacts to this habitat community are anticipated.

Table 1. Species Observed and/or Detected

Common Name	Scientific Name	Native (N)/ Non-Native (X) (Cal-IPC Rating)
Plant Species		
Bermuda grass	*Cynodon dactylon*	X (High)
Black locust	*Robinia pseudoacacia*	X (Limited)
Black walnut	*Juglans nigra*	X
Blue oak	*Quercus douglasii*	N
Bur chevril	*Anthriscus caucalis*	X
California black oak	*Quercus kelloggii*	N
California buckeye	*Aesculus californica*	N
California goldenrod	*Solidago velutina ssp. californica*	N
California mugwort	*Artemisia douglasiana*	N
California pipevine	*Aristolochia californica*	N
Common fig	*Ficus carica*	X (Moderate)
Evening primrose	*Oenothera elata*	N
Fremont cottonwood	*Populus fremontii*	N
Gray pine	*Pinus sabiniana*	N
Himalayan blackberry	*Rubus armeniacus*	X (High)
Hogbite	*Chondrilla juncea*	X (Moderate)

Incense cedar	*Calocedrus decurrens*	N
Interior live oak	*Quercus wislizeni*	N
Mule fat	*Baccharis salicifolia*	N
Narrowleaf willow	*Salix exigua*	N
Poison oak	*Toxicodendron diversilobum*	N
Ponderosa pine	*Pinus ponderosa*	N
Rabbitsfoot grass	*Polypogon monspeliensis*	X (Limited)
Ripgut brome	*Bromus diandrus*	X (High)
Rose clover	*Trifolium hirtum*	X (Limited)
Scotch broom	*Cytisus scoparius*	X (High)
Toyon	*Heteromeles arbutifolia*	N
Tree of heaven	*Ailanthus altissima*	X (High)
Turkey mullein	*Croton setiger*	N
Valley oak	*Quercus lobata*	N
Western brackfern	*Pteridium aquilinum*	N
White alder	*Alnus rhombifolia*	N
Wild carrot	*Daucus carota*	X
Wild grape	*Vitis californica*	N
Yarrow	*Achillea millefolium*	N
Yellow star thistle	*Centaurea solstitialis*	X (High)
Wildlife Species		
Acorn woodpecker	*Melanerpes formicivorus*	N
Bushtit	*Psaltriparus minimus*	N
Canada goose	*Branta canadensis*	N
Spotted towhee	*Pipilo maculatus*	N
Turkey vulture	*Cathartes aura*	N
Western fence lizard	*Sceloporus undulatus*	N

Habitat Connectivity

The CDFW California Essential Habitat Connectivity Map was used to assess whether the Project area falls within an Essential Connectivity Area. It was determined that the Project area is not located within any Essential Connectivity Area or natural landscape blocks.

The CDFW Biogeographic Information & Observation System was reviewed to determine if the BSA is located within an Essential Connectivity Area (CDFW 2024a). The BSA is within an area of Terrestrial Connectivity Rank 4 – Conservation Planning Linkages. These are corridors or linkages that have been identified in regional or local conservation plans as critical for maintaining ecological connectivity. Rank 4 linkages might not always be the most immediate priorities for protection (compared to higher-ranked areas), but they are still essential for long-term conservation and maintaining habitat corridors. These linkages ensure that wildlife can move between larger blocks of habitat, access different resources, and adapt to changes in their environment, such as climate shifts. Since the proposed trail will be constructed directly adjacent to Lotus Road, the Project is not

anticipated to create a substantial new barrier to wildlife movement. Although the proposed trail and boardwalk may not create a new barrier, it could contribute to an increase in the barrier effect in certain areas. The boardwalk interrupts the surface connection at ground level, which could disrupt wildlife movement, particularly in areas where animals might typically move along the landscape. However, it is important to note that the boardwalk is primarily needed in steep or difficult-to-navigate areas and in areas that are in proximity to vehicle traffic on Lotus Road, where wildlife would not typically travel.

The American River corridor is a popular destination for rafting, swimming, and walking, all of which increase human presence and activity in the landscape. These recreational uses may cause disturbances that interrupt wildlife movement, either through direct physical barriers or through noise, human presence, and activity that could deter wildlife from crossing or using certain areas. Since this segment of the American River Corridor serves as a key access point for boaters and rafters, concentrated human presence and noise may disturb sensitive species that require undisturbed environments. While the Project may not create a new permanent barrier, the combined effects of human recreation and infrastructure changes from the installation of the boardwalk may exacerbate existing fragmentation of wildlife habitat, impacting species that rely on the river corridor for migration, feeding, or breeding.

Furthermore, given the proposed location of the sidewalk/boardwalk, extensive land clearing, habitat modification, and or substantial fragmentation is not anticipated. Therefore, implementation of this Project is unlikely to substantially impact habitat connectivity because it consolidates human disturbance in an area where habitat has already been modified due to construction of Lotus Road.

Regional Species and Habitats and Natural Communities of Concern

Plant and wildlife species have special-status if they have been listed as such by federal or state agencies or by one or more special interest groups, such as CNPS. Prior to the field survey, literature searches were conducted using USFWS IPaC, CDFW CNDDB, and CNPS databases to identify regionally sensitive species with potential to occur within the BSA. **Table 2. Special Status Species with Potential to Occur in the Project Vicinity** provides the list of regional special-status species returned by the database searches, describes the habitat requirements for each species, and states if the species was determined to have potential to occur within the BSA. There were 21 plant species and 22 wildlife species with the potential to occur in the Project vicinity returned by the database searches. No special-status species were found to have the potential to occur within the Project area.

Table 2. Special Status Species with the Potential to Occur in the Project Vicinity

Common Name	Species Name	Status		General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
Amphibian Species						
California red-legged frog	*Rana draytonii*	Fed: State: CDFW:	T -- SSC	The species is endemic to California and northern Baja California. Inhabits lowlands and foothills in or near permanent sources of deep water with dense, shrubby, or emergent riparian vegetation. Associated with humid forests, woodlands, grasslands, coastal scrub, and streamsides. The species requires 11-20 weeks of permanent water for larval development and must have access to estivation habitat; estivation occurs from late summer to early winter. If wetlands are dry, requires animal burrows or other moist refuges. Occurs close to permanent and quiet stream pools, marshes, and ponds. Breeds from March to July in northern regions and January to July in southern regions. Occurs from elevations near sea level to 5,200 feet.	A	**Presumed Absent:** The Project area is within the species range and is on the edge of stream channel habitat. However, the Project area lacks microhabitat suitable for the species including stream pools, marshes or ponds associated. The nearest, most recent occurrence of the species is approximately 8 miles northeast of the Project area, recorded in 2009. This occurrence is near an unnamed ephemeral stream at approximately 2,700 feet above sea level which is at a much higher elevation than the Project area. The species is presumed absent from the Project area due to a lack of suitable aquatic habitat.
Foothill yellow-legged frog – northeast/northern Sierra DPS	*Rana boylii pop. 3*	Fed: State: CDFW:	-- T --	Inhabits shallow streams and riffles with rocky substrate and open, sunny banks in a variety of habitats including chaparral and woodland forests. Tadpoles require water for at least three or four months to complete development. Breeds March to May, with eggs laid in clusters on the downstream side of rocks in shallow, slow-moving water, attached to rocks, pebbles, and vegetation. Occurs from elevations near sea level to 6,700 feet.	A	**Presumed Absent:** The Project area is outside of the range of this Distinct Population Segment (DPS) of FYLF. See discussion below regarding the DPS identified for the Project vicinity.

Foothill yellow-legged frog – east/southern Sierra DPS	*Rana boylii pop. 5*	Fed: State: CDFW:	E E --	Inhabits shallow streams and riffles with rocky substrate and open, sunny banks in a variety of habitats including chaparral and woodland forests. Tadpoles require water for at least three or four months to complete development. Breeds March to May, with eggs laid in clusters on the downstream side of rocks in shallow, slow-moving water, attached to rocks, pebbles, and vegetation. Occurs from elevations near sea level to 6,700 feet.	HP	**Presumed Absent:** The Project area does not contain suitable shallow streams and riffles with rocky substrate. The aquatic habitat adjacent to the BSA has deep, fast-moving water and lacks shallow cobble/gravel substrate that would be suitable breeding habitat for the species. Additionally, there aren't any tributaries that connect to the South Fork of the American River that could provide breeding habitat within the Project area. The proposed alignment of the boardwalk/trail ranges from 75 to 260 feet from the water's edge, situated next to the barren, sparsely vegetated margins of Lotus Road. Given that the aquatic habitat in the area is unsuitable for the species, combined with the fact that the alignment is in an upland region with limited vegetation cover, and the Project does not involve in-water work, it is highly unlikely that the foothill yellow-legged frog (FYLF) will be present near the proposed activities. Although there is one recent (2020) CNDDB occurrence of the species ~0.5 miles north of the Project area, the Project area lacks suitable habitat for FYLF. Therefore, the species is presumed absent within the Project area due toa lack of suitable aquatic and upland habitat.
Western spadefoot	*Spea hammondii*	Fed: State: CDFW:	PT -- SSC	Inhabits open areas with sandy or gravelly soils within mixed woodlands, grasslands, coastal sage scrub, chaparral, sandy washes, lowlands, river floodplains, alluvial fans, playas, alkali flats, foothills, and mountains. Burrows underground for most of the year and is active above ground during rainfall. Requires	A	**Presumed Absent:** The Project area lacks sandy soils with shallow vernal or temporary pools required for reproduction. There are no CNDDB or iNaturalist occurrences of the species within a 10-mile radius of the Project area. Therefore, the species is presumed absent due to a lack of local

				vernal, shallow, temporary pools formed by heavy winter rains for reproduction. These pools must be free of bullfrogs, fish, and crayfish. Breeds from late winter to March.		occurrences and necessary habitat features.
Bird Species						
American goshawk	*Accipiter atricapillus*	Fed: -- State: -- CDFW: SSC		This species nests in mature old-growth forests composed of Douglas-firs, pine forests and aspen groves with more than 60% closed canopy. Often build nests near breaks in the canopy, such as a forest trail, jeep road, or opening created by a downed tree, and prefer sites with a creek, pond, or lake nearby. Will usually choose the largest trees in a stand for nest sites and often reuse nests from previous years or appropriate nests of other accipiters. Goshawks hunt in the forest, along riparian corridors, and in more open habitat.	A	**Presumed Absent:** The Project area does not contain mature trees or old growth forest habitat. This type of habitat is typically found at higher elevations than the elevation of the BSA. Therefore, the species is presumed absent from the Project area due to a lack of suitable habitat features.
Bald eagle	*Haliaeetus leucocephalus*	Fed: -- State: E CDFW: FP		Species occurs near ocean shores, lakes, rivers, rangelands, and coastal wetlands for nesting and wintering; nesting occurs within one mile of a water source with abundant fish near mountain forests and woodlands. The species nests in large, old growth, or dominant live trees with open branches. Prefers ponderosa pines and often chooses the largest tree in a stand. Usually, will not nest near evident human disturbance. Prefers lower elevations and not found in the high Sierra Nevada. The breeding season is from February through July.	HP	**Presumed Absent:** The Project area is adjacent to the South Fork American River, which is suitable foraging habitat for the species. Additionally, the Project area does contain ponderosa pines, however these trees are directly adjacent to Lotus Road. Given, the Project area is along an existing highly trafficked roadway the adjacent habitat is subject to high volumes of disturbance. Therefore, it is unlikely that this species would nest within or directly adjacent to the Project area, given the quality and quantity of potentially suitable nesting habitat in the surrounding area. Therefore, the species is presumed absent.
Bank swallow	*Riparia riparia*	Fed: -- State: T		A migratory colonial nester inhabiting lowland and riparian habitats west of	A	**Presumed Absent:** The Project area contains suitable foraging habitat but

		CDFW:	--	the deserts during spring through fall. Majority of current breeding populations occur along the Sacramento and Feather Rivers in the north Central Valley. Forages in grassland, brushland, wetlands, and cropland during migration. Requires vertical banks or cliffs with fine textured/sandy soils for nesting (tunnel and burrow excavations). Nests exclusively near streams, rivers, lakes, or the ocean. Breeds from May through July.		lacks vertical banks or cliffs with fine textured/sandy soils for nesting. Therefore, the species is presumed absent due to a lack of necessary habitat features.
Burrowing owl	*Athene cunicularia*	Fed: State: CDFW:	-- -- SSC	The species inhabits arid, open areas with sparse vegetation cover such as deserts, abandoned agricultural areas, grasslands, and disturbed open habitats. Can be associated with open shrub stages of pinyon-juniper and ponderosa pine habitats. Nests in old small mammal burrows but may dig own burrow in soft soil. Nests are lined with excrement, pellets, debris, grass, and feathers. The species may use pipes, culverts, and nest boxes, and even buildings where burrows are scarce. Breeding occurs March through August (below 5,300 feet).	A	**Presumed Absent:** The Project area lacks arid, open, disturbed areas with sparse vegetation cover. Therefore, the species is presumed absent within the Project area due to a lack of necessary habitat features.
California black rail	*Laterallus jamaicensis coturniculus*	Fed: State: CDFW:	-- T FP	A rare, yearlong California resident of brackish and freshwater emergent wetlands in delta and coastal locations including the San Francisco Bay area, Sacramento-San Joaquin Delta, Morro Bay, the Salton Sea, and lower Colorado River. More than 90% of the species are found in the tidal salt marshes of the northern San Francisco Bay region, predominantly in San Pablo and Suisun Bays.	A	**Presumed Absent:** The Project area lacks wetlands or freshwater marshes. Therefore, the species is presumed absent due to the lack of necessary habitat features.

				Smaller populations occur in the San Francisco Bay, the Outer Coast of Marin County, and freshwater marshes in the foothills of the Sierra Nevada. The species is extirpated from San Diego County and the majority of coastal southern California. Occurs in tidal emergent wetlands dominated by pickleweed, in brackish marshes dominated by bulrushes with pickleweed, and in freshwater wetlands dominated by bulrushes, cattails, and salt grass. Species prefers high wetland areas, away from areas experiencing fluctuating water levels. Requires vegetation providing adequate overhead cover for nesting. Eggs are laid from March through June.		
Golden eagle	*Aquila chrysaetos*		-- -- FP	Inhabits rolling foothills, mountain areas, sage-juniper flats, and desert communities. Requires open terrain for hunting, often utilizing rolling foothills and mountain terrain, wide arid plateaus deeply cut by streams and canyons, open mountain slopes, and cliffs and rock outcrops, grasslands and early successional stages of forest and shrub habitats. Territory is estimated to average 36 mi^2 in southern California and 48 mi^2 in northern California. Nests on cliffs of all heights and in large trees in open areas; may reuse previous nest sites. Breeds from late January through August (0-11,500 feet).	A	**Presumed Absent:** The Project area lacks suitable foraging and nesting habitat for the species, including wide open areas and cliffs with rocky outcrops. Therefore, the species is presumed absent.
Tricolored blackbird	*Agelaius tricolor*		-- T SSC	Inhabits freshwater marsh, swamp and wetland communities, but may utilize agricultural or upland habitats that can support large colonies, often	A	**Presumed Absent:** The Project area lacks wetlands, freshwater marshes, and agricultural/upland habitat. Therefore,

				in the Central Valley area. Requires dense nesting habitat that is protected from predators, is within 3-5 miles from a suitable foraging area containing insect prey and is within 0.3 miles of open water. Suitable foraging includes wetland, pastureland, rangeland, at dairy farms, and some irrigated croplands (silage, alfalfa, etc.). Nests in dense cattails, tules, willow, blackberry, wild rose, or tall herbs. Nests mid-March to early August but may extend until October or November in the Sacramento Valley region.		the species is presumed absent due to the lack of necessary habitat features.
White-tailed kite	*Elanus leucurus*	Fed: State: CDFW:	-- -- FP	Inhabits rolling foothills and valley margins with scattered oaks and river bottomlands or marshes next to deciduous woodland. Prefers open grasslands, meadows or marshes for foraging close to isolated, dense-topped trees for nesting and perching. In southern California, will roost in saltgrass and Bermuda grass. Often found near agricultural lands. Nests are placed near the tops of dense oak, willow, or other tree stands. Breeds February through October	A	**Presumed Absent:** The Project area is not within valley margins and does not contain rolling foothills. Additionally, the Project area does not contain suitable habitat for nesting and perching. Therefore, the species is presumed absent due to a lack of necessary habitat features.
Fish Species						
Steelhead - Central Valley DPS	*Oncorhynchus mykiss irideus pop. 11*	Fed: State: CDFW:	T -- --	This species is known to occur along most of the California coastline and inhabits freshwater streams and tributaries in northern and central California. The preferred habitat consists of estuaries, freshwater streams and near shore habitat with productive costal oceans. Spawning occurs in small freshwater streams and tributaries occurs from January	A	**Presumed Absent:** The Project area is outside of the current distribution of the species. This segment of the American River is anthropogenically blocked to steelhead due to the Nimbus Damn in Folsom; and therefore, the species is presumed absent.

				through March and could extend into spring. Spawning occurs where cool, well oxygenated water is available year-round. Approximately 550-1,300 eggs are deposited in an area with good intergravel flow. The fry emerges from the gravel about 4-6 six weeks after hatching and remain in shallow protected areas associated with stream margin. Juveniles may remain in freshwater for the rest of their life cycle or return to the ocean. The principal remaining wild populations spawn annually in Deer and Mill Creeks in Tehama County, in the lower Yuba River, and a small population in the lower Stanislaus River.		
Invertebrate Species						
Valley Elderberry Longhorn Beetle	*Desmocerus californicus dimorphus*	Fed: State: CDFW:	T -- --	Species requires red or blue elderberry (Sambucus sp.) as host plants. Typically occurs in moist valley oak woodlands associated with riparian corridors in the lower Sacramento River and upper San Joaquin River drainages. Adults are active, feeding, and breeding from March until June (sea level 3,000 feet).	A	**Presumed Absent:** The Project area contains oak woodland and is adjacent to the South Fork American River riparian corridor. However, no elderberry shrubs were observed during the biological survey conducted on August 13, 2024. Therefore, the species is presumed absent given the absence of their obligate host plant.
Vernal Pool Fairy Shrimp	*Branchinecta lynchi*	Fed: State: CDFW:	T -- --	In California, species inhabits portions of Tehama County, south through the Central Valley, and scattered locations in Riverside County and the Coast Ranges. Species is associated with smaller and shallower cool-water vernal pools approximately 6 inches deep and short periods of inundation. In the southernmost extremes of the range, the species occurs in large, deep	A	**Presumed Absent:** The Project Area does not contain vernal pool habitat that could be potentially suitable for the species. Therefore, the species is presumed absent due to a lack of necessary habitat features.

				cool-water pools. Inhabited pools have low to moderate levels of alkalinity and total dissolved solids. The shrimp are temperature sensitive, requiring pools below 50 F to hatch and dying within pools reaching 75 F. Young emerge during cold-weather winter storms.		
Western bumble bee	*Bombus occidentalis*		-- CE --	The habitat for this species is described as open grassy areas, urban parks and gardens, chaparral and shrub areas, and mountain meadows. Most reports of B. occidentalis nests are from underground cavities such as old squirrel or other animal nests and in open west-southwest slopes bordered by trees, although a few nests have been reported from above-ground locations such as in logs among railroad ties. Elevations of known sites range from sea level to over 2,000 m asl.	A	**Presumed Absent:** The Project area lacks open grassy areas, chapparal/shrub areas and mountain meadows associated with the species. Therefore, the species is presumed absent due to a lack of necessary habitat features.
Monarch Butterfly	*Danaus plexippus*	Fed: State: CDFW:	PT -- --	Winter roosts along the coast from northern Mendocino to Baja California. Utilizes wind protected tree groves in proximity to nectar and water sources. Milkweed (*Asclepias* sp.) is the host plant for the species. Suitable habitat includes fields, meadows, weedy areas, marshes, and roadsides. Mass adult migrations occur from August to October.	A	**Presumed Absent:** There are no CNDDB occurrences of this species within a 10-mile radius. Additionally, the Project area is outside of the known range for overwintering habitat (restricted to coastal areas). However, according to the Monarch Milkweed Mapper (Western Monarch Milkweed Mapper 2025), there are known occurrence of milkweed plants within the vicinity of the Project area. Although no milkweed species (*Asclepias* sp.), were observed during the biological survey, the survey was conducted in mid-August at the end of the blooming period for most milkweed species. Therefore, presence of milkweed cannot be entirely

						ruled out. Overall, the Project area is unlikely to support a population of milkweed plants given the dominance of invasive species in areas that will be disturbed, including Himalayan blackberry and scotch broom. Milkweed plants can be easily outcompeted by more aggressive plants (like invasive species) and may be slower to establish given that most milkweed species break dormancy in late spring leaving them vulnerable to encroachment from earlier-germinating species (Xerces Society 2025). At this time, no determination has been made for Monarch butterfly, but a pre-construction survey for milkweed will be implemented and if milkweed plants are observed with any life stage of Monarch butterfly further consideration under FESA will be required (see **BIO-13** in Chapter 5).
Mammal Species						
Fisher	*Pekania pennanti*	Fed: -- State: -- CDFW: SSC		Inhabits mature, dense habitats of north coast coniferous forest and old growth and riparian forest communities with a high percent of canopy closure, large trees and snags with cavities and other deformities, large diameter downed wood and multiple canopy layers. Forest structural composition is critical for species; diversity in tree size and shape, light gaps and associated understory vegetation, natural structures (downed trees, broken limbs, snags, etc.) and limbs close to the ground. Breeds from late February to late April (1,970-8,530 feet). In the Southern Sierra Nevada,	A	**Presumed Absent:** The Project area does not contain mature coniferous forest or old growth forest habitat in which the species occurs. Therefore, the species is presumed absent due to a lack of necessary habitat features.

				the species is not found at elevations below 4,500 feet.		
Pallid bat	*Antrozous pallidus*		-- -- SSC	Inhabits low elevations of deserts, grasslands, shrub lands, woodlands and forests year-round. Most common in open, dry habitats with rocky areas for roosting. Forages over open ground within 1-3 miles of day roosts. Prefers caves, crevices, and mines for day roosts, but may utilize hollow trees, bridges and buildings. Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites. Maternity colonies form early April and young are born April-July (below 10,000 feet).	A	**Presumed Absent:** The Project area lacks suitable roosting and foraging habitat for the species. Therefore, the species is presumed absent due to a lack of necessary habitat features.
Townsend's big-eared bat	*Corynorhinus townsendii*		-- -- SSC	Species occurs throughout California in all habitats except subalpine and alpine communities. Requires caves, mines tunnels, buildings or man-made structures for day and night roosts. Rarely roots in tree cavities, limited to males and non-reproductive females. Young born May-June (0-6,561 feet 10,800 feet elevation).	A	**Presumed Absent:** The Project area does not contain suitable roosting habitat, such as caves, mines, or other cavities/structures. Therefore, the species is presumed absent due to a lack of necessary habitat features.
Reptile Species						
Coast horned lizard	*Phrynosoma blainvillii*	Fed: State: CDFW:	-- -- SSC	Inhabits valley-foothill hardwood, conifer forest, and riparian habitats, as well as pine-cypress, juniper woodland, and annual grasslands with sandy areas, washes or flood plains. Frequently found near ant hills. Egg laying occurs from May to June, and some females may lay two clutches per year (sea level 8,000 feet).	A	**Presumed Absent:** The Project area lacks sandy washes or flood plains where the species is known to occur. Therefore, the species is presumed absent due to a lack of suitable breeding habitat.
Northwestern pond turtle	*Actinemys marmorata*	Fed: State: CDFW:	PT -- SSC	A fully aquatic turtle of ponds, lakes, rivers, streams, creeks, marshes, and irrigation ditches with aquatic	A	**Presumed Absent:** The Project area is adjacent to the South Fork American River, which provide potentially suitable

				vegetation. Suitable habitat includes woodland, forests, and grasslands. Requires logs, rocks, cattail mats, and exposed banks for basking. Suitable upland habitat (sandy banks or grassy open field) is required for reproduction, which begins in April and ends with egg laying as late as August (sea level to 4,700 feet).		aquatic habitat for the species in some areas. However, oak woodland habitat within the Project area is dense and is located on a steep incline. The average elevation gain from the banks of the South Fork American River/associated riparian habitat to Lotus Road is approximately 85 feet. The Project area does not contain suitable upland habitat required for reproduction, including sunny, open banks. Therefore, the species is presumed absent from the Project area due to a lack of necessary habitat features.
Plant Species						
Big-scale balsamroot	*Balsamorhiza macrolepis*	Fed: State: CNPS:	-- -- 1B.2	A perennial herb inhabiting open grassy or rocky slopes and valleys within chaparral, cismontane woodland, valley and foothill grassland communities; sometimes occurs in serpentinite soils. Flowers March-June (300-5,100 feet).	A	**Presumed Absent:** The Project area lacks open, grassy or rocky slopes. There are no CNDDB occurrences of the species within a 10-mile radius of the Project area. Therefore, the species is presumed absent due to a lack of local occurrences.
Bisbee Peak rush-rose	*Crocanthemum suffrutescens*	Fed: State: CNPS:	-- -- 3.2	A perennial evergreen shrub inhabiting serpentinite, lone or gabbroic soils of chaparral communities. Flowers April-June (150-2,750 feet).	A	**Presumed Absent:** The Project area lacks chaparral habitat and serpentine soils. Therefore, the species is presumed absent from the Project area due to a lack of suitable soils and chaparral habitat.
Brownish beaked-rush	*Rhynchospora capitellata*	Fed: State: CNPS:	-- -- 2B.2	This grasslike herb occurs in wetland and salt-marsh communities. Often found in wetland-riparian habitats within the foothills of northern California (0-6,000 feet).	A	**Presumed Absent:** The Project area lacks wetlands and salt-marsh communities. Therefore, the species is presumed absent due to a lack of necessary habitat features.
Butte County fritillary	*Fritillaria eastwoodiae*	Fed: State: CNPS:	-- -- 3.2	A perennial bulbiferous herb inhabiting serpentine soils in chaparral, cismontane woodland, and openings of lower montane coniferous forest. Flowers March-June (165-4,920 feet).	A	**Presumed Absent:** The Project area lacks serpentine soils. Additionally, there are no occurrences of the species within a 10-mile radius of the Project area. Therefore, the species is presumed absent from the Project area due to a

						lack of suitable soils and local occurrences.
Chaparral sedge	*Carex xerophila*	Fed: -- State: -- CNPS: 1B.2		A perennial herb native to California, inhabiting serpentine or dry, gabbroic soils of chaparral, cismontane woodland, or lower montane coniferous forest communities. Flowers March-June (1,480-2,530 feet).	A	**Presumed Absent:** The Project area lacks potentially suitable serpentine or gabbroic soils. Therefore, the species is presumed absent due to a lack of necessary habitat features.
Dubious pea	*Lathyrus sulphureus var. argillaceus*	Fed: -- State: -- CNPS: 3		A perennial herb inhabiting foothill woodlands to fir forests, cismontane woodlands, lower montane coniferous forests, and upper montane coniferous forests. Flowers April-May (500-3,000 feet).	A	**Presumed Absent:** The Project area contains suitable habitat communities for the species. However, there are no occurrences of the species within a 10-mile radius of the Project area. Furthermore, no individuals of the species were observed during the August 2024 biological survey efforts, and according to Calflora, this species has never been observed in El Dorado County (Calflora 2024). Therefore, the species is presumed absent due to a lack of local occurrences and its pattern of distribution.
El dorado bedstraw	*Galium californicum ssp. Sierrae*	Fed: E State: R CNPS: 1B.2		A perennial herb inhabiting gabbroic soils of chaparral, cismontane woodland, lower montane coniferous forest, open pine, and oak forest communities. Flowers May-June (330-1,920 feet). Known from approximately ten occurrences in El Dorado County.	A	**Presumed Absent:** The Project area lacks potentially suitable gabbroic soils. There are several documented CNDDB occurrences within 10 miles of the Project area, however, they are all concentrated in an area located approximately 7.3 miles southwest. The nearest documented occurrence is approximately 6.9 miles southwest of the Project area, near a ravine opening into the South Fork American River (2017). Due to lack of suitable habitat features and lack of nearby occurrences, this species is presumed absent from the Project area.
El Dorado County mule ears	*Wyethia reticulata*	Fed: -- State: --		A perennial herb inhabiting clay or gabbroic soils of wooded slopes,	A	**Presumed Absent:** The Project area lacks potentially suitable gabbroic soils.

		CNPS:	1B.2	chaparral, cismontane woodland, and lower montane coniferous forest communities. Flowers May-August (500-2,070 feet). Known only from El Dorado County.		Therefore, the species is presumed absent due to a lack of necessary habitat features.
Jepson's onion	*Allium jepsonii*	Fed: State: CNPS:	-- -- 1B.2	A perennial bulb inhabiting open, serpentine or volcanic slopes, and flats of chaparral, cismontane woodland, and lower montane coniferous forest communities. Flowers April-August (980-4,330 feet).	A	**Presumed Absent:** The Project area occurs in oak woodland habitat and lacks the vegetation communities where this species is normally found. Moreover, the elevation range of the Project area is below the elevation range of the species. There are also no documented CNDDB occurrences of the species within a 10-mile radius of the Project area. Furthermore, according to Calflora, there is only one documented occurrence of the species within El Dorado County, located near the community of Shingle Springs, approximately 10 miles south of the Project area. Due to lack of suitable habitat and lack of local occurrences near the Project area, this species is presumed absent.
Layne's ragwort	*Packera layneae*	Fed: State: CNPS:	T R 1B.2	A perennial herb inhabiting rocky, gabbroic or serpentinite soils within chaparral and cismontane woodland communities. Flowers April-June (660-3,560 feet).	A	**Presumed Absent:** The Project area lacks potentially suitable serpentine and gabbroic soils. Therefore, the species is presumed absent due to a lack of necessary habitat features.
Nissenan manzanita	*Arctostaphylos nissenana*	Fed: State: CNPS:	-- -- 1B.2	A perennial evergreen shrub inhabiting open, rocky shale ridges, chaparral, woodland, and closed-cone coniferous forests. Flowers February-March (1,475-3,600 feet).	A	**Presumed Absent:** The Project area encompasses suitable woodland habitat for the species. However, this perennial shrub was not observed during the August 2024 biological survey. Therefore, the species is presumed absent due to a lack of observations within the Project area.
Oval-leaved viburnum	*Viburnum ellipticum*	Fed: State: CNPS:	-- -- 2B.3	A perennial deciduous shrub inhabiting chaparral, cismontane woodland, and lower montane	A	**Presumed Absent:** The Project area occurs in oak woodland habitat and lacks the vegetation communities where this species is normally found. There is only

				coniferous forest. Flowers May-June (700-4,500 feet).		one documented occurrence of the species within 10 miles of the Project area, located approximately 7.8 miles southeast, near the City of Placerville (1901). Therefore, the species is presumed absent due to a lack of suitable habitat and lack of local occurrences.
Parry's horkelia	*Horkelia parryi*	Fed: State: CNPS:	-- -- 2B.2	A perennial herb inhabiting openings within chaparral and cismontane woodland. Species is especially known within Ione soil formations but occurs on other soils. Flowers April-September (260-3,400 feet).	A	**Presumed Absent:** The Project area lacks chaparral and cismontane woodland habitat communities. The species is known to occur within Ione soil formations and regional occurrences are concentrated near the Slate Mountains, approximately 9.5 miles northeast of the Project area. There are no occurrences of the species within a 10-mile radius of the Project area. Therefore, the species is presumed absent due to a lack of local occurrences.
Pine Hill ceanothus	*Ceanothus roderickii*	Fed: State: CNPS:	E R 1B.1	An evergreen perennial shrub inhabiting rocky, gabbroic, or serpentine soils characterized by low concentrations of available K, P, S, Fe, and Zn of chaparral, oak/pine woodland, and cismontane woodland communities. Flowers April-June (800-2,070 feet). Known only from El Dorado County.	A	**Presumed Absent:** The Project area lacks potentially suitable serpentine and gabbroic soils. Furthermore, this perennial shrub was not observed during the August 2024 survey; and therefore, the species is presumed absent.
Pine Hill flannelbush	*Fremontodendron decumbens*	Fed: State: CNPS:	E R 1B.2	A perennial evergreen shrub inhabiting rocky, gabbroic, or serpentinite soils of chaparral, cismontane woodland, and pine woodland communities. Flowers April-July (1,400-2,500 feet).	A	**Presumed Absent:** The Project area is outside of the elevational range of the species. In addition, all occurrences of are concentrated at an appropriate elevation roughly 9 miles southwest of the Project area. Therefore, the species is presumed absent due to its pattern of occurrence.
Red Hills soaproot	*Chlorogalum grandiflorum*	Fed: State: CNPS:	-- -- 1B.2	A perennial bulbiferous herb inhabiting open shrubby or wooded hills of chaparral, cismontane	A	**Presumed Absent:** The Project area lacks serpentine soils in which the species is known to occur. However,

				woodland, and lower montane coniferous forest communities. Occurs frequently within serpentine or gabbro soils; known to occur on non-ultramific soils. Flowers May-June (800-4,070 feet).		there are no occurrences of the species within a 10-mile radius of the Project area. Therefore, the species is presumed absent due to a lack of local occurrences.
Sanford's arrowhead	*Sagittaria sanfordii*	Fed: State: CNPS:	-- -- 1B.2	A perennial rhizomatous herb inhabiting freshwater marshes, swamps, ponds, and ditches. Flowers May-October (0-2,130 feet).	A	**Presumed Absent:** The Project area lacks marshes, swamps, ponds and ditches. Therefore, the species is presumed absent due to a lack of necessary habitat communities.
Sierra arching sedge	*Carex cyrtostachya*	Fed: State: CNPS:	-- -- 1B.2	A perennial herb inhabiting mesic lower montane coniferous forest, meadows and seeps, marshes and swamps, and margins of riparian forest communities. Flowers May-August (2,000-4,460 feet).	A	**Presumed Absent:** The Project area lacks all suitable habitat communities for the species. Therefore, the species is presumed absent due to a lack of suitable habitat within the Project area.
Sierra blue grass	*Poa sierrae*	Fed: State: CNPS:	-- -- 1B.3	A perennial grass inhabiting openings and shady moist slopes, often on mossy rocks, in canyons within lower montane coniferous forest communities. Flowers April-June (1,200-5,000 feet).	A	**Presumed Absent:** The Project area lacks all suitable habitat communities for the species. Therefore, the species is presumed absent due to a lack of suitable habitat within the Project area.
Stebbins' morning-glory	*Calystegia stebbinsii*	Fed: State: CNPS:	E E 1B.1	A perennial rhizomatous herb inhabiting gabbroic or serpentinite soils of chaparral openings and cismontane woodland communities. Flowers April-July (600-3,600 feet). Known from fewer than 20 occurrences in El Dorado and Nevada Counties.	A	**Presumed Absent:** The Project area lacks potentially suitable serpentine and gabbroic soils. Therefore, the species is presumed absent due to a lack of necessary habitat features.
Van Zuuk's morning-glory	*Calystegia vanzuukiae*	Fed: State: CNPS:	-- -- 1B.3	A perennial herb native to California, inhabiting gabbroic and serpentine soils in chaparral and cismontane woodland. Flowers May-August (1,600-3,900 feet).	A	**Presumed Absent:** The Project area is outside of the elevational range of the species. Therefore, the species is presumed absent due to its pattern of occurrence.

Federal Designations (Fed): (FESA, USFWS) **E:** Federally listed, endangered **T:** Federally listed, threatened **DL**: Federally listed, delisted C: Candidate	**State Designations (CA):** (CESA, CDFW) **E:** State listed, endangered **T:** State listed, threatened
Other Designations CDFW_SSC: CDFW Species of Special Concern CDFW_FP: CDFW Fully Protected **California Native Plant Society (CNPS) Designations:** ***Note: according to CNPS (Skinner and Pavlik 1994), plants on Lists 1B and 2 meet definitions for listing as threatened or endangered under Section 1901, Chapter 10 of the California Fish and Game Code. This interpretation is inconsistent with other definitions.*** **1A:** Plants presumed extinct in California. **1B:** Plants rare and endangered in California and throughout their range. **2:** Plants rare, threatened, or endangered in California but more common elsewhere in their range. **3:** Plants about which need more information; a review list. **Plants 1B, 2, and 4 extension meanings:** _**.1 Seriously** endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat) _**.2 Fairly** endangered in California (20-80% occurrences threatened) _**.3** Not very endangered in California (<20% of occurrences threatened, or no current threats known)	
Habitat Potential Absent [A] - No habitat present and no further work needed. Habitat Present [HP] - Habitat is or may be present. The species may be present. Critical Habitat [CH] – Project is within designated Critical Habitat.	
Potential for Occurrence Criteria: **Present**: Species was observed on site during a site visit or focused survey. **High**: Habitat (including soils and elevation factors) for the species occurs on site and a known occurrence has been recorded within 5 miles of the site. **Low-Moderate**: Either low quality habitat (including soils and elevation factors) for the species occurs on site and a known occurrence exists within 5 miles of the site; or suitable habitat strongly associated with the species occurs on site, but no records were found within the database search. **Presumed Absent**: Focused surveys were conducted, and the species was not found, or species was found within the database search, but habitat (including soils and elevation factors) do not exist on site, or the known geographic range of the species does not include the survey area.	
Source: (CDFW 2024b), (CNPS 2024), (Calflora 2024), (Jepson 2024), (USFWS 2024).	

Chapter 4 – Results: Biological Resources, Discussion of Impacts, and Mitigation

Habitats and Natural Communities of Special Concern

Habitats are of special concern based on federal, state, or local laws regulating their development; limited distributions; and/or the habitat requirements of special-status plants or wildlife occurring on-site. Wetlands and waters of the U.S. are also considered sensitive by both federal and state agencies. Within the BSA, oak woodland habitat has been identified as a natural community of special concern as it has special protections under the County's Oak Resources Conservation Ordinance. Furthermore, a small patch of riparian habitat is present within the BSA, this habitat is a natural community of special concern under the jurisdiction of CDFW pursuant to Fish and Game Code (FGC) Section 1600. **Table 3. Impacts to Sensitive Natural Habitats** and **Figure 5. Project Impacts** outline the impacts of the Project to oak woodland habitat. Avoidance and minimization, and compensatory mitigation measures regarding oak woodland habitat are discussed below.

Table 3. Impacts to Sensitive Natural Habitats

Impact Type (acres)	Sensitive Natural Habitat	
	Oak Woodland	**Riparian Habitat**
Temporary	0.72 acres	0 acres
Permanent	0.24 acres	0 acres
Total	**0.96 acres**	**0 acres**

Discussion of Oak Woodland

Oak woodlands are characterized by a mix of oak species, primarily dominated by blue oak, valley oak, and interior live oak. These woodlands occur in the foothill regions of California, often between 500 and 3,000 feet in elevation, in areas with well-drained soils. The terrain is typically composed of rolling hills or foothills, and they are frequently found along the transition between grasslands and denser forested areas.

The canopy is typically open to moderately dense, with scattered trees allowing sunlight to reach the understory. The understory varies but is often composed of native grasses, forbs, and shrubs such as poison oak (*Toxicodendron diversilobum*) and buckbrush (*Ceanothus cuneatus*). These woodlands play a crucial role in erosion control, water filtration, and carbon sequestration. They are particularly sensitive to changes in land use, and their preservation is important for maintaining regional biodiversity and ecosystem functions.

Survey Results

Oak woodland habitat encompasses the outer edges of the BSA bordering the roadway/urban land cover. The canopy in this habitat community is dominated by native oak species such as interior live oak, black oak and ponderosa pine (*Pinus ponderosa*)

BSA (13.00 acres)

Project Area (6.04 acres)

Vegetation Communities

Oak Woodland (6.74 acres)

Impacts to Oak Woodland Habitat

Temporary (0.72 acres)

Permanent (0.24 acres)

Little Rd

Coloma Road

Page 4

Page 3

Page 2

Beach View Dr

Beach Ct

South Fork American River

Henningsen
Lotus Park

Lotus Rd

49



V:\3242_Lotus Road\Biology\DD_F5_Project Impacts.mxd

Source: ESRI Maps Online; Dokken Engineering 9/13/2024; Created By: kjacobson

1 inch = 0.06 miles

0 150 300 450 600 750 Feet

Figure 5
Project Impacts

Page 1 of 4
CML-5925(194)
Henningsen/Lotus Multi-Use Trail Project
Lotus, El Dorado County, California

BSA (13.00 acres)

Project Area (6.04 acres)

Vegetation Communities

Oak Woodland (6.74 acres)

Impacts to Oak Woodland Habitat

Temporary (0.72 acres)

Permanent (0.24 acres)

Matchline – See Page 3

Henningsen Lotus Park

Lotus Rd



V:\3242_Lotus Road\Biology\DD_F5_Project Impacts.mxd

Source: ESRI Maps Online; Dokken Engineering 9/13/2024; Created By: kjacobson

1 inch = 0.02 miles

0 40 80 120 160 200 Feet

Figure 5
Project Impacts
Page 2 of 4
CML-5925(194)
Henningsen/Lotus Multi-Use Trail Project
Lotus, El Dorado County, California



V:\3242_Lotus Road\Biology\DD_F5_Project Impacts.mxd

Source: ESRI Maps Online; Dokken Engineering 9/13/2024; Created By: kjacobson

1 inch = 0.02 miles

0 40 80 120 160 200 Feet

Figure 5
Project Impacts
Page 3 of 4
CML-5925(194)
Henningsen/Lotus Multi-Use Trail Project
Lotus, El Dorado County, California

BSA (13.00 acres)

Project Area (6.04 acres)

Vegetation Communities

Oak Woodland (6.74 acres)

Impacts to Oak Woodland Habitat

Temporary (0.72 acres)

Permanent (0.24 acres)

Little Rd

Coloma Road

Lotus Rd

49



Matchline – See Page 3

V:\3242_Lotus Road\Biology\DD_F5_Project Impacts.mxd

Source: ESRI Maps Online; Dokken Engineering 9/13/2024; Created By: kjacobson

1 inch = 0.02 miles

0 40 80 120 160 200 Feet

Figure 5
Project Impacts

CML-5925(194)
Henningsen/Lotus Multi-Use Trail Project
Lotus, El Dorado County, California

trees, with an understory of short herbaceous grasses and non-native plants such as Himalayan blackberry and Scotch broom. Oak woodland habitat within the BSA has potential to supports a diversity of local wildlife species.

Project Impacts

The Project will result in both temporary and permanent impacts to oak woodland habitat within the BSA. Temporary impacts of approximately 0.72 acres are anticipated, due equipment and personnel access. Permanent impacts, covering about 0.24 acres, will result from the installation of a boardwalk, the associated cut and fill construction limits, the placement of RSP near a culvert under Lotus Road to prevent erosion, and the construction of a fence adjacent to the boardwalk (**Table 3** and **Figure 5**).

Tree trimming and removal along the proposed trail will be required; however, County Road Projects are exempt from needing to obtain a tree removal permit under ORMP Policy 2.1.4. A tree survey and preparation of an Oak Resources Technical Report prepared by a certified arborist will be prepared summarizing all required tree removal and trimming, along with any proposed mitigation for the Project.

Avoidance and Minimization Efforts

The Project has been designed to minimize both temporary and permanent impacts to oak woodland habitat within and adjacent to the Project BSA. The following measures will be implemented to avoid and reduce potential impacts to oak woodland habitat:

BIO-1: Prior to the start of construction activities, the Project limits will be marked with high visibility Environmentally Sensitive Area fencing or staking to ensure construction will not further encroach into sensitive habitats. The fencing and/or staking will be maintained and remain in place throughout construction.

BIO-2: Vegetation removal will not exceed what is shown on the plans without prior approval from the Project biologist. If trees will be trimmed rather than removed, trimming must comply with ANSI A300 pruning standards and must not:

- leave branch stubs
- make unnecessary heading cuts
- cut off the branch collar (not make a flush cut)
- top or lion’s tail trees (stripping a branch from the inside leaving foliage just at the ends)
- remove more than 25 percent of the foliage of a single branch
- remove more than 25 percent of the total tree foliage in a single year
- damage other parts of the tree during pruning
- use wound paint
- climb the tree with climbing spikes

Compensatory Mitigation

The ORMP mandates mitigation for permitted oak tree removal, which can include on-site retention, replacement planting both on-site and off-site, and/or payment of in-lieu fees. These fees are allocated for acquiring land, securing conservation easements, and planting and maintaining native oak trees. Each mitigation option requires additional

permits. To incentivize on-site retention of oak woodlands, the ORMP establishes escalating mitigation ratios based on the extent of woodland removal: a 1-to-1 ratio for up to 50 percent removal, a 1.5-to-1 ratio for up to 75 percent removal, and a 2-to-1 ratio for up to 100 percent removal. The specific form of mitigation for the Project—whether on-site retention, replacement planting, or in-lieu fees—will be determined in accordance with these requirements, with final details established following a comprehensive tree survey within the BSA.

Compensatory mitigation will be completed in compliance with measure **BIO-3** below.

BIO-3: If mitigation for tree impacts is required per the ORMP, payment of in-lieu fees will be completed in coordination with the County.

Cumulative Impacts

Removal of trees from oak woodland habitats can result in disruption of ecological processes that trees support, such as nutrient cycling, water infiltration, and soil stabilization, which could lead to increased soil erosion, altered water cycles, and reduced soil fertility within the BSA.

However, tree removal and trimming associated with the Project will be limited to what is necessary for access during construction and construction of the multi-use trail and boardwalk. Only a minor number of trees along the alignment of the proposed trail will be removed and trees will be trimmed rather than removed where feasible. The majority of oak woodland habitat within the Project area will remain intact and will retain its habitat value. Furthermore, the minor tree removal will open up the canopy and may allow the opportunity for other native species to grow in a previous overshaded area.

Measures **BIO-1** through **BIO-3** will be incorporated into the Project to offset impacts to oak woodland habitat and mitigated for tree trimming and removal.

Discussion of Riparian

The riparian corridor within the BSA is considered a natural community of special concern through CDFW. Riparian communities are associated with floodplains and occur as a transitional habitat between wetted areas and upland habitat types. Common plants in foothill riparian zones include willows, cottonwoods, alders, and various shrubs that thrive in the moist soils along the water's edge. These habitats are of ecological importance as they provide essential habitat and resources for wildlife, including birds, amphibians, insects, and mammals. The riparian habitat in foothill regions plays a key role in maintaining water quality by filtering sediments and pollutants, stabilizing stream banks, and reducing erosion. It also acts as a natural buffer, moderating water temperature through shade and creating a cooler microclimate.

Survey Results

Within the BSA, a small patch of riparian habitat, approximately 300 linear feet, occurs in northeastern portion of the BSA along the South Fork American River. The canopy is dominated by riparian tree species including Fremont's cottonwood (*Populus fremontii*), white alder (*Alnus rhombifolia*), and black locust (*Robinia pseudoacacia*). The understory

is comprised of hydrophytic plants such as narrowleaf willow (*Salix exigua*) and mulefat (*Baccharis salicifolia*). Riparian habitat within the BSA has potential to support a diversity of local wildlife species. Riparian habitat comprises approximately 0.14 acres of the BSA.

Project Impacts

Project impacts will be limited to the oak woodland habitat within the BSA. Riparian habitat does not extend into the Project area where Project activities are anticipated, and therefore, no direct or indirect impacts to this habitat community are anticipated.

Avoidance and Minimization Efforts

No temporary or permanent impacts to riparian habitat are anticipated as a result of the proposed Project. Therefore, no avoidance and minimization measures are proposed.

Compensatory Mitigation

No temporary or permanent impacts to riparian habitat are anticipated as a result of the Project. Therefore, no compensatory mitigation is required for riparian habitat.

Cumulative Impacts

No temporary or permanent impacts to riparian habitat are anticipated as a result of the Project. Therefore, no cumulative impacts to riparian habitat are expected to result from construction of the trail.

Special-Status Plant Species

Plants are of special concern based on (1) federal, state, or local laws regulating their development; (2) limited distributions; and/or (3) the presence of habitat required by the special-status plants occurring on site. Prior to field surveys, a list of regional special-status plant species with potential to occur within the Project vicinity was compiled from database searches. The potential for each species to occur within the BSA was determined by analyzing the habitat requirements of each species and comparing the habitat requirements to available habitat within the BSA. After a careful comparison between habitat requirements and the habitat available within the BSA, no special-status plants were determined to have potential to occur and no Project-related impacts to special-status plant species are anticipated. Furthermore, no special-status plant species were observed within the BSA during the biological survey conducted on August 13, 2024.

Special-Status Wildlife Species

Wildlife is considered to be of special concern based on (1) federal, state, or local laws regulating their development; (2) limited distributions; and/or (3) the habitat requirements of special-status wildlife occurring on-site. Prior to field surveys, a list of regional special-status wildlife species with potential to occur within the Project vicinity was compiled from database searches. The potential for each species to occur within the BSA was determined by analyzing the habitat requirements of each species and comparing the habitat requirements to available habitat within the BSA. After a careful comparison between habitat requirements and the habitat available within the BSA, no special-status species were found to have the potential to occur within the BSA. Furthermore, no special-

status species were observed within the BSA during the biological survey conducted on August 13, 2024.

Chapter 5 – Conclusions and Regulatory Determinations

Federal Endangered Species Act Consultation Summary

Based on an analysis of species occurrences and habitat requirements, effect determinations were made for each federally listed, candidate or proposed species as shown in **Table 4. Federally Listed Species Determinations** below. A total of nine federally listed species were returned via database searches. None of these species have potential to occur within the Project area. No effects to FESA listed species are anticipated as a result of the proposed Project. Therefore Section 7 consultation with USFWS is not proposed. This Project is located outside of NOAA Fisheries jurisdiction; therefore, a NOAA Fisheries species list was not queried.

Table 4. Federally Listed Species Determinations

Species Name	Federal Status	Potential	Determination
Northwestern pond turtle (*Actinemys marmorata*)	Proposed Threatened	Absent	No Effect
California red-legged frog (*Rana draytonii*)	Threatened	Absent	No Effect
Foothill yellow-legged frog (*Rana boylii*)	Endangered	Absent	No Effect
Western spadefoot (*Spea hammondii*)	Proposed Threatened	Absent	No Effect
Monarch butterfly (*Danuas plexippus*)	Proposed Threatened	Absent	No Determination
Valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*)	Threatened	Absent	No Effect
Layne's butterweed *(Senecio layneae)*	Threatened	Absent	No Effect
Pine Hill ceanothus (*Ceanothus roderickii*)	Endangered	Absent	No Effect
Stebbins' Morning-glory (*Calystegia stebbinsii*)	Endangered	Absent	No Effect

Essential Fish Habitat Consultation Summary

This Project is located outside of NOAA Fisheries jurisdiction; therefore, no essential fish habitat is present within the Project limits. No essential fish habitat consultation is required.

California Endangered Species Act Consultation Summary

Based on biological surveys, habitat assessments, and local occurrence analysis, no state listed species have the potential to occur within the BSA. As a result, there are no species-specific avoidance and minimization measures to implement.

Wetlands and Other Waters Coordination Summary

Land cover types within the Project area include roadway/urban land cover, oak woodland, and riparian habitat. Riparian habitat is a jurisdictional habitat community regulated by CDFW through FGC Section 1600. However, the Project will not result in direct or indirect impacts to riparian habitat, and therefore coordination with CDFW under Section 1600 is not anticipated.

The BSA is adjacent to South Fork American River, but direct and/or indirect impacts to this water body are not anticipated. No wetlands or other jurisdictional water features were observed within the Project area during the biological survey conducted on August 13, 2024 (**Figure 4**). As such, the Project will not require permits through regulatory agencies.

Invasive Species

In February 1999, EO 13112 was signed, requiring federal agencies to prevent and control the introduction and spread of invasive species. Measure **BIO-4** will be incorporated into the Project plans to ensure that invasive species are not introduced or spread.

BIO-4: Prior to arrival at the Project area and prior to leaving the Project area, construction equipment that may contain invasive plants and/or seeds will be cleaned to reduce the spreading of noxious weeds.

Other

Best Management Practices

To minimize and avoid potential environmental impacts of construction, the following measure **BIO-5 through BIO-7** have been incorporated into the Project design.

BIO-5: To avoid inadvertent entrapment of wildlife during construction:

- Non-entangling erosion control material will be used to reduce the potential for entrapment. Tightly woven fiber netting (mesh size less than 0.25 inch) or similar material will be used to ensure that wildlife is not trapped (no monofilament). Coconut coir matting and fiber rolls containing burlap are examples of acceptable erosion control materials.

- All excavated steep-walled holes and trenches more than 6 inches deep will be covered with plywood (or similar material) or provided with one or more escape ramps constructed of earth fill or wooden planks at the end of each workday or 30 minutes prior to sunset, whichever occurs first. All steep-walled holes and trenches will be inspected each morning to ensure that no wildlife has become entrapped. All construction pipes, culverts, similar structures, construction equipment, and construction debris left overnight within sensitive habitats will be inspected for wildlife prior to being moved.

BIO-6: Work will be restricted to periods of dry weather and low rainfall (less than 0.25 inches within a 24-hour period). The National Weather Service 72-hour forecast will be monitored throughout construction to determine potential rain events. No work will occur during a dry-out period of 24 hours after the above referenced wet weather.

BIO-7: Best Management Practices (BMPs) will be incorporated into Project design and Project management to minimize impacts on the environment including erosion and the release of pollutants (e.g., oils, fuels):

- Exposed soils and material stockpiles would be stabilized, through watering or other measures, to prevent the movement of dust at the Project area caused by wind and construction activities such as traffic and grading activities;
- All vehicle and equipment fueling/maintenance would be conducted outside of any surface waters;
- Equipment used in and around jurisdictional waters must be in good working order and free of dripping or leaking contaminants;
- Raw cement, concrete or concrete washings, asphalt, paint or other coating material, oil or other petroleum products, or any other substances that could be hazardous to aquatic life shall be prevented from contaminating the soil or entering jurisdictional waters;
- All erosion control measures, and storm water control measures would be properly maintained until the site has returned to a pre-construction state;
- All construction materials would be hauled off-site after completion of construction.

General Wildlife

To minimize and avoid potential effects to local wildlife, the following measures **BIO-8** through **BIO-12** have been incorporated into the Project design.

BIO-8: Prior to vegetation removal or initial ground disturbance during the nesting bird season (February 1 – September 30) a pre-construction nesting bird survey must be conducted by a Project Biologist prior to the start of work. The nesting bird survey must include the Project area plus a 300-foot buffer. Within two weeks of the nesting bird survey, all vegetated areas that are designated for removal must be cleared by the contractor or a supplemental nesting bird survey is required.

A minimum 100-foot no-disturbance buffer will be established around any active nest of migratory birds and a minimum 300-foot no-disturbance buffer will be established around any nesting raptor species. The contractor must immediately stop work in the buffer area until the appropriate buffer is established, as determined by the Project Biologist. Work may not proceed within the buffer until a Project Biologist determines the young have fledged. A reduced buffer can be established if determined appropriate by the Project Biologist.

BIO-9: Immediately prior to vegetation removal, the Project Biologist(s) will inspect all areas where ground disturbing activity is anticipated. The Project Biologist will oversee all vegetation clearing and grubbing and will have stop work authority

All construction crew members will allow wildlife enough time to escape initial clearing and grubbing activities.

BIO-10: All food-related trash must be disposed into closed containers and must be removed from the Project area daily. Construction personnel must not feed or otherwise attract wildlife to the Project area.

BIO-11: The contractor must not apply rodenticide or herbicide within the Project area during construction.

BIO-12: If any wildlife is encountered during construction, said wildlife shall be allowed to leave the construction area unharmed.

BIO-13: The Project area has potential to support milkweed plants which may provide suitable habitat for native insects (e.g., Monarch butterfly [*Danaus plexippus*]). Prior to construction a qualified biologist will complete a survey for presence/absence of milkweed plant species during the appropriate bloom period (spring/summer). If milkweed plants are observed each plant will be inspected for signs of any life stage of Monarch butterfly. If no signs of any life stage of Monarch butterfly are observed, then the milkweed plant(s) can be removed. However, if eggs/larvae of Monarch butterfly are discovered on any plants within the Project area they will be flagged and protected in place until fully hatched/emerged. Alternatively, if protection is not feasible, the USFWS will be contacted for further guidance. The appropriate no disturbance buffers will be determined by the qualified biologist.

Migratory Birds

Native birds are protected by the MBTA and CFG Code Sections 3513 and 3503. The implementation of measure **BIO-8** would avoid all potential impacts to migratory birds.

Chapter 6 – References

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Appendix A. USFWS Species List

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Sacramento Fish And Wildlife Office
Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846
Phone: (916) 414-6600 Fax: (916) 414-6713

In Reply Refer To: 01/09/2025 20:11:46 UTC
Project Code: 2024-0049140
Project Name: Henningsen/Lotus Multi-Use Trail

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)

(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts, see https://www.fws.gov/program/migratory-bird-permit/what-we-do.

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

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit https://www.fws.gov/partner/council-conservation-migratory-birds.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Sacramento Fish And Wildlife Office
Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846
(916) 414-6600

PROJECT SUMMARY

Project Code: 2024-0049140
Project Name: Henningsen/Lotus Multi-Use Trail
Project Type: New Constr - Above Ground
Project Description: Class 1 Trail from Henningsen Lotus Park to SR 49
Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@38.806440050000006,-120.90083539183968,14z



Counties: El Dorado County, California

ENDANGERED SPECIES ACT SPECIES

There is a total of 9 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

REPTILES

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

AMPHIBIANS

NAME	STATUS
California Red-legged Frog *Rana draytonii* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2891	Threatened
Foothill Yellow-legged Frog *Rana boylii* Population: South Sierra Distinct Population Segment (South Sierra DPS) No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/5133	Endangered
Western Spadefoot *Spea hammondii* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/5425	Proposed Threatened

INSECTS

NAME	STATUS
Monarch Butterfly *Danaus plexippus* There is **proposed** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/9743	Proposed Threatened
Valley Elderberry Longhorn Beetle *Desmocerus californicus dimorphus* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/7850	Threatened

FLOWERING PLANTS

NAME	STATUS
Layne's Butterweed *Senecio layneae* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4062	Threatened
Pine Hill Ceanothus *Ceanothus roderickii* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/3293	Endangered
Stebbins' Morning-glory *Calystegia stebbinsii* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/3991	Endangered

CRITICAL HABITATS

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

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

IPAC USER CONTACT INFORMATION

Agency: Dokken Engineering
Name: Jeffrey Harris
Address: 110 Blue Ravine Rd #200
City: Folsom
State: CA
Zip: 95630
Email jharris@dokkenengineering.com
Phone: 9167651015

Appendix B. CNDDB Species List

Selected Elements by Common Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Shingle Springs (3812068) OR Placerville (3812067) OR Clarksville (3812161) OR Pilot Hill (3812171) OR Coloma (3812078) OR Garden Valley (3812077) OR Auburn (3812181) OR Greenwood (3812088) OR Georgetown (3812087))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Alabaster Cave harvestman *Banksula californica*	ILARA14020	None	None	GH	SH	
American bumble bee *Bombus pensylvanicus*	IIHYM24260	None	None	G3G4	S2	
American goshawk *Accipiter atricapillus*	ABNKC12061	None	None	G5	S3	SSC
American peregrine falcon *Falco peregrinus anatum*	ABNKD06071	Delisted	Delisted	G4T4	S3S4	
An andrenid bee *Andrena subapasta*	IIHYM35210	None	None	G1G2	S1S2	
bald eagle *Haliaeetus leucocephalus*	ABNKC10010	Delisted	Endangered	G5	S3	FP
bank swallow *Riparia riparia*	ABPAU08010	None	Threatened	G5	S3	
big-scale balsamroot *Balsamorhiza macrolepis*	PDAST11061	None	None	G2	S2	1B.2
Bisbee Peak rush-rose *Crocanthemum suffrutescens*	PDCIS020F0	None	None	G2?Q	S2?	3.2
Blennosperma vernal pool andrenid bee *Andrena blennospermatis*	IIHYM35030	None	None	G2	S1	
Brandegee's clarkia *Clarkia biloba ssp. brandegeeae*	PDONA05053	None	None	G4G5T4	S4	4.2
brownish beaked-rush *Rhynchospora capitellata*	PMCYP0N080	None	None	G5	S1	2B.2
burrowing owl *Athene cunicularia*	ABNSB10010	None	None	G4	S2	SSC
Butte County fritillary *Fritillaria eastwoodiae*	PMLIL0V060	None	None	G3Q	S3	3.2
California black rail *Laterallus jamaicensis coturniculus*	ABNME03041	None	Threatened	G3T1	S2	FP
California red-legged frog *Rana draytonii*	AAABH01022	Threatened	None	G2G3	S2S3	SSC
Central Valley Drainage Hardhead/Squawfish Stream *Central Valley Drainage Hardhead/Squawfish Stream*	CARA2443CA	None	None	GNR	SNR	
chaparral sedge *Carex xerophila*	PMCYP03M60	None	None	G2	S2	1B.2
coast horned lizard *Phrynosoma blainvillii*	ARACF12100	None	None	G4	S4	SSC

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Cosumnes stripetail *Cosumnoperla hypocrena*	IIPLE23020	None	None	G2	S2	
dubious pea *Lathyrus sulphureus var. argillaceus*	PDFAB25101	None	None	G5T1T2Q	S1S2	3
El Dorado bedstraw *Galium californicum ssp. sierrae*	PDRUB0N0E7	Endangered	Rare	G5T1	S1	1B.2
El Dorado County mule ears *Wyethia reticulata*	PDAST9X0D0	None	None	G2	S2	1B.2
Fisher *Pekania pennanti*	AMAJF01020	None	None	G5	S2S3	SSC
foothill yellow-legged frog - north Sierra DPS *Rana boylii pop. 3*	AAABH01053	None	Threatened	G3T2	S2	
foothill yellow-legged frog - south Sierra DPS *Rana boylii pop. 5*	AAABH01055	Endangered	Endangered	G3T2	S2	
Galile's cave harvestman *Banksula galilei*	ILARA14040	None	None	G1	S1	
golden eagle *Aquila chrysaetos*	ABNKC22010	None	None	G5	S3	FP
great blue heron *Ardea herodias*	ABNGA04010	None	None	G5	S4	
great egret *Ardea alba*	ABNGA04040	None	None	G5	S4	
Jepson's onion *Allium jepsonii*	PMLIL022V0	None	None	G2	S2	1B.2
Layne's ragwort *Packera layneae*	PDAST8H1V0	Threatened	Rare	G2	S2	1B.2
Morrison bumble bee *Bombus morrisoni*	IIHYM24460	None	None	G3	S1S2	
Nissenan manzanita *Arctostaphylos nissenana*	PDERI040V0	None	None	G1	S1	1B.2
North American porcupine *Erethizon dorsatum*	AMAFJ01010	None	None	G5	S3	
northwestern pond turtle *Actinemys marmorata*	ARAAD02031	Proposed Threatened	None	G2	SNR	SSC
oval-leaved viburnum *Viburnum ellipticum*	PDCPR07080	None	None	G4G5	S3	2B.3
pallid bat *Antrozous pallidus*	AMACC10010	None	None	G4	S3	SSC
Parry's horkelia *Horkelia parryi*	PDROS0W0C0	None	None	G2	S2	1B.2
Pine Hill ceanothus *Ceanothus roderickii*	PDRHA04190	Endangered	Rare	G1	S1	1B.1

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Pine Hill flannelbush *Fremontodendron decumbens*	PDSTE03030	Endangered	Rare	G1	S1	1B.2
Red Hills soaproot *Chlorogalum grandiflorum*	PMLIL0G020	None	None	G3	S3	1B.2
Ricksecker's water scavenger beetle *Hydrochara rickseckeri*	IICOL5V010	None	None	G2?	S2?	
Sanford's arrowhead *Sagittaria sanfordii*	PMALI040Q0	None	None	G3	S3	1B.2
Sierra arching sedge *Carex cyrtostachya*	PMCYP03M00	None	None	G2	S2	1B.2
Sierra blue grass *Poa sierrae*	PMPOA4Z310	None	None	G3	S3	1B.3
silver-haired bat *Lasionycteris noctivagans*	AMACC02010	None	None	G3G4	S3S4	
spicate calycadenia *Calycadenia spicata*	PDAST1P090	None	None	G3?	S3	1B.3
Stebbins' morning-glory *Calystegia stebbinsii*	PDCON040H0	Endangered	Endangered	G1	S1	1B.1
steelhead - Central Valley DPS *Oncorhynchus mykiss irideus pop. 11*	AFCHA0209K	Threatened	None	G5T2Q	S2	SSC
tight coin (=Yates' snail) *Ammonitella yatesii*	IMGASB0010	None	None	G1	S1	
Townsend's big-eared bat *Corynorhinus townsendii*	AMACC08010	None	None	G4	S2	SSC
tricolored blackbird *Agelaius tricolor*	ABPBXB0020	None	Threatened	G1G2	S2	SSC
valley elderberry longhorn beetle *Desmocerus californicus dimorphus*	IICOL48011	Threatened	None	G3T3	S3	
Van Zuuk's morning-glory *Calystegia vanzuukiae*	PDCON040Q0	None	None	G2Q	S2	1B.3
vernal pool fairy shrimp *Branchinecta lynchi*	ICBRA03030	Threatened	None	G3	S3	
Wawona riffle beetle *Atractelmis wawona*	IICOL58010	None	None	G3	S1S2	
western bumble bee *Bombus occidentalis*	IIHYM24252	None	Candidate Endangered	G3	S1	
western spadefoot *Spea hammondii*	AAABF02020	Proposed Threatened	None	G2G3	S3S4	SSC
white-tailed kite *Elanus leucurus*	ABNKC06010	None	None	G5	S3S4	FP
Yuma myotis *Myotis yumanensis*	AMACC01020	None	None	G5	S4	

Record Count: 61

Appendix C. CNPS Species List

CALIFORNIA NATIVE PLANT SOCIETY

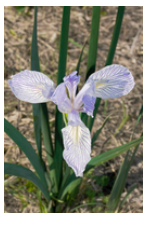
CNPS Rare Plant Inventory

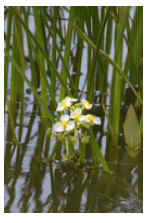
Search Results

42 matches found. Click on scientific name for details

Search Criteria: Quad is one of [**3812068:3812067:3812161:3812171:3812078:3812077:3812181:3812088:3812087**]

▲ COMMON NAME	SCIENTIFIC NAME	FAMILY	LIFEFORM	BLOOMING PERIOD	FED LIST	STATE LIST	GLOBAL RANK	STATE RANK	CA RARE PLANT RANK	CA ENDEMIC	DATE ADDED	PHOTO
Baker cypress	*Hesperocyparis bakeri*	Cupressaceae	perennial evergreen tree		None	None	G3	S3	4.2		1974-01-01	 © 2021 Scot Loring
big-scale balsamroot	*Balsamorhiza macrolepis*	Asteraceae	perennial herb	Mar-Jun	None	None	G2	S2	1B.2	Yes	1974-01-01	 ©1998 Dean Wm. Taylor
Bisbee Peak rush-rose	*Crocanthemum suffrutescens*	Cistaceae	perennial evergreen shrub	Apr-Aug	None	None	G2?Q	S2?	3.2	Yes	1974-01-01	No Photo Available
Brandegee's clarkia	*Clarkia biloba* ssp. *brandegeeae*	Onagraceae	annual herb	(Mar)May-Jul	None	None	G4G5T4	S4	4.2	Yes	2001-01-01	No Photo Available
Brewer's calandrinia	*Calandrinia breweri*	Montiaceae	annual herb	(Jan)Mar-Jun	None	None	G4	S4	4.2		1994-01-01	No Photo Available
bristly leptosiphon	*Leptosiphon aureus*	Polemoniaceae	annual herb	Apr-Jul	None	None	G4?	S4?	4.2	Yes	1994-01-01	 © 2007 Len Blumin
brownish beaked-rush	*Rhynchospora capitellata*	Cyperaceae	perennial herb	Jul-Aug	None	None	G5	S1	2B.2		1974-01-01	 ©2004 Dean Wm. Taylor
Butte County fritillary	*Fritillaria eastwoodiae*	Liliaceae	perennial bulbiferous herb	Mar-Jun	None	None	G3Q	S3	3.2		1974-01-01	 ©2009 Sierra Pacific Industries

chaparral sedge	*Carex xerophila*	Cyperaceae	perennial herb	Mar-Jun	None	None	G2	S2	1B.2	Yes	2016-06-06	 © 2023 Steven Perry
coast iris	*Iris longipetala*	Iridaceae	perennial rhizomatous herb	Mar-May(Jun)	None	None	G3	S3	4.2	Yes	2006-10-12	 © 2014 Aaron Schusteff
Congdon's onion	*Allium sanbornii* var. *congdonii*	Alliaceae	perennial bulbiferous herb	Apr-Jul	None	None	G3T3	S3	4.3	Yes	1994-01-01	 © 2008 Steven Perry
dubious pea	*Lathyrus sulphureus* var. *argillaceus*	Fabaceae	perennial herb	Apr-May	None	None	G5T1T2Q	S1S2	3	Yes	1994-01-01	No Photo Available
El Dorado bedstraw	*Galium californicum* ssp. *sierrae*	Rubiaceae	perennial herb	May-Jun	FE	CR	G5T1	S1	1B.2	Yes	1974-01-01	 © 2019 John Doyen
El Dorado County mule ears	*Wyethia reticulata*	Asteraceae	perennial herb	Apr-Aug	None	None	G2	S2	1B.2	Yes	1974-01-01	No Photo Available
Ewan's larkspur	*Delphinium hansenii* ssp. *ewanianum*	Ranunculaceae	perennial herb	Mar-May	None	None	G4T3	S3	4.2	Yes	1994-01-01	No Photo Available
Fresno ceanothus	*Ceanothus fresnensis*	Rhamnaceae	perennial evergreen shrub	(Apr)May-Jul	None	None	G4	S4	4.3	Yes	1980-01-01	No Photo Available
Humboldt lily	*Lilium humboldtii* ssp. *humboldtii*	Liliaceae	perennial bulbiferous herb	May-Jul(Aug)	None	None	G4T3	S3	4.2	Yes	1994-01-01	 © 2008 Sierra Pacific Industries
Jepson's onion	*Allium jepsonii*	Alliaceae	perennial bulbiferous herb	Apr-Aug	None	None	G2	S2	1B.2	Yes	1994-01-01	 © 2019 Steven Perry
Jepson's woolly sunflower	*Eriophyllum jepsonii*	Asteraceae	perennial herb	Apr-Jun	None	None	G3	S3	4.3	Yes	1974-01-01	No Photo Available
Layne's ragwort	*Packera layneae*	Asteraceae	perennial herb	Apr-Aug	FT	CR	G2	S2	1B.2	Yes	1974-01-01	No Photo Available
Nissenan manzanita	*Arctostaphylos nissenana*	Ericaceae	perennial evergreen shrub	Feb-Mar	None	None	G1	S1	1B.2	Yes	1974-01-01	No Photo Available

oval-leaved viburnum	*Viburnum ellipticum*	Viburnaceae	perennial deciduous shrub	May-Jun	None	None	G4G5	S3	2B.3		1974-01-01	 © 2006 Tom Engstrom
Parry's horkelia	*Horkelia parryi*	Rosaceae	perennial herb	Apr-Sep	None	None	G2	S2	1B.2	Yes	1974-01-01	 © 2009 Barry Breckling
Pine Hill ceanothus	*Ceanothus roderickii*	Rhamnaceae	perennial evergreen shrub	Apr-Jun	FE	CR	G1	S1	1B.1	Yes	1974-01-01	No Photo Available
Pine Hill flannelbush	*Fremontodendron decumbens*	Malvaceae	perennial evergreen shrub	Apr-Jul	FE	CR	G1	S1	1B.2	Yes	1974-01-01	No Photo Available
Red Hills soaproot	*Chlorogalum grandiflorum*	Agavaceae	perennial bulbiferous herb	(Apr)May-Jun	None	None	G3	S3	1B.2	Yes	1974-01-01	No Photo Available
Sanborn's onion	*Allium sanbornii* var. *sanbornii*	Alliaceae	perennial bulbiferous herb	May-Sep	None	None	G3T4?	S3S4	4.2		1994-01-01	 ©2018 Steven Perry
Sanford's arrowhead	*Sagittaria sanfordii*	Alismataceae	perennial rhizomatous herb (emergent)	May-Oct(Nov)	None	None	G3	S3	1B.2	Yes	1984-01-01	 ©2013 Debra L. Cook
serpentine bluecup	*Githopsis pulchella* ssp. *serpentinicola*	Campanulaceae	annual herb	May-Jun	None	None	G4T3	S3	4.3	Yes	2001-01-01	 © 2019 Barry Breckling
serpentine leptosiphon	*Leptosiphon ambiguus*	Polemoniaceae	annual herb	Mar-Jun	None	None	G4	S4	4.2	Yes	1994-01-01	 © 2010 Aaron Schusteff
Sierra arching sedge	*Carex cyrtostachya*	Cyperaceae	perennial herb	May-Aug	None	None	G2	S2	1B.2	Yes	2015-08-18	No Photo Available
Sierra blue grass	*Poa sierrae*	Poaceae	perennial rhizomatous herb	Apr-Jul	None	None	G3	S3	1B.3	Yes	2010-06-10	 © 2012 Belinda Lo
Sierra clarkia	*Clarkia virgata*	Onagraceae	annual herb	May-Aug	None	None	G3	S3	4.3	Yes	1974-01-01	No Photo Available

Sierra monardella	*Monardella candicans*	Lamiaceae	annual herb	Apr-Jul	None	None	G4	S4	4.3	Yes	1994-01-01	 © 2011 Jean Pawek
Sierra starwort	*Hartmaniella sierrae*	Caryophyllaceae	perennial rhizomatous herb	May-Aug	None	None	G3G4	S3S4	4.2	Yes	2004-01-01	No Photo Available
spicate calycadenia	*Calycadenia spicata*	Asteraceae	annual herb	May-Sep	None	None	G3?	S3	1B.3		2023-04-05	 © 2023 Christopher Bronny
Stebbins' morning-glory	*Calystegia stebbinsii*	Convolvulaceae	perennial rhizomatous herb	Apr-Jul	FE	CE	G1	S1	1B.1	Yes	1980-01-01	No Photo Available
streambank spring beauty	*Claytonia parviflora* ssp. *grandiflora*	Montiaceae	annual herb	Feb-May	None	None	G5T3	S3	4.2	Yes	2006-09-29	No Photo Available
Tehama navarretia	*Navarretia heterandra*	Polemoniaceae	annual herb	Apr-Jun	None	None	G4	S4	4.3		1974-01-01	 ©2021 Scot Loring
tripod buckwheat	*Eriogonum tripodum*	Polygonaceae	perennial deciduous shrub	May-Jul	None	None	G4	S4	4.2	Yes	1974-01-01	 ©2008 Steven Perry
True's manzanita	*Arctostaphylos mewukka* ssp. *truei*	Ericaceae	perennial evergreen shrub	Feb-Jul	None	None	G4?T3	S3	4.2	Yes	1984-01-01	 © 2008 George W. Hartwell
Van Zuuk's morning-glory	*Calystegia vanzuukiae*	Convolvulaceae	perennial rhizomatous herb	May-Aug	None	None	G2Q	S2	1B.3	Yes	2014-07-16	No Photo Available

Showing 1 to 42 of 42 entries

Suggested Citation:

California Native Plant Society, Rare Plant Program. 2024. Rare Plant Inventory (online edition, v9.5). Website https://www.rareplants.cnps.org [accessed 13 September 2024].

Appendix D. NRCS Soil Survey Report

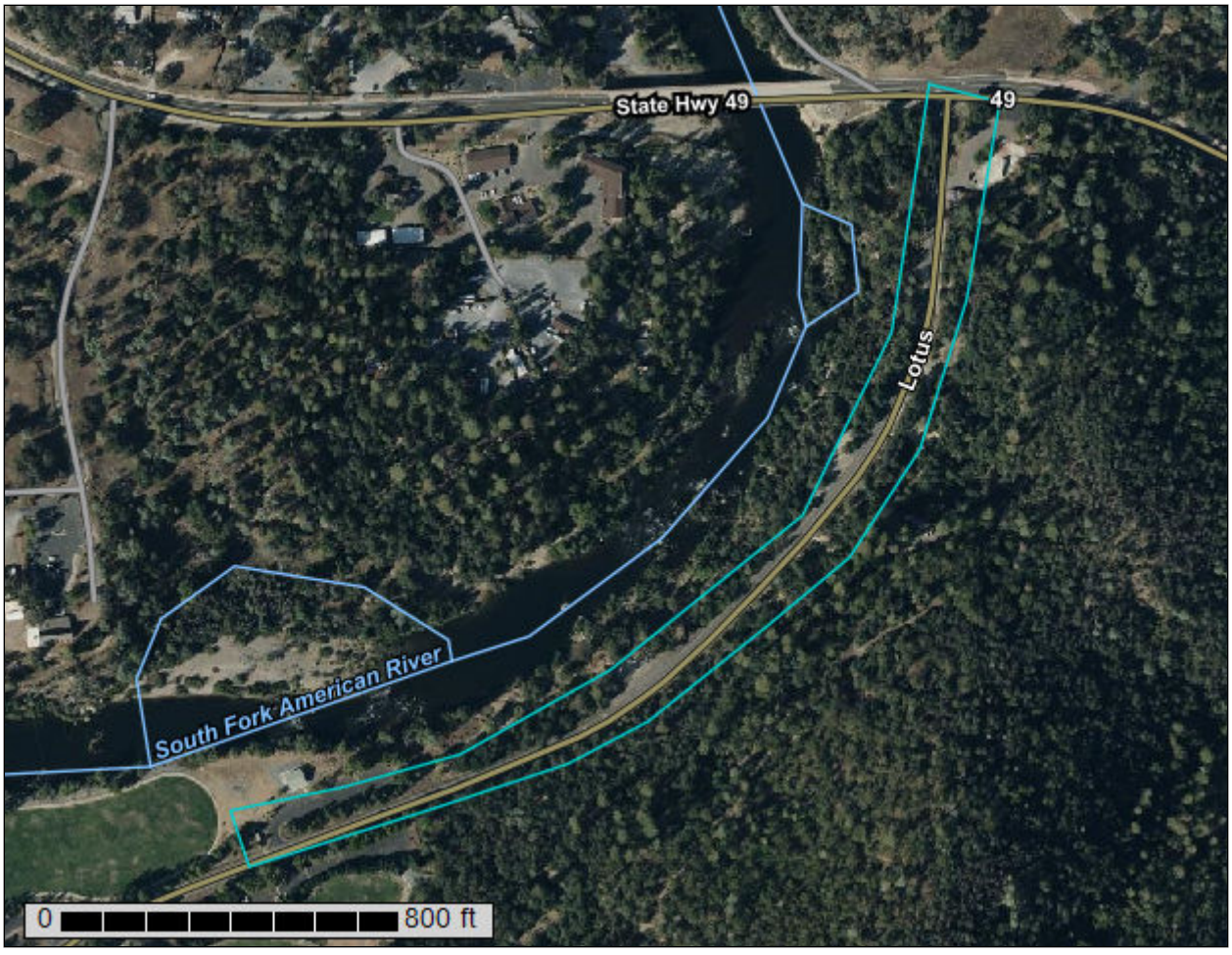
United States Department of Agriculture

NRCS

Natural Resources Conservation Service

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

Custom Soil Resource Report for El Dorado Area, California



February 14, 2024

Preface

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

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

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

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

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

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

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How Soil Surveys Are Made

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

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

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

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

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

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

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

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

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

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

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

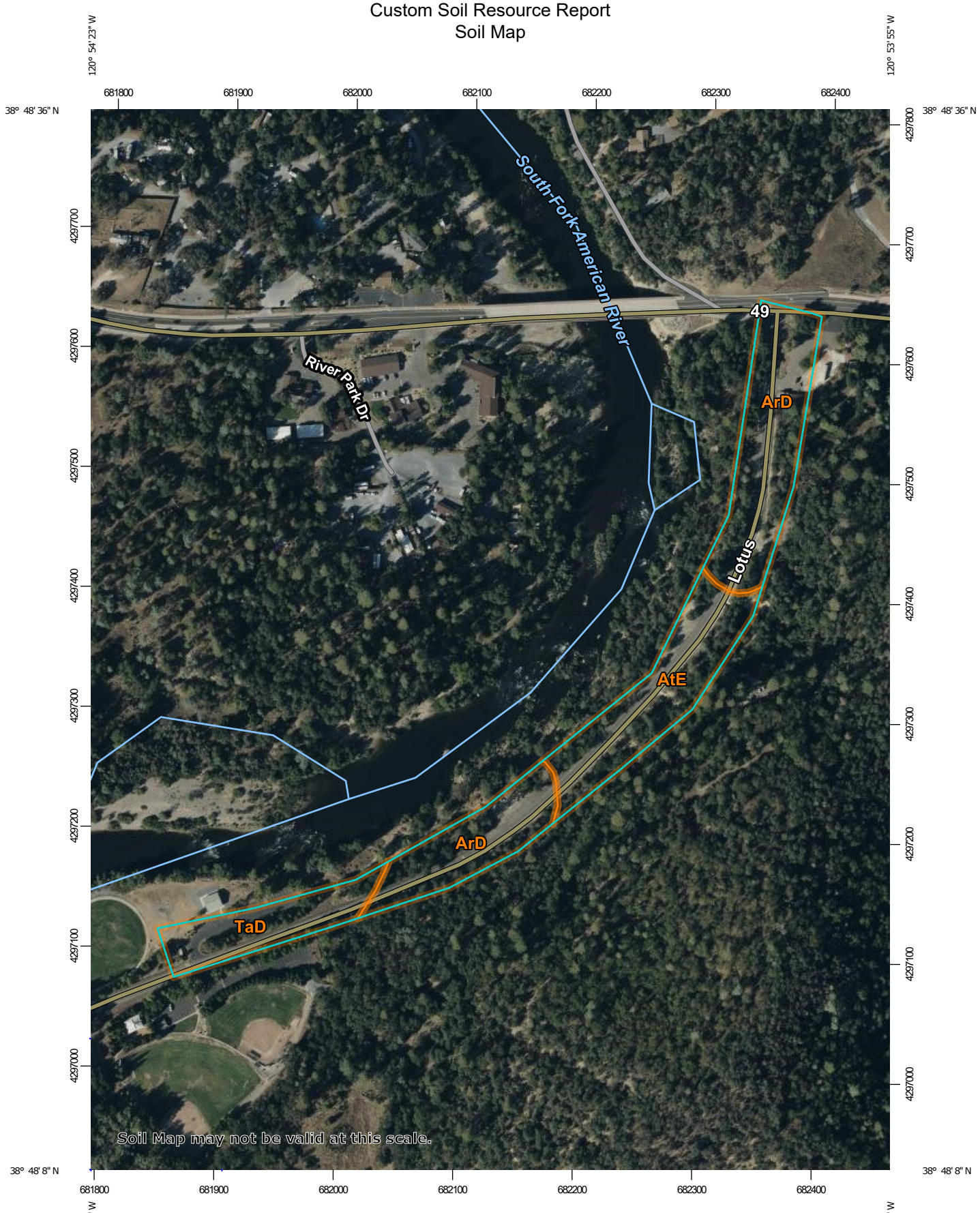
After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

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

Soil Map

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

Custom Soil Resource Report
Soil Map



Map Scale: 1:4,310 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 50 100 200 300

Feet: 0 200 400 800 1200

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

MAP LEGEND

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

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

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

Water Features
- Streams and Canals

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

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

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

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

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

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

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

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

Soil Survey Area: El Dorado Area, California
Survey Area Data: Version 15, Aug 31, 2023

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

Date(s) aerial images were photographed: Oct 3, 2022—Oct 6, 2022

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

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
ArD	Auberry coarse sandy loam, 15 to 30 percent slopes	4.8	52.9%
AtE	Auberry very rocky coarse sandy loam, 30 to 50 percent slopes	2.7	29.6%
TaD	Tailings	1.6	17.5%
Totals for Area of Interest		**9.1**	**100.0%**

Map Unit Descriptions

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

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

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

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or

landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

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

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

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

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

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

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

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

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

El Dorado Area, California

ArD—Auberry coarse sandy loam, 15 to 30 percent slopes

Map Unit Setting

National map unit symbol: hhyk
Elevation: 400 to 3,500 feet
Mean annual precipitation: 25 to 35 inches
Mean annual air temperature: 59 degrees F
Frost-free period: 150 to 260 days
Farmland classification: Farmland of local importance

Map Unit Composition

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

Description of Auberry

Setting

Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Concave
Across-slope shape: Convex
Parent material: Residuum weathered from granite and/or residuum weathered from granodiorite

Typical profile

H1 - 0 to 13 inches: coarse sandy loam
H2 - 13 to 36 inches: sandy clay loam
H3 - 36 to 56 inches: coarse sandy loam
H4 - 56 to 60 inches: weathered bedrock

Properties and qualities

Slope: 15 to 30 percent
Depth to restrictive feature: 56 to 60 inches to paralithic bedrock
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Moderate (about 7.4 inches)

Interpretive groups

Land capability classification (irrigated): 6e
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: C
Ecological site: F018XI205CA - Thermic Granitic Foothills
Hydric soil rating: No

Minor Components

Ahwahnee
Percent of map unit: 5 percent
Hydric soil rating: No

Sierra
Percent of map unit: 5 percent
Hydric soil rating: No

Boomer
Percent of map unit: 5 percent
Landform: Mountain slopes, hillslopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank, side slope
Down-slope shape: Concave
Across-slope shape: Convex
Hydric soil rating: No

AtE—Auberry very rocky coarse sandy loam, 30 to 50 percent slopes

Map Unit Setting
National map unit symbol: hhyn
Elevation: 400 to 3,500 feet
Mean annual precipitation: 25 to 35 inches
Mean annual air temperature: 59 degrees F
Frost-free period: 150 to 260 days
Farmland classification: Not prime farmland

Map Unit Composition
Auberry and similar soils: 75 percent
Rock outcrop: 15 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Auberry

Setting
Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Concave
Across-slope shape: Convex
Parent material: Residuum weathered from granite and/or residuum weathered from granodiorite

Typical profile
H1 - 0 to 13 inches: coarse sandy loam
H2 - 13 to 36 inches: sandy clay loam
H3 - 36 to 56 inches: coarse sandy loam

H4 - 56 to 60 inches: weathered bedrock

Properties and qualities

Slope: 30 to 50 percent
Depth to restrictive feature: 56 to 60 inches to paralithic bedrock
Drainage class: Well drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Moderate (about 7.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: C
Ecological site: R018XI105CA - Mesic Steep Convex Slopes bordering thermic
Hydric soil rating: No

Description of Rock Outcrop

Setting

Parent material: Granite and/or granodiorite

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8
Hydric soil rating: No

Minor Components

Ahwahnee

Percent of map unit: 3 percent
Hydric soil rating: No

Sierra

Percent of map unit: 3 percent
Hydric soil rating: No

Boomer

Percent of map unit: 2 percent
Landform: Mountain slopes, hillslopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank, side slope
Down-slope shape: Concave
Across-slope shape: Convex
Hydric soil rating: No

Chawanakee

Percent of map unit: 2 percent
Hydric soil rating: No

TaD—Tailings

Map Unit Composition

Tailings: 95 percent
Minor components: 5 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Tailings

Typical profile

H1 - 0 to 60 inches: fragmental material

Properties and qualities

Slope: 5 to 30 percent
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)
Frequency of flooding: Rare
Available water supply, 0 to 60 inches: Very low (about 1.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8
Hydric soil rating: No

Minor Components

Unnamed

Percent of map unit: 3 percent
Landform: Drainageways
Hydric soil rating: Yes

Unnamed

Percent of map unit: 2 percent
Landform: Depressions
Hydric soil rating: Yes

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Appendix E. Reference Photos



Photo 1. Representative photo of the intersection of Lotus Road and SR-49, where a curb will be installed to connect the boardwalk with the existing pedestrian facilities along SR-49. Taken facing north (8/13/2024).



Photo 2. Representative photo of the oak woodland habitat found on the northernmost extent of the BSA. Taken facing north (8/13/2024).



Photo 3. Representative photo of a culvert along Lotus Road that is to be reinforced with RSP to prevent further soil erosion from large rain events. Taken facing south (8/13/2024).



Photo 4: Representative photo of the oak woodland habitat that encompasses a large majority of the BSA. Taken facing southwest (8/13/2024).



Photo 5: Representative photo of the shoulder of Lotus Road where the boardwalk will be installed. Taken facing north (8/13/2024).



Photo 6: Representative photo of oak woodland habitat that will be permanently impacted to connect the new pedestrian facilities to the existing parking lot at Henningsen Lotus Park. Taken facing southwest (8/13/2024).



Photo 7: Representative photo of the riparian corridor habitat associated with the South Fork of the American River. This habitat is found within the BSA but will not be impacted by Project activities. Taken facing north (8/13/2024).



Photo 8: Representative Photo of the end of the existing paved trail that leads into the parking lot of Henningsen Lotus Park. The new trail system will connect to this pre-existing path. Taken facing south (8/13/2024).

Appendix D:
Initial Site Assessment Report

INITIAL SITE ASSESSMENT



Henningsen/Lotus Road Multi-Use Trail Project El Dorado County, California

PREPARED FOR:

DOKKEN ENGINEERING
110 BLUE RAVINE ROAD, SUITE 200
FOLSOM, CALIFORNIA 95630

EL DORADO COUNTY DEPARTMENT OF TRANSPORTATION
2850 FAIRLANE COURT
PLACERVILLE, CALIFORNIA 95667

PREPARED BY:

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GEOCON

GEOCON PROJECT NO. S2878-07-01

OCTOBER 2024

GEOCON
CONSULTANTS, INC.
GEOTECHNICAL ■ ENVIRONMENTAL ■ MATERIALS

Project No. S2878-07-01
October 23, 2024

Dokken Engineering
110 Blue Ravine Road, Suite 200
Folsom, California 95630

Attn: Ms. Amy Bakker

Subject: INITIAL SITE ASSESSMENT
HENNINGSEN/LOTUS ROAD MULTI-USE TRAIL PROJECT
EL DORADO COUNTY, CALIFORNIA

Ms. Bakker:

In accordance with the request of Dokken Engineering on behalf of the El Dorado County Department of Transportation (County), we have performed an Initial Site Assessment (ISA) of the Henningsen/Lotus Road Multi-Use Trail Project in El Dorado County, California. The ISA Project Study Area consists of Lotus Road and adjacent property between Henningsen Lotus Park and State Route 49. The proposed project entails construction of a bike lane, boardwalk structure, sidewalks and other improvements.

The accompanying report presents the details of the ISA. The report summarizes our findings relative to potential recognized environmental conditions and environmental concerns identified within the Project Study Area that may impact construction of the proposed trail improvements within existing County and State right-of-way.

Please contact us should you have any questions concerning the contents of this ISA Report or if we may be of further service.

Sincerely,

GEOCON CONSULTANTS, INC.

John E. Juhrend, PE, CEG
Senior Engineer

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F. EDR Regulatory Database Report

ACRONYMS, INITIALISMS AND ABBREVIATIONS

ACM	asbestos-containing building material
ADL	aerially deposited lead
ASTM	American Society for Testing and Materials
CalGEM	California Geologic Energy Management Division
Caltrans	California Department of Transportation
CDMG	California Division of Mines and Geology
CEG	Certified Engineering Geologist
CERS	California Environmental Reporting System
CGS	California Geological Survey
County	El Dorado County Department of Transportation
CREC	controlled recognized environmental condition
CVRWQCB	Central Valley Regional Water Quality Control Board
DTSC	Department of Toxic Substances Control
EDCEMD	El Dorado County Environmental Management Department
EDR	Environmental Data Resources
HREC	historical recognized environmental condition
ISA	Initial Site Assessment
LCP	lead-containing paint
LUST	Leaking Underground Storage Tank
NOA	naturally occurring asbestos
PE	Professional Engineer
REC	recognized environmental condition
ROW	right-of-way
USGS	United States Geological Survey
UST	underground storage tank

EXECUTIVE SUMMARY

Geocon Consultants, Inc. performed an Initial Site Assessment (ISA) of the Henningsen/Lotus Road Multi-Use Trail Project for Dokken Engineering on behalf of the El Dorado County Department of Transportation (County). The ISA Project Study Area consists of Lotus Road and adjacent property between Henningsen Lotus Park and State Route 49 in the community of Lotus, El Dorado County, California.

The purpose of the Henningsen/Lotus Road Multi-Use Trail Project is to connect State Route 49 pedestrian improvements to Henningsen Lotus Park by way of a new Class I trail. The new trail will be constructed within existing County and State right-of-way to provide continuity for pedestrians, bicyclists, and recreational users between Lotus and Coloma.

Dokken and the County requested the ISA to determine the presence of recognized environmental conditions and potential environmental concerns within the Project Study Area that may impact planning and construction of proposed trail improvements. The ISA included a site reconnaissance and review of historical topographic maps, aerial photographs, and city directories, and regulatory databases.

No documented subsurface contamination or other potential environmental concerns were identified within the Project Study Area other than the potential for aerially deposited lead (ADL) along the unpaved roadway shoulder due to historical gasoline-powered vehicle emissions, and mercury due to historical gold dredge mining operations and naturally occurring asbestos (NOA) associated with upstream ultramafic rock formations within the flat lying areas within the western portion of the Project Study Area.

Shallow soil sampling and analytical testing should be performed for the unpaved roadway shoulder in areas of planned trail construction excavations to evaluate the potential presence of ADL at regulated concentrations. Shallow soil sampling and analytical testing for mercury and NOA would only be necessary for any construction excavations within the paved parking lot area (none currently planned) in the western portion of the Project Study Area.

Yellow thermoplastic and roadway paint striping that is removed during planned trail improvements (not anticipated) may require special handling and disposal requirements.

INITIAL SITE ASSESSMENT

1.0 INTRODUCTION

This report presents the results of an Initial Site Assessment (ISA) of the Henningsen/Lotus Road Multi-Use Trail Project located between Henningsen Lotus Park and State Route 49 in El Dorado County, California. The ISA Project Study Area consists of Lotus Road and adjacent property between Henningsen Lotus Park and State Route 49 in the community of Lotus.

This ISA was performed by Geocon Consultants, Inc. for Dokken Engineering on behalf of the El Dorado County Department of Transportation (County). The Project Study Area is depicted on the Project Location Map, Figure 1 and Site Plan, Figure 2, and shown in the site photographs.

1.1 Purpose and Scope of Services

Doken and the County requested this ISA to determine the potential presence of environmental concerns and contaminated properties within the Project Study Area that may impact construction of the proposed trail improvements. The proposed trail improvements will be constructed within existing County and State right-of-way (ROW). Potential environmental concerns that are determined to potentially pose a significant impact to the planned trail improvements will be further evaluated during a subsequent environmental site investigation. This ISA was performed in general accordance with the *Caltrans Initial Site Assessment Guidance Document* (Geomatrix, 2006).

The primary purpose of the ISA was to identify evidence or indications of 'recognized environmental conditions' (RECs) as defined by the American Society for Testing and Materials (ASTM) *Designation E 1527-21 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process.* Section 1.1.1 of ASTM *Designation E 1527-21* defines an REC as: (1) the presence of hazardous substances or petroleum products in, on, or at the subject property due to a release to the environment; (2) the likely presence of hazardous substances or petroleum products in, on, or at the subject property due to a release or likely release to the environment; or (3) the presence of hazardous substances or petroleum products in, on, or at the subject property under conditions that pose a material threat of a future release to the environment. A de minimis condition is not a recognized environmental condition." De minimis conditions are those that generally do not present a threat to human health or the environment and that generally would not be the subject of enforcement action if brought to the attention of appropriate governmental agencies.

We define a "potential environmental concern" as a past use of a site or adjoining or adjacent property that may have involved the use, storage, and/or release of hazardous substances or petroleum products that could have impacted the site, but for which there are no records or other information to confirm that use, storage, or release. An example would be the possible application of pesticides to an agricultural field (i.e., irrigated row crop or orchard), but for which there are no records of such application or information from a knowledgeable person (i.e., site owner/occupant/operator) to confirm that application.

ASTM *Designation E1527-21* also defines 'Historical' and 'Controlled' RECs (HREC and CREC, respectively). An 'Historical REC' is defined as "a previous release of hazardous substances or petroleum products affecting the subject property that has been addressed to the satisfaction of the applicable regulatory authority or authorities and meeting unrestricted use criteria established by the applicable regulatory authority or authorities without subjecting the subject property to any controls (for example, activity and use limitations or other property use limitations)." A 'Controlled REC' is defined as "recognized environmental condition affecting the subject property that has been addressed to the satisfaction of the applicable regulatory authority or authorities with hazardous substances or petroleum products allowed to remain in place subject to implementation of required controls (for example, activity and use limitations or other property use limitations)." An HREC is not an REC if a property meets current standards for unrestricted residential use. A CREC remains an REC by definition when a property does not meet the unrestricted residential use requirement unconditionally.

The following principles are an integral part of ASTM *Designation E1527-21*:

- "**Uncertainty Not Eliminated** - No environmental site assessment can wholly eliminate uncertainty regarding the potential for recognized environmental conditions in connection with a subject property. Performance of this practice is intended to reduce, but not eliminate, uncertainty regarding the potential for recognized environmental conditions in connection with a subject property, and this practice recognizes reasonable limits of time and cost."

- "**Not Exhaustive** - All Appropriate Inquiries does not mean an exhaustive assessment of a property. There is a point at which the cost of information obtained, or the time required to gather it outweighs the usefulness of the information and, in fact, may be a material detriment to the orderly completion of transactions. One of the purposes of this practice is to identify a balance between the competing goals of limiting the costs and time demands inherent in performing an environmental site assessment and the reduction of uncertainty about unknown conditions resulting from additional information."

- "**Level of Inquiry is Variable** - Not every property will warrant the same level of assessment. Consistent with good commercial and customary standards and practices as defined at 42 U.S.C. § 9601(35)(B), the appropriate level of environmental site assessment will be guided by the type of property subject to assessment, the expertise and risk tolerance of the user, future intended uses of the subject property disclosed to the environmental professional, and the information developed in the course of the inquiry."

- **"Comparison with Subsequent Inquiry** - It should not be concluded or assumed that an inquiry was not all appropriate inquiries merely because the inquiry did not identify recognized environmental conditions in connection with a subject property. Environmental site assessments must be evaluated based on the reasonableness of judgments made at the time and under the circumstances in which they were made. Subsequent environmental site assessments should not be considered valid standards to judge the appropriateness of any prior assessment based on hindsight, new information, use of developing technology or analytical techniques, or other factors."

- **"Point in Time** - The environmental site assessment is based upon conditions at the time of completion of the individual environmental site assessment elements."

The main components of this report, as specified by the Caltrans ISA Guidance and ASTM Standard include the following:

- **Physical Setting:** Physical setting references were reviewed and observations made to obtain information concerning the topographic, geologic, and hydrogeologic characteristics of the Project Study Area. Such information may be indicative of the direction and/or extent that a contaminant could migrate in the event of a spill or release.

- **Site Reconnaissance:** The objective of the site reconnaissance was to observe conditions and activities for indications of evidence of recognized environmental conditions within the Project Study Area. The site reconnaissance was performed by making observations from public thoroughfares.

- **Site History:** The purpose of consulting historical references was to develop a history of the previous uses of the Project Study Area in order to identify if past uses have led to recognized environmental conditions in connection with the improvement project. Historical sources reviewed included aerial photographs, topographic maps, and city directories provided by Environmental Data Resources (EDR). EDR certified that Sanborn fire insurance map coverage is not available for the Project Study Area.

- **Records Review:** The objective of the records review was to obtain and review records that will help identify recognized environmental conditions at or potentially affecting the improvement project. We reviewed publicly available Federal, State, and local regulatory agency records for facilities located within the Project Study Area.

1.2 Report Limitations

This ISA report has been prepared exclusively for Dokken Engineering on behalf of the County. The information obtained is only relevant for the dates of the records reviewed or as of the date of the site reconnaissance. Therefore, the information contained herein is only valid as of the date of the report and will require an update to reflect recent records and site observations.

This report is not a comprehensive site characterization and should not be construed as such. The findings and conclusions presented in this report are predicated on the site reconnaissance, a review of the historical usage of land in the Project Study Area, and a review of the specified regulatory records as presented in this report. We did not assess the Project Study Area for wetlands, or perform testing (sample collection and testing) for asbestos-containing building materials (ACM), lead-containing paint (LCP), lead in drinking water, mercury related to mining activities, methane, mold, or potential naturally occurring hazards such as radon and arsenic as part of this ISA.

Therefore, the report should only be deemed conclusive with respect to the information obtained. No guarantee or warranty of the results of the ISA is implied within the intent of this report or any subsequent reports, correspondence or consultation, either express or implied. We strived to conduct the services summarized herein in accordance with the local standard of care in the geographic region at the time the services were rendered.

2.0 PHYSICAL SETTING

This section provides a brief description of the physical setting of the Henningsen/Lotus Road Multi-Use Trail Project Study Area including topography, geologic and hydrogeologic conditions. Observations of onsite conditions are described in Section 3.0.

2.1 Existing Conditions and Improvements

Within the Project Study Area Lotus Road is a two-lane asphalt concrete roadway with unpaved shoulders. Lotus Road exists along a moderately steep forested hillside along the American River. In addition to the roadway, existing improvements within the Project Study Area include a paved parking lot within Henningsen Lotus Park, two unpaved pull-outs/parking areas, and drainage facilities. Overhead electrical lines are located along a portion of the southern (uphill) side of Lotus Road near State Route 49.

2.2 Proposed Multi-Use Trail Improvements

The proposed multi-use trail would be constructed adjacent to the downslope shoulder of Lotus Road between the roadway and the American River within County and State ROW. Existing conditions and proposed trail improvements within the Project Study Area are depicted on the Site Plan, Figure 2.

The following project description is presented in the Preliminary Environmental Study (PES) prepared for the project dated April 10, 2023:

“The project entails the installation of Class I bike lane, boardwalk structure, sidewalks and other improvements as follows; Connects SR-49 improvements (including recent sidewalk improvement features and Class II bicycle lanes) to Henningsen Lotus Park by way of a new Class I trail thereby providing continuity for pedestrians, bicyclists, and recreational users between Lotus and Coloma, Approximately 2,300 linear feet of new Class I multi-use trail, Improvements to existing pullouts along Lotus Road, and Installation of approximately 1,800 linear feet of Guardrail.”

The PES states that construction excavations are anticipated to extend to a maximum depth of 5 feet. The PES further includes an undated California Department of Transportation (Caltrans) ISA Checklist. Information provided in the ISA Checklist indicates that Lotus Road has been present since the early 1900s. The ISA Checklist identifies potential environmental concerns within the Project Study Area including aerially deposited lead (ADL) along the unpaved shoulders of Lotus Road and thermoplastic roadway paint. A copy of the ISA Checklist is in Appendix A.

2.3 Topography and Drainage Patterns

Review of an online topographic map available form the United States Geological Survey (USGS) indicates that elevations along Lotus Road within the Project Study Area range from approximately 720 feet above mean sea level at the western end to approximately 770 feet above mean sea level at the eastern project boundary. The general topography slopes northwesterly toward the American River. No water bodies or streams are mapped within the Project Study Area.

2.4 Soil and Geologic Conditions

The Project Study Area is located within the western foothills of the Sierra Nevada geomorphic province. This province is characterized by a tilted granitic fault block roughly 400 miles long with a steep eastern fault scarp and gentle western slope that extends beneath Great Valley sediments. Older metamorphic rocks are exposed along the western foothills.

According to the *Generalized Geologic Map of El Dorado County* prepared by the California Geological Survey (CGS, 2001), the extreme western end of the Project Study Area is underlain by historical dredge tailings and the remainder by Mesozoic-aged granite. The presence of dredge tailing sediments on the western end of the Project Study Area is a potential environmental concern based on historical use of mercury (quicksilver) for the extraction of gold. Further information is presented in the USGS *Mercury Contamination from Historical Gold Mining in California* (Appendix B).

Based on the *Areas More Likely to Contain Natural Occurrences of Asbestos in Western El Dorado County, California*, prepared by California Division of Mines and Geology (CDMG, 2000), areas across State Route 49 upstream of the Project Study Area are mapped as “Areas More Likely to Contain Asbestos.” The potential presence of naturally occurring asbestos (NOA) transported as sediments within the Project Study Area is a potential environmental concern.

2.5 Regional Groundwater Occurrence

Site specific groundwater elevation data is not available for the Project Study Area. Depth to groundwater within the Project Study Area is expected to be less than 50 feet with a predominant northwesterly flow toward the American River. Shallow perched groundwater likely occurs seasonally at the interface of shallow soil and underlying bedrock.

3.0 SITE RECONNAISSANCE

Mr. John Juhrend with Geocon performed a reconnaissance of the Project Study Area on October 2, 2024, to attempt to identify visual indicators of potential contamination sources. The reconnaissance was limited to viewing the Project Study Area from the public ROW.

Information presented hereinafter is based on observations noted during the site reconnaissance. Photographs of the Project Study Area are attached.

Within the Project Study Area, Lotus Road is a two-lane asphalt concrete roadway with unpaved shoulders (Photo No. 1). An asphalt concrete paved parking lot associated with Henningsen Lotus Park is located within the western portion of the Project Study Area (Photo No. 2). The proposed trail alignment starts at the eastern end of the parking lot, extends along the downslope shoulder of Lotus Road and along two pull-out/parking areas, and connects with the existing sidewalk along State Route 49 (Photo Nos. 3 through 8).

Other than the potential for ADL along the unpaved shoulders, and lead and chromium typically associated with thermoplastic yellow lane striping, no evidence of potentially hazardous waste impacts was observed within the Project Study Area.

4.0 PROJECT STUDY AREA HISTORY

This section summarizes information regarding the historical development and use of the Project Study Area. The historical information sources included historical topographic maps, aerial photographs, and city directories provided by EDR, an environmental and historical records search firm. Historical source documents were reviewed to obtain information regarding the history and the potential for impact to the Project Study Area due to the former/existing generation, use, storage, and/or disposal of hazardous substances and/or petroleum products.

4.1 Review of Historical Topographic Maps

Historical topographic maps provided by EDR for the years 1891, 1892, 1893, 1949, 1950, 1973, 2012, 2015, 2018, and 2021 were reviewed. A copy of the *EDR Historical Topographic Map Report* dated September 16, 2024 is in Appendix C. The following summarizes information about the Project Study Area depicted on the maps (map scale in parenthesis):

- **1891, 1892 and 1893 Maps (1:125,000):** The 1891, 1892 and 1893 maps depict the alignment of Lotus Road within the Project Study Area. The community of Lotus is depicted southwest of the Project Study Area.
- **1949 and 1950 Maps (1:24,000):** The 1949 and 1950 maps depict dredge tailings at the western end of the Project Study Area covering the majority of the current park facilities.
- **1973 Map (1:24,000):** The 1973 map depicts the intersection of Lotus Road with State Route 49.
- **2012, 2015, 2018 and 2021 Maps (1:24,000):** The 2012 through 2021 maps depict current conditions.

Information obtained from review of the historical USGS maps indicates that the alignment of Lotus Road has existed within the Project Study Area since at least the early 1890s. Dredge tailings associated with historical mining operations were depicted on the 1949 through 1973 maps within the flay lying areas of the park including the western end of the Project Study Area. Mercury associated with historical mining operations is a potential environmental concern.

4.2 Review of Historical Aerial Photographs

We reviewed historical aerial photographs (1" = 500') provided by EDR for the years 1940, 1952, 1962, 1975, 1984, 1993, 2005, 2009, 2012, 2016 and 2020. A copy of the *EDR Aerial Photo Decade Package* dated September 17, 2024 is in Appendix D. The following summarizes information regarding the Project Study Area based on our review of the photographs:

- **1940 Photograph:** The alignment of Lotus Road extended through the Project Study Area with the exception of the eastern end where the roadway veered toward the northeast.

- **1952 Photograph:** Dredge tailings were present in the western end of the Project Study Area.

- **1962, 1975, 1984 and 1993 Photographs:** Sand and gravel operations were present in the western end of the Project Study Area. Lotus Road was realigned by 1962 to connect with State Route 49 within the eastern end of the Project Study Area.

- **2005, 2009, 2012, 2016 and 2020 Photographs:** Henningsen Lotus Park and the associated paved parking lot on the western end of the Project Study Area were constructed by 2005. The general development and land use of the Project Study Area appears to have been similar to existing conditions.

The historical alignment of Lotus Road has extended through the Project Study Area since at least the 1940s. Dredge tailing were observed on the western end of the Project Study area in the 1952 photograph with construction of the existing park improvements by 2005. Mercury associated with historical mining operations is a potential environmental concern.

4.3 Review of City Directories

We reviewed historical city directories dated between 1971 and 2020 for addresses listed along Lotus Road and State Route 49 within the vicinity of the Project Study Area. A copy of *The EDR-City Directory Image Report* dated September 18, 2024 is in Appendix E.

The directories list individual names, retail businesses, post office, construction companies, river rafting companies, restaurants, a campground, and Henningsen Lotus Park (950 Lotus Road). None of the listed facilities have names suggestive of the use/storage/disposal of hazardous material/waste that could likely have impacted the Project Study Area.

5.0 REGULATORY AGENCY RECORDS

This section describes the review of regulatory agency database and records for listed facilities located within the Project Study Area.

5.1 Database Review

EDR searched federal, state, and local environmental databases for the Project Study Area and surrounding areas. The following table lists the databases that were searched and the number of properties/facilities listed. Other databases searched that do not list any properties/facilities are not included in the table. A copy of the report titled *EDR Radius Map™ Report with GeoCheck®* dated September 16, 2024, is in Appendix F.

Database Name	Search Radius (Miles)	Number of Listings
STANDARD ENVIRONMENTAL RECORDS		
RCRA - Small Quantity Generator (SQG)	0.25	1
SWF/LF (Solid Waste Information System)	.5	1
Leaking Underground Storage Tank (LUST)	0.5	1
ADDITIONAL ENVIRONMENTAL RECORDS		
SWEEPS UST (Statewide Environmental Evaluation and Planning System – UST Listing)	0.25	1
HIST UST (Historical UST Properties/Facilities)	0.25	1
RCRA NonGen / No Longer Regulated (NLR)	0.25	3
Mines Master Index File (US MINES)	0.25	9
MINES MRDS (Mineral Resources Data System)	0.25	10
UST FINDER RELEASE	0.5	1
E MANIFEST (Hazardous Waste Electronic Manifest System)	0.25	1
CUPA Listings	0.25	2
HIST CORTESE	0.5	1

Summaries of the searched databases are presented in the referenced EDR Report.

5.1.1 Project Study Area

The Project Study Area is not listed on any of the regulatory databases searched by EDR.

5.1.2 Offsite Properties/Facilities

Eighteen properties within 1/4 mile of the Project Study Area are listed on various non-release databases[1] for hazardous material use and storage, hazardous waste disposal, and mining operations. We found no information on these databases that would indicate that these properties/facilities would have (or potentially) caused an REC at the Project Study Area. Following are summaries of information for three properties/facilities within ½-mile of the Project Study Area that are either listed on a release-related databases, and/or existing/historical gasoline station and other hazardous material/waste use/storage/disposal databases. Additional available information for these properties/facilities is presented in the Regulatory File Review, Section 5.3 of this report.

Facility Name	Address (distance/ direction from site)	Regulatory Release Databases	Pertinent Information
Lotus Store	986 Lotus Road (1,250 feet southwest)	SWEEPS UST, HIST UST, CUPA Listings	This former facility is listed for a 500-gallon and a 550-gallon gasoline underground storage tanks (UST). The status of the tanks was listed as inactive in 2002. Based on the downgradient location of this facility, any UST releases are unlikely to have impacted the Project Study Area.
Riverside Mini-Mart	7215 Highway 49 (2,350 feet west)	LUST, HIST CORTESE, UST FINDER RELEASE	This active Chevron gasoline station facility is listed for a gasoline UST release to soil and groundwater. The LUST regulatory case was closed by the Central Valley Regional Water Quality Control Board (CVRWQCB) in 2002. Based on the distance, cross-gradient location, and LUST case closure status, the documented gasoline release at this facility is unlikely to have impacted the Project Study Area.
Coloma-Lotus #1	6651 Marshall Grade (2,600 feet north-northeast)	SWF/LF	This inactive pre-regulation solid waste disposal facility was closed in 1972. No further pertinent details are provided. Based on the lack of a reported release, this disposal facility is unlikely to have impacted the Project Study Area.

[1] "Release" refers to an unauthorized release of a petroleum product or hazardous substance to the environment - i.e. the ground surface, soil, soil vapor, groundwater, or surface water on a property. "Non-release database" refers to those that may report use, storage, or disposal of hazardous substances and/or petroleum products or other environmental conditions, but do not report releases of such. "Release database" refers to those which provide information regarding an unauthorized release.

5.2 Orphan Summary

EDR's Orphan Summary identifies properties and facilities that have incomplete address information and therefore could not be accurately plotted by EDR. There are no properties or facilities listed on the Orphan Summary.

5.3 Regulatory Online Database Review

Additional information obtained from a review of regulatory case file documentation available on the California State Water Resources Control Board GeoTracker website (http://geotracker.waterboards.ca.gov), California Department of Toxic Substances Control (DTSC) EnviroStor website (http://www.envirostor.dtsc.ca.gov/public/), and California Environmental Protection Agency Regulated Site Portal/California Environmental Reporting System (CERS) (https://siteportal.calepa.ca.gov/nsite/map/help), for one property/facility with a documented release within the vicinity of the Project Study Area is presented hereinafter.

Riverside Mini-Mart, 7215 Highway 49. Three fuel USTs were replaced at this active gasoline station facility in 1998. Approximately 100 cubic yards of contaminated soil was excavated beneath the removed tanks and transported for disposal. Gasoline constituents were detected in two of six confirmation soil samples. Soil borings were completed in 2000 around the former UST excavation to approximately 30 feet. Low level detections of gasoline impacts were reported in four of six soil samples analyzed. Based on the soil analytical data collected, the CVRWQCB issued "no further action required" regulatory case closure status on September 30, 2002.

5.4 El Dorado County Environmental Management Department

We contacted the El Dorado County Environmental Management Department (EDCEMD) to obtain any available regulatory files pertaining to the use/storage/disposal and/or unauthorized releases of hazardous material/waste within the Project Study Area including Henningsen Lotus Park. The EDCEMD confirmed that they do not have any regulatory files associated with the Project Study Area.

5.5 California Geologic Energy Management Division

We reviewed the California Department of Conservation - Geologic (CalGEM) website (https://www.conservation.ca.gov/calgem/Pages/WellFinder.aspx) for oil or gas wells within the vicinity of the Project Study Area. Based on a review of CalGEM well finder map, active oil or gas wells/fields are not depicted within the Project Study Area or vicinity.

5.6 National Pipeline Mapping System

The National Pipeline Mapping System online mapping system does not depict any hazardous pipelines at or in the general vicinity of the Project Study Area.

6.0 CONCLUSIONS AND RECOMMENDATIONS

Geocon Consultants, Inc. performed an ISA of the Henningsen/Lotus Road Multi-Use Trail Project for Dokken Engineering on behalf of the County. The ISA Project Study Area consists of Lotus Road and adjacent property between Henningsen Lotus Park and State Route 49 in the community of Lotus.

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No documented subsurface contamination or other potential environmental concerns were identified within the Project Study Area other than the potential for ADL along the unpaved roadway shoulder due to historical gasoline-powered vehicle emissions, and mercury due to historical gold dredge mining operations and NOA associated with upstream ultramafic rock formations within the flat lying areas within the western portion of the Project Study Area.

Shallow soil sampling and analytical testing should be performed for the unpaved roadway shoulder in areas of planned trail construction excavations to evaluate the potential presence of ADL at regulated concentrations. Shallow soil sampling and analytical testing for mercury and NOA would only be necessary for any construction excavations within the paved parking lot area (none currently planned) in the western portion of the Project Study Area.

Yellow thermoplastic and roadway paint striping that is removed during planned trail improvements (not anticipated) may require special handling and disposal requirements.

7.0 REFERENCES

ASTM International, *Designation E 1527-21 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*, 2021.

California Department of Conservation, Geologic Energy Management Division website, https://www.conservation.ca.gov/calgem/Pages/WellFinder.aspx, accessed October 2024.

California Division of Mines and Geology, *Areas More Likely to Contain Natural Occurrences of Asbestos in Western El Dorado County*, California, March 2000.

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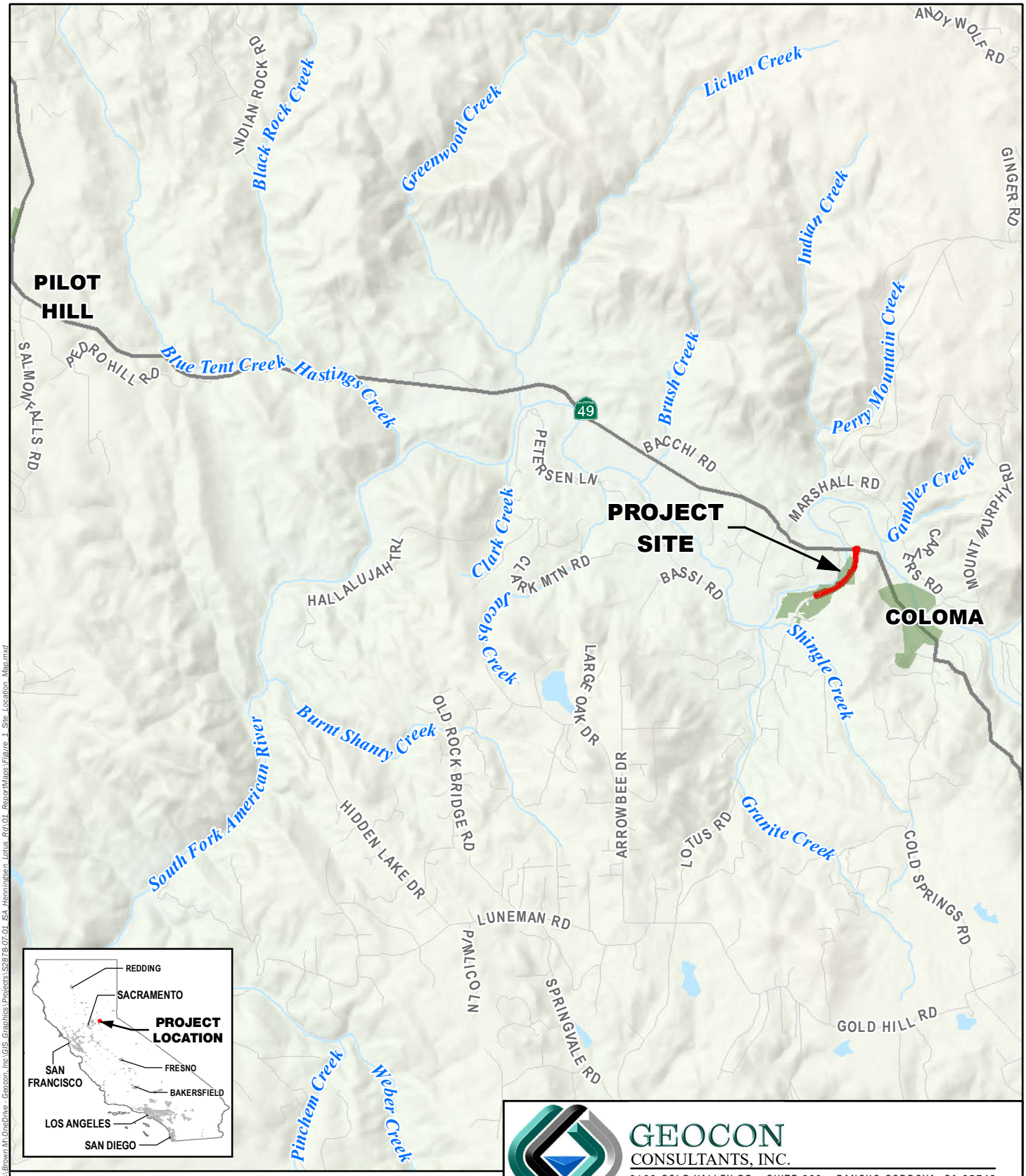
California Geological Survey, *Generalized Geologic Map of El Dorado County, California, Open-File Report 2000-03, Plate 1,* 2001.

California State Water Resources Board, GeoTracker website, http://geotracker.waterboards.ca.gov/, accessed October 2024.

Geomatrix, *Caltrans Initial Site Assessment Guidance Document,* 2006.

United States Department of Transportation, National Pipeline Mapping System, https://pvnpms.phmsa.dot.gov/PublicViewer/, accessed October 2024.

United States Geologic Survey, Topographic Map website, https://ngmdb.usgs.gov/topoview/viewer, accessed October 2024.



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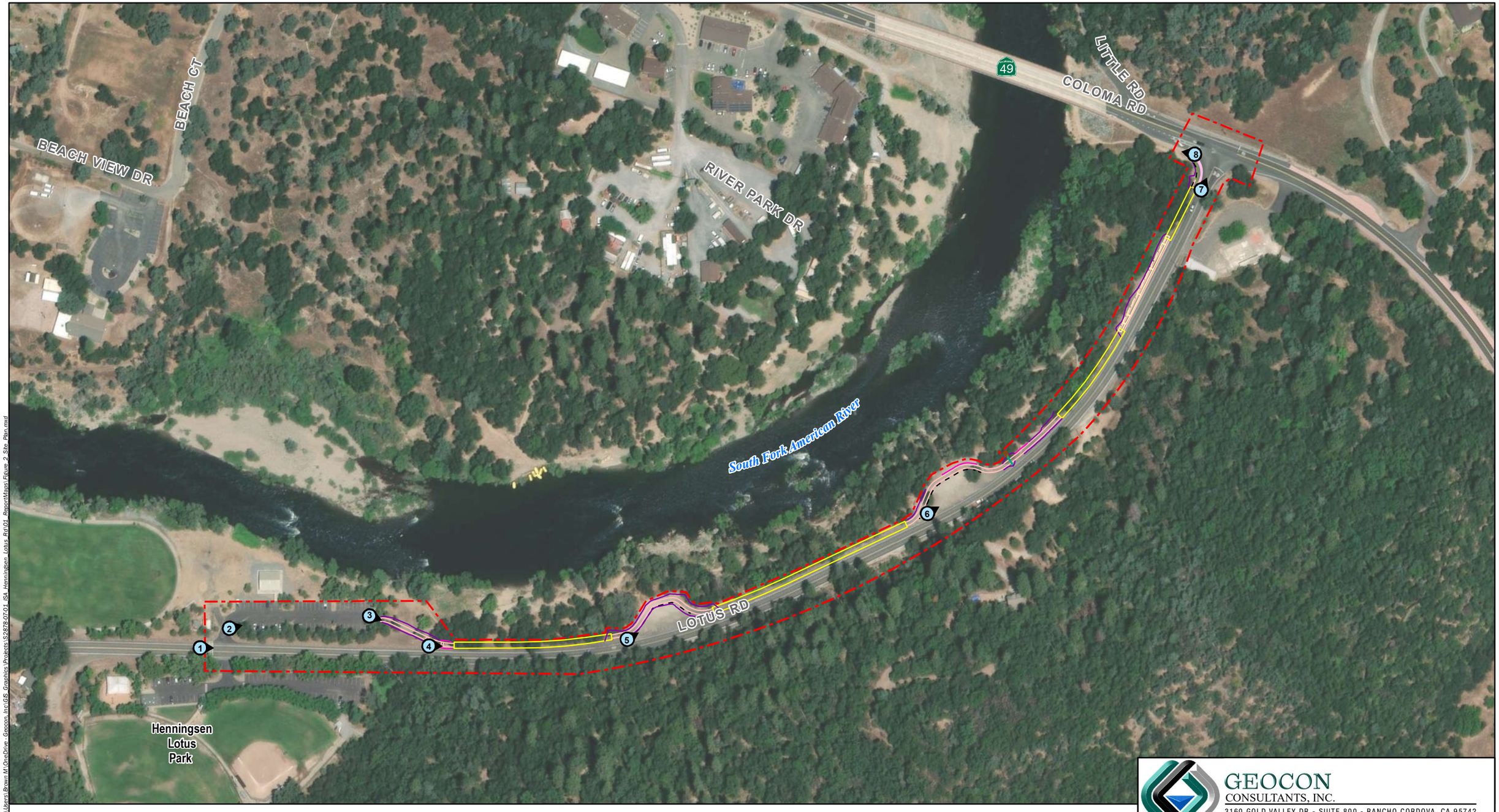
Henningsen/Lotus Road Multi-Use Trail Project

El Dorado County,
California

SITE LOCATION MAP

S2878-07-01	October 2024	Figure 1

GEOCON 10.3.2024 USER:Brown,M PATH:C:\Users\Brown,M\OneDrive - Geocon, Inc\GIS Graphics\Projects\S2878-07-01_ISA_Henningsen_Lotus_Rd\01_Report\Maps\Figure_1_Site_Location_Map.mxd



Legend

- 8 — Site Photograph Location and Orientation
- Approximate Project Limits

Trail Project Features

- Curb
- Cut
- Fill
- Pavement Edge
- Fence
- Storm Drain
- Sidewalk
- Boardwalk
- Rock Slope Protection
- Retainign Wall
- Retainign Wall Footing

Trail project features from Dokken Engineering (9/5/2024).

0 200
Scale in Feet

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Henningsen/Lotus Road Multi-Use Trail Project

El Dorado County,
California

SITE PLAN

S2878-07-01	October 2024	Figure 2

GEOCON 10/3/2024 USER:Brown M PATH:C:\Users\Brown M\OneDrive - Geocon, Inc\GIS Graphics\Projects\S2878-07-01 JSA Henningsen Lotus Rd\01 Report\Maps\Figure 2 Site Plan.mxd



Photo No. 1 Lotus Road viewed from western end of Project Study Area



Photo No. 2 Paved parking lot in western portion of Project Study Area

PHOTOS NO. 1 & 2

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Henningsen/Lotus Road Multi-Use Trail Project

El Dorado County,
California

GEOCON Project No. S2878-07-01 | October 2024



Photo No. 3 Start of proposed trail alignment at eastern end of paved parking lot

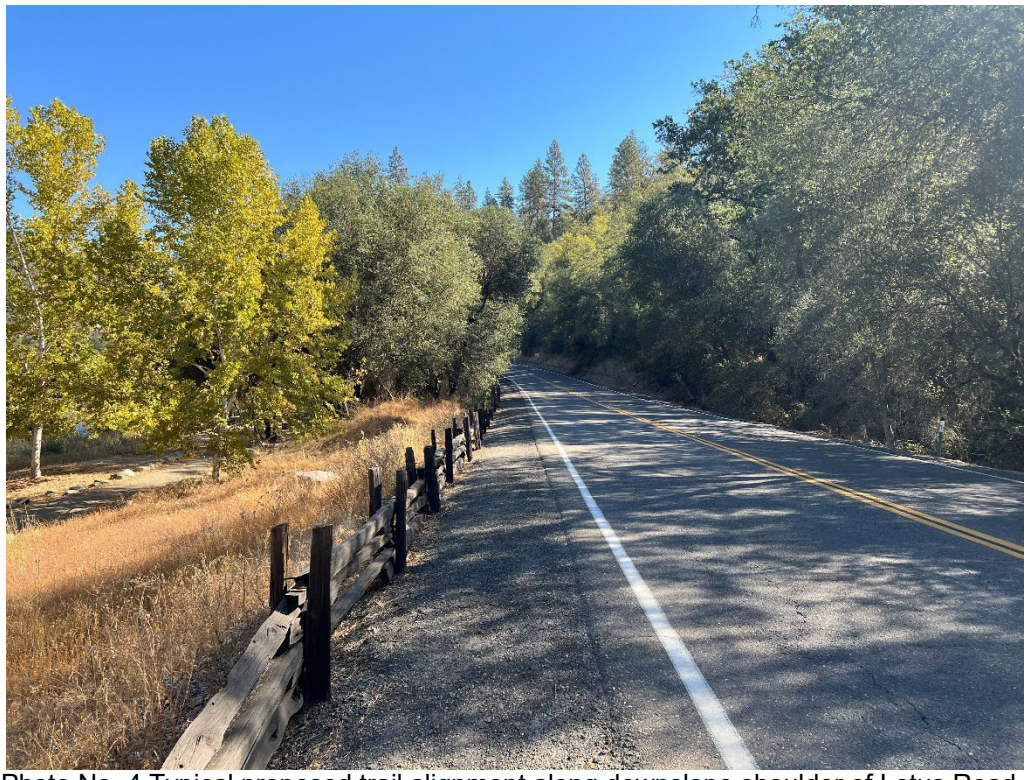

Photo No. 4 Typical proposed trail alignment along downslope shoulder of Lotus Road

PHOTOS NO. 3 & 4

GEOCON
CONSULTANTS, INC.
3160 GOLD VALLEY DR – SUITE 800 – RANCHO CORDOVA, CA 95742
PHONE 916.852.9118 – FAX 916.852.9132

Henningsen/Lotus Road Multi-Use Trail Project

El Dorado County,
California

GEOCON Project No. S2878-07-01 | October 2024



Photo No. 5 Western unpaved pull-out/parking area along proposed trail alignment



Photo No. 6 Eastern unpaved pull-out/parking area along proposed trail alignment

PHOTOS NO. 5 & 6

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Henningsen/Lotus Road Multi-Use Trail Project

El Dorado County,
California

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Photo No. 7 Intersection of Lotus Road and State Route 49



Photo No. 8 Proposed trail terminus at existing State Route 49 sidewalk

PHOTOS NO. 7 & 8

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Henningsen/Lotus Road Multi-Use Trail Project

El Dorado County,
California

GEOCON Project No. S2878-07-01 | October 2024

APPENDIX A

Initial Site Assessment (ISA) Checklist

Project Information

District 3
County El Dorado
Route Lotus Road
Post Mile 6.2-6.8
Fed Project No. CML-5925(194)

Description:
El Dorado County (County), in cooperation with the California Department of Transportation (Caltrans), proposes to construct a new Class I multi-use path for bicyclists and pedestrians directly adjacent to Lotus Road within the Town of Coloma in rural El Dorado County. The project involves the installation of the Class I path, boardwalk structure, sidewalks and other improvements as follows; Connects SR-49 improvements (including recent sidewalk improvement features and Class II bicycle lanes) to Henningsen Lotus Park by way of a new Class I trail thereby providing continuity for pedestrians, bicyclists, and recreational users between Lotus and Coloma, Approximately 2,300 linear feet of new Class I multi-use trail, Improvements to existing pullouts along Lotus Road, and Installation of approximately 1,800 linear feet of Guardrail. The project is located at Lotus Park and the intersection of Lotus Road and State Route 49.

Is the project on the HW Study Minimal-Risk Projects List (HW1)? No.

Project Manager: Jon Balzer, PE phone # (530) 621-5920

Project Engineer: David Markowski, PE phone # (530) 621-6050

Project Screening

Attach the project location map to this checklist to show location of all known and/or potential HW sites identified.

1. Project Features: New R/W? No. Excavation? Yes. Railroad Involvement? No

   Structure demolition/modification? No. Subsurface utility relocation? No

2. Project Setting: The project is along a rural road, Lotus Road, within the census-designated place of Coloma. It is situated directly east of the South Fork American River and approximately 0.30 miles northeast of Henningsen Lotus Park. The surrounding land uses include recreation, commercial and residential.

   Rural or Urban: Rural

   Current land uses: Commercial and Tourist Recreational

   Adjacent land uses: Public Facilities, Medium Density Residential
   (industrial, light industry, commercial, agricultural, residential, etc.)

3. Check federal, State, and local environmental and health regulatory agency records as necessary, to see if any known hazardous waste site is in or near the project area. If a known site is identified, show its location on the attached map and attach additional sheets, as needed, to provide pertinent information for the proposed project. No Known Sites.

4. Conduct Field Inspection. Date 11/30/2023 Use the attached map to locate potential or known HW

sites.

STORAGE STRUCTURES / PIPELINES:

Underground tanks Not observed — Surface tanks Not observed

Sumps Not observed — Ponds Not observed

Drums Not observed — Basins Not observed

Transformers Observed — Landfill Not observed

Other None

CONTAMINATION: (spills, leaks, illegal dumping, etc.)

Surface staining Not observed — Oil sheen Not observed

Odors Not observed — Vegetation damage Not observed

Other None

HAZARDOUS MATERIALS: (asbestos, lead, etc.)

Buildings Observed — Spray-on fireproofing Not observed

Pipe wrap Not observed — Friable tile Not observed

Acoustical plaster Not observed — Serpentine Not observed

Paint Thermoplastic paint — Other None

5. Additional record search, as necessary, of subsequent land uses that could have resulted in a hazardous waste site. Use the attached map to show the location of potential hazardous waste sites. None.

6. Other comments and/or observations:
The proposed trail would impact Lotus Road which has been present since the early 1900s. Potential for aerially deposited lead (ADL).

ISA Determination

Does the project have potential hazardous waste involvement? Yes. If there is known or potential hazardous waste involvement, is additional ISA work needed before task orders can be prepared for the Investigation? No. If "YES," explain; then give an estimate of additional time required:

A brief memo should be prepared to transmit the ISA conclusions to the Project Manager and Project Engineer.

ISA Conducted by _____ Date _____

Signature _____

APPENDIX B

USGS
science for a changing world

Mercury Contamination from Historical Gold Mining in California

by Charles N. Alpers, Michael P. Hunerlach, Jason T. May, and Roger L. Hothem

Mercury contamination from historical gold mines represents a potential risk to human health and the environment. This fact sheet provides background information on the use of mercury in historical gold mining and processing operations in California, with emphasis on historical hydraulic mining areas. It also describes results of recent USGS projects that address the potential risks associated with mercury contamination.

Miners used mercury (quicksilver) to recover gold throughout the western United States. Gold deposits were either hardrock (lode, gold-quartz veins) or placer (alluvial, unconsolidated gravels). Underground methods (adits and shafts) were used to mine hardrock gold deposits. Hydraulic, drift, or dredging methods were used to mine the placer gold deposits. Mercury was used to enhance gold recovery in all the various types of mining operations; historical records indicate that more mercury was used and lost at hydraulic mines than at other types of mines. On the basis of USGS studies and other recent work, a better understanding is emerging of mercury distribution, ongoing transport, transformation processes, and the extent of biological uptake in areas affected by historical gold mining. This information has been used extensively by federal, state, and local agencies responsible for resource management and public health in California.

Gold Mining History

Vast gravel deposits from ancestral rivers within the Sierra Nevada contained large quantities of placer gold, derived from the weathering of gold-quartz veins. Gold mining evolved from hydraulic mining of unconsolidated placer deposits in the early days of the Gold Rush, to underground mining of hardrock deposits, and finally to large-scale dredging of low-grade gravel deposits, which in many areas included the tailings from upstream hydraulic mines.

By the mid-1850s, in areas with sufficient surface water, hydraulic mining was the most cost-effective method to recover large amounts of gold. Monitors (or water cannons, fig. 1) were used to break down placer ores, and the resulting slurry was directed through sluices (fig. 2).



Figure 1. Monitors (water cannons) were used to break down the gold-bearing gravel deposits with tremendous volumes of water under high pressure. Some mines operated several monitors in the same pit. Malakoff Diggings, circa 1860.



Figure 2. Gravel deposits were washed into sluices (from center to lower part of figure) where gold was recovered.

As mining progressed into deeper gravels, tunnels were constructed to facilitate drainage and to remove debris from the bottom of hydraulic mine pits. The tunnels also provided a protected environment for sluices and a way to discharge processed sediments (placer tailings) to adjacent waterways. Gold particles were recovered by mechanical settling in troughs (riffles) within the sluices and by chemical reaction with liquid mercury to form gold-mercury amalgam. Loss of mercury during gold processing was estimated to be 10 to 30 percent per season (Bowie, 1905), resulting in highly contaminated sediments at mine sites, especially in sluices and drainage tunnels (fig. 3). From the 1850s to the 1880s, more than 1.5 billion cubic yards of gold-bearing placer gravels were processed by hydraulic mining in California's northern Sierra Nevada region. The resulting debris caused property damage and



Figure 3. Gold pan with more than 30 grams of mercury from 1 kilogram of mercury-contaminated sediments collected in a drainage tunnel.

flooding downstream. In 1884, the Sawyer Decision prohibited discharge of hydraulic mining debris to rivers and streams in the Sierra Nevada region, but not in the Klamath-Trinity Mountains (fig. 4), where such mining continued until the 1950s.

Underground mining of placer deposits (drift mining) and of hardrock gold-quartz vein deposits produced most of California's gold from the mid-1880s to the 1930s. Another important source of gold from the late 1890s to the 1960s was gold-bearing sediment, which was mined using dredging methods. More than 3.6 billion cubic yards of gravel was mined in the foothills of the Sierra Nevada, where the dredging continued until 2003.

Mercury Mining

Most of the mercury used in gold recovery in California was obtained from mercury deposits in the Coast Range on the west side of California's Central Valley (fig. 4). Total mercury production in California between 1850 and 1981 was more than 220,000,000 lb (pounds) (Churchill, 2000); production peaked in the late 1870s (Bradley, 1918). Although most of this mercury was exported around the Pacific Rim or transported to Nevada and other western states, about 12 percent (26,000,000 lb) was used for gold recovery in California, mostly in the Sierra Nevada and Klamath-Trinity Mountains.

Use and Loss of Mercury in Gold Mining

To enhance gold recovery from hydraulic mining, hundreds of pounds of liquid mercury (several 76-lb flasks) were added to riffles and troughs in a typical sluice. The high density of mercury allowed gold and gold-mercury amalgam to sink while sand and gravel passed over the mercury and through the sluice. Large

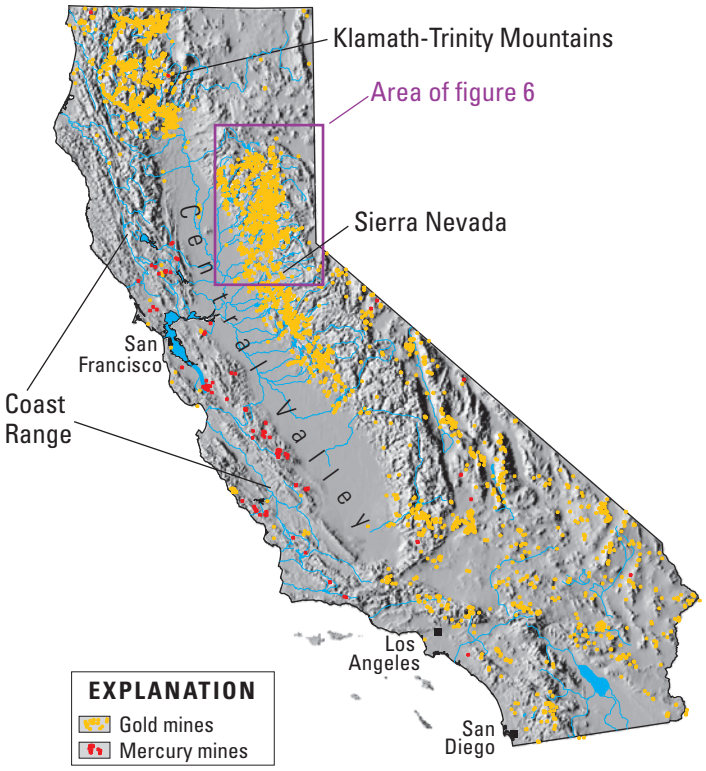

Figure 4. Locations of past-producing gold and mercury mines in California. Source: MAS/MILS (Minerals Availability System/Mineral Information Location System) database compiled by the former U.S. Bureau of Mines, now archived by the USGS.

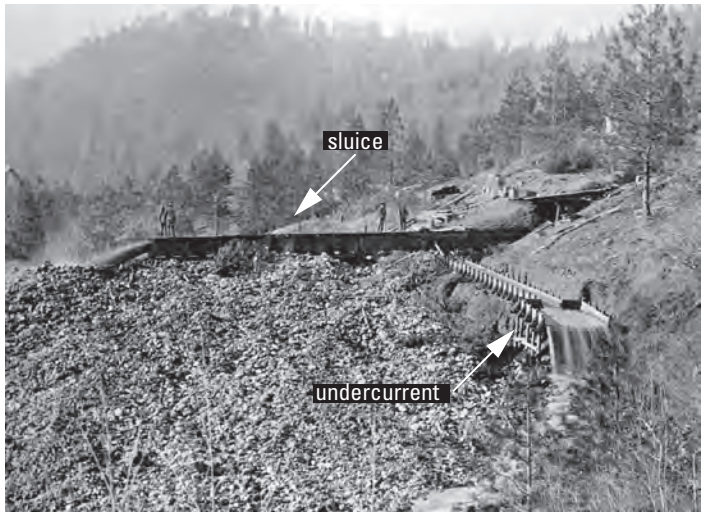

Figure 5. Undercurrent in use, circa 1860, Siskyou County, California.

volumes of turbulent water flowing through the sluice caused many of the finer gold and mercury particles to wash through and out of the sluice before they could settle in the mercury-laden riffles. A modification known as an undercurrent (fig. 5) reduced this loss. The finer grained particles were diverted to the undercurrent, where gold was amalgamated on mercury-lined copper plates. Most of the mercury remained on the copper plates; however, some was lost to the flowing slurry and was transported to downstream environments.

Gravel and cobbles that entered the sluice at high velocity caused the mercury to flour, or break into tiny particles. Flouring was aggravated by agitation, exposure of mercury to air, and other chemical reactions. Eventually, the entire bottom of the sluice became coated with mercury. Some mercury was lost from the sluice, either by leaking into underlying soils and bedrock or being transported downstream with the placer tailings. Minute particles of quicksilver could be found floating on surface water as far as 20 miles downstream of mining operations (Bowie, 1905). Some remobilized placer sediments, especially the coarser material, remain close to their source in ravines that drained the hydraulic mines.

Mercury use in sluices varied from 0.1 to 0.36 lb per square foot. A typical sluice had an area of several thousand square feet; several hundred lb of mercury were added during initial start-up, after which several additional 76-lb flasks were added weekly to monthly throughout the operating season (generally 6 to 8 months, depending on water availability). During the late 1800s, under the best operating conditions, sluices lost about 10 percent of the added mercury per year (Averill, 1946), but under average conditions, the annual loss was about 25 percent (Bowie, 1905). Assuming a 10- to 30-percent annual loss rate, a typical sluice likely lost several hundred pounds of mercury during the operating season (Hunerlach and others, 1999). From the 1860s through the early 1900s, hundreds of hydraulic placer-gold mines were operated in California, especially in the northern Sierra Nevada (fig. 6). The total amount of mercury lost to the environment from placer mining operations throughout California has been estimated at 10,000,000 lb, of which probably 80 to 90 percent was in the Sierra Nevada (Churchill, 2000).

Historical records indicate that about 3,000,000 lb of mercury were lost at hardrock mines, where gold ore was crushed

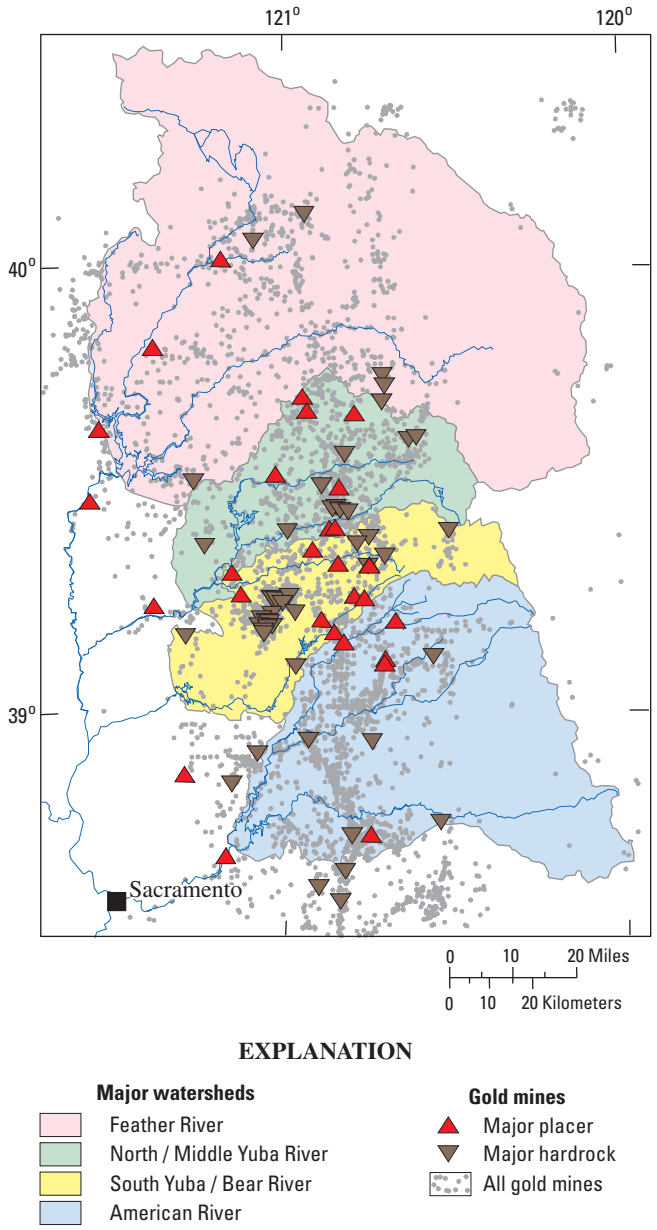

Figure 6. Watersheds (also known as drainage basins) in the northwestern Sierra Nevada of California showing past-producing gold mines (as in figure 4) and major placer and hardrock gold mines. Source: USGS Significant Deposits Database (Long and others, 1998).

using stamp mills (Churchill, 2000). Mercury was also used extensively at drift mines and in dredging operations. Mercury was used widely until the early 1960s in the dredging of auriferous sediment from alluvial flood-plain deposits. Today, mercury is recovered as a by-product from small-scale gold-dredging operations; also, mercury and gold are recovered as byproducts from some gravel-mining operations, especially in areas affected by historical gold mining. Understanding the present distribution and fate of the mercury used in historical gold mining operations is the subject of ongoing multi-disciplinary studies.

The Bear–Yuba Project

In cooperation with federal land-management agencies (the Bureau of Land Management and the U.S. Forest Service) and various state and local agencies, USGS scientists have investigated mercury contamination at abandoned mine sites and downstream environments in the Bear River and Yuba River watersheds (fig. 6) since 1999. Fish from reservoirs and streams in the Bear–Yuba watersheds (fig. 7) have bioaccumulated sufficient mercury (May and others, 2000) to pose a risk to human health (Klasing and Brodberg, 2003). A conceptual diagram (fig. 8) summarizes known mercury sources, transport mechanisms, and bioaccumulation pathways. Based primarily on data from other USGS studies (for example, Saiki and others, 2004), additional fish consumption advisories regarding mercury in other areas of northern California affected by historical gold mining (fig. 9) have been issued.

The USGS and cooperating agencies have identified several "hot spots" of mercury contamination and bioaccumulation by reconnaissance sampling of water, sediment, and biota at numerous hydraulic mine sites in the Bear–Yuba watersheds (Alpers and others, 2005). Subsequently, some mercury-contaminated mine sites have been remediated by other federal agencies, and remediation plans are being developed for other sites. Mercury contamination has also been investigated in dredge fields at lower Clear Creek (Ashley and others, 2002), the Trinity River, and the lower Yuba River (Hunerlach and others, 2004). These investigations show that total mercury concentrations in dredge tailings tend to be most elevated in the finest grained sediments. The State of California has listed several water bodies in the Bear-Yuba watersheds as impaired with regard to beneficial uses, starting a regulatory process that may include eventual mercury-load reduction through Total Maximum Daily Loads (TMDLs). The USGS is providing data and information to stakeholders through ongoing studies of mercury and methylmercury loads in the Bear River, mercury fluxes from reservoir sediments (Kuwabara and others, 2003), mercury methylation and demethylation processes in sediment, and mercury bioaccumulation in the food web of Camp Far West Reservoir.

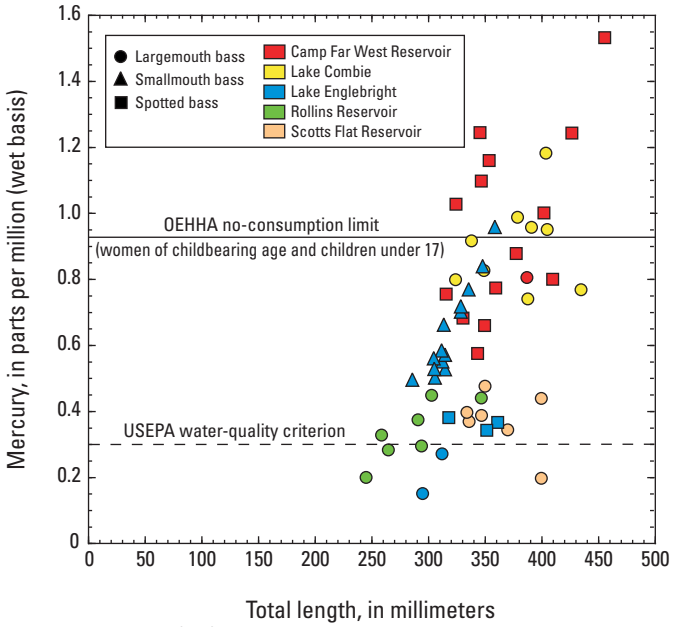

Figure 7. Mercury (Hg) concentration in relation to total length for all bass (*Micropterus spp.*) samples collected in 1999 from reservoirs in the Bear–Yuba watersheds, California (May and others, 2000). Dashed horizontal line at Hg concentration of 0.3 ppm represents criterion for methylmercury in fish tissue for the protection of human health (U.S. Environmental Protection Agency [USEPA], 2001). Solid horizontal line at Hg concentration of 0.93 ppm indicates value above which the state of California recommends no consumption of fish for women of child-bearing age and children under 17 (Klasing and Brodberg, 2003). OEHHA, Office of Environmental Health Hazard Assessment.

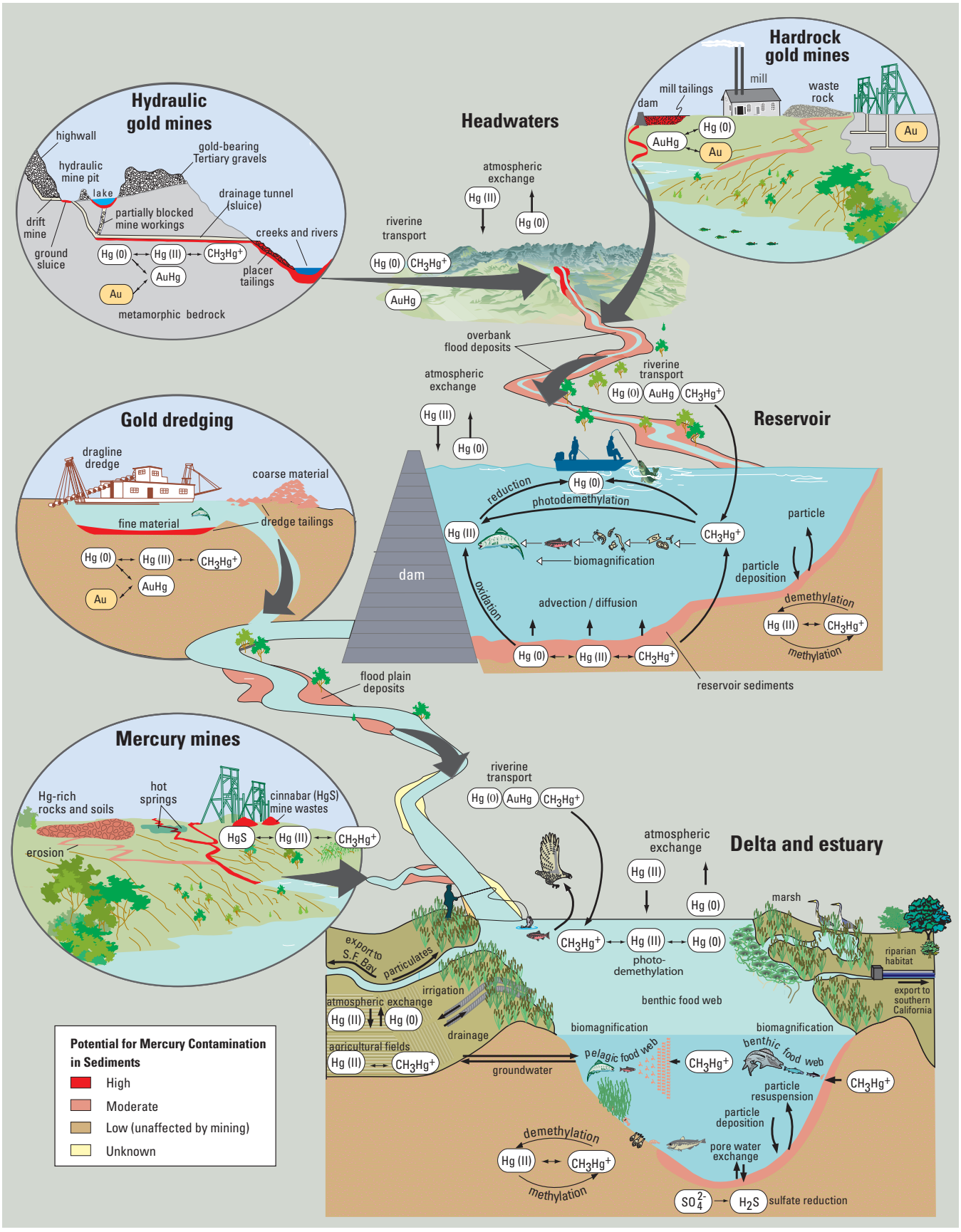

Figure 8. Schematic diagram showing transport and fate of mercury and potentially contaminated sediments from the mountain headwaters (hydraulic, drift, and hardrock mine environments) through rivers, reservoirs, and the flood plain, and into an estuary. A simplified mercury cycle is shown, including overall methylation reactions and bioaccumulation; the actual cycling is much more complex. Hg(0), elemental mercury; Hg(II), ionic mercury (mercuric ion); HgS, cinnabar; CH_3Hg^+, methylmercury; Au, gold; AuHg, gold-mercury amalgam; H_2S, hydrogen sulfide; SO_4^{2-}, sulfate ion; DOC, dissolved organic carbon. Mark Stephenson (California Department of Fish and Game) contributed to the development of this diagram.

MERCURY AND ABANDONED MINES: KEY ISSUES

Risks to Human Health

- Consumption of contaminated fish
- Improper handling of contaminated sediments
- Inhalation of mercury vapors
- Municipal drinking water supplies generally safe
- Some mine waters unsafe for consumption

Challenges for Land Management

- Public access to contaminated areas
- Physically hazardous sites
- Environmental consequences of resource development
- Remediation of affected sites

Environmental Fate of Mercury

- "Hot spots" at mine sites
- Contaminated sediments
- Transformation to methylmercury
- Transport to downstream areas
- Bioaccumulation and biomagnification in food

Mercury Methylation and Biomagnification

Mercury occurs in several different geochemical forms, including elemental mercury [Hg(0)], ionic (or oxidized) mercury [Hg(II)], and a suite of organic forms, the most important of which is **methylmercury** *(CH_3Hg^+). Methylmercury is the form most readily incorporated into biological tissues and most toxic to humans. The transformation from elemental mercury to methylmercury is a complex biogeochemical process that requires at least two steps, as shown in figure 8: (1) oxidation of Hg(0) to Hg(II), followed by (2) transformation from Hg(II) to CH_3Hg^+; step 2 is referred to as* **methylation.** *Mercury methylation is controlled by sulfate-reducing bacteria and other microbes that tend to thrive in conditions of low dissolved oxygen, such as near the sediment-water interface or in algal mats. Numerous environmental factors influence the rates of mercury methylation and the reverse reaction known as* **demethylation.** *These factors include temperature, dissolved organic carbon, salinity, acidity (pH), oxidation-reduction conditions, and the form and concentration of sulfur in water and sediments.*

The concentration of CH_3Hg^+ generally increases by a factor of ten or less with each step up the food chain, a process known as **biomagnification**. *Therefore, even though the concentrations of Hg(0), Hg(II), and CH_3Hg^+ in water may be very low and deemed safe for human consumption in drinking water, CH_3Hg^+ concentration levels in fish, especially predatory species such as bass and catfish, may reach levels that are considered potentially harmful to humans and fish-eating wildlife, such as bald eagles.*

Fish Consumption Advisories for Mercury

Methylmercury (CH_3Hg^+) is a potent neurotoxin that impairs the nervous system. Fetuses and young children are more sensitive to methylmercury exposure than adults. Methylmercury can cause many types of problems in children, including damage to the brain and nervous system, mental impairment, seizures, abnormal muscle tone, and problems in coordination. Therefore, the consumption guidelines in areas where CH_3Hg^+ is known to occur in fish at potentially harmful levels tend to be more restrictive for children as well as for pregnant women, nursing mothers, and other women of childbearing age.

In the United States, as of 2003, there were a total of 2,800 fish and wildlife consumption advisories for all substances, of which 2,140 (more than 76 percent) were for mercury. Forty-five states have issued advisories for mercury, and 19 states have statewide advisories for mercury in all freshwater lakes and (or) rivers.

As of October 2005, the state of California had issued fish consumption advisories for mercury in about 20 waterbodies, including the San Francisco Bay–Delta region and several areas in the Coast Range affected by mercury mining (fig. 9; compare with fig. 4). Water bodies with advisories based on USGS fish-tissue data include the Bear River and Yuba River watersheds of the Sierra Nevada (Klasing and Brodberg, 2003), the lower American River including Lake Natoma (Klasing and Brodberg, 2004), and the Trinity Lake area.

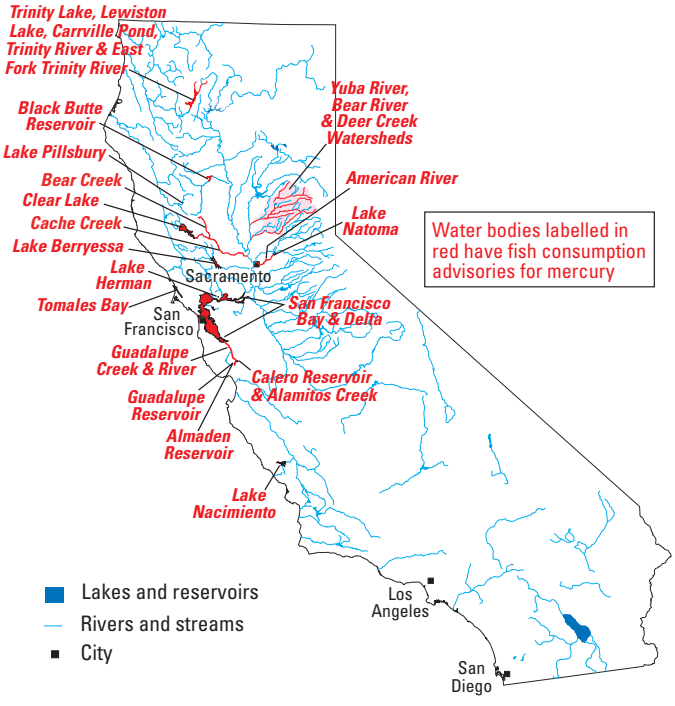

Figure 9. Locations of health advisories for mercury in sport fish consumed in California. Source: California Office of Environmental Health Hazard Assessment, accessed October 12, 2005 (*http://www.oehha.ca.gov/fish.html*).

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Cooperating Agencies and Stakeholder Groups

U.S. Forest Service

Bureau of Reclamation

California State Water Resources Control Board

California Department of Fish and Game

California Bay–Delta Authority

Nevada County Resource Conservation District



Bureau of Land Management

U.S. Environmental Protection Agency

California Department of Parks and Recreation

California Department of Conservation

California Department of Water Resources

Sacramento River Watershed Program

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U.S. Geological Survey
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Sacramento, CA 95819-6129

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U.S. Geological Survey
6924 Tremont Rd.
Dixon, CA 95620

Web links:
http://ca.water.usgs.gov/mercury
http://mine-drainage.usgs.gov
http://toxics.usgs.gov/bib/bib-mercury-on-line.html
http://minerals.usgs.gov/mercury

APPENDIX C

Record Search Results Available Upon Request

Appendix E:
FEMA FIRMette Map

National Flood Hazard Layer FIRMette

FEMA

120°54'22"W 38°48'36"N



0 250 500 1,000 1,500 2,000 Feet

1:6,000

120°53'45"W 38°48'8"N

Basemap Imagery Source: USGS National Map 2023

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 / 17.5 Cross Sections with 1% Annual Chance / Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 1/16/2025 at 10:12 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

Appendix F:
Response to Public Comments

RESPONSE TO PUBLIC COMMENTS FOR THE

Draft Initial Study / Mitigated Negative Declaration for the

Henningsen/ Lotus Road Class I Multi-Use Trail Project

Although not required under CEQA, the County is providing responses to comments made on the IS/MND during the public review period. Copies of the comment letters and responses are presented below.

Response to I-01, Aiko Akers, March 3, 2025

I-01: This is a comment of support for the project and its safety improvements. Comment noted.

Response to I-02, Adam Anderson, March 13, 2025

I-02: This is a comment of support for the project and the connectivity it provides the community. Comment noted.

Response to I-03, Anna Eubanks, March 11, 2025

I-03: This is a comment of support for the project and its safety improvements. Comment noted.

Response to I-04, Haley Friegang, March 7, 2025

I-04-1: This is a comment of support for the project and safety improvements. Comment noted.

I-04-2: The project proposes safety features in locations where the speed and separation distance between the roadway and trail require protective barriers for pedestrians based on current design standards. In these locations, safety features such as metal beam guardrail are proposed to protect pedestrians and trail users from vehicular traffic.

Response to I-05, Diana Giroux, March 13, 2025

I-05-1: The trail segment associated with this project is based on connecting Henningsen Lotus Park with SR 49 and utilizes County right-of-way. This trail project does not preclude

extending the trail segment through later separate projects, however, the additional costs and process to extend the trail as a part of this project is not feasible due to the schedule and funding of the current segment.

I-05-2: This trail project proposes to tie into the SR49 improvements, where bicycles would utilize Class II bike lanes to cross the SR 49 bridge.

I-05-3: Incorporating solar lights on the stop signs at Lotus Rd and SR 49 is an item of current discussion and coordination with Caltrans as this item affects both County and Caltrans right-of-way.

I-05-4: Regulatory speed limits require a process to post and change. This process includes speed surveys to establish user speeds in areas and adjusting the speed limit to lower them can be a challenge. Speed limits in this area is an item of ongoing discussion and at a minimum this project proposes to incorporate traffic calming measures where possible to encourage vehicles to reduce speeds through the project corridor.

I-05-5: Currently Class II bike lanes exist along SR 49 between Lotus Rd and Cool, meaning that at the completion of this project, bicycles will be able utilize the Class I trail in this project between Henningsen Lotus Park and the Class II bike lanes on SR 49 to travel to Cool. While a designated pedestrian path does not currently exist between Lotus and Cool, there are sidewalk features along SR 49 between Lotus Rd and Coloma, and an existing Class I trail in Cool and in this project between SR 49 and Henningsen Lotus Park. The improvements proposed in this project, however, do not preclude future active transportation improvements for bicycles and pedestrians, and are consistent with the El Dorado County Active Transportation Plan.

Refer to the follow website for details:
https://www.edctc.org/files/bd0b340ff/El+Dorado+County+ATP+February+2020.pdf

Response to I-06, Robert Hughes, March 4, 2025

I-06: This is a comment of support for the project as it improves community connection and provides safety improvements. Comment noted.

Response to I-07, Angie Jae, March 14, 2025

I-07: This is a comment of support for the project as it improves community connection. Comment noted.

Response to I-08, Scott Ligare, March 5, 2025

I-08-1: This is a comment of support for the project and its safety improvements. Comment noted.

I-08-2: This is a comment expressing the desire to replace Mt. Murphy Bridge (a separate project) faster. Comment noted.

Response to I-09, Jacqui Moore, March 3, 2025

I-09: This is a comment of support for the project and its safety improvements. Comment noted.

Response to I-10, Michelle Peeters, March 16, 2025

I-10-1: This is a comment of support for the project and its safety improvements. Comment noted.

I-10-2: Project related impacts and mitigation measures associated with Biological Resources are discussed in Section IV of the project IS/MND. As discussed in BIO-4, construction equipment that may contain invasive plants and/or seeds will be cleaned to reduce the spreading of noxious weeds. Removal and replanting of riparian habitat, such as willows, is not anticipated at this time.

Response to I-11, Hilde Schweitzer, March 11, 2025

I-11: This is a comment of support for the project and its safety improvements. Comment noted.

Response to I-12, Matt Semonsen, March 1, 2025

I-12: This segment of Class I trail between Henningsen Lotus Park and SR 49 was previously planned for and is included in numerous comprehensive planning documents including El Dorado County's Parks and Trails Master Plan (2012), Henningsen Lotus Park Conceptual Master Plan (2014), and Coloma Sustainable Community Mobility Plan (2019). After the CMAQ Grant was awarded in 2022, the County created a public outreach program to share information and obtain feedback to better define the proposed Project. Public feedback received to date has primarily been in support of the Project.

Response to I-13, Cheryl Snipes, March 13, 2025

I-13: This is a comment of support for the project and offers a potential property location for construction staging. Comment noted.

Response to I-14, Cheryl Snipes, March 12, 2025

I-14: This is a comment of support for the project and offers a potential property location for construction staging. Comment noted.

Response to I-15, Richard Weiss, March 14, 2025

I-15-1: This is a comment of support for the project and its safety improvements. Comment noted.

I-15-2: The trail segment associated with this project is based on connecting Henningsen Lotus Park with SR 49 and utilizes County right-of-way. This trail project does not preclude extending the trail segment through later separate projects, however, the additional costs and process to extend the trail as a part of this project is not feasible due to the schedule and funding of the current segment.

Response to A-01, Central Valley Regional Water Quality Control Board (RWQCB), April 2, 2025

A-01-1: This comment is a summary of the purpose of the RWQCB, and the standard permit(s) requirements that are not project specific. The County will obtain all relevant permits for the Project as required.

Response to O-01, EDC Historical Society, March 17, 2025

O-01: This comment discusses the significance of the research associated with the site background due to the intense prehistoric and historical use in the area. GPA Consulting submitted outreach letters on behalf of the County to local historical societies and other interest groups who might have information in support of the Historic Property Survey Report on January 17, 2025. This research has been completed and is summarized and accounted for in the project IS/MND including the following project mitigation measures: CR-1, CR-2, and PA-1.

Response to O-02, South Fork Arts and Recreation, March 30, 2025

O-02-1: Although people park vehicles in the limited room along the road in safety turnouts designed to allow vehicles to pass and not designed for parking, and on County right of way alongside Lotus Road near the intersection of SR49, there are no formal facilities (e.g., parking lot, staging area, bathroom facilities, formal accesses) for recreationists in this undeveloped area. Nor are there formal, maintained access trails to the South Fork of the American River or the adjoining undeveloped cliffs from the embankment. Nonetheless, and independent of this project, the County has agreed to keep roadside parking where it is safely away from intersections and on County right of way connected to the Henningsen Park once the new trail is complete.

O-02-2: As outlined in the project IS/MND, and mitigation measure WF-1, the Contractor will prepare a Traffic Management Plan that will outline managing traffic, emergency response, and access during construction on this project.

O-02-3: As shown in the project plans, the project proposes to construct access to undeveloped South Fork Arts and Recreation (SFAR) parcel via an opening or removable metal beam guardrail in a location that the existing terrain of the parcel provides a feasible future access. Additionally, the project also proposes to provide an alternative access point to this undeveloped parcel via the Class I trail entering from the adjacent easterly parking area. These access locations should suffice for maintaining leach lines within the undeveloped parcel, vegetation management/brush removal, and/or other permitted and acceptable undeveloped parcel uses. Additional access improvements beyond the proposed project or within the SFAR undeveloped property may be pursued by SFAR through the encroachment permit process (separate and outside this project).

Letter 1: Aiko Akers

From: Aiko Akers <aiko.akers@gmail.com>
Sent: Monday, March 3, 2025 9:52 PM
To: TD-DOT Engineering
Subject: Lotus Road Multi-Use Project - Resident in Favor

This Message Is From an Untrusted Sender
You have not previously corresponded with this sender.
Report Suspicious

Hello,

I'm writing in support of the Lotus Road Multi-Use Project. I'm a homeowner in the area; our property abuts Dave Moore Nature Area. We've much enjoyed the road and pedestrian improvements in the area and I believe connecting the pedestrian and bike infrastructure will further improve the safety of our community. Thank you for all the work that has gone into studying this project and I'm looking forward to it. I-01

Sincerely,
Aiko Akers
5541 Deloro Lane
Lotus, CA 95651

Letter 2: Adam Anderson

Henningsen/ Lotus Road Class I Multi-Use Trail Public Meeting, March 13, 2025

IS/MND Comment Card

Questions/Comments:

This would be a welcome and valuable feature to our community. It will reduce traffic, encourage walking, connect our communities in a meaningful way. Thank you! I-02

Comments may be submitted today or emailed to: dotengineering@edcgov.us or mail to: El Dorado County Department of Transportation, Attn: Fairlane Engineering, 2850 Fairlane Court, Placerville, CA 95667

Your Contact Information (Optional):

Name: Adam Anderson
Address: 496 Main St Placerville CA 95667 6673 Conners Rd. Columbia
Email: Adamanderson@gmail.com **Phone:** 530-391-2585

Letter 3: Anna Eubanks

From: Anna Eubanks <anna.m.eubanks@gmail.com>
Sent: Tuesday, March 11, 2025 7:01 PM
To: TD-DOT Engineering
Subject: Bike path

This Message Is From an Untrusted Sender
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Report Suspicious

Hello,
I am emailing to show my support for a Lotus bike path. I think it would be an awesome addition to the community that would improve safety, would have a positive effect on the environment and be a great source of recreation. **I-03**
Anna Noceti
Sent from my iPhone

Letter 4: Haley Friegang

From: Haley Friegang <haleykenobbie@gmail.com>
Sent: Friday, March 7, 2025 6:12 PM
To: TD-DOT Engineering
Subject: Lotus Road Multi Use Trail Project

This Message Is From an Untrusted Sender
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Report Suspicious

Hi there,

I wanted to submit a comment regarding the Lotus Road Project and just let you all know that I think this project is wonderful and will have a positive impact on the Coloma Lotus community but also surrounding areas. **I-04-1**

I have seen some negative reactions to this project that I think are short sighted and do not appreciate how positive of an impact this project will have. I thought it was important to share my support and support for future Active Transportation projects within El Dorado County. I appreciate the time and work that it took to consider the other available options, such as the existing trail that I do not think would address the potential uses that this project can have, such as bicycles and strollers.

My only concern for the project is if there will be any safety features that separate the path from the road, for example bollards or posts of some kind, as people drive excessively fast on that road and it concerns me that the only separation would be a line. **I-04-2**

Again, I think this project is wonderful and appreciate the work put into making this project happen, and look forward to other Active Transportation projects in our community!

Haley Friegang

Letter 5: Diana Giroux

TO: Rep. Parlin

Questions:

diana giroux
PO Box 700, Lotus
530-301-7421
(please answer me by mail or text)

1. Why not start the path at Bassi Rd.? It seems the businesses on the other side of the park will not benefit from the path. Even though the purpose of the path is to benefit businesses. I-05-1

2. How are bikes suppose to get across bridge once on Hwy 49. In the traffic? I-05-2

3. Stop signs at Lotus Rd & Hwy 49. they are constantly being ran. Why not get the stop signs that have the solar lights on them? I-05-3

4. 45 is to high of a speed limit! Why not get it changed back to 35? I would be better for People living on road, businesses, people on bikes or walking and people using the park. I-05-4

5. Bike/walking Path from Lotus to Cool? if not answered tonight, please see Phone# Above. thank you. I-05-5

Letter 6: Robert Hughes

From: Robert Hughes <hughes.castle@gmail.com>
Sent: Tuesday, March 4, 2025 6:18 AM
To: TD-DOT Engineering
Subject: Lotus Road Multi-Use Project _Comment of Endorsement

This Message Is From an Untrusted Sender
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Report Suspicious

Committee members,
My husband and I have owned property and lived in Lotus for over 40 years. We believe the **Lotus Road Multi-Use Project** is an absolutely necessary improvement for our community. I-06
Its completion will greatly increase pedestrian safety, bring ease of access and use to community facilities, and additionally add beauty to our area. We can see this project being used by residents and visitors alike for many years to come. Please complete this much needed project to bring improvement to both the Lotus and Coloma areas. We, who are longtime residents, give our wholehearted endorsement to this project.
Regards, Jacque and Robert Hughes
--
March 4, 2025
Robert and Jacque Hughes
5501 Lodestar Lane
Lotus, CA 95651

Letter 7: Angie Jae

From: angie j <angiejaefineart@gmail.com>
Sent: Friday, March 14, 2025 5:33 AM
To: TD-DOT Engineering
Subject: Lotus Road Multi-Use Trail Meeting Follow Up.

This Message Is From an Untrusted Sender
You have not previously corresponded with this sender.

Report Suspicious

Thank you so much for hosting the Lotus Class 1 trail meeting, yesterday evening! I am part of a large group of locals who are very excited for this wonderful project. I wanted to pass along a flier that I created and sent out to my community in order to build support for this amazing project. I also plan to hold a letter/email writing party to further build community support and hopefully assist in securing the much needed grants that will make this project possible. **I-07**

If there are specific things to include in our letters/emails that will appeal to the grant committees, please let me know.

Also, please let me know if there are any events, specific meetings, or people to contact so that we can show our ongoing support of this Class 1 Trail Project on Lotus Road!

Hope you have a wonderful day!

In kindest regards,
Angie
M.Ed.
Art Teacher.

Letter 8: Scott Ligare

From: Scott Ligare <sligare@yahoo.com>
Sent: Wednesday, March 5, 2025 10:23 AM
To: TD-DOT Engineering
Subject: Lotus Trail Project

This Message Is From an External Sender
This message came from outside your organization.
Report Suspicious

Hello,

I am a resident of the Coloma/Lotus Valley and have looked through the neg dec and the design for the proposed trail. **I fully support the project** and hope that the County will move forward expeditiously. I think this project would be a great addition to the valley. This is a dangerous stretch of road where cars go too fast and a separated trail would allow pedestrians with inner tubes and bikes travel safely between the State Park and HLP. **I-08-1**

Additionally, I hope that the County is moving forward with the Mt. Murphy Bridge replacement quickly as well, because that is also very dangerous for the hundreds if not thousands of school kids on field trips that walk across it annually. **I-08-2**

Thanks,

Scott Ligare

Letter 9: Jacqui Moore

From: J Moore <jacqui.a.moore@gmail.com>
Sent: Monday, March 3, 2025 4:27 PM
To: TD-DOT Engineering
Subject: Lotus Road Multi-Use Project

This Message Is From an Untrusted Sender
You have not previously corresponded with this sender.
Report Suspicious

I am in full support of the Lotus Road Multi-Use Project. It will allow safer travel along the river left side by having a path and walkway that is level and does not drop precipitously. I use the current trail from my home just north of the river, but I would definitely use it more often if it were safer. **I-09**

Thank you for helping us find safer and pollution free ways to get around our beautiful community.

Many thanks!

Jacqui Moore

Letter 10: Michelle Peeters

From: Michelle Peeters <michelle.ckp@gmail.com>
Sent: Sunday, March 16, 2025 10:06 AM
To: TD-DOT Engineering
Subject: Lotus bike path

This Message Is From an Untrusted Sender
You have not previously corresponded with this sender.

Report Suspicious

Hello,
I'd like to chime in my support of the Lotus bike path project. We have needed safer foot and bike transportation in this area for a very long time, and our family is excited that the opportunity is finally presenting itself! Since we moved here 13 years ago, we would've absolutely walked or taken our bikes instead of driving to Lotus Park pretty much every weekend (weather permitting). So going forward, if there was a safe path, that's what we would do. That corridor is extremely dangerous and there's so much foot traffic in the summer. It seems like a very necessary project for safety and reduction of vehicle use. **I-10-1**

I would like to add that if environmental remediation for this project is required, please ensure that only native plants are planted. There have been some projects in which non-native plants have accidentally been planted with our county projects and are now causing major issues as well as unnecessary exorbitant resource use. (For example, the willows planted at the bridge on Green Valley Road in the stretch between Lotus Road and N. Shingle Rd. If native willows had been planted instead of the invasive and water-demanding weeping willows, the county and public would've saved thousands of dollars in water services. Not only that, but weeping willows are detrimental to our local ecosystems.) **I-10-2**

Thanks for reading my note! I hope this helps in your planning and decision-making going forward. Thank you so much for your work on this project!

Kindly,
Michelle Peeters
Coloma

Letter 11: Hilde Schweitzer

From: hilde schweitzer <hilde@amriver.us>
Sent: Tuesday, March 11, 2025 8:59 PM
To: TD-DOT Engineering
Subject: HLP Bike Path Support

This Message Is From an Untrusted Sender
You have not previously corresponded with this sender.

Report Suspicious

I am writing to voice my support for the proposed bike path from Henningson Lotus Park to HW 49. I-11
I have lived here since 1991 and still bike and walk all of the trails in the valley. The most dangerous area is where this trail covers and it will be a wonderful addition connecting not only the town and businesses, but the State Park trails.
I am grateful to all of the hard work done to date for this project and support it 100%.
Thank you for your time,
Hilde Schweitzer
Lotus, Calif.

hilde schweitzer
hilde@amriver.us

Letter 12: Matt Semonsen

Submitted on	1 March 2025, 8:51AM
Receipt number	18
Related form version	2

Comments, Questions or Suggestions	This project is the very definition of Boondoggle. As a resident of Lotus for 30+ years, countless visitor to HLP, Lotus PO recipient and visitor to Lotus commercial spaces, I can't imagine a more wasteful use of funds, and an even less utilized project that will inconvenience the locals for 2 years. Are soccer teams, baseball teams, ultimate frisbee teams or any other out of town visitor to HLP going to walk to the bakery, PO, Dog clipping store or Gym and back? NO! Are boaters putting in/taking out at HLP going to walk to the PO, Bakery or Gym and back? NO! Are there bike riders at HLP? Rarely if ever. Are they going to rider to the Bakery and back? NO! Is anyone going to enjoy the walkway along Lotus Rd while on it? Not a chance with all the trucks and traffic on Lotus Rd! Do I see lots of walkers on the newly constructed bridge? Never. I see the occasional local walking their dogs. I see the occasional visitor walking on the bridge to photograph the river. I live on Little Rd and walk to the PO almost everyday. Do I run into folks walking on the bridge. Rarely. Are more visitors going to photograph the river then continue on to HLP? Rarely! Do I see walkers on Lotus Rd within the trail portion? RARELY! Do I see wakers/visitors on the river front trail in the proposed project location? YES all the time! Are they going to use the proposed trail? NO! Will I walk along this trail? Yes, but only to access the beautiful river front portion as soon as possible to get off of Lotus Rd. My point is this trail will be used so infrequently because there's no reason TO use it, and building it won't create a reason TO use it. Is it dangerous to walk/ride on Lotus Rd where the trail will be built? YES! But this project is an end point to end point project which will be rarely used. Will folks use this project over and over? Not a chance! PLEASE find a better way to utilize the funds, and don't use the funds just because they are there and lost if not used!	I-12
Bridge Project	Henningsen/Lotus Road Class I Multi-Use Trail	

Optional Contact Information

Full Name	matt semonsen
Email Address	matt.semonsen@gmail.com
Address	4955 Little Road
City	Lotus
State	
ZIP Code	95651
Phone Number	9162811895

Letter 13: Cheryl Snipes

Henningsen/ Lotus Road Class I Multi-Use Trail Public Meeting,
March 13, 2025

IS/MND Comment Card

Questions/Comments: If interested in a staging area for any equipment needed: please call Cheryl Snipes 530.559.0697.

4.75 acres available behind Colomakee store at 3 way stop Marshall Rd + 49

I-13

Comments may be submitted today or emailed to: dotengineering@edcgov.us or mail to: El Dorado County Department of Transportation, Attn: Fairlane Engineering, 2850 Fairlane Court, Placerville, CA 95667

thanks love the project

Your Contact Information (Optional):

Name: Cheryl Snipes

Address: P.O. Box 206 Pilot Hill, Ca 95664

Email: inclne2000@hotmail.com Phone: 530-559-0697

Letter 14: Cheryl Snipes

From: cheryl snipes <incline2000@hotmail.com>
Sent: Friday, March 14, 2025 9:28 AM
To: TD-DOT Engineering
Subject: HENNINGSEN/LOTUS ROAD CLASS 1 MULTI-USE TRAIL PROJECT

This Message Is From an Untrusted Sender
You have not previously corresponded with this sender.
Report Suspicious

Good morning, attended meeting 3/13/25 at Henningsen Lotus Pavillion last night. **I-14**
So excited about this project. Would like to offer any support to include 4.75 acres to park equipment/vehicles during construction.
Property located at 3 way stop at Hwy 49 and Marshall grade behind Coloma feed store.
If interested please contact Cheryl Snipes 530-559-0697 or email incline2000@hotmail.com.
Thank you for all your work to keep our beautiful community safe and accessible to enjoy.
Sent from my Verizon, Samsung Galaxy smartphone
Get Outlook for Android

Letter 15: Richard Weiss

Submitted on	12 March 2025, 4:18PM
Receipt number	19
Related form version	2

Comments, Questions or Suggestions	I believe this trail will be a valuable resource for the community and for visitors. It would allow me to safely travel to the park from my home by bicycle or on foot. I also frequent Marco's, the Lotus Pub, and the River Store. It would be good to have the trail extended to Bassi Road.	I-15-1 I-15-2
Bridge Project	Henningsen/Lotus Road Class I Multi-Use Trail	

Optional Contact Information

Full Name	Richard Weiss
Email Address	helpsaverivers@gmail.com
Address	7320 Amoloc Ln
City	Lotus
State	California
ZIP Code	95651
Phone Number	5104104549

Letter A: Central Valley Regional Water Quality Control Board

Central Valley Regional Water Quality Control Board

2 April 2025

Jon Balzer
El Dorado County Department of Transportation
2850 Fairlane Court
Placerville, CA 95667
jon.balzer@edcgov.us

COMMENTS TO REQUEST FOR REVIEW FOR THE MITIGATED NEGATIVE DECLARATION, HENNINGSEN/ LOTUS ROAD CLASS I MULTI-USE TRAIL PROJECT, SCH#2025021136, EL DORADO COUNTY

Pursuant to the State Clearinghouse's 27 February 2025 request, the Central Valley Regional Water Quality Control Board (Central Valley Water Board) has reviewed the *Request for Review for the Mitigated Negative Declaration* for the Henningsen/ Lotus Road Class I Multi-Use Trail Project, located in El Dorado County.

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

I. Regulatory Setting

Basin Plan

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

The Basin Plan is subject to modification as necessary, considering applicable laws, policies, technologies, water quality conditions and priorities. The original Basin Plans were adopted in 1975, and have been updated and revised periodically as required, using Basin Plan amendments. Once the Central Valley Water Board has adopted a Basin Plan amendment in noticed public hearings, it must be approved by

the State Water Resources Control Board (State Water Board), Office of Administrative Law (OAL) and in some cases, the United States Environmental Protection Agency (USEPA). Basin Plan amendments only become effective after they have been approved by the OAL and in some cases, the USEPA. Every three (3) years, a review of the Basin Plan is completed that assesses the appropriateness of existing standards and evaluates and prioritizes Basin Planning issues. For more information on the *Water Quality Control Plan for the Sacramento and San Joaquin River Basins*, please visit our website:
http://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/

Antidegradation Considerations
All wastewater discharges must comply with the Antidegradation Policy (State Water Board Resolution 68-16) and the Antidegradation Implementation Policy contained in the Basin Plan. The Antidegradation Implementation Policy is available on page 74 at:
https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/sacsjr_201805.pdf

In part it states:

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

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

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

II. Permitting Requirements

Clean Water Act Section 404 Permit
If the project will involve the discharge of dredged or fill material in navigable waters or wetlands, a permit pursuant to Section 404 of the Clean Water Act may be needed from the United States Army Corps of Engineers (USACE). If a Section 404 permit is required by the USACE, the Central Valley Water Board will review the permit application to ensure that discharge will not violate water quality standards. If the project requires surface water drainage realignment, the applicant is advised to contact the Department of Fish and Game for information on Streambed Alteration Permit requirements. If you have any questions regarding the Clean Water Act Section 404 permits, please contact the Regulatory Division of the Sacramento District of USACE at (916) 557-5250.

Clean Water Act Section 401 Permit – Water Quality Certification

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

Waste Discharge Requirements – Discharges to Waters of the State

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

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

Dewatering Permit

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

For more information regarding the Low Threat General Order and the application process, visit the Central Valley Water Board website at: http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2003/wqo/wqo2003-0003.pdf

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

Limited Threat General NPDES Permit

If the proposed project includes construction dewatering and it is necessary to discharge the groundwater to waters of the United States, the proposed project will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit. Dewatering discharges are typically considered a low or limited threat to water quality and may be covered under the General Order for *Limited Threat Discharges to Surface Water* (Limited Threat General Order). A complete Notice of Intent must be submitted to the Central Valley Water Board to obtain coverage under the Limited Threat General Order. For more information regarding the Limited Threat General Order and the application process, visit the Central Valley Water Board website at: https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2016-0076-01.pdf

NPDES Permit

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

If you have questions regarding these comments, please contact me at (916) 464-4684 or Peter.Minkel2@waterboards.ca.gov.

Peter G. Minkel
Engineering Geologist

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

Amy Bakker
Dokken Engineering
abakker@dokkenengineering.com

Letter O-1: El Dorado County Historical Society

El Dorado County Department of Transportation

Attn: Fairlane Engineering

2850 Fairlane Court

Placerville, CA 95667

March 17, 2025

R.e: Response to Invitation to Comment

Henningsen/Lotus Road Class I Multi-Use Trail Project

Thank you for the opportunity to comment on the proposed Henningsen/Lotus Road Class I Multi-Use Trail Project along Lotus Road.

The indicated project is located in a historic transportation corridor dating from the early Gold Rush. Routes to and from the epicenter of the Gold Rush, (Coloma), include the route through Lotus. Prehistoric occupation of this area is also known though most evidence is probably obliterated by early placer mining activities along the South Fork of the American River. **O-01**

To aid in your research, please feel free to avail yourself of the resources available in the El Dorado County Library, on Fair Lane, in Placerville and of the El Dorado County Historical Museum, on the Fairgrounds at Placerville Drive, also in Placerville, and the Marilyn Ferguson Research Center at 515 Main Street in Placerville.

As with any project in this part of El Dorado County, extreme care should be taken to research the background of the site due to intense prehistoric and historical use in the area.

Jill G. Kearney
Resource Coordinator, EDCHS
edchistoricalsociety.org

Jill G. Kearney

Letter O-2: South Fork Arts and Recreation



SOUTH FORK ARTS AND RECREATION
PO Box 157, Coloma CA 95613 530•303•2404

March 30, 2025

El Dorado County Department of Transportation
Attn: Fairlane Engineering
2850 Fairlane Court
Placerville, CA 95667

Comments on Henningsen/ Lotus Road Class I Multi-Use Trail Project
Mitigated Negative Declaration EIR

The South Fork Arts and Recreation Company (SoFAR) is a Coloma and Lotus 501(c)(3) non-profit whose mission is to "inspire and teach the arts and music, support recreational opportunities, and promote community development, culture, and involvement associated with the Coloma, Lotus, and surrounding region." We are the sole owners of the developed parcel at 835 Lotus Road, Coloma, CA 95613, and the undeveloped parcel directly across from 835 Lotus Road along the South Fork of the American River just below the Highway 49 bridge on the downriver left side of the river. The undeveloped parcel along the river between Henningsen Lotus Park and the Highway 49 bridge is directly in the project area and area of impact.

The following comments are submitted by the entire Board of Directors of SoFAR and are a reflection of the concerns and comments as a board and property owner of the undeveloped river parcel.

Overview:
SoFAR's mission of supporting recreation and community development is aligned with the development of pedestrian, bicycling, and other active transportation facilities, and in theory, adding Class I multi-use trails to the Coloma and Lotus River Valley is a beneficial and valuable asset for both visitors and residents. We are providing the following comments as a way to find an amicable solution to the direct impacts the project will create on our river parcel, to the maintenance of our river parcel, and to the long-term use and value of our property.

Responses to the Mitigated Negative Declaration Analysis:

1. Construction of a Class I bike path along Lotus Road would significantly block access and use of SoFAR's river parcel along the South Fork of the American River. A Class I path requires separating it from the traffic along Lotus Road, and those barriers (e.g., guard rails, handrails, boardwalk rails, etc.) would prevent pedestrians and vehicles from accessing the approximately one-acre river parcel. Use of the river parcel would be significantly reduced from future uses for educational programs, recreational activities, and other uses appropriate for valuable private riverfront **O-02-1**

parcels. The current DOT right-of-way does not allow blocking or preventing normal and customary uses of private property. Because access to the parcel would be significantly impacted, mitigation for the loss of use of that parcel should be addressed. Additionally, access to both sides of the multi-use trail will need to be available during construction in order to build the elevated boardwalks and the grading necessary, and the current right-of-way will not be wide enough to accommodate those construction needs. O-02-2

2. Historically, the river parcel and the parcel at 835 Lotus Road were one parcel. Lotus Road was an easement road at one time, and the county split the parcel into two and took ownership of Lotus Road some time ago. Because it was one parcel, the septic leach lines were on the riverside of Lotus Road. The leach field has been there ever since the previous Sierra Nevada House Restaurant and Hotel was built back in the 1960s. Updates and maintenance of those leach lines are essential for the use of the commercially zoned 835 Lotus Road parcel, which currently has developed facilities on it. The multi-use trail will block access for large equipment (backhoes, gravel trucks, bulldozers, etc.) to access the river parcel to maintain the leach lines, and there are no alternatives developed in the analysis for equipment access to the river parcel. Access to the river parcel for heavy equipment would also add additional costs for any equipment operator to cross the trail without damaging the trail's surface and access the river parcel safely. O-02-3
3. Along with heavy equipment necessary for leach line maintenance, we also require equipment access to the parcel for vegetation management and brush removal. O-02-3
4. Lastly, there is a dirt pull-out on the river parcel along Lotus Road that has been used for decades as ad hoc parking. Although not "official" parking for the 835 Lotus Road parcel, it has been free parking for decades for visitors to the river at the Highway 49 bridge. Because Caltrans is required to allow access at all river crossings, they do not block pedestrian access to the river from the Highway 49 Bridge located adjacent to our river parcel and also do not supply parking. This pull-out is the closest ideal parking for visitors to park and walk a few hundred feet to access the river. Throughout the year, there are hundreds of users that use that dirt pullout for parking close to the river access at the bridge. Removing the closest parking to the bridge and the easiest access point to the river will have significant impacts on our parking facility at 835 Lotus Road and other surrounding resident and business parking resources. When Caltrans built the new Highway 49 bridge in 2018, they also removed numerous parking spaces adjacent to the new bridge and the closest river access. They did not replace those parking spaces with any additional spaces, and businesses and residents on both sides of the bridge now are significantly impacted with river users parking illegally for extended periods of time in various locations. Without any mitigation for the loss of those "ideal" parking spaces next to the bridge, our facilities and others around the bridge will be significantly more affected. These parking issues were raised during the stakeholder meetings on the Coloma and Lotus Mobility Study conducted by the EDC Transportation Commission. They specifically adjusted the alignment of the proposed bike path in the study report to accommodate those parking spaces, as they did for the other two county pull-outs, in order to satisfy the stakeholders concerned about losing public parking in that critical location. And since the mobility study report was used as the inspiration and instigation for this trail, it would be appropriate to use what the stakeholders and community members supported in that study report since that report is what is being used as the community "study report," and no additional study has been performed. O-02-1

The ten-person Board of Directors of the South Fork Arts and Recreation non-profit appreciates your attention on these concerns and comments and looks forward to an amicable resolution.

Sincerely on behalf of the full Board of Directors,



Howard Penn, President/General Manager