Henningsen Lotus Park Improvements Project

Initial Study / Draft Mitigation Negative Declaration

Prepared for:

County of El Dorado
Chief Administrative Office
Parks Division
330 Fair Lane
Placerville, CA 95667

August 24, 2016

Prepared by:

FOOTHILL ASSOCIATES

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NOTICE OF INTENT
TO ADOPT A MITIGATED NEGATIVE DECLARATION

for the

Henningsen Lotus Park Improvements Project

Public Notice is hereby given that a Mitigated Negative Declaration (Environmental Report) is available for public review for the Henningsen Lotus Park Improvements Project.

Project Location: The Proposed Project is located within Henningsen Lotus Park at 950 Lotus Road just south of the intersection of Highway 49 and Lotus Road next to the South Fork of the American River in western El Dorado County, Lotus, California, Latitude 38° 48' 13.374" North, Longitude 120° 54' 21.178" West, NAD 83, and can be located on the *Coloma*, California USGS 7.5-minute topographic quadrangles.

Project Description: Implementation of the Proposed Project would result in the development of 11 proposed improvements to the 47-acre Henningsen Lotus Park located in El Dorado County as recommended by the Henningsen Lotus Park Concept Plan. The proposed improvements would accommodate park users providing additional recreation opportunities. The proposed development includes improvements to existing facilities, trails, and natural resources, as well as land acquisition and construction of a new picnic area.

Document Review and Availability: The public review and comment period will extend for 30 calendar days in accordance with CEQA Guidelines Section 15105 starting **August 24, 2016** and ending **September 23, 2016**. The Initial Study/Mitigated Negative Declaration (IS/MND) is available for public review at the following location:

County of El Dorado
Parks and Trails Division
330 Fair Lane, Suite 1
Placerville, California 95667

The IS/MND can also be viewed and/or downloaded at the County of El Dorado website via the following: http://www.edcgov.us/Parks/.

Comments/Questions: Comments and/or questions regarding the IS/MND may be directed to: Vickie Sanders, Parks Manager, County of El Dorado, Chief Administrative Office, Parks Division, 330 Fair Lane, Placerville, California, 95667, Phone: (530) 621-7538, Email: vickie.sanders@edcgov.us.

Public Meetings: The IS/MND is tentatively scheduled for consideration and possible adoption by the County of El Dorado on **November 15, 2016**. Board meetings are on Tuesdays and start at 8:00 A.M. in the County Supervisors Board Meeting Room, 330 Fair Lane, Building A, Placerville, California, 95667. Interested parties should call Vickie Sanders, Parks Manager with the County of El Dorado at (530) 621-7538 to confirm meeting agendas, times, and dates.

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TABLE OF CONTENTS

1.0 Mitigation Negative Declaration Information Sheet 1-1
2.0 Introduction 2-1
2.1 Introduction and Regulatory Guidance 2-1
2.2 Lead Agency 2-1
2.3 Purpose and Document Organization 2-1
2.4 Thresholds of Significance 2-2
2.5 Terminology Used in this Document 2-2
2.6 Required Permit Approvals 2-3
3.0 Project Description 3-1
3.1 Project Location 3-1
3.2 Environmental Setting 3-1
3.2.1 General Plan Land Use Determination and Zoning Designation 3-1
3.2.2 Surrounding Land Uses 3-1
3.2.3 Biological Communities 3-7
3.2.4 Aquatic Features 3-7
3.2.5 Topography 3-7
3.3 Background 3-7
3.3.1 Wetland Mitigation Area 3-8
3.4 Project Purpose & Objectives 3-8
3.5 Project Components 3-9
3.5.1 Recommended Land Acquisition 3-9
3.5.2 Recommended New Facility Construction 3-9
3.5.3 Trail Improvements and New Trail Construction 3-9
3.5.4 Natural Resource Improvements 3-19
4.0 Initial Study Checklist 4-1
4.1 Aesthetics 4-1
4.2 Agriculture and Forest Resources 4-5
4.3 Air Quality 4-9
4.4 Biological Resources 4-15
4.5 Cultural Resources 4-31
4.6 Geology and Soils 4-35
4.7 Greenhouse Gas Emissions 4-43
4.8 Hazards and Hazardous Materials 4-47
4.9 Hydrology and Water Quality 4-51
4.10 Land Use and Planning 4-65
4.11 Mineral Resources 4-69
4.12 Noise 4-71
4.13 Population and Housing 4-75
4.14 Public Services 4-77
4.15 Recreation 4-79
4.16 Transportation/Traffic 4-81
4.17 Utilities and Service Systems 4-85
4.18 Mandatory Findings of Significance 4-89
5.0 CEQA Determination 5-1
6.0 Report Preparation 6-1
6.1 Lead Agency 6-1
6.1.1 County of El Dorado, Parks Division 6-1
6.2 Consultant Staff 6-1
6.2.1 Foothill Associates 6-1
6.2.2 Ric Windmiller Consulting 6-1
7.0 References 7-1
7.1 Literature References 7-1

7.2 Personal Communication 7-4

List of Tables

Table 2.6-1 — Potential Resource Agency Permitting Requirements 2-3
Table 3.2-1 — Biological Communities by Acreages 3-7
Table 4.3-1 — Ambient Air Quality Standards for EDCAQMD 4-11
Table 4.5-1 — Cultural Resources Identified within Henningsen Lotus Park and California Register Eligibility 4-31
Table 4.7-1 — Project Estimated Annual Construction-Related GHG Emissions 4-44
Table 4.12-1 — Construction Noise Levels 4-72

List of Figures

Figure 3.2-1 — Henningsen Lotus Park Site and Vicinity 3-2
Figure 3.2-2 — Henningsen Lotus Park General Plan Designations 3-3
Figure 3.2-3 — Henningsen Lotus Park Zoning 3-5
Figure 3.5-1 — Henningsen Lotus Park Concept Plan 3-11
Figure 3.5-2 — Erosion Repair/Public Access Point 3-13
Figure 3.5-3 — Henningsen Lotus Park Restoration Areas 3-15
Figure 4.2-1 — Henningsen Lotus Park Farmland 4-6
Figure 4.4-1 — Henningsen Lotus Park CNDDB 4-17
Figure 4.4-2 — Henningsen Lotus Park Biological Communities and Constraints 4-21
Figure 4.6-1 — Henningsen Lotus Park Soils 4-38
Figure 4.9-1 — Henningsen Lotus Park FEMA Mapped Flood Zones 4-61

List of Appendices

Appendix A — Mitigation Monitoring and Reporting Program

Appendix B — California Emissions Estimator Model (CalEEMod) Version 2013.2.2 for Henningsen Lotus Park Improvement Construction

Appendix C — *Biological Resources Assessment* [for the] ±*46.5-Acre Henningsen Lotus Park Improvements Project, El Dorado County, California, dated March 3, 2016*

1.0 MITIGATION NEGATIVE DECLARATION INFORMATION SHEET

PROJECT TITLE: Henningsen Lotus Park Improvements Project

PROJECT LOCATION: Lotus, El Dorado County, California

DATE: August 24, 2016

PROJECT APPLICANT: County of El Dorado

LEAD AGENCY: County of El Dorado

CONTACT PERSON: Vickie Sanders, Parks Manager

PROJECT DESCRIPTION: Implementation of the Proposed Project would result in the development of 11 proposed improvements to the 47-acre Henningsen Lotus Park, located in El Dorado County as recommended by the Henningsen Lotus Park Concept Plan. The proposed improvements would accommodate park users providing additional recreation opportunities. The proposed improvements include an easement for the trail connection to Highway 49, a new group picnic facility, new site furnishings, new shade shelters, development for a connector trail to Highway 49, river access improvements, Monroe Ridge Trailhead, wetland boardwalk trail system, downstream park trails, river bank stabilization and restoration, and interpretive signage. See **Section 3.0** for additional Project Description details.

DECLARATION

The County of El Dorado has determined that implementation of the Proposed Project will not result in significant effects on the environment and therefore this project does not require evaluation through the preparation of an Environmental Impact Report (EIR) pursuant to the California Environmental Quality Act (CEQA). This determination is based on the attached Initial Study in support of the following findings:

- The project will not degrade environmental quality, substantially reduce habitat, cause a wildlife population to drop below self-sustaining levels, reduce the number or restrict the range of special-status species, or eliminate important examples of California history or prehistory;
- The project does not have the potential to achieve short-term, to the disadvantage of long-term, environmental goals;
- The project will not have impacts that are individually limited, but cumulatively considerable;
- The project will not have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly; and
- No substantial evidence exists that the project will have a negative or adverse effect on the environment.

The project incorporates all applicable mitigation measures identified in the attached Initial Study.

This Mitigated Negative Declaration (MND) reflects the independent judgment of the Lead Agency.

Written comments shall be submitted no later than 30 days from the posting date. The County of El Dorado's determination on the draft MND shall be final.

Submit comments in writing to:

Vickie Sanders
Parks Manager
County of El Dorado
Parks Division
330 Fair Lane, Building A
Placerville, California 95667
Phone: (530) 621-7538
Fax: (530) 626-5730
Email: vickie.sanders@edcgov.us

2.0 INTRODUCTION

2.1 INTRODUCTION AND REGULATORY GUIDANCE

This document is an Initial Study (IS) supporting a Mitigated Negative Declaration (MND) determination to clear the development for a subset of 11 proposed improvements outlined in the Henningsen Lotus Park Concept Plan (Proposed Project). This MND evaluates the potential impacts resulting from implementation of the Proposed Project. This MND has been prepared in accordance with CEQA, Public Resources Code Section 21000 *et seq.*, and the State CEQA Guidelines, 14 California Code of Regulations (CCR) Section 15000 *et seq*.

An Initial Study is prepared by a Lead Agency to determine if a project has the potential to result in significant impacts on the environment (CEQA Guidelines Section 15063). An EIR must be prepared if an IS indicates that the proposed project under review may result in significant impacts to the environment. A Negative Declaration (ND) may be prepared instead, if the Lead Agency prepares a written statement describing the reasons why a proposed project would not have a significant effect on the environment, and therefore does not require the preparation of an EIR. According to CEQA Guidelines Section 15070, a Negative Declaration or Mitigated Negative Declaration shall be prepared for a project subject to CEQA when either:

A. The Initial Study documents that there is no substantial evidence, in light of the whole record before the agency, that the proposed project may result in any significant effect on the environment, or

B. The Initial Study identifies potentially significant effects, but:

    1) Revisions in the project plans or proposals made by or agreed to by the applicant before the proposed negative declaration is released for public review would avoid potentially significant impacts or mitigate potential impacts to less than significant levels, and

    2) There is no substantial evidence, in light of the whole record before the agency that the proposed project as revised, may result in significant impacts to the environment.

2.2 LEAD AGENCY

The Lead Agency is the public agency that has the principal responsibility for carrying out or approving a proposed project. CEQA Guidelines Section 15051 states that if a project will be carried out by a public agency that agency shall be the Lead Agency, even if the project would be located within the jurisdiction of another public agency. The County of El Dorado will oversee and implement the project, therefore the County of El Dorado is the designated Lead Agency for the purposes of CEQA.

2.3 PURPOSE AND DOCUMENT ORGANIZATION

The purpose of this Initial Study is to document if implementation of the Proposed Project may result in potentially significant impacts on the environment.

This document is divided into the following sections:

Section 1.0 Mitigation Negative Declaration Information Sheet
Pursuant to CEQA Guidelines 15071, Section 1 includes a brief description of the project, the project location, and the County of El Dorado's proposed findings, and references the attached Initial Study, including proposed mitigating measures included within individual resource issue areas as applicable to development of the proposed Henningsen Lotus Park Improvements Project.

Section 2.0 Introduction
This section provides an introduction and describes the purpose and organization of this document.

Section 3.0 Project Description
This section provides a detailed description of the Proposed Project including the location of the project.

Section 4.0 Initial Study Checklist
This section describes the environmental setting for each of the environmental subject areas, the regulatory setting, where relevant, and evaluates a range of impacts in response to the environmental checklist. Impacts are classified as "no impact", "less than significant impact," "less than significant with mitigation incorporated," or "potentially significant impact." Where appropriate, mitigation measures are provided that mitigate potentially significant impacts to a less than significant level.

Section 5.0 CEQA Determination
This section provides the environmental determination for the project.

Section 6.0 Report Preparation
This section identifies a list of staff and consultants responsible for preparation of this document, and persons and agencies consulted.

Section 7.0 References
This section identifies the references used in preparation of the MND.

Appendix A Mitigation Monitoring and Reporting Program
This appendix identifies mitigation measures included in the Initial Study and the responsible entity for implementation of the mitigation measures, as required by Section 15097 of the CEQA Guidelines.

Appendix B California Emissions Estimator Model (CalEEMod) Version 2013.2.2 for Henningsen Lotus Park Construction

Appendix C *Biological Resources Assessment* [for the] ± *46.5-Acre Henningsen Lotus Park Improvements Project, El Dorado County, California, dated March 3, 2016*

2.4 THRESHOLDS OF SIGNIFICANCE

A significant effect on the environment is generally defined as a substantial or potentially substantial adverse change in the physical environment (CEQA Guidelines Section 15358). Environment as used in this definition includes the land, air, water, minerals, flora, fauna, ambient noise, and objects which are historical or aesthetic in nature. The guidelines in the following Initial Study focus on these elements and are used as tools to determine the potential of whether or not an activity is considered significant (CEQA Guidelines Section 15065). Effects are also recognized as to whether they would occur either directly or indirectly as a result of the project.

2.5 TERMINOLOGY USED IN THIS DOCUMENT

This Environmental Checklist in this document utilizes the following terminology to describe the levels of significance associated with project-related impacts:

Potentially Significant Impact: An impact that may have a "substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project" (CEQA Guidelines Section 15382); the existence of a potentially significant impact requires the preparation of an EIR with respect to such an impact.

Less Than Significant With Mitigation Incorporated: A potentially significant impact that could be mitigated to a level of less than significant through the incorporation of mitigation measures.

Less Than Significant Impact: An impact which is less than significant and does not require the implementation of mitigation measures.

No Impact: Utilized for checklist items where development of the project would not have any impact and does not require the implementation of mitigation measures.

2.6 REQUIRED PERMIT APPROVALS

Development of the Proposed Project is anticipated to require permits and authorizations as summarized in **Table 2.6-1** below.

Table 2.6-1 — Potential Resource Agency Permitting Requirements

Approving Agency	Permit/Approval
Federal Agencies	
U.S. Fish and Wildlife Service (USFWS)	Compliance with Section 7 of the Federal Endangered Species Act (16 USC 1536)
U.S. Army Corps of Engineers (USACE)	Compliance with Section 404 of the Federal Clean Water Act, (33 USC 1341)
State Agencies	
State Water Resources Control Board, Regional Water Quality Control Board (SWRCB, RWQCB)	Coverage under the General Construction Activity Storm Water Permit (§ 402 of the Clean Water Act, 40 CFR Part 122)
State Water Resources Control Board, Regional Water Quality Control Board (SWRCB, RWQCB)	Water Quality Certification (§ 401 of the Clean Water Act)
California Department of Fish and Wildlife (CDFW)	Streambed Alteration Agreement (§1602 of the Fish and Game Code)
Local Agencies	
County of El Dorado Approval	Project Approval and Adopt Initial Study / Mitigated Negative Declaration
County of El Dorado, Building and Safety Services	Grading Permit (El Dorado County Grading, Erosion, and Sediment Control Ordinance, Chapter 15.4)

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3.0 PROJECT DESCRIPTION

The proposed project location, components, and characteristics are described in the following subsections.

3.1 PROJECT LOCATION

The El Dorado County Henningsen Lotus Park is located at 950 Lotus Road just south of the intersection of Highway 49 and Lotus Road next to the South Fork of the American River in western El Dorado County, in Lotus, California, Latitude 38° 48' 13.374" North, Longitude 120° 54' 21.178" West, NAD 83, and can be located on the *Coloma* Quad USGS 7.5 Minute Topographic Quadrangle (Project Site), as shown on **Figure 3.2-1**.

3.2 ENVIRONMENTAL SETTING

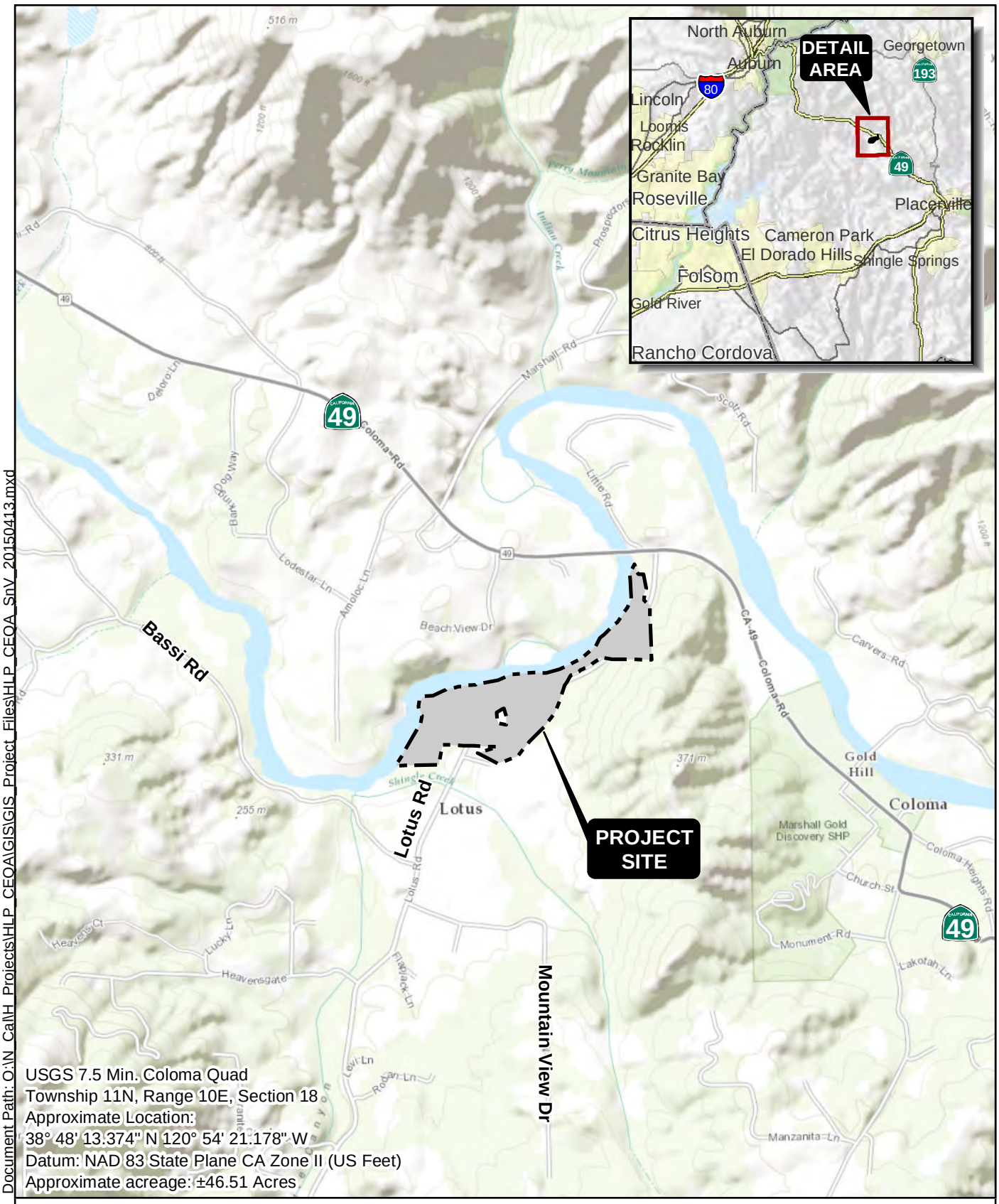
The 47-acre Project Site is south of and adjacent to the South Fork of the American River. Lotus Road intersects the park with portions of the improved park area south of the road.

3.2.1 General Plan Land Use Determination and Zoning Designation

The Project Site is designated in the *El Dorado County General Plan, Land Use Element* as a Public Facility, owned by the County of El Dorado, within a delineated Rural Center (County of El Dorado 2004c). Land use to the north and south of the Project Site is designated as Commercial and Rural Residential. The land uses to the east and west of the Project Site are designated as Residential, Commercial, and Rural Residential by the *El Dorado County General Plan, Land Use Element (*County of El Dorado 2004c) (**Figure 3.2-2**). The majority of the Project Site is zoned as Recreational Facilities/Municipal Services Center; however, two small parcels in the northwest and southeast corners of the Project Site are zoned as Residential (**Figure 3.2-3**). There is one small residential property located within the Project Site. This approximately ½-acre parcel contains several occupied residential structures and outbuildings. The zoning designations surrounding the Project Site include One-Half Acre Residential, Commercial, Planned Commercial, Residential Agriculture 40-acre, and Estate Residential Five-Acre (County of El Dorado 2004c) (**Figure 3.2-3**).

3.2.2 Surrounding Land Uses

The Marshall Gold Discovery State Historic Park is located southeast of the Project Site and the O.A.R.S River Park Adventure Campground is west of the northern end of the park. Adjacent land uses include several developed and undeveloped rural residential parcels; natural recreation areas owned by the State of California (State) and the Bureau of Land Management (BLM); El Dorado County Fire Station 74; and several commercial properties.



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USGS 7.5 Min. Coloma Quad
Township 11N, Range 10E, Section 18
Approximate Location:
38° 48' 13.374" N 120° 54' 21.178" W
Datum: NAD 83 State Plane CA Zone II (US Feet)
Approximate acreage: ±46.51 Acres

HENNINGSEN LOTUS PARK SITE AND VICINITY

FOOTHILL ASSOCIATES
ENVIRONMENTAL CONSULTING • PLANNING • LANDSCAPE ARCHITECTURE

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Date: 03/01/2016

FIGURE 3.2-1

Parcels

LandUse

- BLM
- State Of California
- El Dorado County
- Church
- Commercial
- Recreation
- Residential
- Rural Residential
- Retirement

SOUTH FORK AMERICAN RIVER

Lotus Rd.

Firehouse Rd.

PARK BOUNDARY

49

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HENNINGSEN LOTUS PARK
GENERAL PLAN DESIGNATIONS

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FIGURE 3.2-2

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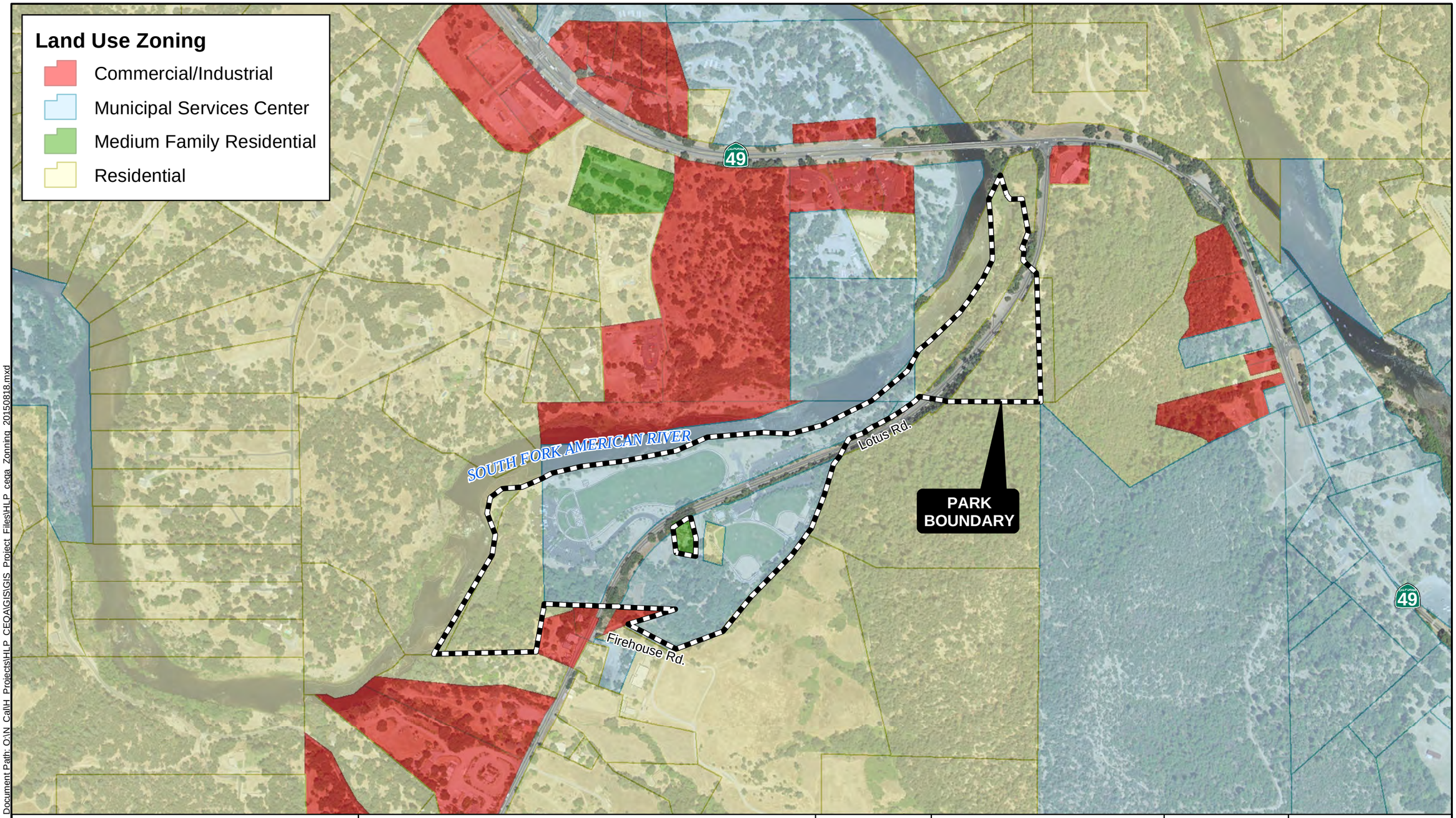

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HENNINGSEN LOTUS PARK ZONING

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FIGURE 3.2-3

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3.2.3 Biological Communities

The Project Site is primarily characterized by disturbed/developed areas and mixed oak woodland. The extent of individual biological communities mapped within the Project Site is summarized below in **Table 3.2-1**.

Table 3.2-1 — Biological Communities by Acreages

Biological Community	Total Acreage
Mixed Oak Woodland	14.55
Chaparral	1.07
Riparian	3.82
Himalayan Blackberry Scrub	4.64
Disturbed/Developed	19.51
Seasonal Marsh	0.45
Perennial Marsh	0.65
South Fork of the American River	1.76
Ephemeral Drainage	0.06
Total	**46.51**

3.2.4 Aquatic Features

The South Fork of the American River, a navigable water of the United States, borders the Project Site on the north and west boundaries, drawing numerous recreational users to the Project Site. The river receives water from upstream snowpack and water then flows into Folsom Lake, which empties into the American River, which is a tributary to the Sacramento River and ultimately to the Pacific Ocean. Many unnamed ephemeral drainages are present throughout the Project Site. These drainages flow northwest and drain into the South Fork of the American River on the northwest boundary of the Project Site.

3.2.5 Topography

The general topography of the Project Site has been influenced by the old gravel mining business that historically operated on the property, and is comprised of moderately steep slopes on the eastern side of the Project Site. The western side of the Project Site is composed of mostly flat/developed park land. Elevations within the Project Site range from 710 feet above mean sea level (MSL) to 1,000 feet above MSL.

3.3 BACKGROUND

Henningsen Lotus Park (HLP) is a 47-acre park owned by the County of El Dorado and located in the Coloma-Lotus area on the site of an old gravel mining operation. HLP is classified as a community and regional park facility in the *El Dorado County Parks and Trails Master Plan* (2012), but also functions as a local neighborhood park for the Coloma-Lotus area. HLP is the largest and most heavily used improved park in El Dorado County (Foothill Associates 2012). The community park currently includes facilities such as Little League fields, picnic areas, walking trails, play areas, restrooms, and a pavilion. HLP is adjacent to the South Fork of the American River and provides river access for rafting and kayaking with a boat launch and beach in the downstream end of the park. Current uses of the park include: picnicking; river access for paddle sports such as kayaking, inner tubing, and rafting; walking and jogging; organized sports including soccer, softball, and baseball; special events such as the American River Music Festival; swimming and other beach activities; fishing; and wildlife and scenery viewing.

The first master planning effort for HLP took place in the late 1980's and focused on an initial area encompassing 18-acres. As the park expanded opportunities for other improvements were identified and implemented over the next 20 years.

The 2004 *El Dorado County General Plan, Parks and Open Space Element* directed the County to develop a *Parks and Trails Master Plan* (Master Plan) for the west slope area of El Dorado County (County of El Dorado 2004d). The Master Plan developed a long term vision and direction for the planning, implementation, and management strategies for parks and trails within the western slope of the El Dorado County. This included a large planning effort for HLP. The Master Plan process included involving community members to offer ideas for future HLP improvements. The proposed improvements were reported in the Master Plan which suggested additional uses and facilities for HLP.

In response to the *El Dorado County Parks and Trails Master Plan* a comprehensive *Henningsen Lotus Park Conceptual Master Plan* (Concept Plan) was developed with further community input for HLP. The Concept Plan aimed to balance the desires of park visitors and neighbors while reflecting the County's need for recreation facilities. The planning process included an existing conditions assessment, public workshops, analysis of economic impact, opportunities and constraints, and a draft park concept plan. The Concept Plan was adopted by the County of El Dorado Board of Supervisors in 2014. The Concept Plan identified over 20 potential proposed improvements to HLP. From the outlined improvements in the Concept Plan, a subset of 11 improvements for HLP have been identified for potential implementation by the County of El Dorado over the next 10 years in anticipation of future grant or other funding opportunities.

3.3.1 Wetland Mitigation Area

Henningsen Lotus Park contains a wetland mitigation area in the southwest corner of the park. The wetland mitigation area was developed as the Wetland Mitigation Plan for Landwick Properties off-site in 1994. The Landwick Property (Diamond Springs Project Site) is a 5-acre site on the corner of Highway 49 and Missouri Flat Road in Diamond Springs, California, which was developed for industrial use. The Diamond Springs Project Site was delineated for wetlands and 0.95 acres of seasonal wetlands were identified and verified by the U.S. Army Corps of Engineers (Corps). No reasonable on-site development alternatives were available for Diamond Springs Project Site and Henningsen Lotus Park was chosen as the best area for off-site mitigation.

The mitigation area at HLP is located in an area that was mined for gravel and sand and had an old highway running through the center. The HLP mitigation area had the wetland mitigation criteria of sufficient water to support wetland vegetation and to maintain wetland conditions in perpetuity. Development of the mitigation area consisted of grading down the floor of one of the pit areas and two reaches of abandoned haul road and then converting these features into wetland and riparian terrace habitat elements. The final grade landform was installed to provide a natural appearance with irregular slopes and surfaces to enhance visual aspects of the park.

Revegetation of the mitigation area consisted of three components to achieve a functional wetland. First, riparian tree species were planted to develop a tree canopy on the mitigation site consisting of cottonwood, valley oak, button-willow, and three types of willow. Next, all disturbed areas were revegetated and stabilized with a hydroseed mixture composed of native plant species. Finally, a topsoil/seedbank mixture from the Diamond Springs Project Site was imported to the mitigation area.

A monitoring program was prepared to ensure the success of the off-site mitigation area and consisted of annual survival and growth surveys; success criteria for herbaceous and tree species; a revegetation status report; and supplemental planting. The monitoring program was carried out for the first five years after the mitigation area was developed and annual status reports were submitted to the County of El Dorado Parks and Recreation Department (Water Resources Consulting 1994).

3.4 PROJECT PURPOSE & OBJECTIVES

The adopted Concept Plan identified potential project improvements for HLP by engaging community members and park visitors. The Concept Plan identified over 20 proposed park improvements. The purpose of this environmental analysis is to clear the development of a subset of 11 proposed projects outlined in the Concept Plan. These 11 improvements (Proposed Project) were identified by the County

of El Dorado and are targeted priorities for potential implementation. Development of the Proposed Project would provide additional park and recreation facilities within HLP based on the need identified in the Concept Plan.

3.5 PROJECT COMPONENTS

Improvements analyzed for the Proposed Project include: land acquisition, construction of new facilities, trail improvements and new trail construction, and natural resource improvements (**Figure 3.5-1**). Individual recommended improvements are summarized in the following sections.

3.5.1 Recommended Land Acquisition

Trail Easement

An easement for trail connections to Highway 49 is proposed to improve connection and access from the northern park boundary to Highway 49 at the bridge over the South Fork of the American River. The trail currently ends 200 feet south of the bridge. The County of El Dorado intends to acquire a recreation access easement on this parcel zoned for commercial use in order to formalize and improve the trail connecting the park to Highway 49. The trail connection would provide pedestrians with access to Highway 49 and the commercial center north of the river in Lotus.

3.5.2 Recommended New Facility Construction

New Group Picnic Area

A new group picnic area would be constructed northeast of the existing turf area on the north side of Lotus Road on a dirt area with little existing vegetation. The picnic area would be near the existing paved parking lot that is accessed by Lotus Road. The new group picnic area would include multiple accessible tables, shade structures, paved paths, trash cans, barbecues, drinking fountains, and a prefabricated vault-style restroom.

New Site Furnishings

Additional benches, trash cans, recycling bins, and drinking fountains would be installed at various locations throughout the park to better accommodate the needs to park users. Benches, trash cans, recycling bins, and drinking fountains would be mounted on concrete slabs to prevent theft. Water connections to drinking fountains would be extended from existing water service to the park.

New Shade Shelters

Several new shade shelters would be added with accessible picnic tables to the existing picnic area near the beach and main parking lot. The new shade shelters and tables will be similar in size and design to the existing tables and shelter.

3.5.3 Trail Improvements and New Trail Construction

Connector Trail to Highway 49

The approximately ½-mile of existing informal trail connecting the northern edge of the park to Highway 49 will be improved to provide safer access and protect the bank from erosion and the river from associated sedimentation. Proposed trail improvements would consist primarily of establishing a more consistent width (approximately three feet) and cross slope; stabilizing downhill and uphill slopes and drainages using appropriately sized boulders and other bioengineering techniques; as well as removing significant surface barriers such as protruding rocks. The trail alignment would follow the existing informal trail as much as possible to limit impacts to vegetation and would remain unpaved.

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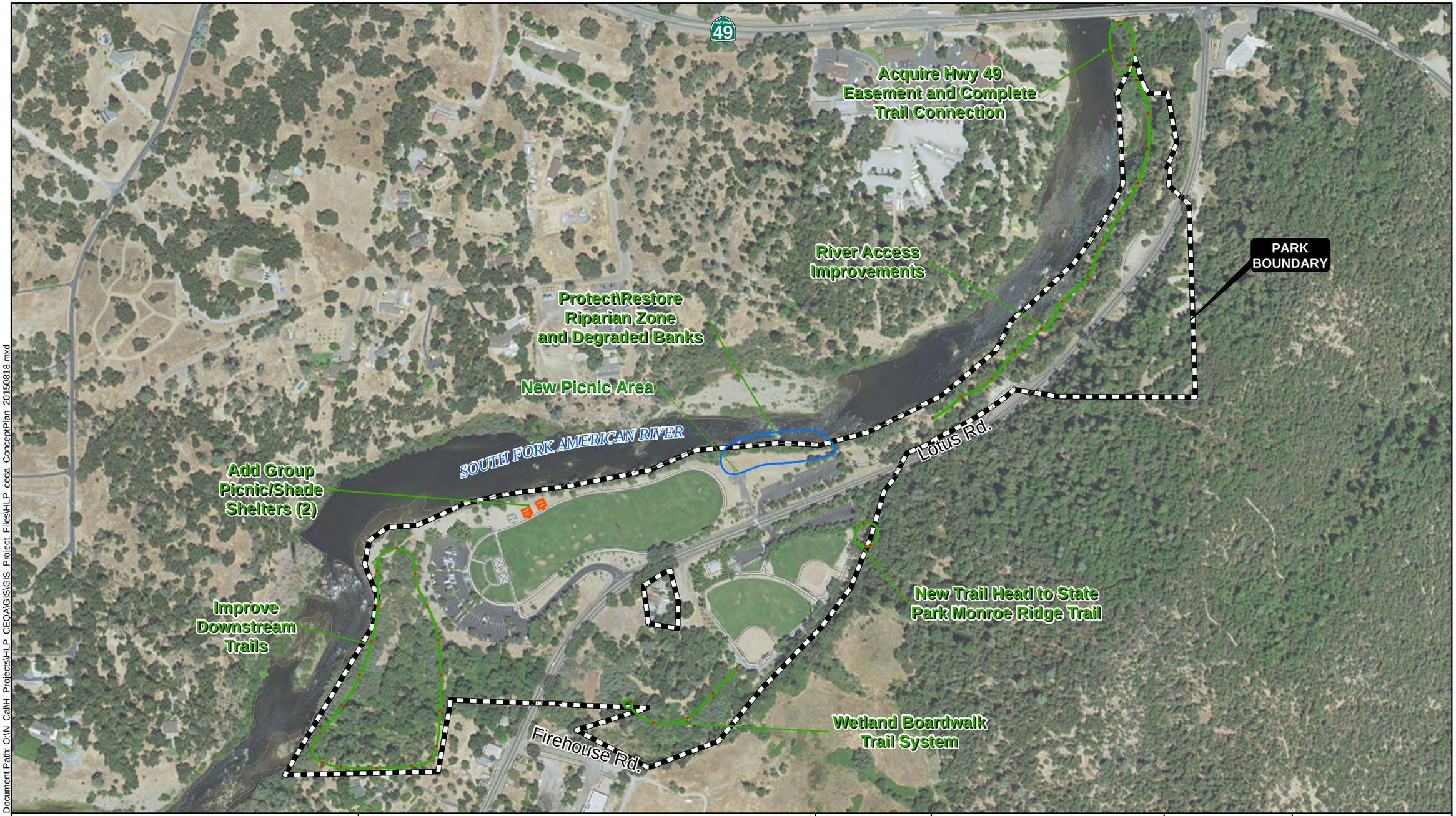

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FOOTHILL ASSOCIATES
ENVIRONMENTAL CONSULTING • PLANNING • LANDSCAPE ARCHITECTURE

HENNINGSEN LOTUS PARK CONCEPT PLAN

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SCALE IN FEET

Drawn By: KEZ
Date: 03/01/2016

FIGURE 3.5-1

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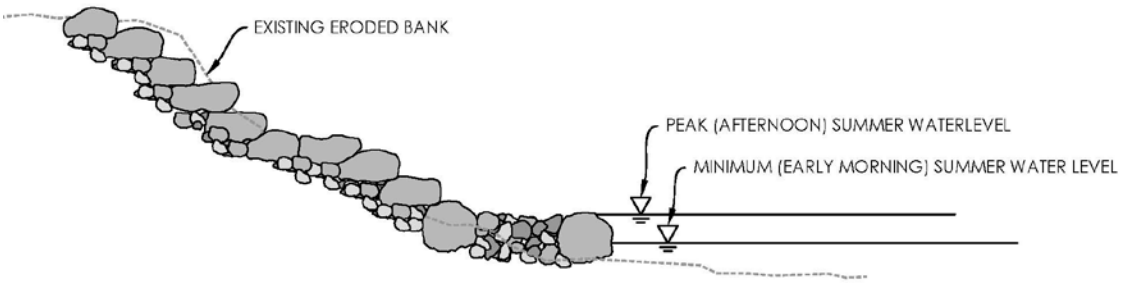
River Access Improvements

Several locations exist where park users have established informal trails from the park down to the edge of the river damaging riparian vegetation and causing soil erosion. Trailblazing by pedestrians has degraded the riverbank and riparian zone at sixteen locations between the beach area and the upper paved trail at HLP. The informal trails range in width from three feet to over 10 feet, and transverse between 10 and 20 vertical feet to the river bank.

Ten of the sixteen informal trails down to the river would be improved through boulder and cobble terracing and planting of riparian species on either side of the access point (**Figure 3.5-2**). The remaining six informal trails would be closed to public access and restored. See **Section 3.5.4**, subsection **River Bank Stabilization and Restoration** for a more detailed description. Bioengineered log cribwalls are also proposed at two of the larger areas. Sites are classified as "small", "medium", and "large". Small sites would be approximately three to four feet wide. Medium sites would be four to six feet wide, and large sites would be six to 10 feet wide.

Figure 3.5-2 — Erosion Repair/Public Access Point



A priority has been defined for each trail segment based upon the magnitude of the disturbance and the potential effect of improvements. Priorities have been assigned as A, B, or C with A representing the highest priority and C representing the lowest priority. Priority is generally based upon size and erosion potential, so large sites and sites with a high potential for erosion received a higher priority than smaller and/or more stable sites. Closures have generally been given a low priority because improvements to adjacent sites should be implemented prior to closures or the closures are unlikely to be successful. The paved trail extension and terraced improvements to the picnic area (Site A) have also been given a high priority because these projects would have significant recreational value and also significant impact on pedestrian circulation (**Figure 3.5-3**). Individual site recommendations are summarized below and shown on **Figure 3.5-3**.

Site A: Priority A, Significant Circulation Enhancement

High use area with picnic tables and slope leading down to boat put-in area. There is some evidence of erosion on slope, due primarily to the heavy foot traffic. Recommendations include installation of a series of 16-inch boulder terraces to level and stabilize the slope. This would also create a level area for the picnic tables.

Site B: Priority C, Site Closure

This area receives moderate use, primarily from users of the adjacent picnic tables. Recommend closing to pedestrian traffic with boulders, plantings, and signage directing visitors to Sites A or C.

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RESTORATION AREAS

FOOTHILL ASSOCIATES ENVIRONMENTAL CONSULTING • PLANNING • LANDSCAPE ARCHITECTURE	HENNINGSEN LOTUS PARK SOUTH FORK AMERICAN RIVER: RIVER PARKWAYS GRANT	N	0 125 250 SCALE IN FEET	Drawn By: ETA Date: 03/01/2016 © 2016	FIGURE 3.5-3

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Site C: Priority B, Small Access Point

This site is a moderately used, narrow trail to the water's edge experiencing some erosion. The riverbank at this location is approximately 10-feet high. Recommend stabilizing the path with boulder/cobble "steps". Width for this and other sites labeled as "small" would be three to four feet.

Site D: Priority C, Site Closure

This small access point receives moderate use and should be closed, with users redirected to Sites C and E. Access control would be accomplished with boulders, planting, and signage.

Site E: Priority A, Medium Access Point

This medium sized access point receives heavy use due to proximity to trail and picnic tables. Height of top of bank is approximately 14 feet above the river. Medium access points should be four to six feet wide and consist of boulder and cobble terraces with restoration plantings on either side to constrain pedestrian traffic.

Site F: Priority C, Site Closure

This small access point would be closed using boulders and plantings at the top of bank, with signage directing visitors to Site E or G and/or H.

Site G: Priority A, Medium Access Point

This is the site of an old bridge abutment. The river access is very steep and use is heavy due to the adjacent picnic tables. Distance from top of bank to river cobble is approximately 16 feet. Repair of site G would include boulder terracing and riparian restoration and be combined with Site H.

Site H: Priority A, Medium Access Point

This medium access point receives heavy use due to nearby picnic tables and water fountain. Erosion is very extensive and could threaten paved trail given time. Height of bank is approximately 20 feet. Solution would involve boulder/cobble terracing and riparian restoration. Due to size, use, and height, a hand/guard rail may be required for safe access.

Site I: Priority C, Site Closure

This small access point would be closed using boulders and plantings at the top of bank, with signage directing visitors to Site G and H.

Site J: Priority C, Site Closure

This small access point receives moderate use and would be closed using boulders and plantings at the top of bank, with signage directing visitors to Site K.

Site K: Priority B, Large Access Point

Located at the tail of a rapid, this site receives heavy use from visitors due to proximity to the parking lot and desirability as a swimming location. Use at Site K is anticipated to increase once the loop trail is extended to connect to the north trail. Height is approximately 20 feet above dry-season river level. Erosion potential is moderate. The site should be improved with boulder terraces and restoration plantings.

Site L: Priority B, Large Access Point

This site, located along the rapid upstream of Site K, also receives heavy use from visitors accessing the planed granite beach at the toe of the bank. Bank height is approximately 18 feet and composed of cobble and soil. Evidence of erosion is moderate. Boulder and cobble terraces are recommended to stabilize the slope and provide better access to the river's edge. Riparian vegetation would be planted to direct pedestrian traffic and provide enhanced habitat and soil stability.

Site M: Priority C, Site Closure

This small access point would be closed using boulders and plantings at the top of bank, with signage directing visitors to Sites L and N.

Site N: Priority A, Large Access Point with Significant Erosion Potential

Located near the end of the paved trail, this site has extensive erosion of the sandy substrate that is undermining the existing paved trail. Bank height is approximately 16 feet and erosion potential is high. Stabilization and access improvements would include installation of a bioengineered log cribwall and ramp, boulders and cobble, stabilized decomposed granite surfacing, and restoration plantings. A handrail may be needed for safety. Invasive species present at the site, including tree of heaven and Scotch broom, would be removed and replaced with native species, including alder, cottonwood, willow, Oregon ash and native shrubs and groundcover.

Site O: Priority B, Large Access Point with Significant Erosion Potential

As with Site N, this location is also experiencing heavy erosion of the sandy substrate. The bank is very steep and approximately 16 feet high. A bioengineered log cribwall with boulder landing and restoration plantings is proposed for Site O.

Site P: Priority B

This site is the only location not adjacent to the river. An existing overly steepened path leading from the parking lot on Lotus Road to the north trail is experiencing erosion. A boulder/rock stairway is proposed for this location.

DG Trail Improvements: Priority C

The earthen trail leading north from the developed area of the park to the vicinity of the Highway 49 bridge has been partially improved through use of natural rock retaining walls, but many areas are eroding and in need of repair. Proposed improvements include additional boulder retaining walls, widening of the existing dirt track where feasible, resurfacing with stabilized decomposed granite, installation of culverts for drainage, and addition of a pet waste station at the trailhead. These improvements would provide pedestrians with safer and easier access to the river.

Additionally, the existing paved loop trail would be extended to connect to the paved north trail between the river and the northern paved lot to provide additional river access. The extension will be a 10 feet wide, paved asphalt trail with two foot stabilized decomposed granite trails. The trail extension would include benches, trash receptacles, and interpretive signs on riparian habitat, erosion and the bank stabilization.

Monroe Ridge Trailhead

A trailhead would be developed southeast of the parking area south of Lotus Road to mark the access point for a future trail connecting HLP to the Monroe Ridge Trail in Marshall Gold Discovery Park. The trailhead would include a kiosk with trail information, trash cans, dog waste dispensers, and recycling bins. The kiosk would include signage identifying the Monroe Ridge Trail route, access restrictions, trail

use etiquette, safety practices, and information about natural resources. Construction of the connector trail is not part of this project.

Wetland Boardwalk Trail System

A system of unpaved and elevated boardwalk trails would be constructed through the wetland mitigation area at the southwest corner of HLP. Elevated boardwalks would be used to keep hikers out of wetland areas and to prevent interruption of drainage connections between wetland features. Trail alignments would follow existing informal trails where feasible, and would minimize impacts to native vegetation and the wetland area. The trail width would not exceed four feet.

Downstream Park Trails

There are several informal trails established through the wooded vegetation southwest of the main parking lot. The County of El Dorado intends to formalize and improve specific routes constructing approximately ½-mile of unpaved trails. Impacts to vegetation will be limited by using existing informal trails where possible and routing the trails around significant trees and shrubs.

3.5.4 Natural Resource Improvements

River Bank Stabilization and Restoration

Select locations along approximately ½-mile of riverbank would be stabilized and restored to correct existing erosion issues and prevent future damage. Proposed techniques would include use of native rock and other bioengineering methods such replanting riparian vegetation. Six of the sixteen degraded river access locations would be closed to pedestrian traffic and restored. Restoration sites are classified as “small”, “medium” and “large”. Small sites would be approximately three to four feet wide. Medium sites would be four to six feet wide, and large sites would be six to ten feet wide. The following sites are recommended for closure and restoration: Site B, Site D, Site F, Site I, Site J, and Site M (**Figure 3.5-3**). See **Section 3.5.3**, subsection **River Access Improvements** for more detailed descriptions of site closures and river bank restoration. Other sites listed in subsection **River Access Improvements** also have components of bank stabilization and restoration. Additionally, restoration of the riparian woodland would be accomplished between the extended paved loop trail and the river in an area approximately 550-feet long by 10-feet wide through planting of 40 trees and 600 shrubs and groundcover.

Interpretive Signage

Interpretive signs would be erected highlighting the natural resources at HLP and recreation practices for minimizing impacts to the environment. These signs would encourage stewardship among the many types of park users to inspire stewardship, and preservation of the natural qualities that all park users enjoy. Anticipated interpretive signage areas would include wetland mitigation area, adjacent to trails, at river access points, near parking areas, and group picnic areas. Signs would typically be mounted on posts set in concrete, or decorative bases set on concrete.

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4.0 INITIAL STUDY CHECKLIST

4.1 AESTHETICS

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings along a scenic highway?	☐	☐	☐	☒
c. Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐
d. Create a new source of substantial light or glare which would adversely affect daytime or nighttime views in the area?	☐	☐	☐	☒

Impact Analysis

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

Less Than Significant Impact. Development of the Proposed Project would involve land acquisition, new park facilities, construction of park trails, and natural resource improvements. There are no designated scenic routes, vistas, or resources listed in the *El Dorado County General Plan* (County of El Dorado 2004a). However, some of the guidelines and policies outlined in the General Plan are relevant to the Proposed Project. Goal 7.6 and Policy 7.6.1.1(c) in the *Conservation and Open Space Element* states that open space is for the enjoyment of scenic beauty and recreation; and that the County of El Dorado shall maintain areas of importance for outdoor recreation with outstanding scenic views (County of El Dorado 2004a). Goal 7.6 and Policy 7.6.1.1(c) state:

Goal 7.6: Conserve open space land for the continuation of the County's rural character, commercial agriculture, forestry, and other productive uses, the enjoyment of scenic beauty and recreation, the protection of natural resources, for protection from natural hazards, and for wildlife habitat.

Objective 7.6.1: Importance of Open Space

> **Policy 7.6.1.1(c)** Maintaining areas of importance for outdoor recreation including areas of outstanding scenic, historic, and cultural value; areas particularly suited for park and recreation purposes including those providing access to lake shores, beaches and rivers and streams; and areas which serve as links between major recreation and open space reservations including utility easements, banks of rivers and streams, trails and scenic highway corridors.

Development of the Proposed Project would facilitate opportunities for public observation of open space and would not disrupt any scenic vistas for the following improvements:

New Picnic Tables and Benches

New picnic tables and benches associated with improvements of the new group picnic area, new shade shelters, new site furnishings, and river access improvements would modify the existing undeveloped character within areas of HLP and would also provide park users with additional seating to observe views of the South Fork of the American River and surrounding landscape.

New Trails and Improvements to Existing Trails

New and formalized trails associated with improvements for the development of the connector trail to Highway 49, river access improvements, wetland boardwalk trail system, downstream park trails, and river bank stabilization and restoration would provide park users with outdoor recreation and expanded walking opportunities within HLP.

Interpretive Signage

Interpretive signs would be erected around the park highlighting the natural resources at HLP. Highlighting natural resources would direct park users to the scenic views within HLP allowing them to enjoy and learn about the surrounding landscape.

Monroe Ridge Trailhead

The proposed development of the Monroe Ridge Trailhead would introduce trailhead improvements including signage, trash cans, dog waste dispensers, and recycling bins.

Proposed Improvements with No Impact

It is anticipated that the following proposed improvement would have no impact to scenic vistas: easement for the trail connection to Highway 49.

Development of the Proposed Project would involve the construction of a variety of recreational improvements facilitating visitor access, as well as amenities for visitor use while they are in the park, which would result in minor impacts to the existing visual setting. However, none of the proposed improvements would impact a scenic vista at HLP. Therefore, impacts resulting from development of the Proposed Project are considered **less than significant**.

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

No Impact. The only designated state scenic highway in El Dorado County is U.S 50 from west of Placerville to Tahoe. The Proposed Project is not within the viewshed of that designated portion of U.S. 50. Development of the Proposed Project would therefore have **no impact** on any scenic highway.

c. Substantially degrade the existing visual character or quality of the site and its surroundings?

Less Than Significant Impact. Development of the Proposed Project would result in 11 individual categories of proposed park improvements. The following improvements would alter the existing visual character of the Project Site:

New Group Picnic Area

A new group picnic area would be constructed northeast of the existing turf area on the north side of Lotus Road. The picnic area would include multiple accessible tables, shade structures, trash cans, barbecues, drinking fountains, and a prefabricated restroom. The location of the new group picnic area would be on an area in the park that is barren of vegetation. The shade structures and picnic benches would be similar in size and design to the existing tables and shelters, maintaining the character of the

park. The new picnic area would also provide an additional area for park users to enjoy the scenic view of the South Fork of the American River, remaining consistent with Policy 7.6.1.1(c) of the General Plan.

New Site Furnishings

Additional benches, trash cans, recycling bins, and drinking fountains would be installed at various locations within the park to better accommodate the needs of park users. These new furnishings would maintain the visual character and quality of the park through strategic placement throughout the park, as further described by improvement category below.

New Shade Shelters

Several new shade shelters with accessible picnic tables would be added to the existing picnic area near the beach and main parking lot. These new shade shelters and picnic tables would be similar in size and design to the existing tables and shelters maintaining the existing character of HLP. The additional seating from picnic benches would provide an opportunity for more park users to enjoy the scenic view of the South Fork of the American River, remaining consistent with Policy 7.6.1.1(c) of the General Plan.

Development of Connector Trail to Highway 49

Approximately ½-mile of existing informal trail that connects the existing park to the bridge at Highway 49 would be improved to provide safer access to and from the park and to protect the river from associated sedimentation. Formalization of this segment of the trail would maintain the existing character and quality of the park by using appropriately sized boulders to stabilized slopes, following the existing informal trail as much as possible to limit impacts to vegetation, and remaining unpaved.

River Access Improvements

At 10 currently existing locations where park users have established informal trails from the parks edge down to the river, formalized access paths would be created. River access improvements would be stabilized with boulders and cobbles to maintain the natural character of the park. Additionally, some of the heavier traffick-ed and degraded areas, such as Site G, would incorporate planting native riparian vegetation.

Wetland Boardwalk Trail System

The wetland boardwalk trail system would consist of a system of unpaved trails constructed through the wetland mitigation area at the southwest corner of HLP. Elevated boardwalks would be used to keep hikers out of the wetland areas and existing informal trail alignments would be followed to minimize impacts to vegetation. These design features would maintain the quality of HLP having a minimal impact on the wetland area and remain consistent with Policy 7.6.1.1(c) of the General Plan to provide recreation in areas of outdoor scenic beauty.

Downstream Park Trails

Several informal trails currently exist in the downstream section of the park and approximately ½-mile of existing informal trail would be formalized to expand walking opportunities in HLP. The trails would remain unpaved and would be rerouted to avoid trees and shrubs. The formalized trails would reduce impacts to vegetation from informal trailblazing and maintain the quality of HLP, remaining consistent with Policy 7.6.1.1(c) of the General Plan to provide recreation in areas of outdoor scenic beauty.

River Bank Stabilization and Restoration

Six locations along approximately ½-mile of riverbank would be stabilized to remediate existing erosion problem areas. Restoration would include native rock and replanting of riparian vegetation to maintain

the visual character of the site. The riparian woodland would also be restored with planting of 40 trees and 600 shrubs and groundcover.

Interpretive Signage

Interpretive signs would be placed around HLP highlighting natural resources and promoting stewardship. These signs would be strategically placed along trails and near picnic areas. The strategic sign placement would prevent distraction from the visual quality of the Project Site.

Monroe Ridge Trailhead

The proposed development of the Monroe Ridge Trailhead would introduce trailhead improvements including signage, trash cans, dog waste dispensers, and recycling bins.

Proposed Improvements with No Impact

It is anticipated that the following proposed improvements would not degrade the existing visual character or quality of HLP: easement for connector trail to Highway 49.

Implementation of proposed improvements would not substantially degrade the existing visual character or quality of the Project Site and its surroundings and impacts resulting from implementation of the Proposed Project are therefore considered **less than significant**.

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

No Impact. The proposed improvements would not include any new source of substantial light or glare. HLP would maintain its current hours open seven days a week from 8:00 A.M. until dusk, and park users would not be permitted in the park during nighttime hours. Since no residential areas or scenic vistas are nearby, light sources from recreational uses would not be expected to adversely affect nighttime views. Therefore, there would be **no impact**.

Mitigation Measures

No mitigation is warranted.

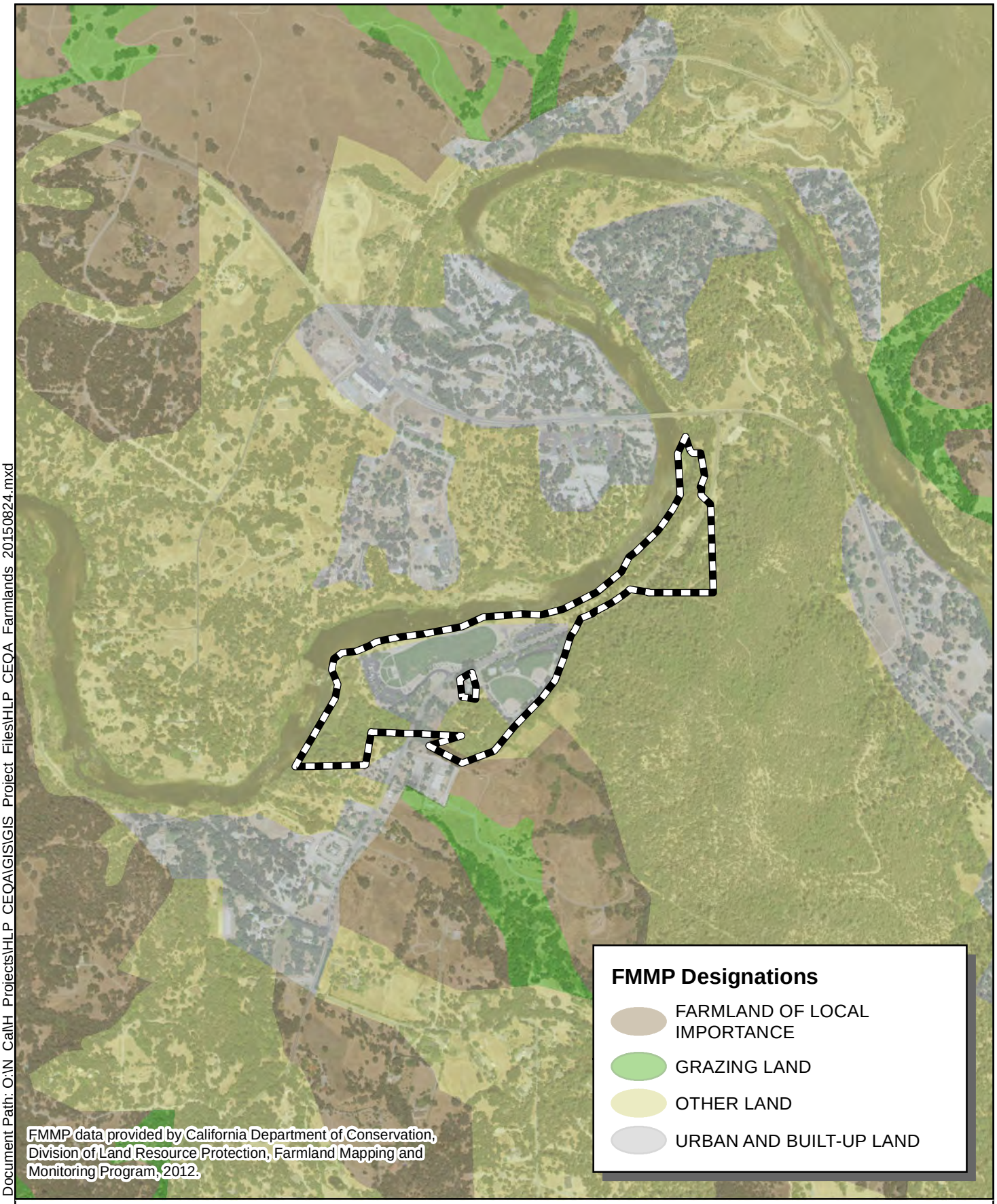
4.2 AGRICULTURE AND FOREST RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b. Conflict with existing zoning for agricultural use or conflict with 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 that, due to their location or nature, could result in conversion of Farmland to non-agricultural use?	☐	☐	☐	☒

Impact Analysis

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 Division of Land Resource Protection of the California Department of Conservation has developed the Farmland Mapping and Monitoring Program (FMMP) which monitors the conversion of the State's farmland to and from agricultural use. Data is collected at the county level to produce a series of maps identifying eight land use classifications using a minimum mapping unit of 10 acres. According to the 2010 FMMP data, the boundaries of HLP include land categorized as Other Land and; Urban and Built-Up Land (**Figure 4.2-1**). The residential parcel (Assessor Parcel Number: 006-341-1810) that would be acquired for a trail easement and trail development to Highway 49 is categorized as Urban and Built-Up Land (**Figure 4.2-1**).



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HENNINGSEN LOTUS PARK FARMLAND

FOOTHILL ASSOCIATES
ENVIRONMENTAL CONSULTING • PLANNING • LANDSCAPE ARCHITECTURE

N

0 500 1,000
Feet
1 inch = 1,000 feet

Drawn By: MUB
Date: 03/01/2016

FIGURE 4.2-1

No farmland mapped by the FMMP is present within the Project Site, and no grazing or any other active agricultural practices are currently taking place within the park boundaries or on the property that would contain the connector trail to Highway 49. Therefore, **no impact** would result from development of the Proposed Project and no mitigation is required.

b. Conflict with existing zoning for agricultural use or conflict with a Williamson Act contract?

No Impact. Land within the Project Site is mapped by the FMMP as Urban and Built-Up Land and Other Land (**Figure 4.2-1**) and zoned by County of El Dorado Zoning Code as Residential, and Municipal Services Center (**Figure 3.2-3**). The acquisition of the easement for the trail connection to Highway 49, however, is not within the boundaries of HLP.

Easement and Development for Trail Connection to Highway 49

The proposed trail easement and development of the trail to Highway 49 would improve access and circulation within the park from the northern park boundary to Highway 49. The property on which the easement and trail would be established is zoned as Residential (Assessor Parcel Number: 006-341-1810). The County of El Dorado has several zoning designations for agriculture in the Zoning Ordinances but designates land under Williamson Act contract as an agricultural preserve. The easement and proposed development of the trail connection to Highway 49 would therefore, not result in any conflict with existing zoning for agricultural use or with a Williamson Act contract.

Proposed Improvements with No Impact

It is anticipated that the following proposed improvements would have no impact on zoning for agricultural use: new group picnic facility, new site furnishings, new shade shelters, river access improvements, Monroe Ridge Trailhead, wetland boardwalk trail system, downstream park trails, river bank stabilization and restoration, and interpretive signage.

Development of Proposed Project would not impact agricultural land or any agricultural zoned land or land currently under the Williamson Act. **No impact** would result from project development.

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 section4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

No Impact. The Project Site contains some areas of mixed oak woodland and riparian woodland, but is not zoned as Forest Land or Timberland Preserve (**Figure 3.2-3**). The Proposed Project would implement improvements involving land acquisition, new park facilities, construction of park trails, and natural resources. Implementation of these proposed improvements would not conflict with zoning within the park. The acquisition of the easement for the trail connection to Highway 49, however, is not within the boundaries of HLP.

Easement and Development for Trail Connection to Highway 49

The proposed trail easement and development of the trail to Highway 49 would improve access and circulation within the park from the northern park boundary to Highway 49. The property on which the easement and trail would be established contains mixed oak woodland near the proposed trail alignment. This property (Assessor Parcel Number: 006-341-1810) is zoned as Residential, not Forest Land or Timberland Preserve. The easement and proposed trail would therefore, not result in any conflict with existing zoning for forests or timberland.

Proposed Improvements with No Impact

It is anticipated that the following proposed improvements would not conflict with zoning for forest land or timberland: new group picnic facility, new site furnishings, new shade shelters, development for river

access improvements, Monroe Ridge Trailhead, wetland boardwalk trail system, downstream park trails, river bank stabilization and restoration, and interpretive signage.

The Project Site would not impact any 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 zoned Timberland Production (as defined by Government Code Section 51104(g)). Therefore, **no impact** would result from development of the Proposed Project.

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

No Impact. The Project Site, as well as the property on which the trail easement would be established (*subsection c*), have no designation as forest land and are not located within the Eldorado National Forest. The Proposed Project would therefore, not involve the loss of any forest land resulting from implementation of the 11 proposed improvements. There would be no land converted to non-forest use or loss of forest, and therefore, **no impact** would result from development of the Proposed Project.

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

No Impact. The majority of proposed improvements would be located within HLP and there would be no changes to the environment that would result in the conversion of Farmland. The proposed acquisition of the trail easement and development of the trail to Highway 49 would not impact Farmland (*see subsection b*).

Proposed Improvements with No Impact

It is anticipated that the following proposed improvements would not involve changes in the existing environment that could result in the conversing of Farmland to non-agricultural use: new group picnic facility, new site furnishings, new shade shelters, river access improvements, Monroe Ridge Trailhead, wetland boardwalk trail system, downstream park trails, river bank stabilization and restoration, and interpretive signage.

No farmland occurs in the project vicinity and development of the Proposed Project would not result in conversion of farmland to non-agricultural use. Therefore, **no impact** would result from development of the Proposed Project.

Mitigation Measures

No mitigation is warranted.

4.3 AIR QUALITY

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒
b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☒	☐	☐
c. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is a non-attainment area for an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?	☐	☐	☒	☐
d. Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
e. Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐

Impact Analysis

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

No Impact. Implementation of the Proposed Project would not conflict with or obstruct implementation of any applicable air quality plan. Proposed improvements include consistency with the goals and policies identified by the *El Dorado County General Plan* pertaining to sustainability and overall strategy for air quality.

El Dorado County General Plan, Health and Safety Element identifies the following goals and policies applicable to Air Quality and relevant to the Proposed Project:

Goal 6.7: A. Strive to achieve and maintain ambient air quality standards established by the U.S. Environmental Protection Agency and California Air Resources Board.

B. Minimize public exposure to toxic or hazardous air pollutants and air pollutants that create unpleasant odors.

Objective 6.7.6: Air Pollution-Sensitive Land Uses

Policy 6.7.6.1 Ensure that new facilities in which sensitive receptors are located (e.g., schools, child care centers, playgrounds, retirement homes, and hospitals) are sited away from significant sources of air pollution.

Policy 6.7.6.2 New facilities in which sensitive receptors are located (e.g. residential subdivisions, schools, childcare centers, playgrounds, retirement homes, and hospitals) shall be sited away from significant sources of air pollution.

Objective 6.7.7: Construction Related, Short-Term Emissions

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 (AQMD) *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. The County shall encourage actions (e.g., use of light-colored roofs and retention of trees) to help mitigate heat island effects on air quality.

Construction and operation of the proposed improvements would be implemented consistent with applicable regulatory standards and requirements, including consistency with all El Dorado County Air Quality Management (EDCAQMD) rules and standards. Therefore, **no impact** is anticipated and no mitigation is required.

b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Less Than Significant with Mitigation Incorporated. The Proposed Project is located within the Mountain Counties Air Basin (MCAB). The MCAB includes the western slope of El Dorado County, from Lake Tahoe on the east to the Sacramento County boundary on the west. The prevailing wind is southwesterly and air pollution generally moves west to east through the air basin.

Air quality in the County is regulated by the El Dorado County Air Quality Management District. The EDCAQMD regulates air quality through the federal and State Clean Air Acts, district rules, and its permit authority. Air quality concerns in western El Dorado County include the most common pollutants including ozone, particulate matter from dust and diesel exhaust, and state defined Toxic Air Contaminants (TACs). One TAC of concern in the County is naturally occurring asbestos. Naturally Occurring Asbestos (NOA) is a concern in El Dorado County because it is present in certain soils and can be a health risk if released into the air. The EDCAQMD has adopted an El Dorado County Naturally Occurring Asbestos Review Area Map identifying areas most likely to contain NOA. The Project Site is not located in an area identified by the map as containing NOA (County of El Dorado 2005).

El Dorado County is in "non-attainment" for both federal and State ozone standards and for the State PM_{10} standard. The County is in "attainment" or unclassified status for all other pollutants (California Air Resources Board 2013). The El Dorado County AQMD developed a *Guide to Air Quality Assessment* in 2002 identifying specific daily emissions thresholds based on the national and State standards. These thresholds were established to guide CEQA evaluation and are the national and State ambient air quality standards. The project would have the potential to result in significant effects to air quality if project emissions exceed the pollutant thresholds in **Table 4.3-1** for applicable national or State ambient air quality standards. The thresholds are used for all pollutants other than reactive organic gasses (ROG) and oxides of nitrogen (NO_x). The significance criteria of ozone are: 82 pounds for day for both ROG and NO_x.

Table 4.3-1 — Ambient Air Quality Standards for EDCAQMD

Pollutant	Unit of Measure	California	National
Ozone	1-Hour 8- Hour	0.09 ppm N/A	0.12 ppm 0.08 ppm
Carbon Monoxide	1-Hour 8- Hour	20.0 ppm 9.0 ppm	35.0 ppm 9.0 ppm
Nitrogen Dioxide	1-Hour Annual	0.25 ppm N/A	N/A 0.53 ppm
Sulfur Dioxide	1-Hour 24-Hour Annual	0.25 ppm 0.04 ppm N/A	N/A 0.14 ppm 0.03 ppm
Respirable Particulates (PM_{10})	24-Hour Annual Average[1]	50 µg/m^3 30 µg/m^3	150 µg/m^3 50 µg/m^3
Fine Particulate Matter ($PM_{2.5}$)	24-Hour Annual Average[1]	N/A N/A	65 µg/m^3 15 µg/m^3
Sulfates	24-Hour	25 µg/m^3	N/A
Lead	30-Day Average Calendar Quarter	1.5 µg/m^3 N/A	N/A 1.5 µg/m^3
Hydrogen Sulfide	1-Hour	0.03 ppm	N/A
Vinyl Chloride	24-Hour	0.010 ppm	N/A
Visibility Reducing Particles	1-Observation	Visibility > 10 Miles with relative humidity <70%	N/A

The County has a list of rules for air quality attainment and the EDCAQMD *Guide to Air Quality Assessment* to regulate air quality, but it is also included in California Air Resources Board Sacramento Region Attainment Plans because the Sacramento Metropolitan Air Quality Management District (SMAQMD) includes the MCAB. The SMAQMD prepared the 1991 *Air Quality Attainment Plan* (AQAP) as required by the California Clean Air Act of 1988. The AQAP has adopted regulations and programs to minimize pollutant emissions. The County of El Dorado, as Lead Agency, utilizes the EDCAQMD's recommended project-level criteria air pollutant thresholds of significance for CEQA evaluation purposes. Thus, if the Proposed Project's emissions exceed the pollutant thresholds presented in **Table 4.3-1**, the project would have the potential to result in significant effects to air quality, and affect the attainment of federal and State Ambient Air Quality Standards.

Construction Emissions

During construction of proposed improvements, various standard types of equipment and vehicles would be used to implement construction activities. Construction exhaust emissions would be generated from construction equipment, earth movement activities, construction worker commutes, and construction material hauling during the construction work window. The aforementioned activities would involve the

[1] The State PM_{10} annual standard is for geometric mean of all measurements. The national PM10 and $PM_{2.5}$ annual average standards are based upon the arithmetic mean of all measurements; ppm=parts per million. µg/m^3 = micrograms per cubic meter. The NAAQS shown serve as both primary (health-related) and secondary (welfare-related) standards, except that for SO_2 the standards shown are the primary NAAQS; there is also a separate secondary NAAQS for SO_2 of 0.5 ppm. Implementation of the 8-hour NAAQS for ozone and the NAAQA for fine particulate has delayed by litigation and is pending further implementation guidance from the federal court and EPA. SOURCE: California Air Resources Board and ECAQMD CEQA Guidelines.

use of diesel- and gasoline-powered equipment that would generate emissions of criteria pollutants. Construction equipment for the Proposed Project includes but is not limited to: dozer, bobcat, excavator, and dump truck. Project construction activities also represent sources of fugitive dust, which includes PM emissions. As construction of proposed park improvements would generate air pollutant emissions intermittently over the next ten years until all construction has been completed, it is not anticipated that implementation of the Proposed Project would result in emissions exceeding EDCAQMD established thresholds. However, construction-related activities remain of potential concern due to the fact that the County is currently designated as "non-attainment" for ozone and PM_{10} standards.

Operational Emissions

Operational emissions of ROG, NO_X, $PM_{2.5}$, and PM_{10} are generated by mobile and stationary sources, including day-to-day activities such as vehicle trips to and from a given site, heavy equipment operation, natural gas combustion from heating mechanisms, landscape maintenance equipment exhaust, and consumer products (e.g., deodorants, cleaning products, spray paint, etc.). Implementation of the Proposed Project is not anticipated to result in a substantial increase in vehicle trips, nor would proposed improvements significantly modify the existing land use or operations within the park. Implementation of the Proposed Project would not involve mobile, stationary, or area sources and new operational emissions would therefore not occur.

All trails within the Proposed Project would comply with the County of El Dorado transportation policies outlined in the *El Dorado County General Plan*. The Proposed Project aligns with Goal TC-4 of the *El Dorado County General Plan, Circulation Element* to promote alternative modes of transportation that are safe, continuous, and easily accessible for non-motorized transportation by developing the trail within the park that would connect with Highway 49 for pedestrian park access and trails that connect with Lotus Road (County of El Dorado 2004a).

Conclusion

Implementation of the Proposed Project is not anticipated to exceed the current applicable thresholds of significance for air pollutant emissions operation. However, due to the fact that proposed improvements would be constructed over a ten-year timeframe, it is impossible to anticipate future regulatory thresholds and analyze potential construction-related impacts for individual projects. Therefore, implementation of the Proposed Project would result in **less than significant with mitigation incorporated** construction-related impacts related to air quality. Implementation of **Mitigation Measure AQ – 1** would reduce potential impacts to less than significant levels.

c. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is a non- attainment area for an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?

Less Than Significant Impact. El Dorado County is currently designated as "non-attainment" for ozone and PM_{10}. Projected growth and combined population, vehicle usage, and business activity within the County, in combination with other past, present, and reasonably foreseeable projects within the County and surrounding areas, could either delay attainment of established standards or require the adoption of additional controls on existing and future air pollution sources to offset emission increases.

Implementation of the Proposed Project would involve minimal emissions during construction, as proposed improvements would not require frequent maintenance, substantial increases in long-term operational emissions are not anticipated. Construction emissions would be short-term in duration, and would be implemented intermittently throughout a ten-year timeframe. Accordingly, the incremental contribution of the Proposed Project's construction-related emissions would not be considered cumulatively considerable. Therefore, impacts from the Proposed Project are considered **less than significant**, cumulatively. No mitigation is required.

d. Expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant Impact. Development of the Proposed Project would involve on-site operations of recreational use by pedestrians. Emissions of diesel particulate matter (DPM) resulting from construction-related equipment and vehicles would be temporary and intermittent. Sensitive receptors, including any residents within the residential parcel within HLP, would not be exposed to substantial long-term concentrations of DPM emissions associated with construction of the Proposed Project.

Implementation of the Proposed Project would not introduce any sensitive receptors to the area, and thus, would not expose new sources of sensitive receptors to any existing sources of substantial pollutant concentrations.

The California Air Resource Board promulgated two Airborne Toxic Control Measures (ATCMs) for naturally occurring asbestos, including the Asbestos ATCM for Construction, Grading, Quarrying and Surface Mining Operations. The El Dorado County Naturally Occurring Asbestos Review Area Map identifies areas most likely to contain naturally occurring asbestos in El Dorado County. The Project Site is not located in an area identified by the map as containing NOA (El Dorado County 2005).

The Proposed Project would not introduce sensitive receptors to the area and would not generate substantial levels of pollutant concentrations that would affect existing sensitive receptors in the area. Therefore, impacts related to exposing sensitive receptors to substantial pollutant concentrations are considered **less than significant**.

e. Create objectionable odors affecting a substantial number of people?

Less Than Significant Impact. While offensive odors rarely cause any physical harm, they can be unpleasant, leading to considerable distress among members of the public and often result in generating citizen complaints to local governments and air districts. Project-related odor emissions would be limited to times when equipment would be utilized for construction and emissions from equipment may be evident in the immediately surrounding area. Potential impacts would be limited to the construction period, when emissions from equipment may be evident in the immediately surrounding area. These activities would be short-term and would not result in the creation of long-term objectionable odors. Therefore, impacts related to objectionable odors are considered **less than significant**.

Mitigation Measures

Mitigation Measure AQ – 1: Prior to implementation of any proposed future improvements that require a grading permit, the County of El Dorado shall consult with the El Dorado County AQMD. These consultations shall determine if a project-specific air quality analysis and/or GHG analysis for project construction would be required. If a project-specific air quality analysis or GHG analysis is required, the County shall conduct the analysis using the applicable standards in place at the time of development. The methodology may include, but not be limited to: project screening identified by the El Dorado County AQMD, the California Emissions Estimator Model (CalEEMod), Urban Emissions Model (URBEMIS) for air quality, or other methodology identified by El Dorado County AQMD. Should the project-specific analysis estimate that emissions, (including GHG emissions) could exceed thresholds, the project shall incorporate the appropriate level of mitigation measures, which may include additional fugitive dust/particulate matter control as well as the applicable standard construction mitigation measures, or other measures identified to reduce GHG emissions in accordance with the current standards applicable at the time of development.

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4.4 BIOLOGICAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife 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, or regulations, or by the California Department of Fish and Wildlife or U.S. 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, marshes, vernal pools, coastal wetlands, 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?	☐	☐	☐	☒

Impact Analysis

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 Wildlife or U.S. Fish and Wildlife Service?

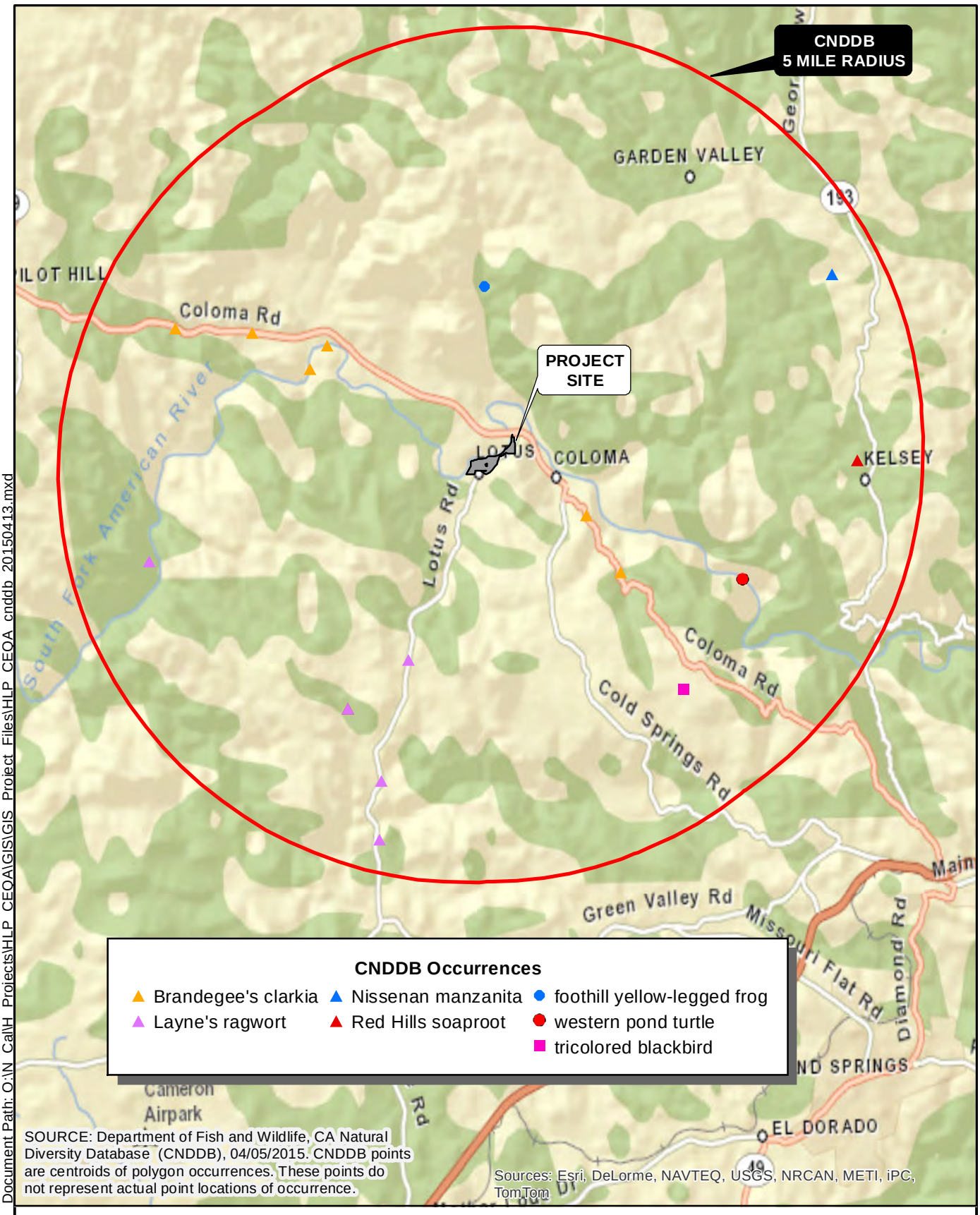
Less Than Significant Impact With Mitigation Incorporated. The Proposed Project would implement 11 components from the Henningsen Lotus Park Concept Plan including land acquisition, new park facilities, construction of parks and trails, and natural resource improvements. A Biological Resources Assessment (BRA) was prepared for the 47-acre Project Site. A table identifying regionally occurring special-status species was compiled based on the California Natural Diversity Database (CNDDB), the U.S. Fish and Wildlife Service (USFWS) Information and Planning Conservation (IPaC), and the California Native Plant Society (CNPS) lists. The CNDDB special-status species occurrences in the project vicinity are shown on **Figure 4.4-1** and are described in detail within the *Biological Resources Assessment* [for the] ±*46.5-Acre Henningsen Lotus Park Improvements Project, El Dorado County, California,* prepared by Foothill Associates March 3, 2016 (**Appendix C**). Biological surveys were conducted to determine whether regionally occurring special-status species occur or have the potential to occur within the Project Site based on the presence of the species or presence of habitat required by the species. The following set of criteria has been used to determine each species potential for occurrence within the Project Site:

Present: Species known to occur within the Project Site based on CNDDB records and/or observed within the Project Site during the biological surveys.

High: Species known to occur on or near the Project Site (based on CNDDB records within five miles and/or based on professional expertise specific to the Project Site or species) and there is suitable habitat within the Project Site.

Low: Species known to occur in the vicinity of the Project Site and there is marginal habitat within the Project Site -**OR**- Species is not known to occur in the vicinity of the site, however, there is suitable habitat on the site.

None: Species is not known to occur on or in the vicinity of the Project Site and there is no suitable habitat within the Project Site -**OR**- Species was surveyed for during the appropriate season with negative results -**OR**- Species is not known in El Dorado County.



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HENNINGSEN LOTUS PARK CNDDB

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0 1 2
SCALE IN MILES

Drawn By: MUB
Date: 04/13/2015

FIGURE 4.4-1

Listed and Special-Status Plants

Brandegee's Clarkia

Brandegee's clarkia (*Clarkia biloba* ssp. *brandegeeae*) is an annual herb often found on roadcuts in chaparral, cismontane woodland, and lower montane coniferous forest from 246 to 3,002 feet (75 to 915 meters) above mean sea level (MSL). There are six CNDDB records for this species within five miles of the Project Site (**Figure 4.4-1**) (CDFW 2015). An estimated 1,000 individuals were observed along roadcuts and hillslopes within approximately 0.53 acres of the mixed oak woodland. This species is *present* within the Project Site.

Listed and Special-Status Wildlife

Western pond turtle (*Emys marmorata*) is the only special-status wildlife species with a *high* potential to occur in the Project Site. The following special-status wildlife species have a *low* potential to occur within the Project Site: coast horned lizard (*Phrynosoma blainvillii*), foothill yellow-legged frog (*Rana boylii*), migratory birds and raptors including northern goshawk (*Accipiter gentilis*) and white-tailed kite (*Elanus leucurus*), and special-status bat species including: Townsend's big-eared bat (*Corynorhinus townsendii*).

Special-status wildlife species with the potential to occur or that were observed within the Project Site are discussed in detail below.

Species with a High Potential to Occur

Western Pond Turtle

Western pond turtles are found in ponds, lakes, rivers, streams, creeks, marshes, and irrigation ditches with suitable basking sites (Californiaherps 2015). Suitable aquatic habitat for western pond turtles typically has a muddy or rocky bottom with emergent aquatic vegetation for cover (Stebbins 2003). Western pond turtles nest and overwinter in areas of sparse vegetation comprised of grassland and forbs with less than ten percent slopes and less than 492 feet (150 meters) from aquatic habitat (Rosenberg *et. al.* 2009). There is one CNDDB record for this species within five miles of the Project Site (**Figure 4.4-1**) (CDFW 2015). The South Fork of the American River on the Project Site provides aquatic habitat and the riparian area provides upland habitat for this species. The seasonal and perennial marshes within the Project Site also provide additional aquatic habitat. No western pond turtles were observed within the Project Site during the biological surveys, however this species has a *high* potential to occur within the Project Site.

Species with a Low Potential to Occur

Coast (California) Horned Lizard

Coast horned lizard inhabits open areas of sandy soil and low vegetation in valleys, foothills, and semiarid mountains from sea level to 8,000 feet above MSL. This species is found in grasslands, coniferous forests, woodlands, and chaparral with open areas and patches of loose soil and in lowlands along sandy washes with scattered shrubs and along dirt roads (Nature Serve 2015). There are no CNDDB occurrences for this species within five miles of the Project Site (CDFW 2015). However, the sandy areas within the mixed oak woodland and chaparral within the Project Site provide habitat for this species. No coast horned lizards were observed during the biological surveys of the Project Site. This species has a *low* potential to occur within the Project Site.

Foothill Yellow-Legged Frog

Foothill yellow-legged frog inhabits permanent slow-moving streams or channels with rocky or muddy bottoms within areas of chaparral, open woodland, and forest. This species has been extirpated from an estimated 66 percent of its range in the foothills of the Sierra Nevada Mountains, especially south of Interstate 80 where it is nearly extinct. They are found in large perennial streams with rocky or bedrock habitat, although they prefer smaller streams (Nature Serve 2015). There is one CNDDB occurrence

within five miles of the Project Site (**Figure 4.4-1**) (CDFW 2015). The occurrence is in Indian Creek, which is tributary to the South Fork of the American River. Although the South Fork of the American River provides marginal habitat, the portion of the river that occurs within or along the western boundary of the Project Site is fast moving with rapids and lacks backwater pools. No foothill yellow-legged frogs were observed during the biological surveys of the Project Site. This species has a *low* potential to occur within the Project Site.

Migratory Birds and Other Birds of Prey

Northern goshawk

Northern goshawk nests in a wide variety of forest types including deciduous and coniferous forests. Northern goshawks generally nest in the largest trees of dense, old, or mature stands with high canopy closure (60 to 95 percent) and sparse groundcover. This species forages in heavily forested and open habitats (Nature Serve 2015). There are no CNDDB records for this species within five miles of the Project Site (CDFW 2015). The mixed oak woodland, however, provides habitat for this species within the Project Site. No northern goshawks were observed during the biological surveys of the Project Site. This species has a *low* potential to occur within the Project Site.

White-tailed kite

White-tailed kite is a year-long resident in coastal and valley lowlands in California. White-tailed kites breed from February to October, peaking from May to August (Zeiner *et. al.* 1990). This species nests near the top of dense oaks, willows, or other large trees. There are no CNDDB records of this species within five miles of the Project Site (CDFW 2015). The trees within the mixed oak woodland, riparian, and Himalayan blackberry scrub, however, provide nesting habitat for this species within the Project Site. No white-tailed kites were observed during the biological surveys of the Project Site. This species has a *low* potential to nest within the Project Site.

Other Bird and Raptors

Migratory birds and other birds of prey are protected under 50 CFR 10 of the Migratory Bird Treaty Act (MBTA) and/or Section §3503.5 of the California Fish and Game Code. Potentially occurring Birds of Conservation Concern include: black-chinned sparrow (*Spizella atrogularis*), Nuttall's woodpecker (*Picoides nuttallii*), oak titmouse (*Baeolophus inornatus*), Williamson's sapsucker (*Sphyrapicus thyroideus*), fox sparrow (*Passerella ilaca*), and Lewis's woodpecker (*Melanerpes lewis*). Migratory birds and other birds of prey have a *high* potential to nest within the Project Site during the nesting season. The generally accepted nesting season is from February 15 through August 31.

Special-Status Bat Species

California is home to several special-status bat species, including Townsend's big-eared bat. Bat numbers are in decline throughout the U.S. due to loss of roosting habitat, habitat conversion, and habitat alteration. There are no CNDDB occurrences for bat species within five miles of the Project Site (CDFW 2015). The buildings within the developed/disturbed areas, however, provide roosting habitat for special-status bats. No bat species were observed roosting during the biological surveys of the Project Site. These species has a low potential to roost within the Project Site.

Conclusion

Several special-status wildlife species have been identified and/or have the potential to occur within the Project Site and would be impacted by the proposed improvements. Implementation of **Mitigation Measure BIO – 1 through Mitigation Measure BIO – 5** would require pre-construction surveys prior to implementation of construction activities ensuring no adverse effects to special-status species. Implementation of these measures would reduce potential impacts to special-status species to a less than significant level. Therefore, impacts to special-status species are considered to be **less than significant impact with mitigation incorporated**.

b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Less Than Significant Impact With Mitigation Incorporated. Sensitive habitats include those that are of special concern to resource agencies or those that are protected under CEQA, Section 1600 of the California Fish and Game Code, or Section 404 of the Clean Water Act. The Project Site includes the following biological communities and resources: mixed oak woodland, riparian, chaparral, South Fork of the American River, Himalayan Blackberry Scrub, disturbed/developed, potential waters of the U.S. (including ephemeral drainage, seasonal marsh, and perennial marsh).

Mixed Oak Woodland

Mixed oak woodland occurs throughout the Project Site (**Figure 4.4-2**). There are approximately 14.55 acres of mixed oak woodland habitat within the Project Site. Dominant vegetation includes: Interior live oak (*Quercus wizlizeni*), California black oak (*Quercus kelloggii*), gray pine (*Pinus sabiniana*), Ponderosa pine (*Pinus ponderosa*), California buckeye (*Aesculus californica*), wall bedstraw (*Galium parisiense*), filaree (*Erodium botrys*), Manzanita (*Arctostaphylos manzanita*), and Brandegee's clarkia.

Riparian

Riparian habitat, a sensitive habitat under the jurisdiction of the California Department of Fish and Wildlife, occurs along the river corridor along the western portion of the Project Site (**Figure 4.4-2**). There are approximately 8.46 acres of riparian habitat on the Project Site. This includes 3.82 acres of the riparian biological community and 4.64 acres of Himalayan blackberry scrub. Dominant vegetation is comprised of a mixture of native and invasive species including: bigleaf periwinkle (*Vinca major*), ripgut grass (*Bromus diandrus*), poison oak (*Toxicodendron diversilobum*), black locust (*Robinia pseudoacacia*), willow (*Salix* sp.), Fremont cottonwood (*Populus fremontii* ssp. *fremontii*), California wild rose (*Rosa californica*), Himalayan blackberry (*Rubus armeniacus*), purpletop (*Verbena bonariensis*), tree of heaven (*Ailanthus altissima*), and California grape (*Vitis californi*a).

Chaparral

Chaparral occurs within the western boundary of the Project Site (**Figure 4.4-2**). Dominant vegetation includes: coyote brush (*Baccharis pilularis*), California poppy (*Eschscholzia californica*), and buckbrush (*Ceanothus cuneatus* var. *cuneatus*).

South Fork of the American River

The South Fork of the American River borders the Project Site on the north and west boundaries (**Figure 4.4-2**). A total of 1.76 acres of the river reside in the Project Site. Dominant vegetation is equivalent to the dominant vegetation of the Riparian community discussed above.

Himalayan Blackberry Scrub

Himalayan blackberry scrub occurs within the southwestern portion of the Project Site (**Figure 4.4-2**). This biological community is comprised of dense thickets of Himalayan blackberry in predominately upland areas that lack hydrophytic soils. This biological community is impenetrable to access aside from a few narrow, manmade trails. Dominant vegetation interspersed throughout the Himalayan blackberry brambles includes: Fremont cottonwood, willow, black locust, Oregon ash (*Fraxinus latifolia*), and California sycamore (*Platanus racemosa*).

Project Boundary
± 46.5 Acres

Brandegee's Clarkia (0.53 Acres)

Biological Communities

- Himalayan Blackberry (4.64 Acres)
- Chaparral (1.07 Acres)
- Mixed Oak Woodland (14.55 Acres)
- Disturbed\Developed (19.51 Acres)
- Riparian (3.82 Acres)
- South Fork American River (1.76 Acres)
- Seasonal Marsh (0.45 Acres)
- Perennial Marsh (0.65 Acres)
- Ephemeral Drainage (0.06 Acres)

Other Features

- Culvert
- Park Boundary

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HENNINGSEN LOTUS PARK
BIOLOGICAL COMMUNITIES AND CONSTRAINTS

N

0 300 600
Feet
1 inch = 300 feet

Drawn By: MUB
Date: 07/24/2015

FIGURE 4.4-2

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Waters of the U.S.

Ephemeral Drainage

Several unnamed ephemeral drainages occur within the Project Site comprising approximately 0.06 acres (**Figure 4.4-2**). Dominant vegetation includes: doveweed (*Croton setigerus*), Northern willow herb (*Epilobium ciliatum)*, and wall bedstraw (*Galium parisiense*).

Seasonal Marsh

Two seasonal marshes occur within the southern portion of the Project Site comprising approximately 0.45 acres (**Figure 4.4-2**). Dominant vegetation includes: narrow-leaved willow (*Salix exigua*) and whiteroot sedge (*Carex barbarae*).

Perennial Marsh

The perennial marsh occurs within the mixed oak woodland adjacent to the southern border of the Project Site comprising approximately 0.65 acres (**Figure 4.4-2**). Dominant vegetation includes: Himalayan blackberry, Fremont cottonwood, and Goodding's black willow (*Salix gooddingii*).

Project Impacts

Development of the proposed connector trail to Highway 49, river access improvements, wetland boardwalk system, downstream park trails, and river bank stabilization and restoration would have the potential to impact sensitive biological communities and/or riparian habitat. Impacts by individual improvement are discussed in detail below.

Development for Connector Trail to Highway 49

The Highway 49 trail connection would be located in mixed oak woodland and riparian habitat. Acquiring the approximately ½-mile easement for the trail would not result in potential adverse impacts to the mixed oak woodland and/or riparian habitat. However, construction of proposed trail improvements would result in impacts to mixed oak woodland and/or riparian habitats.

River Access Improvements

River access improvements would occur on the South Fork of the American River and in riparian habitat. The formalization of existing informal access paths would have the potential to impact the South Fork of the American River and/or riparian habitat during the construction phase of the Proposed Project. The river access improvements, however, would stabilize the bank with native boulders and intentional cobble to direct travel away from sensitive riparian areas and help reduce trail use impacts to sensitive biological communities.

Wetland Boardwalk System

The wetland boardwalk system would be established within areas of mixed oak woodland and seasonal marsh habitat. Construction-related activities for the wetland boardwalk system would have the potential to impact these sensitive biological communities. Once constructed, the elevated boardwalks would establish trail linkage, while avoiding long-term impacts to the seasonal marsh and/or other sensitive habitats, and would minimize impacts to native vegetation.

Downstream Park Trails

Improvements proposed to the downstream park trails would improve existing informal trails and would designate preferred routes limiting impacts on vegetation and sensitive biological communities. Trail design and construction would avoid significant trees and shrubs. However, construction of the downstream park trails would have the potential to impact sensitive biological communities, including seasonal marsh habitat.

River Bank Stabilization and Restoration

River bank stabilization and restoration would occur on the South Fork of the American River and within riparian habitat. These improvements would involve the implementation of bioengineering techniques and design, including use of native rock, for bank stabilization and replanting riparian vegetation. Implementation of these improvements has the potential to impact sensitive biological communities during construction.

Proposed Improvements with No Impact

It is anticipated that the development of the new group picnic area, new site furnishings, new shade shelters, Monroe Ridge Trailhead, and interpretive signage would not impact any sensitive biological communities or riparian habitat.

Conclusion

Project development would result in 11 individual categories of proposed improvements in HLP. Improvements that would potentially impact riparian habitat or any sensitive natural communities include: development of the connector trail to Highway 49, river access improvements, wetland boardwalk trail system, downstream park trails, and river bank stabilization and restoration. Implementation of **Mitigation Measures BIO – 6 through Mitigation Measure BIO – 8** would require that the County of El Dorado obtain all applicable required regulatory authorizations from the U.S. Army Corps of Engineers (Corps), Regional Water Quality Control Board (RWQCB), and the California Department of Fish and Wildlife (CDFW). Therefore, impacts to sensitive natural communities within the Project Site are considered **less than significant with mitigation incorporated**.

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, marshes, vernal pools, coastal wetlands, etc.) through direct removal, filling hydrological interruption, or other means?

Less Than Significant Impact With Mitigation Incorporated. The Project Site contains a total of 2.92 acre of potential federally jurisdictional waters of the United States including seasonal marsh (0.45 acre), perennial marsh (0.65), ephemeral drainage (0.06 acre), and the South Fork of the American River (perennial drainage) (1.76 acre). See *subsection b* above for a more detailed characterization of individual feature classifications. Development of the Proposed Project would involve the construction of river access improvements, a wetland boardwalk trail system, downstream park trails, and riverbank stabilization and restoration projects which would have the potential to impact wetlands and other protected aquatic features.

River Access Improvements

The river access improvements would establish informal trails to the river to limit degradation to the shoreline and erosion into the river. These improvements have the potential to impact wetlands through construction and utilization of access trails.

Wetland Boardwalk Trail System

The wetland boardwalk trail system would consist of a series of unpaved and boardwalk trails through the existing wetland mitigation area. The elevated boardwalks would be used to keep hikers out of wetland areas and prevent the interruption of drainage connections between wetland features to minimize impacts of the wetland mitigation area. Existing informal trails in the wetland mitigation area already exist and the proposed trail alignments would follow the existing trails where feasible. These improvements would impact the wetland mitigation area during the construction phase; however, proposed improvements would reduce long-term impacts to the wetlands

Downstream Park Trails

The downstream park trails have the potential to impact seasonal marsh during construction.

Bank Stabilization and Restoration

Bank stabilization along the river would utilize native rock and other bioengineering methods such as replanting riparian vegetation and slope reinforcement with boulder terraces to minimize impacts to the river. Bank stabilization has the potential to impact wetlands if the bank stabilization locations occur within the ephemeral drainages.

Proposed Improvements with No Impact

It is anticipated that development of the connector trail to Highway 49, new group picnic area, new site furnishings, new shade shelters, the Monroe Ridge Trailhead, and interpretive signage would not impact wetlands because they are not located near any wetlands or other aquatic features.

Conclusion

Potentially jurisdictional wetlands identified in the Project Site include: two seasonal marshes and one perennial marsh. Other waters of the U.S. include ten ephemeral drainages, and one perennial drainage (South Fork of the American River) divided into nine segments. The Proposed Project would impact aquatic resources through river access improvements, a wetland boardwalk trail system, downstream park trails, and river bank stabilization and restoration. Implementation of **Mitigation Measures BIO – 6** and **Mitigation Measure BIO – 7** would require Section 404 Authorization for the fill of any federally jurisdictional waters and would require that a Section 401 Water Quality Certification be obtained from the RWQCB. In addition, a 1600 Streambed Alteration Agreement would be required for impacts to the streamzone. Compliance with these measures would ensure that impacts to federally jurisdictional waters, including wetlands, as well as other aquatic resources are implemented in a manner consistent with current regulatory standards and that impacts are offset through applicable regulatory standards, ensuring no-net-loss of aquatic functions and values. Therefore, impacts to aquatic features are considered **less than significant with mitigation incorporated**.

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. The South Fork of the American River along the western boundary of the Project Site functions as a wildlife corridor that provides upstream and downstream linkages for wildlife. Although wildlife may travel within the South Fork of the American River, Lotus Road, which extends southwest to northeast through the central portion of the Project Site, acts as a barrier for travel between the South Fork of the American River and the mixed oak woodland to the east of the Project Site. Movement of any native resident or migratory fish or wildlife species would not be impacted by the Proposed Project because none of the proposed improvements would interfere with the wildlife corridor within the South Fork of the American River. Therefore, impacts are considered **less than significant** and no mitigation is required.

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

Less Than Significant with Mitigation Incorporated. Oak canopy occurs within the approximately 14.55 acres of mixed oak woodland within the Project Site. The *El Dorado County General Plan, Conservation and Open Space Element* regulates impacts to tree canopy under General Plan Policy 7.4.4.4. This policy set forth percentages of on-site canopy retention requirements for development projects until the County developed a County-wide strategy. In 2008, the County adopted the *El Dorado County Oak Woodland Management Plan* (OWMP) to implement these General Plan oak woodland

protection policies. The County's adoption of the OWMP was challenged in court. In 2012, the Appellate Court upheld the CEQA challenge to the OWMP and directed the County to prepare an Environmental Impact Report for the OWMP. Currently, a General Plan amendment is being prepared to clarify and refine the County's oak tree protection policies.

As a result, only Option "A" of Policy 7.4.4.4 is applicable to oak woodland mitigation. Impacts to oak woodland canopy are currently assessed under the *Interim Interpretive Guidelines* amended October 12, 2007.

> **Policy 7.4.4.4** For all new development projects (not including agricultural cultivation and actions pursuant to an approved Fire Safe Plan necessary to protect existing structures, both of which are exempt from this policy) that would result in soil disturbance on parcels that (1) are over an acre and have at least 1 percent total canopy cover or (2) are less than an acre and have at least 10 percent total canopy cover by woodlands habitats as defined in this General Plan and determined from base line aerial photography or by site survey performed by a qualified biologist or licensed arborist, the County shall require one of two mitigation options: (1) the project applicant shall adhere to the tree canopy retention and replacement standards described below; or (2) the project applicant shall contribute to the County's *Integrated Natural Resources Management Plan* (INRMP) conservation fund described in Policy 7.4.2.8.
>
> **Option A**
> The County shall apply the following tree canopy retention standards:

Percent Existing Canopy Cover	Canopy Cover to be Retained
80–100	60% of existing canopy
60–79	70% of existing canopy
40–59	80% of existing canopy
20–39	85% of existing canopy
10-19	90% of existing canopy
1-9 for parcels > 1 acre	90% of existing canopy

> Under Option A, the project applicant shall also replace woodland habitat removed at 1:1 ratio. Impacts on woodland habitat and mitigation requirements shall be addressed in a Biological Resources Study and Important Habitat Mitigation Plan as described in Policy 7.4.2.8. Woodland replacement shall be based on a formula, developed by the County, that accounts for the number of trees and acreage affected.

The *El Dorado County General Plan, Conservation and Open Space Element* also protects wetlands under Objective 7.3.3. Policy 7.3.3.4 outlines specific buffers and special setbacks for the protection of wetlands and riparian areas. Exceptions to the riparian and wetland buffers and setbacks outlined in the General Plan can be permitted if the County exempts a project and Best Management Practices are incorporated into the project.

Development of the wetland boardwalk trail system and development for the connector trail to Highway 49 would potentially impact oak woodland. See *subsection b* for discussion of proposed improvement impacts on oak woodland. Development of river access improvements, wetland boardwalk trail system, downstream park trails, and bank stabilization and restoration would potentially impact wetlands. See *subsection c* for discussion of proposed improvement impacts on wetlands and riparian communities.

Proposed Improvements with No Impact

It is anticipated that the following proposed improvements would have no conflict with any local policies or ordinances related to biological resources: easement for trail connection to Highway 49, new group picnic facility, new site furnishings, new shade shelters, Monroe Ridge Trailhead, and interpretive signage.

Conclusion

The Proposed Project has the potential to impact mixed oak woodland and riparian communities through the implementation of proposed river access improvements, connector trail to Highway 49, wetland boardwalk trail system, downstream park trails, and river bank stabilization and restoration. **Mitigation Measures BIO – 8** would ensure development of the Proposed Project would be implemented in a manner consistent with local policies and ordinances protecting biological resources. Therefore, impacts are considered **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. Although the County of El Dorado is in the process of approving the *Integrated Natural Resource Management Plan*, currently there are no habitat conservation plans, natural community conservation plans, or local, regional, or State habitat conservation plans in El Dorado County. Therefore, **no impact** would result from development of the Proposed Project and no mitigation is required.

Mitigation Measures

Mitigation Measures BIO – 1 through BIO – 9 are identified by the analyses within this IS/MND to reduce potential impacts related to biological resources to less than significant levels:

Mitigation Measure BIO – 1: If construction is proposed during the nesting season for non-raptor migratory birds (February 1 through August 15), a pre-construction survey shall be conducted by a qualified biologist within 15 days of the start of project-related activities. If nests of migratory birds are detected onsite, or within 100 feet of the Project Site, the County shall consult with CDFW to determine the size of a suitable buffer in which no new site disturbance is permitted until August 15, or until the qualified biologist determines that the young are foraging independently, or the nest has been abandoned.

Mitigation Measure BIO – 2: Vegetation clearing operations, including pruning or removal of trees and shrubs, shall be completed between September 1 and January 31, if feasible, to avoid migratory birds protected under 50 CFR 10 of the MBTA and/or Section 3503 of the California Fish and Game Code. If construction is proposed during the raptor breeding season (March 1 through August 31), a pre-construction raptor nest survey shall be conducted within 30 days prior to beginning of construction activities by a qualified biologist. If no active nests are found during the pre-construction survey, no further mitigation is required. If active nests are found, a quarter-mile (1,320 feet) initial temporary nest disturbance buffer area shall be established. If project-related activities within the temporary nest disturbance buffer are determined to be necessary during the nesting season (approximately March 1 through August 31), then an onsite biologist/monitor experienced with raptor behavior shall be retained by the County to monitor the nest, and shall along with the County, consult with the CDFW to determine the best course of action necessary to avoid nest abandonment or take of individuals. Work may

be allowed to proceed within the temporary nest disturbance buffer if raptors are not exhibiting agitated behavior. The designated onsite biologist/monitor shall be onsite daily or less if approved by CDFW while construction-related activities are taking place and shall have the authority to stop work if raptors are exhibiting agitated behavior.

Mitigation Measure BIO – 3: A qualified biologist shall conduct a pre-construction survey for western pond turtle within 14 days prior to the start of ground disturbance within 500 feet of the river and the marshes. If no western pond turtles are observed, then a letter report documenting the results of the survey shall be provided to the County for their records, and no additional measures are recommended. If construction does not commence within 14 days of the pre-construction survey, or halts for more than 14 days, a new survey is required.

If western pond turtles are found, additional avoidance measures are required including having a qualified biologist conduct a pre-construction survey within 24 hours prior to commencement of construction activities, performing a worker awareness training to all construction workers, and being present on the Project Site during any grading activities within 500 feet of the river and marshes for the purpose of relocating any western pond turtles found within the construction footprint to suitable habitat away from the construction zone, but within the Project Site.

Mitigation Measure BIO – 4: A qualified biologist shall conduct a pre-construction survey within 14 days prior to the start of construction activities for the coast horned lizard. If no coast horned lizards are observed, a letter report documenting the results of the survey shall be submitted to the County for their records, and no addition measures are recommended. If construction does not commence within 14 days of the pre-construction survey, or halts for more than 14 days, a new survey is required.

If coast horned lizards are found, additional avoidance measures are required including having a qualified biologist conduct a pre-construction survey within 24 hours prior to commencement of construction activities, performing a worker awareness training to all construction workers, and being present within the Project Site during grading activities within the mixed oak woodland and chaparral habitat for the purpose of relocating any coast horned lizards found within the construction footprint to suitable habitat away from the construction zone, but within the Project Site.

Mitigation Measure BIO – 5: A qualified biologist shall conduct a pre-construction survey for foothill yellow-legged frog within 14 days prior to the start of ground disturbance activities within 500 feet of the South Fork of the American River. If no foothill yellow-legged frogs are observed, then a letter report documenting the results of the survey shall be provided to the County for their records, and no additional measures are recommended. If construction does not commence within 14 days of the pre-construction survey, or halts for more than 14 days, a new survey is required.

If foothill yellow-legged frogs are found, additional avoidance measures are required including having a qualified biologist conduct a pre-construction survey within 24 hours prior to commencement of construction activities, performing a worker awareness training to all construction workers, and being present within the Project Site during

grading activities within 500 feet of the river for the purpose of relocating any foothill yellow-legged frogs found within the construction footprint to suitable habitat away from the construction zone, but within the Project Site.

Mitigation Measure BIO – 6: For any permanent or temporary placement of fill into jurisdictional waters of the U.S., authorization under Section 404 of the federal Clean Water Act Permit shall be obtained from the Corps and a Section 401 Water Quality Certification shall be obtained from the RWQCB prior to the issuance of a Grading Permit. Any waters of the U.S. or jurisdictional wetlands that would be lost or disturbed shall be replaced or rehabilitated on a "no-net-loss" basis in accordance with the Corps mitigation guidelines. Habitat restoration, rehabilitation, and/or replacement shall be at a location and by methods agreeable to the Corps and RWQCB.

Mitigation Measure BIO – 7: If it is determined that project development would affect the bed, bank, or associated riparian vegetation of the South Fork of the American River or the ephemeral drainages, a Streambed Alteration Agreement shall be entered into with the CDFW pursuant to §1600 of the California Fish and Game Codes prior to the issuance of a Grading or Building Permit by El Dorado County. If required, the County shall coordinate with CDFW in developing mitigation appropriate for potential impacts to riparian and/or wetland impacts and shall abide by the conditions of any executed agreement.

Mitigation Measure BIO – 8: If the removal of oak trees is anticipated to occur, an Arborist Survey and Arborist Report shall be prepared for the Project Site by an International Society of Arboriculture (ISA)-Certified Arborist to determine any mitigation that may be required to maintain consistency with the *El Dorado County Oak Woodland Management Plan*, which sets forth guidance on Policy 7.4.4.4 of the *El Dorado County General Plan*.

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4.5 CULTURAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	☐	☐	☐	☒
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	☐	☒	☐	☐
c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐
d. Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐

Impact Analysis

a. Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?

No Impact. Registered Professional Archaeologist Ric Windmiller, M.A., and Paleontologist Kenneth Finger, Ph.D., prepared the July 2015 *Henningsen Lotus Park Concept Plan Cultural Resources Assessment, Lotus, El Dorado County, California* (Cultural Assessment Report). The Cultural Assessment Report was prepared to identify and evaluate cultural resources within Henningsen Lotus Park (Project Site), and consisted of a records search by the Northern Central Information Center, California Historical Resource Information System; a paleontological database search; a Native American Heritage commission sacred lands file search; contact with Native Americans listed by the native American Heritage commission; literature review/historical research and an archaeological field survey.

As summarized below in **Table 4.5-1**, the field team documented two features within the Project Site.

Table 4.5-1 — Cultural Resources Identified within Henningsen Lotus Park and California Register Eligibility

Reference Number	Description	California Register Eligibility (Yes/No)
HLP-1	Placer Mine Tailings	No
HLP-2	Dirt Road Segment – Connects residential parcel to Lotus Road	No

HLP-1: A massive field of placer mining debris, which was leveled for the construction of HLP, underlies nearly the entire park except for the north extension of the river-side trail. HLP-1 does not demonstrate an association with a clearly important event or theme outlined in historic context; have an association with individual(s) whose specific contributions to history can be identified and documented; have properties significant for their physical design or construction; or demonstrate or have the potential to yield information important in history. Therefore, HLP-1 is not eligible for the California Register of

Historical Resources and does not meet any criterion as a unique archaeological resource as defined by CEQA.

HLP-2: A dirt road segment connects the approximately ½ acre residential parcel within HLP to Lotus Road. The road occupies a narrow ridge between the two low areas within the park boundary. The low area west of the abandoned dirt road, that includes a concrete culvert, has a flow of tailings originating at the leveled portion of the residential parcel. The culvert does not represent innovation in design or materials and is not associated with a specific designer, engineer or contractor significant to California local history. The dirt road segment does not appear to be a significant type of structure or is it the sole or rare source of information pertaining to a road and bridge of its type. HLP-2 does not demonstrate an association with a clearly important event or theme outlined in historic context; have an association with individual(s) whose specific contributions to history can be identified and documented; have properties significant for their physical design or construction; or demonstrate or have the potential to yield information important in history. Therefore, HLP-2 is not eligible for the California Register of Historical Resources or a unique archaeological resource under the CEQA guidelines.

Proposed Improvements with No Impact

It is anticipated that none of the proposed improvements would have an impact on historical resources defined in Section 15064.5.

Neither resource HLP-1 or HLP-2 were determined to be eligible for the National Register of Historic Places, the California Register of Historical Resources, or under CEQA as a unique archaeological resource (Windmiller 2015). No tribal cultural resources, unique geologic features, or unique paleontological resources were identified during the study. Therefore, there would be **no impact** from development of the Proposed Project and no mitigation is required.

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

Less Than Significant With Mitigation Incorporated. No historical archaeological resources were identified by the Cultural Assessment Report (Windmiller 2015).

Per Assembly Bill 52 (AB 52), as of July 1, 2015 Public Resources Code Sections 21080.3.1 and 21080.3 require public agencies to consult with the Native American Heritage Commission (NAHC) and Native American tribes for the purpose of mitigating impacts to tribal cultural resources. The process is described in part below.

> Within 14 days of determining that an application for a project is complete or a decision by a public agency to undertake a project, the lead agency shall provide formal notification to the designated contact of, or a tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, which shall be accomplished by the means of at least one written notification that includes a brief description of the proposed project and its location, the lead agency contact information, and a notification that the California Native American tribe has 30 days to request consultation pursuant to this section (Public Resources Code Section 21080.1 (d)).

As a component of the Cultural Resources Assessment conducted for the Proposed Project, the NAHC was contacted for a sacred lands file search and list of Native American contacts. The NAHC responded to the request for a sacred lands file search and list of Native American contacts on June 15, 2015. On July 24, 2015 each of the 15 Native American contacts were sent written correspondence requesting input on the Proposed Project. Contacts were sent information including a project description and location, however there was no response to the mailing. Each contact was then called by telephone on July 31, 2015 and most were unavailable. One response was received from Mr. Grayson Coney, Cultural Director for the T'si-Akim Maidu. Mr. Coney indicated that his tribe has the Most Likely Descendant

(MLD) from the area, but that the tribe has no important sites within HLP. No Native American cultural resources were identified by the NAHC or any of the responses from Native American contacts. No Native American archaeological resources or traditional cultural properties were identified by the Cultural Assessment Report (Windmiller 2015).

In addition, pursuant to AB 52, the County sent out Formal Notification August 15, 2016.

Grading and excavation activities associated with construction of the Proposed Project may have the potential to unearth or otherwise expose previously unidentified archaeological resources. The following proposed improvements have to potential to unearth or expose previously unidentified archaeological resources: new group picnic facility, new site furnishings, new shade shelters, development for connector trail to Highway 49, river access improvements, Monroe Ridge Trailhead, wetland boardwalk trail system, downstream park trails, river bank stabilization and restoration, and interpretive signage. The only proposed improvement that is not anticipated to unearth or expose previously unidentified resources is the easement for the connector trail to Highway 49. Therefore, impacts are considered **less than significant with mitigation incorporated**.

Compliance with **Mitigation Measure CR – 1** would require construction activities to cease in the event of inadvertent discovery of archaeological resources and would require that the County be immediately contacted and grading excavation within 100 feet of the find would be immediately halted. In the event of inadvertent discovery of archaeological resources, **Mitigation Measure CR – 1** would require coordination with local agency planning resources and the project archaeologist to assist with the proper treatment of inadvertently discovered resources.

c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less Than Significant With Mitigation Incorporated. No paleontological resources or geologic features were identified by the Cultural Assessment Report (Windmiller 2015). A search of the University of California Museum of Paleontology and specimen databases was conducted May 14, 2015. The museum and database searches listed no fossil localities in the Coloma, California 7.5' quadrangle or any invertebrate localities on or adjacent to the Project Site. However, grading and excavation activities associated with construction of the Proposed Project would have the potential to inadvertently unearth or otherwise expose previously unidentified paleontological resources or unique geologic features. The following proposed improvements have to potential to unearth or expose previously unidentified paleontological resources: new group picnic facility, new site furnishings, new shade shelters, development for connector trail to Highway 49, river access improvements, Monroe Ridge Trailhead, wetland boardwalk trail system, downstream park trails, river bank stabilization and restoration, and interpretive signage. The only proposed improvement that is not anticipated to unearth or expose previously unidentified paleontological resources is the easement for the trail connection to Highway 49. Therefore, impacts are considered **less than significant with mitigation incorporated**.

Compliance with **Mitigation Measure CR – 2** would require construction activities to cease in the event of inadvertent discovery of paleontological resources and would require that the County be contacted for inadvertent discovery of resources associated with project construction. In the event of inadvertent discovery of paleontological resources, **Mitigation Measure CR – 2** would require coordination with local agency planning resources and the project archaeologist to assist with the proper treatment of discovered resources.

d. Disturb any human remains, including those interred outside of formal cemeteries?

Less Than Significant With Mitigation Incorporated. No known grave sites or burial grounds have been identified within the Project Site. However, grading and excavation activities associated with project construction would have the potential to inadvertently unearth or otherwise expose previously unidentified human remains or burial grounds. The following proposed improvements have the potential to unearth or expose previously unidentified human remains or burial grounds: new group picnic facility, new site furnishings, new shade shelters, development for connector trail to Highway 49, river access improvements, Monroe Ridge Trailhead, wetland boardwalk trail system, downstream park trails, river

bank stabilization and restoration, and interpretive signage. The only proposed improvement that is not anticipated to unearth or expose previously unidentified human remains or burial grounds is the easement for the trail connection to Highway 49. Therefore, impacts are considered **less than significant with mitigation incorporated**.

Compliance with **Mitigation Measure CR – 3** would require coordination with the County coroner in compliance with CEQA (Section 1064.5) and the California Health and Safety Code (Section 7050.5), as well as Native American Heritage Commission who will notify and appoint a Most Likely Descendent (MLD), thereby reducing potential impacts to less than significant levels.

Mitigation Measures

Mitigation Measure CR – 1: Should buried archaeological deposits, prehistoric or historic artifacts be inadvertently exposed during the course of any construction activity, work shall cease in the immediate area and the County shall be immediately contacted for inadvertent discovery of archaeological resources. A qualified archaeologist will be retained to document the find, assess its significance, and recommend further treatment. Work on the Project Site shall not resume until the archaeologist has had a reasonable time to conduct an examination and implement mitigation measures deemed appropriate and necessary by the County of El Dorado in consultation with the qualified archaeologist to reduce impacts to a less than significant level.

Mitigation Measure CR – 2: Should paleontological resources be inadvertently exposed during grading or other construction activities, work shall be halted within 100 feet of the find and the County shall be contacted for inadvertent discovery of resources associated with project construction. A qualified paleontologist shall be retained to conduct an on-site evaluation and provide recommendations for removal and/or preservation. Work on the Project Site shall not resume until the paleontologist has had a reasonable time to conduct an examination and implement mitigation measures deemed appropriate and necessary by the County of El Dorado in consultation with the qualified paleontologist to reduce impacts to a less than significant level.

Mitigation Measure CR – 3: In the event that any human remains or any associated funerary objects are encountered during construction, all work will cease within the vicinity of the discovery and the County shall be immediately contacted for inadvertent discovery of resources associated with park construction. In accordance with CEQA (Section 1064.5) and the California Health and Safety Code (Section 7050.5), the El Dorado County coroner should be contacted immediately. If the human remains are determined to be Native American, the coroner shall notify the Native American Heritage Commission, who will notify and appoint a Most Likely Descendent (MLD). The MLD will work with a qualified archaeologist to decide the proper treatment of the human remains and any associated funerary objects. Construction activities in the immediate vicinity will not resume until a notice-to-proceed is issued.

4.6 GEOLOGY AND SOILS

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Expose people or structures to 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 groundshaking?	☐	☐	☐	☒
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 Section 1803.5.3 of the 2010 CBC, creating substantial risks to life or property?	☐	☐	☐	☒
e. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒

Impact Analysis

a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

a.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.

No Impact. Geological maps indicate that no major active faults delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map transect El Dorado County (Department of Conservation 2015). Therefore, **no impact** related to rupture of a known earthquake fault would result from development of the Proposed Project.

a.ii. Strong seismic groundshaking?

No Impact. According to mapping prepared by the California Division of Mines and Geology, the potential for seismic ground shaking hazards within the vicinity of the Project Site is low, and the Project Site is not located within the vicinity of an Alquist-Priolo Earthquake Fault Zone. The closest Alquist-Priolo Earthquake Fault Zone is the Genoa fault, located in Alpine County 45 miles southeast of the Project Site. The Genoa fault is a northerly trending fault extending from Reno, Nevada to Markleeville, California (Department of Conservation 2015) (Division of Mines and Geology 1984). The Proposed Project is not expected to experience strong groundshaking. **No impact** would result from development of the Proposed Project and no mitigation is required.

a.iii. Seismic-related ground failure, including liquefaction?

No Impact. Liquefaction is a loss of soil strength related to seismic groundshaking and is most commonly associated with soil deposits characterized by water-saturated, well sorted, fine grain sands and silts. The Project Site is composed of the following soils: Auberry Coarse Sandy Loam, 9 to 15 Percent Slopes; Auberry Course Sandy Loam, 15 to 30 Percent Slopes; Auberry Very Rocky Coarse Sandy Loam, 30 to 50 Percent Slopes; Placer Diggings, and Tailings. All of these soils, except tailings, have a depth to the water table of over 80 inches (USDA, NRCS 2015b). The probability of liquefaction is highest in areas subject to groundshaking and groundwater close to the surface, with highly saturated soil (USDA, NRCS 2004). The potential for seismic related ground failure due to liquefaction is low because the groundwater levels are low and the Project Site is not within the vicinity of a fault zone. Tailings have a rare flooding frequency, low runoff class, and high ability to transmit water (USDA, NRCS 2015b). These characteristics make tailings unlikely to hold water and therefore have a low susceptibility to liquefaction, along with the location of the Project Site far from the vicinity of a fault zone. Therefore, **No Impact** would result from development of the Proposed Project and no mitigation is required.

a.iv. Landslides?

Less Than Significant Impact. The existing Project Site topography is characterized by moderately steep slopes on the eastern side of the park, which descend to a mostly flat disturbed/developed park on the western side of the Project Site. Elevations range from 710 feet (216 meters) above mean sea level (MSL) in the southwestern portion of the Project Site to 1,000 feet (305 meters) above MSL in the northeastern portion of the Project Site. The following individual improvements may have the potential to result in minor landslide hazards:

Development of Connector Trail to Highway 49

Approximately ½ mile of informal trail connecting the existing park to the bridge at Highway 49 would be improved to provide access to the park and existing commercial facilities on Highway 49. The trail would be developed on a steep slope that angles down to the South Fork of the American River. Trail improvements, included in project design, would protect the bank from erosion and landslides by stabilizing downhill and uphill slopes with large boulders and other bioengineering techniques.

River Access Improvements

For several locations where park users have established informal trails from the parks edge down to the river, intentional access paths would be developed. River access improvements, included in project design, would help to stabilize the river access points at ten of the exiting sixteen degraded river access areas. These improvements include stabilization measures such as boulders and terracing that would prevent landslides from the bank into the South Fork of the American River. Planting of native vegetation would also contribute to bank stabilization.

River Bank Stabilization and Restoration

River bank stabilization and restoration would occur along approximately ½ mile of river bank and six of the sixteen degrader river access locations would be closed to pedestrian traffic and restored. These bank stabilization areas are designed to help prevent erosion, and landslides, through the use of boulder and cobble terraces to stabilize slopes and riparian vegetation to direct traffic and prevent erosion. Additionally, the planting of over 40 trees and 600 shrubs would occur as part of river bank restoration. The design elements of the river bank stabilization and restoration improvements would prevent any small landslides.

Proposed Improvements with No Impact

It is anticipated that the following proposed improvements do not have the potential to cause a landslide because they would not occur on steep topography: easement for the trail connection to Highway 49, new group picnic facility, new site furnishings, new shade shelters, Monroe Ridge Trailhead, wetland boardwalk trail system, downstream park trails, and interpretive signage.

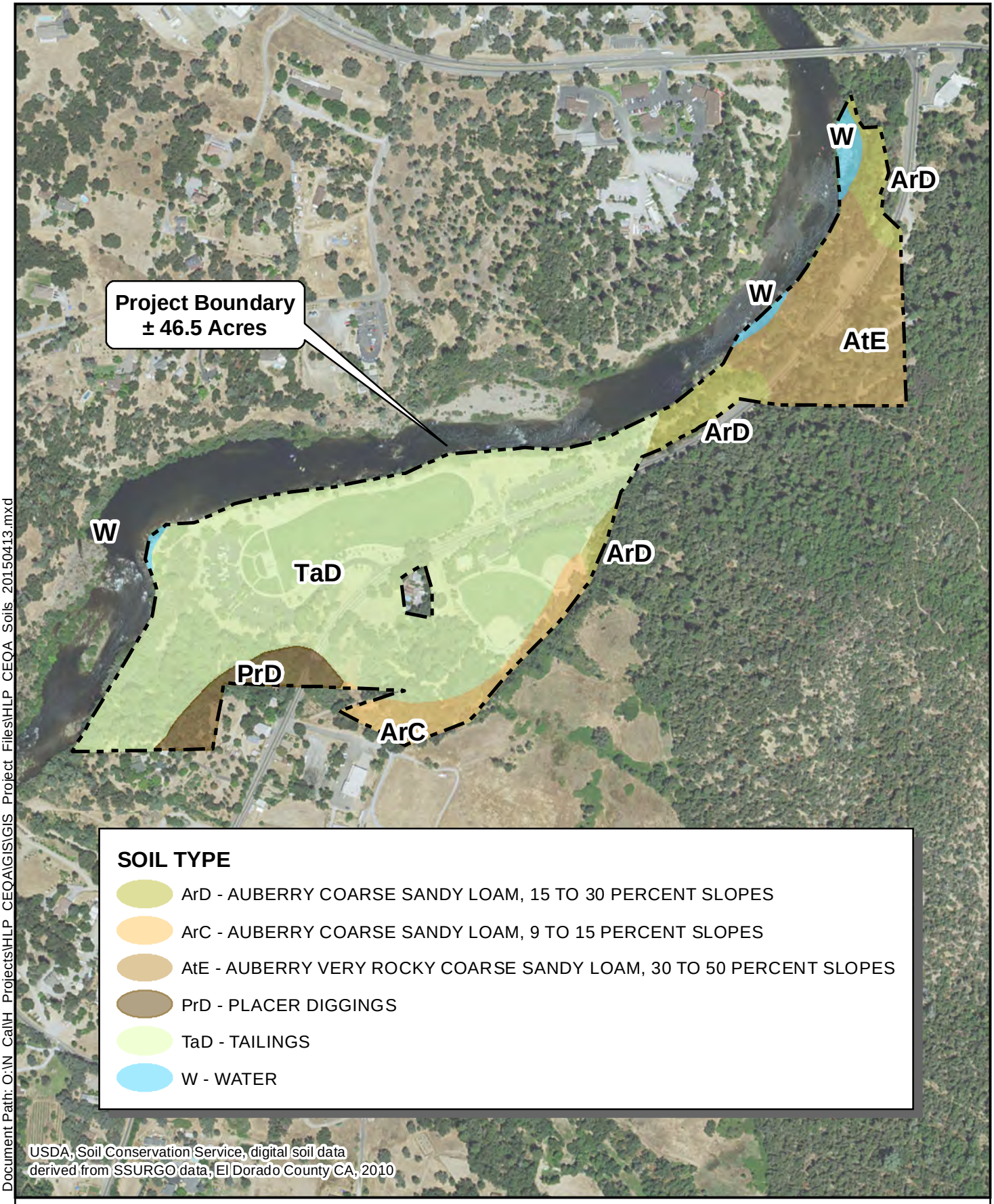
As described above, improvements proposed on slopes may have the potential to result in minor landslides; however, proposed improvements include bank stabilization measures designed to reduce the risk of landslides and impacts are therefore considered **less than significant**.

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

Less Than Significant With Mitigation Incorporated. As shown on **Figure 4.6-1,** the Proposed Project is characterized by five soil map units including: Auberry Coarse Sandy Loam, 9 to 15 Percent Slopes, Auberry Course Sandy Loam, 15 to 30 Percent Slopes, Auberry Very Rocky Coarse Sandy Loam, 30 to 50 Percent Slopes, Placer Diggings, and Tailings (USDA, NRCS 1974 and 2015a).

Auberry Coarse Sandy Loam, 9 to 15 Percent Slopes, soil unit is moderately permeable and less than five percent of the surface consists of rock outcrops. Runoff is medium, and the erosion hazard is moderate. The Auberry series consists of deep, well drained soils that are formed in material weathered from intrusive, acid igneous rocks. The hydric soils list for El Dorado County does not identify this soil type as hydric (USDA, NRCS 2015b).

Auberry Coarse Sandy Loam, 15 to 30 Percent Slopes, soil unit is similar to the Auberry Coarse Sandy Loam soil described above. It is moderately permeable, consists of less than five percent of rock outcrops on the surface, and is moderately steep. Runoff is medium to rapid, and the hazard of erosion is moderate to high. The hydric soils list for El Dorado County does not identify this soil type as hydric (USDA, NRCS 2015b).



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HENNINGSEN LOTUS PARK SOILS

FOOTHILL ASSOCIATES
ENVIRONMENTAL CONSULTING • PLANNING • LANDSCAPE ARCHITECTURE

N

0 260 520
Feet
1 inch = 500 feet

Drawn By: MUB
Date: 04/13/2015

FIGURE 4.6-1

Auberry Very Rocky Coarse Sandy Loam, 30 to 50 Percent Slopes, soil unit is found in the steep, heavily forested areas on the east end of the Project Site. Five to 25 percent of the surface has outcrops of bedrock. Permeability is moderate, surface runoff is rapid, and the erosion hazard is very high. Similar to the other Auberry soils described above, this soil is formed in material weathered from intrusive, acid igneous rocks. The hydric soils list for El Dorado County does not identify this soil type as hydric (USDA, NRCS 2015b).

Placer Diggings consist of stony, cobbly, and gravelly material, commonly in beds of creeks and other streams, or of areas that have been Placer-mined and contain enough fine sand or silt to support some grass for grazing. The depth of the material is variable, ranging from six inches to five feet. Natural drainage varies from place to place. The hydric soils list for El Dorado County identifies this soil type as hydric (USDA, NRCS 2015b).

Tailings consist of cobbly and stony tailings from dredge mining and hydraulic mining and in hard-rock mine dumps. All of the soil material has either been washed away, as in hydraulic mining, or has been buried, as in dredge mining, or mine dumps. Surface runoff is slight and the erosion hazard is none to slight. The hydric soils list for El Dorado County identifies this soil type as hydric (USDA, NRCS 2015b).

The Proposed Project would involve several improvements that have the potential to result in increased soil erosion or the loss of top soil through project construction and park operations are discussed below.

New Group Picnic Area

A new group picnic area would be constructed near the existing paved parking lot on the north side of Lotus Road. The picnic area would include multiple accessible tables, shade structures, paved paths, trash cans, barbecues, drinking fountains, and a prefabricated restroom. The grading for the picnic area and bathroom installation have the potential to result in erosion and soil loss.

Development of Connector Trail to Highway 49

Approximately ½ mile of informal trail connecting the existing park to the bridge at Highway 49 would be improved to provide access to the park and existing commercial facilities on Highway 49. Trail improvements would protect the bank from erosion by stabilizing downhill and uphill slopes with large boulders and other bioengineering techniques. However, project construction and continued trail operations have the potential to result in soil erosion.

River Access Improvements

River access improvements would develop access trails down to the South Fork of the American River on ten of the sixteen existing informal paths. These improvements would occur on Auberry Coarse Sandy Loam (9 to 15 percent slopes), which have a high erosion hazard. The river access improvements would help to stabilize the river access points with stabilization measures such as boulders and terracing that would help prevent soil erosion and loss of topsoil. Planting of native vegetation would also direct trail users onto the designated river access paths and further stabilize the river bank to prevent erosion from park operations. Construction activities, however, have the potential to cause erosion and loss of topsoil.

Downstream Park Trails

Several informal trails have been established in the downstream area of the park. Approximately ½ mile of unpaved trails would be created designating specific paths to limit impacts on vegetation and expand walking opportunities in HLP. Trail construction and continued operations of the downstream park trails would have the potential result in erosion and soil loss.

River Bank Stabilization

River bank stabilization and restoration would occur along approximately ½ mile of river bank and six of the sixteen degrader river access locations would be closed to pedestrian traffic and restored. River bank stabilization would occur on Auberry Coarse Sandy Loam (9 to 15 percent slopes) that has a high erosion hazard. To prevent erosion and soil loss the bank stabilization areas would be designed with boulder and cobble terraces to stabilize slopes; and riparian vegetation to direct traffic and stabilize the bank. Additionally, the planting of over 40 trees and 600 shrubs would occur as part of river bank restoration for riparian woodland between the existing trail and the river. These improvements would minimize erosion at the Project Site from park operations. Construction activities, however, have the potential to cause erosion and loss of topsoil.

Wetland Boardwalk System

The wetland boardwalk system would involve the development of a boardwalk system through the existing wetland mitigation area. Construction of the boardwalk system would consist of building the boardwalk, grading, and expanding the existing informal trail. Construction activities therefore have the potential to cause erosion and loss of topsoil.

Proposed Improvements with Less Than Significant Impact

The Monroe Ridge Trailhead would be a kiosk placed within HLP. Construction of the kiosk would involve minimal grading and site disturbance, and would have a less than significant impact on soil erosion and loss of topsoil. The new site furnishings and interpretive signage would involve minimal soil disturbance when placing the amenities but construction of these features would not cause significant soil erosion or loss of topsoil.

Proposed Improvements with No Impact

The trail connection to Highway 49, would not involve any soil disturbance or loss of topsoil.

State regulations pertaining to the management of erosion and sedimentation target the protection of surface water resources from the effects of land development (such as turbidity caused by sedimentation), measures included in such regulations and standards also reduce the potential for erosion and soil loss. Such regulations include, but are not limited to, the National Pollutant Discharge Elimination System (NPDES) program for management of construction and municipal storm water runoff, which is part of the federal Clean Water Act and the State Porter-Cologne Water Quality Act and is implemented at the State and local level through issuance of permits and preparation of site-specific Storm Water Pollution Prevention Plans (SWPPP).

Project development would be required to comply with the standards established by *El Dorado County's Storm Water Management Plan* (SWMP). Project-related grading activities would also be subject to the requirements of the California Regional Water Quality Control Board for filing a Notice of Intent (NOI) to comply with the Construction General Permit for projects over an acre or for projects that are part of a larger common plan of development that is over one acre. NOI applicants are required to develop a SWPPP specifying individual Best Management Practices (BMPs) as well as scheduling for regular monitoring and maintenance of said BMPs for effectiveness.

Construction-related soil disturbance within the Project Site would exceed one acre and would have the potential to result in impacts to water quality resulting from pollutant discharge, including soil sediments. Therefore, preparation of a SWPPP would be required to comply with the NPDES Construction General Permit administered by the State Water Resources Control Board. The SWPPP will identify structural and non-structural BMPs to control and prevent erosion and topsoil loss. Therefore, impacts are considered **less than significant with mitigation incorporated**.

Compliance with **Mitigation Measure GEO – 1** would require that the County of El Dorado Parks Division comply with applicable NPDES requirements in effect at the time of construction.

Compliance with **Mitigation Measure GEO – 2** would ensure that the park is monitored for erosion resulting from long-term usage of the connector trail to Highway 49, downstream river trails, and the river access trails, as well as unauthorized use in surrounding park areas that have the potential to contribute to erosion and soil loss.

It is anticipated that compliance with **Mitigation Measure GEO – 1** and **Mitigation Measure GEO – 2** would ensure that construction activities comply with current enforceable regulations pertaining to maintaining federal and State water quality objectives as well as ensure that long-term trail usage would not result in exacerbated areas of erosion from ongoing regular use. Implementation of **Mitigation Measures GEO – 1** and **GEO – 2** would therefore, reduce potential impacts associated with erosion to less than significant levels.

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. Lateral spreading, a phenomenon associated with liquefaction, subsidence, or other geologic or soils conditions that could create unstable subsurface conditions that could affect project features, is not a significant hazard for the Project Site. Impacts related to unstable soils including lateral spreading or collapse resulting from seismic-induced groundshaking are considered less than significant due to the distance from an active fault, the low potential for groundshaking hazards, and soil conditions in the area. Subsidence is generally characterized by the gradual settling of the earth's surface with little or no horizontal motion, and typically occurs in formations overlaying an aquifer subject to a gradual and consistently decreasing withdraw of groundwater. Soils on the Project Site consist of sandy and rocky loam soils that are not at threat from subsidence. The Placer Diggings and Tailing comprise the majority of the site. These soils have slight surface runoff and erosion hazards. Project improvements are not anticipated to be located on soil that would become unstable as a result of the project. The potential for these secondary seismic effects is considered minimal (County of El Dorado 2003). Impacts are therefore considered **less than significant** and no mitigation is required.

d. Be located on expansive soil, as defined in Section 1803.5.3 of the 2010 CBC, creating substantial risks to life or property?

No Impact. The Project Site is not located in an area of expansive soils and would not expose people to risk related to potential geologic impacts. Therefore, there would be **no impact** and no mitigation is required.

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

No Impact. Project development would not involve septic tank installation or the use of alternative waste water disposal systems in the majority of project improvements. Therefore, there would be **no impact** and no mitigation is required.

Mitigation Measures

Mitigation Measure GEO – 1: The County of El Dorado Parks Division shall apply for and comply with all current construction-related storm water permitting, monitoring and reporting requirements required by the RWQCB under NPDES, as applicable to project development at the time of construction of proposed improvements/facilities.

Mitigation Measure GEO – 2: Annually, prior to October 15 (the onset of the rainy season), the County of El Dorado Parks Division shall inspect and repair the Connector Trail to Highway 49, downstream park trails, river access trails, and other park

areas that have the potential to contribute to substantial erosion and soil loss. Repairs shall prioritize any areas subject to erosion, as well as improper drainage and areas likely to form gullies during the rainy season.

Compliance with **Mitigation Measure GEO – 1** and **Mitigation Measure GEO – 2** ensure that construction activities comply with current enforceable regulations pertaining to maintaining federal and State water quality objectives as well as ensure that long-term trail usage would not result in exacerbated areas of erosion from ongoing regular use.

4.7 GREENHOUSE GAS EMISSIONS

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	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?	☐	☐	☐	☒

Impact Analysis

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

Less Than Significant Impact With Mitigation Incorporated. Greenhouse gas (GHG) emissions negatively affect the environment through contributing, on a cumulative basis, to global climate change. Atmospheric concentrations of GHGs determines the intensity of climate change, with current levels already leading to increases in global temperatures, sea level rise, severe weather, and other environmental impacts. From a CEQA perspective, GHG impacts to global climate change are inherently cumulative (SMAQMD 2015). Due to the inherently cumulative nature of impacts associated with global climate change, a project's GHG emissions contribution is typically quantified and analyzed on an annual operational basis.

Construction Emissions

The County of El Dorado has no adopted policies or goals for reducing GHG emissions that would be directly applicable to the Proposed Project. However, State regulations have been adopted for GHG emissions that apply to project development. California Assembly Bill 32 (AB 32), adopted in 2006, established the Global Warming Solutions Act of 2006. AB 32 requires the State to reduce GHGs to 1990 levels by the year 2020. Senate Bill 97, adopted in 2007, requires the Governor's Office of Planning and Research (OPR) to develop CEQA Guidelines to incorporate analysis and mitigation for GHG emissions for projects subject to CEQA. Finally, Executive Order S-3-05, established in 2006, develops statewide emission reduction targets through the year 2050.

El Dorado County Air Quality Management District (EDCAQMD) is part of the committee of air districts in the Sacramento Region called the Thresholds Committee. The committee of air districts along with the Sacramento Metropolitan Air Quality Management District (SMAQMD) has developed recommended GHG thresholds of significance in order to comply with AB 32 and meet requirements of the CEQA Guidelines section 15183.5 (b). Data from the EDCAQMD was used to help determine the air quality GHG thresholds developed by the Threshold Committee. The SMAQMD Board of Directors adopted GHG thresholds on October 23, 2014, via resolution AQMD2014-028. The adopted annual threshold of 1,100 $MTCO_2e$ is applicable to the construction phase, as well as the operational phase for land development and construction projects in the jurisdiction of the SMAQMD. EDCAQMD has not yet formally adopted the annual threshold of 1,100 $MTCO_2e$, but will add it to their CEQA Guide to Air Quality Assessment in the near future. The EDCAQMD is recommending CEQA analysis to adopt the SMAQMD thresholds of 1,100 $MTCO_2e$ and use their guidance for GHG emissions (EDCAQMD 2015).

Construction-related GHG emissions are a one-time release that occurs over a short period of time. The estimated construction-related GHG emissions attributable to the Proposed Project would be primarily associated with increases of CO_2 and other GHG pollutants, such as methane (CH4) and nitrous oxide (N_2O), from mobile sources and construction equipment operation. The Proposed Project's short-term construction-related emissions were estimated using the *California Emissions Estimator Model* (CalEEMod) (**Appendix B**), developed to estimate emissions associated with construction and operational use of land development projects in California. The model quantifies direct GHG emissions from construction, which are expressed in tons per project of CO_2 equivalent units of measure ($MTCO_2e$), based on the global warming potential of the individual pollutants. This number is then converted from English tons to metric tons by a conversion factor of 0.91. The estimated annual increase in GHG emissions associated with construction of proposed improvements over the anticipated ten-year planning timeframe is summarized below in **Table 4.7-1**.

Table 4.7-1 — Project Estimated Annual Construction-Related GHG Emissions

	CO_2 emissions ($MTCO_2e$)
Short-term Construction GHG Emissions	74.4

Source: CalEEMod, Version 2013.2.2 (**Appendix B**).

As presented in **Table 4.7-1**, total construction-related estimated GHG emissions associated with development of the proposed improvements is estimated at 74.4 $MTCO_2e$. The SMAQMD adopted annual threshold of 1,100 $MTCO_2e$ is applicable to the construction phase, as well as the operational phase for land development and construction projects in El Dorado County.

As construction of proposed park improvements would generate GHG emissions intermittently until all construction has been completed, it is not anticipated that implementation of the Proposed Project would result in emissions exceeding the current established GHG thresholds of 1,100 $MTCO_2e$. Short-term construction-related emissions were modeled and estimated to be 74.4 $MTCO_2e$, well below the threshold. However, construction-related activities remain of potential concern due to the fact that construction is estimated over a ten-year timeframe and it is impossible to anticipate future regulatory thresholds and analyze potential construction-related impacts for future individual projects. Impacts to GHG from construction activities are therefore considered less than significant with mitigation incorporated.

Operational Emissions

Operational emissions related to GHG are generated by mobile and stationary sources, including day-to-day activities such as vehicle trips to and from a given site, heavy equipment operation, natural gas combustion from heating mechanisms, landscape maintenance equipment exhaust, and consumer products (e.g., deodorants, cleaning products, spray paint, etc.). Implementation of the Proposed Project would not involve mobile, stationary, or area sources and new operational emissions would therefore not occur. Implementation of the Proposed Project is not anticipated to result in a substantial increase in vehicle trips, nor would proposed improvements significantly modify the existing land use or operations within the park. Therefore, operational emissions are considered less than significant.

All trails within the Proposed Project would comply with the County of El Dorado transportation policies outlined in the *El Dorado County General Plan*. The Proposed Project aligns with Goal TC-4 of the *El Dorado County General Plan, Circulation Element* to promote alternative modes of transportation that are safe, continuous, and easily accessible for non-motorized transportation by developing the trail within the park that would connect with Highway 49 for easier park access and trails that connect with Lotus Road (County of El Dorado 2004a).

Conclusion

Operational GHG emissions would be minimal and are anticipated to be less than significant. However, construction of the Proposed Project would generate GHG emissions that would contribute to the overall GHG levels in the atmosphere. Due to the fact that proposed improvements would be constructed over a ten-year timeframe, it is impossible to anticipate future regulatory thresholds and analyze potential construction-related impacts for individual projects. Therefore, impacts are considered **less than significant with mitigation incorporated** for construction-related impacts related to GHG. Implementation of **Mitigation Measure AQ – 1** would reduce potential impacts to less than significant levels.

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. All trails within the Proposed Project would comply with the County of El Dorado transportation policies outlined in the *El Dorado County General Plan*. The Proposed Project aligns with Goal TC-4 of the *El Dorado County General Plan*, *Circulation Element* to promote alternative modes of transportation that are safe, continuous, and easily accessible for non-motorized transportation by developing the trail within the park that would connect with Highway 49 for easier park access and trails that connect with Lotus Road (County of El Dorado 2004a).

Proposed improvements include consistency with the goals and policies identified by the *El Dorado County General Plan* pertaining to sustainability and an overall strategy for reduction of emissions. Construction and operation of proposed improvements would be implemented consistent with applicable regulatory standards and requirements, including consistency with all applicable El Dorado County AQMD and SMAQMD rules and thresholds. Therefore, **no impact** is anticipated from development of the Proposed Project and no mitigation is required.

Mitigation Measures

Compliance with **Mitigation Measure AQ – 1** would reduce potential impacts from GHG associated with the Proposed Project to less than significant levels.

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4.8 HAZARDS AND HAZARDOUS MATERIALS

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
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 involve handling hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d. Be located on a site that 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. Be located within an airport land use plan area or, where such a plan has not been adopted, be within two miles of a public airport or public use airport, and result in a safety hazard for people residing or working in the project vicinity?	☐	☐	☐	☒
f. Be located within the vicinity of a private airstrip and result in a safety hazard for people residing or working in the project vicinity?	☐	☐	☐	☒
g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
h. Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized	☐	☐	☒	☐

areas or where residences are intermixed with wildlands?				

Impact Analysis

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

Less Than Significant Impact. The Proposed Project would not involve the development of land uses or facilities typically associated with the storage, use, disposal, or generation of hazardous materials or wastes. The construction of park improvements may involve the use of heavy equipment, which would contain fuels, oils, lubricants, solvents, and various other possible contaminants. Temporary storage tanks necessary to store fuel and/or other flammable or combustible liquids required on the Project Site during construction would be regulated through the applicable federal, State and local regulations. Routine maintenance activities occurring within recreational facilities may involve the occasional use of hazardous materials. Potentially toxic or hazardous compounds associated with maintenance activities typically consist of readily available solvents, cleaning compounds, paint, herbicides, and pesticides. These compounds are regulated by stringent federal and State laws mandating the proper transport, use, and storage of hazardous materials in accordance with product labeling. The transport, storage, and disposal of any hazardous materials used would be subject to federal, State, and local regulations as overseen by agencies such as the California Department of Health Services and the County of El Dorado Environmental Health Department.

The County of El Dorado Department of Environmental Management, Hazardous Waste Division, is approved by Cal-EPA as the Certified Unified Program Agency (CUPA) for El Dorado County. As the CUPA, the County of El Dorado Department of Environmental Management, Hazardous Waste Division regulates the use, storage, and disposal of hazardous materials and is available to respond to hazardous materials complaints or emergencies, if any, during construction and routine park maintenance.

Implementation of the Proposed Project would not involve the development of facilities or land uses associated with hazardous materials handling, storage, or use. Therefore, impacts related to the creation of a significant hazard to the public or the environment through the routine, transport, use or disposal of hazardous materials are considered **less than significant**, and no mitigation is required.

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 Impact. During project construction and maintenance, the possibility of upset or accident conditions involving the release of hazardous materials into the environment involving contaminants from machinery exists. However, if an accident should occur the County of El Dorado Department of Environmental Management, Hazardous Waste Division is available to respond to an emergency relating to hazardous materials. The handling, use, and storage of hazardous materials during construction would be required to be compliant with standards set forth by the County Department of Environmental Management, Hazardous Waste Division. Therefore, impacts are considered **less than significant** and no mitigation is required.

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

No Impact. As discussed above in *subsections a and b*, the Proposed Project would not involve the development of land uses or facilities typically associated with the storage, use, disposal, or generation of hazardous materials or wastes. Construction activities and/or routine maintenance activities occurring within recreational facilities may involve the occasional use of hazardous materials. Potentially toxic or hazardous compounds associated with maintenance activities typically consist of readily available solvents, cleaning compounds, paint, herbicides, and pesticides.

There are no schools located within the Project Site. The closest schools to the Project Site are Sutter's Mill Elementary School located 2.8 miles from the Project Site and Gold Trail School located 3 miles from the Project Site. Therefore, there are no public or private schools either located within ¼ mile of the project alignment nor are there any schools planned to be developed within ¼ mile of the Proposed Project. Construction would not generate hazardous air emissions or handle acutely hazardous substances within ¼ mile of a school. Therefore, **no impact** would result from development of the Proposed Project and no mitigation is required.

d. Be located on a site that 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. The Project Site is not included on the list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. According to the California Department of Toxic Substances Control (CDTSC) *Envirostor Database*, there are no known hazardous sites within the immediate vicinity of the Proposed Project alignment (CDTSC 2014). Therefore, the Proposed Project would not create a significant hazard to the public or environment and **no impact** would result from project implementation.

e. Be located within an airport land use plan area or, where such a plan has not been adopted, be within two miles of a public airport or public use airport, and result in a safety hazard for people residing or working in the project vicinity?

No Impact. The west slope of El Dorado County operates three public airports: Cameron Airpark Airport, Georgetown Airport, and Placerville Airport. The Proposed Project is not located within an airport land use plan area for any of these airports (El Dorado County Transportation Commission 2015). The closest airport to the Project Site is the Bacchi Valley Industries Airport located at 6825 Bacchi Road, Lotus, California, 1.22 miles from the Project Site. The Bacchi Valley Industries Airport is a private airport and would not result in safety hazards for people residing or working in the project vicinity. Therefore, **no impact** would result from development of the Proposed Project and no mitigation is required.

f. Be located within the vicinity of a private airstrip and result in a safety hazard for people residing or working in the project vicinity?

No Impact. The closest private airport to the Project Site is the Bacchi Valley Industries Airport located at 6825 Bacchi Road, Lotus, California, 1.22 miles from the Project Site. The Bacchi Valley Industries Airport is a small private airport and would not result in any safety hazards for people residing or working in the project vicinity. Therefore, **no impact** would result from development of the Proposed Project and no mitigation is required.

g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

No Impact. A review of the *Circulation Element* and the *Health and Safety Element* from the El *Dorado County General Plan* (2004a and 2004e) supports a conclusion that development of Proposed Project would not impair implementation or physically interfere with an adopted emergency response plan or emergency evacuation plan. See **Section 4.16**, **Transportation/Traffic**, *subsection e* for more detailed information. Therefore, **no impact** would result from development of the Proposed Project and no mitigation is required.

h. Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

Less Than Significant Impact. Wildland fires are those fires that pose a threat to the more rural areas of the County. Wildland fires result from intentional and unintentional human activities as well as natural processes. Henningsen Lotus Park is located within the El Dorado County Fire Protection District (EDFPD). Fire suppression responsibilities are shared between EDCFPD, California Department of Forestry and Fire Protection (CAL FIRE), and the U.S. Forest Service (USFS). The fire station closest to

HLP is station Number 74 of the EDCFPD, at 5122 Firehouse Road, approximately 0.05 miles south of HLP. Station Number 74 is staffed by two Firefighter-EMTs. Additionally, there are a number of other local fire stations within a 10-mile radius of HLP and CAL FIRE operates a station at Mount Danaher southeast of HLP in Camino.

The El Dorado County Fire Safe Council is currently developing a *Community Wildfire Protection Plan* (CWPP) for the western slope of El Dorado County. The CWPP would include HLP and will develop a cohesive plan for the western slope of the County incorporating existing CWPPs, CAL FIRE Unit Plan, and existing and proposed fuels treatments. The objectives of the plan are to manage fuel and develop and implement projects to protect the western slope of the County from wildland fires. The plan is in its second phase updating existing CWPPs in accordance with community interfaces. The expected completion date for the *El Dorado County Western Slope Wildfire Protection Pan* is January 2017 (El Dorado County Fire Safe Council 2015). Additionally, the Coloma/Lotus area has a satellite community fire safe council developed under the El Dorado County Wildfire Protection Plan (EDCWPP). The community fire safe councils developed under the EDCWPP have defensible space demonstration areas with interpretive signs for public education purposes and evacuation plans (El Dorado County Fire Safe Council 2004).

Proposed improvements to the park would not increase exposure of people or structures to a significant fire risk. HLP is within a 10-mile radius of several fire stations and the El Dorado County Fire Safe Council is currently developing further wildfire protection that would include the park. Development of proposed improvements would not increase park operations to a level where emergency services for fire protection and evacuation could not be provided by the existing fire stations. Additionally, proposed improvements to trails would increase trail safety and width providing for easier evacuation from HLP in the case of a wildland fire or other emergency circumstance. All other proposed improvements would not be expected to increase the risk of park users to wildland fires. Therefore, impacts are considered **less than significant** and no mitigation is required.

Mitigation Measures

No mitigation is warranted.

4.9 HYDROLOGY AND WATER QUALITY

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Violate any water quality standards or waste discharge requirements?	☐	☒	☐	☐
b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge, resulting in a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☒	☐
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation onsite or offsite?	☐	☒	☐	☐
d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding onsite or offsite?	☐	☐	☐	☒
e. Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐
f. Otherwise substantially degrade water quality?	☐	☒	☐	☐
g. Place housing within a 100-year flood hazard area, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒

h. Place structures within a 100-year flood hazard area that would impede or redirect flood flows?	☐	☐	☒	☐
i. Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☒	☐
j. Contribute to inundation by seiche, tsunami, or mudflow?	☐	☐	☒	☐

Impact Analysis

a. Violate any water quality standards or waste discharge requirements?

Less Than Significant Impact With Mitigation Incorporated. Grading during construction, as well as long-term ongoing usage of proposed improvements would have the potential to result in water quality-related impacts. The easement for the trail would not require any construction or operational activities that may impact water quality and the Monroe Ridge Trailhead is not near the South Fork of the American River or any other waterbodies, therefore, it is not anticipated that there would be any violations of water quality standards or waste discharge requirements related to development of these improvements.

Construction-Related Impacts

Any discharge of pollutants to waters of the U.S. is unlawful unless the discharge is in compliance with the National Pollutant Discharge Elimination System permit. The Statewide General Construction Permit and the NDPES General Construction Activity Stormwater Permit (General Permit) are applicable to requiring the preparation and implementation of a Storm Water Pollution Prevention Plan that specifies erosion and sediment control construction and post-construction Best Management Practices to reduce or eliminate construction-related and operational impacts on water quality. The SWPPP identifies structural and non-structural BMPs to uphold water quality and waste discharge requirements.

Chapter 15.14 of the El Dorado County Code establishes the Grading, Erosion, and Sediment Control Ordinance. A Grading Permit is required for all grading projects in El Dorado County unless exempt under Section 15.14.140. The grading must also be consistent with Section B of the Grading, Erosion, and Sediment Control chapter of the *Grading Design Manual* adopted by the El Dorado County Board of Supervisors, which relates to water quality. The Grading, Erosion, and Sediment Control Ordinance was established to "*safeguard life, health, property, and public welfare; to avoid pollution of watercourses; and to ensure that the intended grading site is consistent with the El Dorado County General Plan, any Specific Plans, the adopted Storm Water Management Plan, California Fire Safe Standards, and the California Building Code*" (County of El Dorado 2010).

El Dorado County has adopted a *Storm Water Management Plan* (SWMP) to reduce the discharge of pollutants associated with storm water drainage systems and identify how the County will comply with the provisions of the NPDES permit (SWMP 2004). The SWMP outlines program management for permit compliance, program development and implementation of storm water management practices, monitoring, and reporting. Additionally, the SWMP addresses how the County will manage planning, design, and construction projects.

The following proposed improvements may result in construction-related impacts to water quality:

New Group Picnic Area

The new group picnic area would be located northeast of the existing turf area on the north side of Lotus Road. The picnic area would include new picnic benches and shade structures as well as amenities such as trash cans, paved paths, barbecues, drinking fountains, and a prefabricated vault-style restroom. The picnic area would be located adjacent to the South Fork of the American River and has the potential to impact water quality through erosion, grading, sedimentation, and excavation associated with project construction.

New Site Furnishings

New site furnishings such as benches, trash cans, recycling bins, and drinking fountains would be placed around the park. These furnishings have the potential to impact water quality standards if they are located near the South Fork of the American River or the wetland mitigation area. If furnishings are placed near these sensitive aquatic areas then they have the potential to impact water quality during construction through erosion, sedimentation, excavation, and grading.

New Shade Shelters

New shade shelters would be placed among the existing picnic area near the beach and main parking lot. The new shade shelters would be near the South Fork of the American River and have the potential to impact water quality through erosion, grading, sedimentation, and excavation associated with project construction.

Development of Connector Trail to Highway 49

Approximately ½ mile of trail would be formalized connecting park users to Highway 49. The trail would remain unpaved and improvements would consist of widening the trail to 3 feet, stabilizing downhill and uphill slopes and drainages, and removing significant surface barriers. The trail would be located upslope from the South Fork of the American River and has the potential to impact water quality through erosion, grading, sedimentation, and excavation associated with project construction.

River Access Improvements

The proposed river access improvements have the potential to degrade water quality during construction activities. The access areas, however, are designed to help prevent erosion and water quality degradation through boulder and cobble terraces to stabilize slopes; riparian vegetation to direct traffic and prevent erosion; and boulder and cobble “steps.”

Downstream Park Trails

Several informal trails downstream through wooded vegetation would be formalized to improve visibility and safety and expand walking opportunities in HLP. Many of the trail segments are located adjacent to the South Fork of the American River and have the potential to impact water quality during construction through erosion, grading, and sedimentation.

Wetland Boardwalk Trail System

The wetland boardwalk system would be implemented within an existing wetland mitigation area. Construction for the boardwalk system would consist of building of the boardwalk, grading, and expanding the trail to four feet. The wetland boardwalk trail system has the potential to impact water quality in the wetland through erosion, grading, and sedimentation associated with project construction.

River Bank Stabilization and Restoration

River bank stabilization and restoration would occur along approximately ½ mile of river bank and six of the sixteen degrader river access locations would be closed to pedestrian traffic and restored. These bank stabilization areas are designed to help prevent erosion and water quality degradation through boulder and cobble terraces to stabilize slopes; and riparian vegetation to direct traffic and prevent erosion. However, construction for riverbank stabilization would have the potential to impact water quality through erosion and sedimentation.

Interpretive Signage

Several interpretive signs would be erected highlighting natural resources at HLP. Where the signs are placed at river access points, the wetland mitigation area, and the group picnic areas there is the potential for water quality impacts from construction. Potential impacts may occur through erosion, grading, sedimentation, and excavation associated with project construction.

Implementation, monitoring and maintenance of BMPs required to comply with existing enforceable County ordinances, combined with compliance with State and federal regulations relevant to maintaining water quality objectives, would ensure that project development would not result in substantial erosion or siltation violating water quality standards and discharge requirements. Construction-related impacts related to project development are considered less than significant with mitigation incorporated.

Compliance with **Mitigation Measure GEO – 1** would require the County to comply with local, State, and federal standards applicable to proposed improvements at the time of construction, ensuring compliance with the current NPDES and State and federal water quality objectives.

In addition, the discharge of fill into aquatic features would require compliance with the State Porter-Cologne Water Quality Control Act through the issuance of waste discharge requirements (WDRs) or compliance with 401 Water Quality Certification Technical Conditions. For all aquatic features within the project alignment that may be determined to be subject to federal jurisdiction through a Determination issued by the U.S. Army Corps of Engineers, any fill proposed within federally-jurisdictional aquatic features delineated within the project boundary would be subject to 401 Water Quality Certification. Compliance with **Mitigation Measure BIO – 6** would require that the County obtain Water Quality Certification prior to implementation of any fill of federally-jurisdictional aquatic features within the project alignment. Therefore, impacts related to violation of waste discharge requirements are considered less than significant with mitigation incorporated with implementation of **Mitigation Measure BIO – 6**.

Operational Impacts

Ongoing use of the park improvements would have the potential, through time, and ongoing usage, to result in areas prone to erosion along the trail segments and new site furnishings along the river. Discussed below are improvements that are anticipated to potentially affect water quality through operational use.

New Site Furnishings

Additional benches added throughout the park near the river have to potential over time to cause erosion and sediment loss into the river with the continuous use of the benches.

Development of Connector Trail to Highway 49

The improvements to connector trail to Highway 49 would consist of stabilizing downhill and uphill slopes and drainages using appropriately sized boulders and other bioengineering techniques. These improvements would help protect the trail from erosion and sediment loss. However, the trail could still result in erosion and sediment loss after extensive operational trail utilization.

River Access Improvements

The proposed river access improvements have the potential to degrade water quality with the continuous utilization of the river access trails. However, bank stabilization measures in the river access designs would help to reduce some of the erosion and sedimentation from trail operations.

Downstream Park Trails

The improved downstream park trails would remain unpaved and have the potential over time to cause erosion and sediment loss into the river with excessive trail use.

Proposed Improvements with No Impact

It is anticipated that the following proposed improvements would have no impact on water quality related to operational use: easement for the trail connection to Highway 49, new shade shelters, Monroe Ridge Trailhead, wetland boardwalk trail system, and interpretive signage.

Ongoing use by park users would have the potential to result in areas within and off of the improved trails in the park that may exhibit erosion and sediment loss. Therefore, potential impacts associated with trail operation are considered less than significant with mitigation incorporated.

Implementation of **Mitigation Measure GEO – 2** would require the County to conduct annual inspections of the improvements listed above for areas of erosion and would require the implementation of BMPs to stabilize all areas exhibiting erosion.

Conclusion

Compliance with **Mitigation Measure GEO – 1, Mitigation Measure GEO – 2,** and **Mitigation Measure BIO - 6** would require the County to obtain all applicable permits and implement effective erosion control BMPs during construction, as well as throughout the operational life of HLP, thereby reducing potential erosion-related impacts to less than significant levels. Impacts are therefore considered **less than significant with mitigation incorporated**.

b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge, resulting in a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre- existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?

Less Than Significant Impact. HLP currently receives water supply direct from the South Fork of the American River and from existing entitlements through the El Dorado Irrigation District (EID). It is anticipated these existing sources of water would be adequate to accommodate proposed improvements.

The New Picnic Area and New Site Furnishings project improvements include water consumption, as further described below.

New Picnic Area and New Site Furnishings

The drinking fountains proposed in the new group picnic area and around the park as new site furnishings would be supplied from the existing water source in the park. The prefabricated vault-style restroom proposed as part of the new group picnic area would also be supplied with water from the existing water connections in the park.

Water within HLP is supplied from both the El Dorado Irrigation District (EID) and the South Fork of the American River. The water allocation for HLP is sufficient to meet the proposed demands generated from proposed improvements.

The proposed loop-trail and a few short trail segments within the group picnic area would be paved. This additional amount of impervious surface would not, however, be considered substantial and is not anticipated to result in impacts to groundwater supply.

Proposed Improvements with No Impact

It is anticipated that the following proposed improvements would have no impact on groundwater supplies or groundwater recharge: easement for the trail connection to Highway 49, new shade shelters, development for connector trail to Highway 49, river access improvements, Monroe Ridge Trailhead, wetland boardwalk trail system, downstream park trails, river bank stabilization and restoration, and interpretive signage.

Therefore, the Proposed Project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level, and impacts are considered **less than significant**. No mitigation is required.

c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation onsite or offsite?

Less Than Significant Impact with Mitigation Incorporated. As described in detail below, several of the proposed improvements would have the potential to alter drainage patterns resulting in erosion or siltation.

Development of Connector Trail to Highway 49

Approximately ½ mile of trail would be formalized to provide safer access to Highway 49. Improvements to the trail would include protecting the bank from erosion and the river from associated stabilization; and stabilizing downhill and uphill slopes and drainages using appropriately sized boulders and other bioengineering techniques. These preventative improvements would maintain the drainage patterns and prevent erosion and siltation.

River Access Improvements

River access improvements would help to stabilize the river access points at ten of the exiting sixteen degraded river access areas. These improvements include stabilization measures such as boulders and terracing that would help to restore natural drainage patterns down to the South Fork of the American River. Planting of native vegetation would also direct trail users onto the designated river access paths, maintaining drainage patterns. These improvements would have a less than significant impact on a drainage pattern.

Wetland Boardwalk Trail System

A system of unpaved and boardwalk trails would be constructed through the wetland mitigation area with elevated boardwalks. These boardwalks would keep hikers out of wetland areas to prevent the interruption of drainage connections between wetland features.

Downstream Park Trails

Existing informal trails through wooded vegetation in the park would be formalized to improve visibility and safety. Trail construction activities in these areas has the potential to alter existing drainages to the South Fork of the American River and result in erosion and siltation. Implementation, monitoring and maintenance of BMPs required to comply with existing enforceable County ordinances, combined with compliance with State and federal regulations relevant to maintaining water quality objectives, would ensure that development of the downstream trails would not result in substantial erosion or siltation from the alteration of drainage patterns. Implementation of **Mitigation Measure GEO – 1** would ensure compliance with the current NPDES and State and federal water quality objectives, preventing erosion and siltation.

River Bank Stabilization and Restoration

River bank stabilization and restoration would occur along approximately ½ mile of river bank and six of the sixteen degraded river access locations would be closed to pedestrian traffic and restored. These bank stabilization areas are designed to help prevent erosion and water quality degradation through boulder and cobble terraces to stabilize slopes; and riparian vegetation to direct traffic and prevent erosion. Additionally, the planting of over 40 trees and 600 shrubs would occur as part of river bank

restoration. Natural drainage patterns would be restored and maintained through these restoration and stabilization improvements.

Proposed Improvements with No Impact

It is anticipated that the following proposed improvements would have no impact on existing drainages: easement for the trail connection to Highway 49, new group picnic facility, new site furnishings, new shade shelters, Monroe Ridge Trailhead, and interpretive signage.

Compliance with **Mitigation Measure GEO – 1** for the downstream park trails would require implementation, monitoring, and maintenance of BMPs required to comply with existing enforceable County ordinances (Section 8.79.150), combined with compliance with current State and federal regulations relevant to maintaining water quality objectives in effect at the time of project development, would ensure that project development would not result in the alteration of existing drainage patterns resulting in erosion or siltation. Impacts are therefore considered **less than significant with mitigation incorporated**. All other proposed improvements would have either a less than significant impact or no impact on existing drainage patterns in a way that would result in extensive erosion or siltation.

d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding onsite or offsite?

No Impact. Several of the proposed improvements have the potential to alter drainage patterns, as further described below.

Development of Connector Trail to Highway 49

Approximately ½ mile of trail would be formalized to provide safer access to Highway 49. Improvement to the trail would include protecting the bank from erosion and the river from associated stabilization; and stabilizing downhill and uphill slopes and drainages using appropriately sized boulders and other bioengineering techniques. These preventative improvements would maintain the drainage pattern and prevent flooding.

River Access Improvements

River access improvements would help to stabilize the river access points at ten of the existing sixteen degraded river access areas. These improvements include stabilization measures such as boulders and terracing that would help to restore natural drainage patterns. Planting of native vegetation would also direct trail users onto the designated river access paths, and would not alter the course of the stream or drainage patterns in a manner that would result in flooding.

Wetland Boardwalk Trail System

A system of unpaved and boardwalk trails would be constructed through the wetland mitigation area with elevated boardwalks. These boardwalks would keep hikers out of wetland areas and would prevent the interruption of drainage connections between wetland features, which would prevent flooding from the wetland area into adjacent park boundaries.

Downstream Park Trails

The existing informal trails through wooded vegetation in the park would be formalized to improve visibility and safety. Trail formalization would not result in downstream flooding.

River Bank Stabilization and Restoration

River bank stabilization and restoration would occur along approximately ½ mile of river bank and six of the sixteen degraded river access locations would be closed to pedestrian traffic and restored. Planting of over 40 trees and 600 shrubs would occur as part of river bank restoration. The natural drainage patterns would be restored and maintained through these restoration and stabilization improvements and would not result in any flooding.

Proposed Improvements Not Impacting Drainage Patterns

It is also anticipated that the following proposed improvements would have no impact on existing drainages and result in flooding: easement for the trail connection to Highway 49, new group picnic facility, new site furnishings, new shade shelters, Monroe Ridge Trailhead, and interpretive signage.

Although development of the Proposed Project would have the potential to modify existing drainage patterns, no flooding would be induced from project development. **No impacts** related to flooding would result from development of the Proposed Project.

e. Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

Less than Significant Impact. As described below, proposed river access improvements and the new group picnic area would result in an increase in impervious surfaces within the project area.

River Access Improvements

River access improvements include the extension of the existing paved loop trail. The trail extension would be a paved asphalt 10-foot wide trail. The trail extension is an impervious surface that would result in a minimal amount of runoff. It is not anticipated for the runoff water from the trail extension to exceed the capacity of existing storm water drainage systems because of the short length of the connector trail.

New Group Picnic Area

The new group picnic area would include some paved paths. These paved paths however, would not be very long or wide and it is anticipated that proposed paved paths in the new group picnic area would not significantly contribute to runoff or provide substantial additional sources of polluted runoff.

Proposed Improvements with No Impact

It is anticipated that the following proposed improvements would have no impact on storm water runoff: easement for the trail connection to Highway 49, new site furnishings, new shade shelters, development for connector trail to Highway 49, Monroe Ridge Trailhead, wetland boardwalk trail system, downstream park trails, river bank stabilization and restoration, and interpretive signage. These proposed improvements would not contribute substantial additional runoff water to the Project Site because they would not result in a substantial area of impervious surfaces.

Proposed improvements would not result in exceedance of the capacity of the existing storm water drainage systems or provide substantial additional sources of polluted runoff. No storm water drainage systems are currently developed within the park. Therefore, **no impact** would result from development of the Proposed Project.

f. Otherwise substantially degrade water quality?

Less Than Significant With Mitigation Incorporated. Construction of the proposed improvements for HLP would be implemented through a combination of hand and mechanical work. Construction activities would disturb the existing topography and would therefore, have the potential to result in erosion and

sediment loss contributing to degraded water quality. Long-term park use would occur on trails throughout the park and have the potential to result in additional erosion and sedimentation that could impact water quality.

New Group Picnic Facility

The new group picnic facility would have the potential to degrade water quality, as proposed improvements would develop a new area for park users. The new group picnic area, however, is not located close to the South Fork of the American River of any other aquatic resources in the park.

Development of Connector Trail to Highway 49

The improvements to the connector trail to Highway 49 would consist of stabilizing slopes and drainages using appropriately sized boulders and other bioengineering techniques. These improvements would help protect the trail from erosion and sediment loss, assisting with maintaining water quality. In addition, implementation of **Mitigation Measure GEO – 1** and **Mitigation Measure GEO – 2** would ensure compliance with current NPDES and State and federal water quality objectives to prevent water quality degradation associated with trail construction and operations.

River Access Improvements

The proposed river access improvements have the potential to degrade water quality during construction activities and with continuous utilization of the river access trails. The access areas, however, are designed to help prevent erosion and water quality degradation through boulder and cobble terraces to stabilize slopes; riparian vegetation to direct traffic and prevent erosion; and boulder and cobble "steps." Additionally, compliance with current NPDES and State and federal regulations through implementation of **Mitigation Measure GEO – 1**and **Mitigation Measure GEO – 2** would ensure no degradation of water quality during construction or river access.

Downstream Park Trails

The improved downstream park trails would remain unpaved and have the potential, over time, to result in erosion and sediment loss, with excessive trail use. Implementation, monitoring and maintenance of BMPs required to comply with State and federal regulations relevant to maintaining water quality objectives, would ensure that development and continuous use of the downstream trails would not degrade water quality. Implementation of **Mitigation Measure GEO – 1**and **Mitigation Measure GEO – 2** would ensure compliance with the current NPDES and State and federal water quality objectives.

Wetland Boardwalk Trail System

A system of unpaved and boardwalk trails would be constructed through the wetland mitigation area with elevated boardwalks. These boardwalks would keep hikers out of wetland areas to prevent the interruption of wetland features and maintain water quality. Construction of the wetland boardwalk system would be primarily implemented by hand work. Implementation of **Mitigation Measure GEO – 1** would ensure compliance with the current NPDES and State and federal water quality objectives.

River Bank Stabilization and Restoration

Construction activities associated with river bank stabilization and restoration have the potential to degrade water quality. Implementation, monitoring and maintenance of BMPs required to comply with State and federal regulations relevant to maintaining water quality objectives, would ensure that construction activities related to river bank stabilization and restoration would not degrade water quality. Implementation of **Mitigation Measure GEO – 1** would ensure compliance with the current NPDES and State and federal water quality objectives.

Proposed Improvements with No Impact

It is anticipated that the following proposed improvements would have no impact on water quality: easement for the trail connection to Highway 49, new site furnishings, new shade shelters, Monroe Ridge Trailhead, and interpretive signage.

Implementation, monitoring and maintenance of BMPs required to comply with existing enforceable County ordinances (Section 8.79.150), combined with compliance with State and federal regulations relevant to maintaining water quality objectives, would ensure that project development would not result in substantial erosion or siltation violating water quality standards and discharge requirements. Impacts related to project development are therefore considered **less than significant with mitigation incorporated**.

Compliance with **Mitigation Measure GEO – 1** and **Mitigation Measure GEO – 2** would require the County to obtain all applicable permits and implement effective erosion control BMPs during construction, as well as throughout the operational life of HLP, thereby reducing potential erosion-related impacts to less than significant levels.

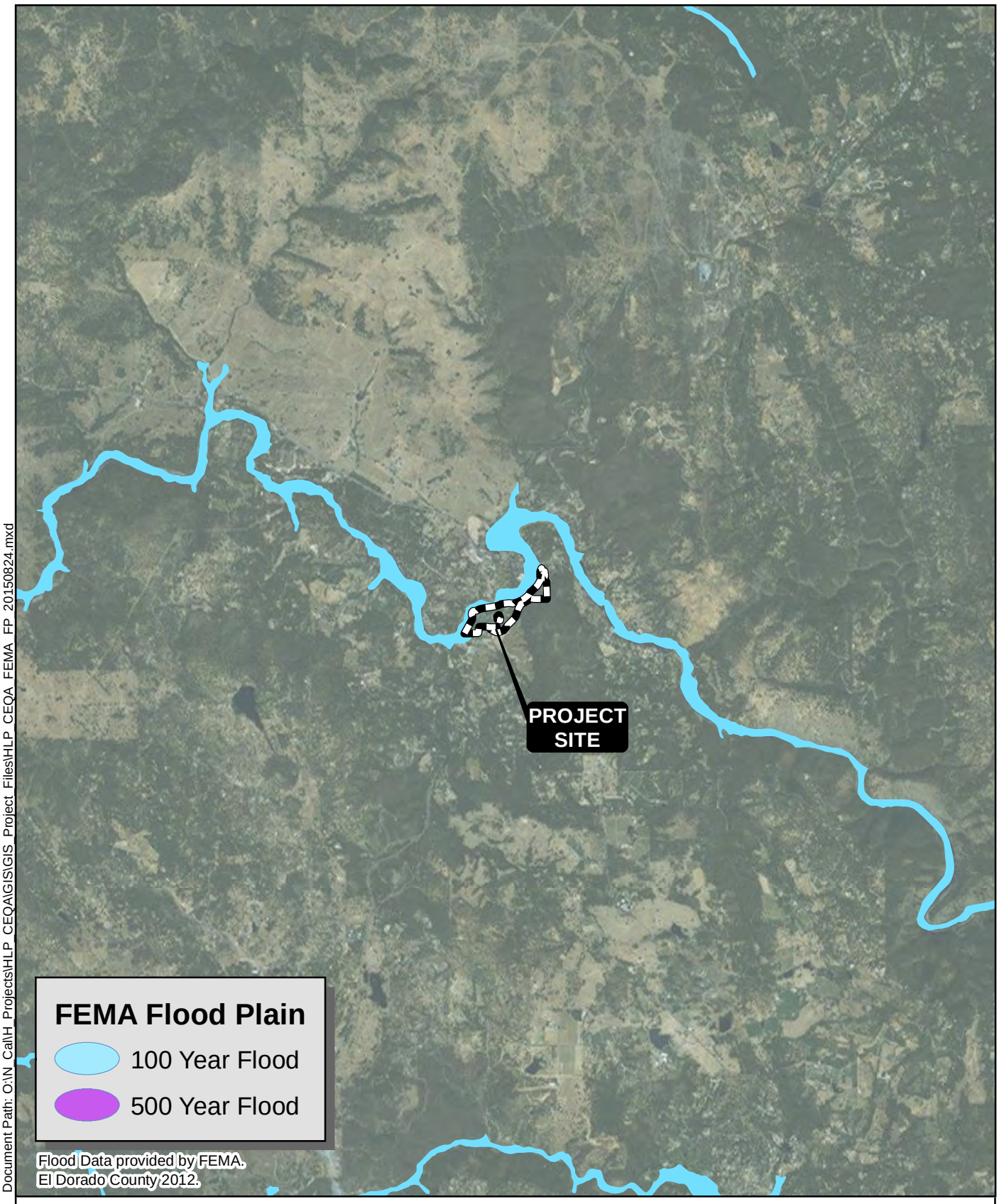
g. Place housing within a 100-year flood hazard area, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

No Impact. Implementation of the Proposed Project would not involve the development of residential land uses or the construction of housing; therefore, there would be **no impact**.

h. Place structures within a 100-year flood hazard area that would impede or redirect flood flows?

Less Than Significant Impact. The Project Site encompasses areas within the 100-year flood hazard zone (**Figure 4.9-1**). The 100-year flood hazard zone impacts locations along the South Fork of the American River.

The El Dorado County Flood Damage Prevention Ordinance (Chapter 17.25 of the County's Municipal Code) includes provisions prohibiting impediment or redirection of flood flows. Under Section 17.25.040 the Floodplain Administrator is designated with the responsibility for reviewing development applications to determine that the requirements of the Ordinance have been met. In addition, the Floodplain Administrator also bears responsibility for reviewing documentation of floodplain development and the certification for floodway encroachments, which must be certified by a licensed civil engineer demonstrating that the proposed encroachment shall not result in any increased flood levels during the occurrence of base flow discharge. All new development, including structures, to be implemented as components of the Proposed Project would require engineering certification for floodplain encroachment and final review and approval by the City's Floodplain Administrator. Compliance with the provisions required by the County's Flood Damage Protection Ordinance would ensure impacts related to flood hazard zones remain less than significant. Therefore, impacts are considered **less than significant**.



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HENNINGSEN LOTUS PARK FEMA MAPPED FLOOD ZONES

FOOTHILL ASSOCIATES
ENVIRONMENTAL CONSULTING • PLANNING • LANDSCAPE ARCHITECTURE

N

0 0.5 1
Miles

1 inch = 1 miles

Drawn By: MUB
Date: 03/01/2016

FIGURE 4.9-1

i. Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?

Less Than Significant Impact. Several areas of the Project Site are within the 100-year floodplain. The County of El Dorado has enacted a Flood Damage Prevention Ordinance (Chapter 17.25), which is compatible with the Federal Emergency Management Agency (FEMA) guidelines, in order to regulate development in the 100-year floodplain to prevent future flooding. This ordinance ensures that the structures associated with the proposed improvements would not be at risk from flooding.

The Chili Bar Dam is located upriver of HLP in Placerville. The State Division of Safety of Dams regulates the construction, maintenance, and overall safety of all substantial impoundments and the County of El Dorado has developed a Dam Failure and Flooding Emergency Response Plan for the County. The plan includes direction of flood waters, responsibilities and actions of individual jurisdictions, and evacuation plans. The plan also contains response plans for floods resulting from periods of high rainfall or rapid snowmelt (County of El Dorado 2004g). Project development would not result in the construction of housing. Project-related impacts are considered **less than significant**.

j. Contribute to inundation by seiche, tsunami, or mudflow?

Less Than Significant Impact. The Project Site is not located near the ocean; there is no potential impact due to a tsunami. The risk of a sieche within HLP is low due to the low risk level of earthquakes within the County and due to the fact that none of the waterbodies are large enough to pose a threat. Project Site topography is characterized by several steep slopes extending to the South Fork of the American River on the eastern side of the park, however, as further described below, project development would result in bank stabilization, reducing potential mudflow hazards.

Development of Connector Trail to Highway 49

Approximately ½ mile of informal trail connecting the existing park to the bridge at Highway 49 would be improved to provide access to the park and existing commercial facilities on Highway 49. Trail improvements would protect the bank from erosion and mudflow by stabilizing slopes.

River Access Improvements

For ten locations where park users have established informal trails from the parks edge down to the river intentional access paths will be created. The access areas are designed to prevent erosion and sedimentation through boulder and cobble terraces to stabilize slopes; riparian vegetation to direct traffic and prevent erosion; and boulder and cobble “steps.” These design features would help to prevent mudflows that have the potential to occur from the steep access trails down to the river.

River Bank Stabilization and Restoration

Select locations along approximately ½ mile of river band would be stabilized and restored to correct existing erosion issues. A total of 40 trees and 600 shrubs would also be planted to help stabilize banks and prevent mudflow.

Proposed Improvements with No Impact

It is anticipated that the following proposed improvements would not contribute to inundation from mudflow because they would not occur on steep topography: easement for the trail connection to Highway 49, new group picnic facility, new site furnishings, new shade shelters, Monroe Ridge Trailhead, wetland boardwalk trail system, downstream park trails, and interpretive signage.

The Project Site is not located near the ocean; there is no potential impact due to a tsunami. The level of a sieche within HLP is low due to the low risk level of earthquakes within the County and due to the fact that none of the waterbodies are large enough to pose a threat. Project improvements include bank

stabilization measures to reduce the risk of mudflows; therefore, impacts are considered **less than significant**.

Mitigation Measures

Compliance with **Mitigation Measure GEO – 1**, **Mitigation Measure GEO – 2**, and **Mitigation Measure BIO – 6** would reduce potential impact to a less than significant level.

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4.10 LAND USE AND PLANNING

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Physically divide an established community?	☐	☐	☐	☒
b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, a general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒
c. Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

Impact Analysis

a. Physically divide an established community?

No Impact. The Project Site, Henningsen Lotus Park does not divide an established community. However, a single private approximately ½ acre residential parcel (APN: 006-360-0110) is located near the existing ball fields south of Lotus Road and is surrounded by HLP property. The parcel is currently occupied by several residential structures and outbuildings. Acquisition of the residential parcel was proposed in the *Henningsen Lotus Park Concept Master Plan* (Concept Plan), but is not included as a component of the Proposed Project. Development of the Proposed Project would only modify the HLP boundaries for the easement for a trail connection to Highway 49, as described below.

Easement and Development for Connector Trail to Highway 49

The proposed easement and trail development for the connector trail to Highway 49 would not divide any established community; it would connect the existing trail alignment to Highway 49. The easement would be acquired on private property (APN: 006-341-1810) to improve access to the park. The private property has no existing structures and an easement would not impact any communities. The existing informal trail would be developed into a formal trail providing pedestrians safe access to the bridge at Highway 49 and access to the commercial center north of the river in Lotus, California.

Proposed Improvements with No Impact

It is anticipated that the following proposed improvements would have no impact on an established community: new group picnic facility, new site furnishings, new shade shelters, river access improvements, Monroe Ridge Trailhead, wetland boardwalk trail system, downstream park trails, river bank stabilization and restoration, and interpretive signage.

Implementation of the Proposed Project would facilitate community interaction and interaction with regional community members. Therefore, **no impact** related to division of an established community would result from development of the Proposed Project.

b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, a general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

No Impact. There are several policies within the *El Dorado County General Plan* that relate to parks and recreation. The underlying goal of the *El Dorado County General Plan, Parks and Recreation Element* is to provide residents with additional recreation land and facilities on a regional scale increasing trails, water recreation, tourism recreation-based business, and acquiring adequate funding. Several goals and policies are outlined in the General Plan to guide the County in accomplishing their park and recreation goals. Goal 9.1 and Objectives and Policies related to the Proposed Project state:

Goal 9.1: Parks and Recreation Facilities

Provide adequate recreation opportunities and facilities including developed regional and community parks, trails, and resource-based recreation areas for the health and welfare of all residents and visitors of El Dorado County.

Objective 9.1.1: Park Acquisition and Development

Policy 9.1.1.1 The County shall assist in the development of regional, community, and neighborhood parks, ensure a diverse range of recreational opportunities at a regional, community, and neighborhood level, and provide park design guidelines and development standards for park development.

Policy 9.1.1.3 Community parks and recreation facilities shall provide a focal point and gathering place for the larger community. Community parks are generally 10 to 44 acres in size, are for the use by all sectors and age groups, and may include multi-purpose fields, ball fields, group picnic areas, playground, tot lot, multi-purpose hardcourts, swimming pool, tennis courts, and a community center.

Policy 9.1.1.4 Regional parks and recreation facilities shall incorporate natural resources such as lakes and creeks and serve a region involving more than one community. Regional parks generally range in size from 30 to 10,000 acres with the preferred size being several hundred acres. Facilities may include multi-purpose fields, ball fields, group picnic areas, playgrounds, swimming facilities, amphitheaters, tennis courts, multi-purpose hardcourts, shooting sports facilities, concessionaire facilities, trails, nature interpretive centers, campgrounds, natural or historic points of interest, and community multi-purpose centers.

Policy 9.1.1.11 Focus park acquisition on recreation oriented facilities.

Objective 9.1.3: Incorporation of Parks and Trails

Policy 9.1.3.2 On public lands and where trails can be developed, maintained, and managed a system of trails along the American and Cosumnes River systems may be created increase public access to scenic waterways.

Policy 9.1.3.3 Coordinate with federal, State, other agencies, and private landholders to provide public access to recreational resources, including rivers, lakes, and public lands.

The Proposed Project aligns with the goals and policies of the *El Dorado County General Plan*, listed above, by proposing 11 improvements consisting of land acquisition, new park facilities, construction of park trails, and natural resource improvements for HLP.

Easement and Development for Connector Trail to Highway 49

The proposed connector trail to Highway 49 would establish an easement across private property at the northern park boundary. The northern park boundary currently stops 200 feet south of the bridge across the South Fork of the American River that connects Highway 49. The County of El Dorado would acquire a recreation access easement on the single parcel zoned for commercial use to formalize the trail. The proposed recreational easement would not conflict with the zoning designation of commercial property because the easement would be for recreation purposes, such as the development of the proposed trail. Trail development is consistent with Policy 9.1.11 and Policy 9.1.3.3 of the County's General Plan.

Downstream Park Trails

Several informal trails have been established downstream of the South Fork of the American River through wooded vegetation southwest of the main parking lot. The parcel (APN: 006-011-5110) on which improvements are proposed is zoned as Residential (**Figure 3.2-3**). The land use designation from the *El Dorado County General Plan* is Rural Residential (**Figure 3.2-1**). Proposed Formalization of these downstream trails would provide improved visibility and safety and would expand walking opportunities in HLP. Daytime public parks, and hiking trails are permitted uses by the County in a parcel zoned as Rural Residential (El Dorado County 2014). The downstream park trails are also consistent with Policy 9.3.1.2 of the *El Dorado County General Plan*. Therefore, there is no conflict with any land use plan or policy for the downstream park trails.

Proposed Improvements with No Impact

It is anticipated that the following proposed improvements would not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project: new group picnic facility, new site furnishings, new shade shelters, Monroe Ridge Trailhead, wetland boardwalk trail system, river bank stabilization and restoration, and interpretive signage.

The Proposed Project remains consistent with all applicable land use plans, policies, or regulation of agencies with jurisdiction over the project. Therefore, **no impact** related to conflicts with land use policy would result from implementation of the Proposed Project.

c. Conflict with any applicable habitat conservation plan or natural community conservation plan?

No Impact. The Project Site does not include lands included within a Habitat Conservation Plan or Natural Community Conservation Plan. Therefore, **no impact** would result from development of the Proposed Project.

Mitigation Measures

No mitigation is warranted.

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4.11 MINERAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
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?	☐	☐	☐	☒

Impact Analysis

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. According to the Open File Report 2000-03, the County of El Dorado has nine recognized Aggregate Resource Areas (Busch 2001). The Project Site is not mapped by the California Geological Survey as one of the nine regional or statewide important Aggregate Resource Areas in El Dorado County. Therefore, **no impact** to mineral resources of the regional or statewide importance would result from development of the Proposed Project and no mitigation is required.

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. As stated in the *El Dorado County General Plan*, *Conservation and Open Space Element*, Goal 7.2 provides for the protection of the County's mineral deposits. Objective 7.2.2 protects important mineral resources from incompatible development and outlines different General Plan designations that may be compatible with surface mining (County of El Dorado 2004a). The Project Site is designated as a Public Facility, one of the land uses listed as being compatible with mining. However, the Project Site is not located within a mineral resource overlay on the County's General Plan land use map (County of El Dorado 2004a).

Improvements proposed on the Project Site would therefore not result in the loss of availability of a locally important mineral resource recovery sites. Therefore, there would be **no impact** to mineral resources as a result of development of the Proposed Project and no mitigation is required.

Mitigation Measures

No mitigation is warranted.

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4.12 NOISE

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☒	☐	☐
b. Expose persons to or generate excessive groundborne vibration or groundborne noise levels?	☐	☒	☐	☐
c. Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
d. Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☒	☐	☐
e. Be located within an airport land use plan area, or, where such a plan has not been adopted, within two miles of a public airport or public use airport and expose people residing or working in the project vicinity to excessive noise levels?	☐	☐	☐	☒
f. Be located in the vicinity of a private airstrip and expose people residing or working in the project vicinity to excessive noise levels?	☐	☐	☐	☒

Impact Analysis

a. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Less Than Significant With Mitigation Incorporated. Development of the proposed improvements to HLP would require intermittent construction activities throughout an estimated ten-year timeframe, as well as potential operational noise resulting from the use of recreational facilities, and traffic noise. The *El Dorado County General Plan, Public Health, Safety, and Noise Element* has established goals and policies relating to evaluating noise impacts due to projects (County of El Dorado 2004e). The underlying theme in the *Public Health, Safety, and Noise Element* is to protect County residents from any noise beyond acceptable levels. The *Public Health, Safety, and Noise Element* establishes noise standards and maximum allowable noise exposure. According to the *El Dorado County, General Plan* Lotus, California is located within a Rural Center, Lotus and must therefore follow the applicable noise standards for a Rural Center.

Construction Impacts

Policy 6.5.1.11 of the General Plan specifies requirements for construction activities. All construction activities must occur between 7:00 A.M. and 7:00 P.M. Monday through Friday and from 8:00 A.M. to 5:00 P.M. Saturday through Sunday and on all federally recognized holidays are required to comply with the standards for noise levels in public facilities shown below in **Table 4.12-1** (County of El Dorado 2004a). Construction activities related to river access improvements, river banks stabilization/restoration, new shade shelters, and new picnic area have the potential to exceed noise levels.

River Access Improvements and River Bank Stabilization/Restoration

The construction of river access improvements and river bank stabilization/restoration would involve grading, placement of large stabilization boulders, boulder terraces, a bioengineered log cribwall and ramp, and paving trail extensions. These construction activities have the potential to exceed County of El Dorado noise standards.

New Picnic Area and New Shade Shelters

The construction of the new picnic area and new shade shelters would involve grading, placement of the new picnic tables, and construction and placement of the new shade shelters. These construction activities have the potential to exceed County of El Dorado noise standards.

Proposed Improvements with No Impact

It is anticipated that the following proposed improvements would not exceed the County El Dorado noise standards: easement for the trail connection to Highway 49, new site furnishings, development for connector trail to Highway 49, Monroe Ridge Trailhead, wetland boardwalk trail system, downstream park trails, and interpretive signage. The proposed trails listed above would be constructed primarily with hand tools and it is anticipated that these activities would not exceed the allowable County noise standards.

Construction noise would be temporary and short-term by nature and implementation of **Mitigation Measure Noise – 1** and **Mitigation Measure Noise – 2** would reduce potential impacts related to construction noise to less than significant levels by ensuring compliance with the *El Dorado County General Plan*. Therefore, impacts are considered less than significant with mitigation incorporated.

Table 4.12-1 — Construction Noise Levels

Construction Time Period	Noise Level (dB)	
	L_{eq}	L_{max}
7:00 A.M. to 7:00 P.M.	65	75
7:00 P.M. to 7:00 A.M.	60	70

Operational Impacts

In is not anticipated that the operation of any of the proposed improvements would produce noise in excess of standards and/or the existing ambient noise within and surrounding HLP. The proposed improvements are not anticipated to increase the ambient noise level permitted in a Rural Center by El Dorado County, which identifies 70 dBL_{max} or 55 dBL (Hourly) as the threshold for noise level performance protection standards for noise sensitive land uses affected by non-transportation sources from 7:00 A.M. to 7:00 P.M. (County of El Dorado 2004e). It is not anticipated that the ongoing operation of or implementation of proposed improvements to passive-recreational use facilities would produce noise in excess of standards and/or the existing ambient noise within the surrounding HLP. The everyday operations for the park are not anticipated to exceed these noise exposure standards once the proposed improvements have been completed, therefore operational impacts are considered less than significant.

Traffic Impacts

The noise environment within the Project Site is influenced only by recreational uses and roadways as the park is not surrounded by residential areas, except the one parcel within the boundaries of HLP. The continued operation of the park after the proposed improvements is not expected to generate traffic related noise that is in excess of the performance standards set out in the *El Dorado County General Plan, Public Health, Safety, and Noise Element.*

Operational noise impacts related to proposed improvements are not anticipated. Compliance with **Mitigation Measure Noise – 1** and **Mitigation Measure Noise – 2** would reduce potential construction-related noise impacts to less than significant levels. The Proposed Project therefore would not generate any noise levels in excess of the standards established by the local General Plans and noise ordinances, and impacts associated with project development are considered **less than significant with mitigation incorporated**.

b. Expose persons to or generate excessive groundborne vibration or groundborne noise levels?

Less Than Significant Impact with Mitigation Incorporated. Operation of the proposed improvements would not be likely to generate ground borne vibration and/or ground borne noise. However, construction activities may result in vibration and groundborne noise. Construction would occur throughout HLP and would have the potential to expose persons to excessive groundborne noise. Proposed construction would be temporary and short term, and compliance with **Mitigation Measure Noise – 1** and **Mitigation Measure Noise – 2** would reduce potential noise-related impacts associated with construction of the Proposed Project to less than significant levels. Impacts associated with development of the Proposed Project are considered **less than significant with mitigation incorporated**.

c. Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

Less Than Significant Impact. As described above in *subsection a*, it is not anticipated that development of the proposed improvements would result in a significant increase in park use and an associated increase in ambient noise. Nor would traffic to the park increase substantially resulting in a significant increase in traffic noise. Therefore, impacts to permanent ambient noise levels are considered **less than significant**.

d. Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

Less Than Significant With Mitigation Incorporated. The primary source of temporary increased noise levels due to development of the Proposed Project would be construction noise. As discussed in *subsection a*, construction noise would be temporary and intermittent. Compliance with **Mitigation Measure Noise – 1** and **Mitigation Measure Noise – 2** would require construction activities to adhere to specified hours of operation and construction standards that would reduce impacts from construction noise to a less than significant level. Therefore, impacts are considered **less than significant with mitigation incorporated**.

e. Be located within an airport land use plan area, or, where such a plan has not been adopted, within two miles of a public airport or public use airport and expose people residing or working in the project vicinity to excessive noise levels?

No Impact. The Proposed Project is not located within an airport land use plan area or within two miles of a public airport or public use airport. Therefore, people working on the project and residing in the project vicinity will not be exposed to excessive noise levels. **No impact** would result from development of the Proposed Project.

f. Be located in the vicinity of a private airstrip and expose people residing or working in the project vicinity to excessive noise levels?

No Impact. There are no private air strips within the project vicinity. Therefore, people working in the Project Site would not be exposed to any excessive noise levels. **No impact** would result from development of the Proposed Project.

Mitigation Measures

Mitigation Measure Noise – 1: Construction activities shall be limited to: Monday through Friday 7:00 A.M. to 7:00 P.M. and 8:00 A.M. to 5:00 P.M. on Saturday, Sunday, and all federally recognized holidays. Any exceptions to these hours shall be evaluated on a case by case basis and require approval by the County of El Dorado.

Mitigation Measure Noise – 2: All construction equipment shall be fitted with factory installed muffling devices and all construction equipment shall be maintained in good working order. All stationary construction noise sources (e.g. generators, compressors) shall be located as far away from noise sensitive land uses as feasible.

4.13 POPULATION AND HOUSING

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?	☐	☐	☐	☒
b. Displace a substantial number of existing housing units, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c. Displace a substantial number of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Impact Analysis

a. Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?

No Impact. Implementation of the Proposed Project would facilitate development of 11 components of the HLP Concept Plan including land acquisition, new park facilities, construction of park trails, and natural resource improvements. Proposed park improvements would not involve residential or commercial development. The Proposed Project would not directly induce population growth because it proposes no employment-generating land uses. Project development would not indirectly induce population growth because it would not extend roads or infrastructure into previously undeveloped areas. Development of proposed park improvements therefore, would result in **no impact** and no mitigation is required.

b. Displace a substantial number of existing housing units, necessitating the construction of replacement housing elsewhere?

No Impact. The Proposed Project would take place entirely within Henningsen Lotus Park. A small (approximately ½ acre) private residential parcel (APN: 006-360-0110) is present within the park boundaries. The parcel is currently occupied by several residential structures and outbuildings. None of the 11 proposed improvements would impact the parcel by requiring housing elsewhere because none of the proposed improvements would occur within or adjacent to the residential property. Implementation of the Proposed Project would not displace any existing housing and would therefore not result in the necessity for the construction of replacement housing at an alternate location(s). **No impact** would result from development of the Proposed Project and no mitigation is required.

c. Displace a substantial number of people, necessitating the construction of replacement housing elsewhere?

No Impact. As discussed above in *subsection b*, the Proposed Project is located entirely within Henningsen Lotus Park. Implementation of the Proposed Project would not impact the residential parcel and displace its current occupants. None of the proposed improvements would occur within or adjacent to the residential property. Therefore, the Proposed Project would not result in the displacement of a substantial number of people necessitating the construction or replacement housing in any other

location(s). **No impact** would result from development of the Proposed Project and no mitigation is required.

Mitigation Measures

No mitigation is warranted.

4.14 PUBLIC SERVICES

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or a 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 following public services:				
a. Fire protection?	☐	☐	☐	☒
b. Police protection?	☐	☐	☐	☒
c. Schools?	☐	☐	☐	☒
d. Parks?	☐	☐	☐	☒
e. Other public facilities?	☐	☐	☐	☒

Impact Analysis

Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or a 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 following public services:

a. Fire protection?

No Impact. The Proposed Project is served by the El Dorado County Fire District (EDCFD). There are currently 15 stations operated by EDCFD throughout the County. HLP is serviced by Station 74 which is located on Fire House Road, off of Lotus Road across from the southern end of HLP. Station 74 is staffed 24 hours a day, 7 days a week by an Engine Company that is staffed with two Firefighter-EMT's (ECF 2015). The *El Dorado County General Plan, Services and Utilities Element* contains policies relating to fire protection (County of El Dorado 2004f). General Plan Policy 5.7.2.1 states:

> **Policy 5.7.2.1** Prior to approval of new development, the responsible fire protection district shall be requested to review all applications to determine the ability of the district to provide protection services. The ability to provide fire protection services shall not be reduced below acceptable levels as a consequence of new development. Recommendations such as the need for additional equipment, facilities, and adequate access may be incorporated as conditions of approval.

Under Policy 5.7.2.1 all new development, including development in rural regions and Rural Centers, shall be reviewed by the responsible fire district to determine the ability of the fire district to provide fire protection. Development of the Proposed Project would not result in increased population and residential structures, and a subsequent need for additional fire protection facilities. Improvements related to land acquisition, new park facilities, trail construction, and natural resources would not result in significant numbers of additional calls related to fire services or decreased response times for fire protective services. It is therefore, anticipated that existing fire protection facilities in El Dorado County will be able to provide fire protections service for the Proposed Project, and maintain acceptable service ratios, response times and performance objectives. Therefore, **no impact** related to fire protection services would result from development of the Proposed Project.

b. Police protection?

No Impact. Police protection services within the vicinity of the Proposed Project are provided by the El Dorado County Sheriff's Department. In addition, the *El Dorado County General Plan, Services and Utilities Element* contains policies relating to police protection (County of El Dorado 2004f). General Plan Policy 5.7.3.1 states:

> **Policy 5.7.3.1** Prior to the approval of new development, the Sheriff's Department shall be requested to review all applications to determine the ability of the department to provide protection services. The ability to provide protection to existing development shall not be reduced below acceptable levels as a consequence of new development. Recommendations such as the need for additional equipment, and adequate access may be incorporated as conditions of approval.

Under Policy 5.7.3.1 all new development shall be reviewed by the Sheriff's Department to determine the ability of the department to provide protection services. The Proposed Project would not involve residential development and would not result in an increased population. Improvements related to land acquisition, new park facilities, trail construction, and natural resources would not result in a significant number of additional calls or decreased response times for police protective services. The trail proposed improvements and river access would result in safer formal pedestrian trails, which would reduce the number of calls. The park hours will remain open seven days a week from 8:00 A.M. until dusk to help ensure that the park is a safe facility. Therefore, **no impact** related to the provision of police protection services would result from development of the Proposed Project.

c. Schools?

No Impact. The Proposed Project would involve land acquisition, new park facilities, construction of park trails, and natural resource improvements for HLP. The Project Site is located in Lotus, California and is served by the Gold Trail Union School District and the El Dorado Union High School District. The Gold Trail Union School District serves kindergarten to 8th grade students and has approximately 543 students enrolled. The El Dorado Union High School District serves 9th through 12th grade students and has approximately 6,908 students enrolled (EDCOE 2015). The Proposed Project would not involve residential development and would not result in increased population or the need for additional school facilities. Therefore, **no impact** related to school facilities would result from project development.

d. Parks?

No Impact. Implementation of the Proposed Project would result in land acquisition, new park facilities, construction of park trails, and natural resource improvements for HLP in order to meet the recreational needs of the local community and regional park users. The Proposed Project would not adversely impact any other El Dorado County parks nor would it result in residential development or an increase in population. Therefore, **no impact** related to park facilities would result from implementation of the Proposed Project.

e. Other public facilities?

No Impact. The Proposed Project would not involve residential development and would not result in increased population; therefore, **no impact** related to other public facilities such as hospitals or libraries would result from project development.

Mitigation Measures

No mitigation is warranted.

4.15 RECREATION

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b. Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	☐	☒	☐	☐

Impact Analysis

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

No Impact. Development of the Proposed Project would facilitate the development of additional recreational facilities within Henningsen Lotus Park, for public access/use and would not increase the use of other recreational facilities or parks. Therefore, **no impact** would result from development of the Proposed Project.

b. Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?

Less Than Significant With Mitigation Incorporated. As discussed throughout this document, construction of the Proposed Project would have the potential to result in adverse physical effects on the environment related to **Air Quality**, **Biological Resources**, **Cultural Resources**, **Geology and Soils**, **Greenhouse Gas Emissions**, **Hydrology and Water Quality**, and **Noise**. However, mitigation measures have been proposed to reduce potentially significant effects resulting from implementation of the Proposed Project to less than significant levels, and impacts are therefore considered **less than significant with mitigation incorporated**.

Mitigation Measures

Mitigating measures are proposed within this document relevant to **Air Quality**, **Biological Resources**, **Cultural Resources**, **Geology and Soils**, **Greenhouse Gas Emissions, Hydrology and Water Quality,** and **Noise**. Individual mitigation measures can be found within individual resource-related sections within this document.

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4.16 TRANSPORTATION/TRAFFIC

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☐	☒	☐
b. Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☐	☐	☐	☒
c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒
d. Substantially increase hazards because of a design feature (e.g., sharp curves or dangerous intersections or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
e. Result in inadequate emergency access?	☐	☐	☒	☐
f. Conflict with adopted policies, plans or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☐	☒

Impact Analysis

a. Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

Less Than Significant Impact. According to the *El Dorado County General Plan, Circulation Element* almost 90 percent of all trips within the County are made by automobile. The County is comprised of a

rural roadway network with U.S. 50 as the primary transportation corridor running east to west, resulting in elevated automobile use (County of El Dorado 2004a). The Proposed Project would implement 11 proposed components from the HLP Concept Plan including land acquisition, new park facilities, construction of park trails, and natural resource improvements. Improvements proposed with the potential to impact transportation/traffic are development of the connector trail to Highway 49, wetland boardwalk trail system, and downstream park trails and are discussed below.

Easement and Development of Connector Trail to Highway 49

The connector trail to Highway 49 would provide pedestrians safe access to the Highway by developing the existing informal trail and acquiring and easement across private property. Trail improvements would also include stabilizing slopes and establishing a constant trail width for improving trail visibility and safety. The connector trail to Highway 49 would align with the General Plan by providing pedestrians a formal trail connecting them to Highway 49 resulting in a more continuous trail plan.

Wetland Boardwalk Trail System

The wetland boardwalk trail system is currently comprised of existing informal trails; however, these trails would be developed into a formal boardwalk system. The formal boardwalk system would provide a safe trail for pedestrians while protecting aquatic resources and adjacent upland habitat. The wetland boardwalk system may connect to a southwest portion of Lotus Road providing pedestrians with increased access to the park and resulting in a more continuous trail plan as outlined the *El Dorado County General Plan, Circulation Element*.

Downstream Park Trails

Approximately ½ mile of the informal downstream trails southwest of the main parking lot would be formalized unpaved trails. These trails would be designed to improve trails visibility and safety while expanding walking opportunities in HLP. These downstream trails however, would connect pedestrians to other portions of HLP from the downstream section of the park and would not have any transportation impacts.

Proposed Improvements with No Impact

It is anticipated that the following proposed improvements would have no impact on any existing plan, ordinance, or policy relating to circulation: new group picnic facility, new site furnishings, new shade shelters, river access improvements, Monroe Ridge Trailhead, river bank stabilization and restoration, and interpretive signage.

All trails in the Proposed Project would comply with El Dorado County transportation policies outlined in the County's General Plan. The Proposed Project aligns with Goal TC-4 of the *El Dorado County General Plan, Circulation Element* to promote alternative transportation modes that are "*safe, continuous and easily accessible for non-motorized transportation*" (County of El Dorado 2004a). Development of the Proposed Project would not conflict with any other components of the circulation system such as existing intersections, streets, highways, freeways or mass transit. Therefore, project development would not conflict with existing adopted plans, ordinances, or policies establishing performance standards for transportation-related improvements, and impacts are considered **less than significant**.

b. Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

No Impact. The Proposed Project would not result in changes in vehicle circulation patterns nor would it increase vehicle trips in the project vicinity. The Proposed Project would implement land acquisition, new park facilities, trail construction, and natural resource improvements for HLP and would not alter the

design of any roadways. Therefore, **no impact** would result from development of the Proposed Project and no mitigation is required.

c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

No Impact. There are three public airports that serve the west slope of El Dorado County: Placerville Airport, Cameron Park Airport, and Georgetown Airport. None of these three airports support commercial flights. The Proposed Project would not result in a change in air traffic patterns. Therefore, **no impact** would result from development of the Proposed Project and no mitigation is required.

d. Substantially increase hazards because of a design feature (e.g., sharp curves or dangerous intersections or incompatible uses (e.g., farm equipment)?

Less Than Significant Impact. Development of the Proposed Project would require establishing three formal trails in the park, listed in *subsection a.*

Proposed Improvements with No Impact

It is anticipated that the following proposed improvements would not substantially increase hazards: new group picnic facility, new site furnishings, new shade shelters, river access improvements, Monroe Ridge Trailhead, river bank stabilization and restoration, and interpretive signage.

All proposed trail alignments listed in *subsection a* would be designed to improve trail visibility and safety. According to project design appropriate safety signage would be placed where the connector trail to Highway 49 intersects with Highway 49 and the wetland boardwalk trail intersects with Lotus Road. Therefore, impacts are considered **less than significant impact** and no mitigation is required.

e. Result in inadequate emergency access?

Less Than Significant. Emergency access to HLP would not be affected by the proposed park improvements. Park operations as a result of proposed improvements are not anticipated to increase to a level where emergency access would be inhibited. The majority of construction access associated with the Proposed Project would be through the park. However, there is the possibility that the construction access for some improvements, such as the river access improvements, could be staged from Lotus Road. Goals and policies related to emergency access are identified by the County's General Plan pertaining to emergency services.

El Dorado County General Plan, Health and Safety Element identifies the following goals and policies applicable to emergency services and relevant to the Proposed Project:

Goal 6.2: Fire Hazards

Objective 6.2.3: Adequate Fire Protection

> **Policy 6.2.3.2** As a requirement of new development, the applicant must demonstrate that adequate access exists, or can be provided to ensure that emergency vehicles can access the site and private vehicles can evacuate the area.

Additionally, Section 3310.1 of the California Fire Code, Access for Fire Fighting, states that all construction or demolition shall have approved vehicle access for firefighting. Article 2 Section 1273.00 of the El Dorado County Fire Regulations, Emergency Access, states that all road and street networks must provide safe access for emergency wildland fire equipment and civilian evacuation. Project development would adhere to all local and State fire codes and General Plan policies. Therefore, impacts to emergency access are considered **less than significant** and no mitigation is required.

f. Conflict with adopted policies, plans or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

No Impact. As discussed in *subsection a*, development of the Proposed Project is consistent with the *El Dorado County, General Plan, and Circulation Element* (County of El Dorado 2004a). Specifically, the Proposed Project is consistent with Goal TC-4 because it would provide safe and continuous trail alignments within HLP. Goal TC-4 of the *Circulation Element* is as follows:

> **Goal TC-4: To provide a safe, continuous, and easily accessible non-motorized transportation system that facilitates the use of the viable alternative transportation modes.**

The Proposed Project would improve trail visibility and safety as well as provide road connections allowing pedestrians to access other facilities within walking distance of HLP. See *subsection a* for a list of proposed improvements that would follow the adopted policies, plans, and programs for transportation.

Proposed Improvements with No Impact

It is anticipated that the following proposed improvements would have no impact on adopted policies, plans, and programs for transportation: new group picnic facility, new site furnishings, new shade shelters, river access improvements, Monroe Ridge Trailhead, river bank stabilization and restoration, and interpretive signage.

The Proposed Project would not conflict with El Dorado County's overall transportation service goal. Therefore, **no impact** would result from development of the Proposed Project and no mitigation is required.

Mitigation Measures

No mitigation is warranted.

4.17 UTILITIES AND SERVICE SYSTEMS

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☒	☐
b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
c. Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or would new or expanded entitlements be needed?	☐	☐	☐	☒
e. Result in a determination by the wastewater treatment provider that 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?	☐	☐	☐	☒
f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐
g. Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☒

Impact Analysis

a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

Less than Significant Impact. Development of the Proposed Project would not result in an increase in residential population or number of dwelling units. However, implementation of the new group picnic area would involve the construction of a prefabricated vault-style restroom. No other proposed improvements are anticipated to impact wastewater treatment requirements.

New Group Picnic Area

The proposed prefabricated vault-style restroom would involve a self-contained vault which would temporarily store waste, which would be periodically removed. The proposed restroom would be designed and constructed according to the County standards as regulated by the El Dorado County Department of Environmental Health and waste would be hauled to a permitted facility by a contract carrier.

Proposed Improvements with No Impact

It is anticipated that the following proposed improvements would have no impact on wastewater treatment requirements: easement for trail connection to Highway 49, new site furnishings, new shade shelters, development for connector trail to Highway 49, river access improvements, Monroe Ridge Trailhead, wetland boardwalk trail system, downstream park trails, river bank stabilization and restoration, and interpretive signage.

Development of the Proposed Project would not exceed wastewater treatment requirements, and impacts are considered **less than significant**.

b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

No Impact. Proposed improvements would not require or result in construction of new water or wastewater treatment facilities. Therefore, development of the Proposed Project would not result in the need for new or expanded wastewater facilities and would not have an adverse effect on wastewater treatment requirements. **No impact** related to wastewater facilities would result from development of the Proposed Project and no mitigation is required.

c. Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

No Impact. The Proposed Project would integrate construction stormwater management principles into proposed design as part of the County ordinance for the Reduction of Pollutants in Stormwater; Best Management Practices (Section 8.79.150). The construction of new stormwater facilities or the expansion of existing facilities would not be required. Therefore, **no impact** would result from development of the Proposed Project and no mitigation is required.

d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or would new or expanded entitlements be needed?

No impact. Development of the Proposed Project would involve new site furnishings to better accommodate park users. Included in the proposed list of site furnishings are drinking fountains. No other proposed improvements are not anticipated to have an impact on water supplies.

Drinking Fountains (New Group Picnic Area and New Site Furnishings)

Drinking fountains would be added at various locations throughout HLP as new site furnishing, as well as at the new group picnic area. Water connections for drinking fountains and the prefabricated vault-style restroom, *subsection a,* would be extended from existing water services in the park provided by EID, removing the need for new or expanded water supplies.

Proposed Improvements with No Impact

It is anticipated that the following proposed improvements would not require additional water supplies: easement for trail connection to Highway 49, new shade shelters, development for connector trail to

Highway 49, river access improvements, Monroe Ridge Trailhead, wetland boardwalk trail system, downstream park trails, river bank stabilization and restoration, and interpretive signage.

EID provides the water services for HLP, and has sufficient water supply to meet the needs to the additional drinking fountains. Therefore, **no impact** would result related to water supply are anticipated from development of the Proposed Project.

e. Result in a determination by the wastewater treatment provider that 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. As discussed above in *subsection b*, no additional wastewater treatment needs would result from development of the Proposed Project. Development of the Proposed Project would not result in the need for new or expanded wastewater facilities and would not have an adverse effect on wastewater treatment requirements. Therefore, **no impact** would result from development of the Proposed Project**.**

f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

Less Than Significant Impact. The Material Recovery Facility in El Dorado County is managed by Waste Connections, El Dorado Disposal and provides commercial waste collection and drop off for demolition and construction for the County (El Dorado Disposal 2015). The Material Recovery Facility (MRF) is located at 4100 Throwita Way in Placerville. The MRF is a large volume transfer facility that was permitted on February 23, 2005. Solid waste is ultimately hauled outside of the County to permitted facilities (Cal Recycle 2015). The Union Mine Disposal Site is located in El Dorado and is a permitted solid waste landfill (Cal Recycle 2015). Project construction and park operations for all proposed improvements would not generate a substantial amount of waste. The waste from project construction and park operations would be collected and disposed of by El Dorado Disposal and taken to the Material Recovery Facility, then hauled outside of the County. Therefore, impacts associated with the development of the Proposed Project are considered **less than significant**.

g. Comply with federal, state, and local statutes and regulations related to solid waste?

No Impact. El Dorado County is served by two permitted Material Recovery Facilities. As discussed in *subsection f* the closer of the two Material Recovery Facilities to the Project Site is in Placerville and is managed by Waste Connections El Dorado Disposal. Waste Connections would haul all construction waste associated with the Proposed Project to the permitted Material Recovery Facility. All construction debris would be disposed of according to the relevant federal, State, and local regulations related to solid waste. Therefore, **no impact** would result from implementation of the Proposed Project.

Mitigation Measures

No mitigation is warranted.

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4.18 MANDATORY FINDINGS OF SIGNIFICANCE

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	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, 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 that will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

Impact Analysis

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, 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 Proposed Project would have the potential to degrade the quality of the existing environment. Potential impacts have been identified related to **Air Quality**, **Biological Resources**, **Cultural Resources**, **Geology and Soils**, **Greenhouse Gas Emissions**, **Hydrology and Water Quality**, and **Noise**. Mitigation measures have been identified related to individual potential resource-specific impacts. Proposed mitigation measures would reduce the level of all project-related impacts to less than significant levels. Therefore, impacts would be 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 Impact. Implementation of the Proposed Project would involve the development of recreational improvements for Henningsen Lotus Park consistent with the standards established in the *El Dorado County Parks and Trails Master Plan* and *Henningsen Lotus Park Concept Plan*. Where applicable, this Initial Study identifies Mitigation Measures by individual resource area as relevant to potential environmental impacts resulting from development of the Proposed Project. Mitigation measures are proposed to reduce all project-related environmental impacts to less than significant levels; impacts are therefore considered **less than significant**.

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

Less Than Significant With Mitigation Incorporated. Implementation of **Mitigation Measure AQ – 1** would reduce potential impacts related to Air Quality to less than significant levels. Implementation of **Mitigation Measures GEO – 1 and GEO – 2** would reduce potential impacts related to Geology and Soils to less than significant levels. Implementation of **Mitigation Measure AQ – 1** would reduce potential impacts related to Greenhouse Gas Emissions to less than significant levels. Implementation of **Mitigation Measure GEO – 1 through GEO – 2** in combination with **Mitigation Measure BIO – 6** would reduce potential impacts related to Hydrology and Water Quality to less than significant levels. Implementation of Mitigation **Measures Noise – 1 and Noise – 2** would reduce potential impacts related to Noise to less than significant levels. Therefore, impacts resulting in substantial adverse environmental effects to human beings from implementation of the Proposed Project are considered **less than significant with mitigation incorporated**.

5.0 CEQA DETERMINATION

Pursuant to Section 15063, CEQA Guidelines, the County of El Dorado has utilized an Environmental Checklist to evaluate the potential environmental effects of the Proposed Project. The checklist provides a determination of these potential impacts and includes the substantiation developed in support of the conclusions checked on this form.

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 the mitigation measures described on the attached sheets have been added to the project (see previous pages). 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 significant effect 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 upon the earlier analysis as described on attached sheets, if the effect is a "potentially significant impact" or "potentially significant unless mitigated." 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, there will NOT be a significant effect in this case 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.

Vickie M. Sanders
Signature

8/23/16
Date

Vickie M. Sanders
Printed Name:
Vickie Sanders, Parks Manager

Parks Manager
For:
County of El Dorado, Parks Division

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6.0 REPORT PREPARATION

6.1 LEAD AGENCY

6.1.1 County of El Dorado, Parks Division

Vickie Sanders, Parks Manager, County of El Dorado, Parks Division

6.2 CONSULTANT STAFF

6.2.1 Foothill Associates

Kyrsten Shields, Project Manager, Senior Regulatory Specialist
Kari Zajac, Environmental Planner
Candice Guider-Heitmann, Regulatory Specialist
Michael Brewer, GIS Specialist
Ann Marie Perozzi, Graphics Design & Mapping

6.2.2 Ric Windmiller Consulting

Ric Windmiller, Registered Professional Archaeologist

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7.0 REFERENCES

7.1 LITERATURE REFERENCES

Busch, Lawrence, L. 2001. *Mineral Land Classification of El Dorado County, California.* California Geological Survey Open File Report 2000-03. Available online: ftp://ftp.consrv.ca.gov/pub/dmg/pubs/ofr/OFR_2000-03/OFR_2000-03_Text.pdf. [Accessed 08/14/2015].

Cal Recycle. 2015. Solid Waste Information Systems. *Facility Site Listing*. Available online at: http://www.calrecycle.ca.gov/SWFacilities/Directory/Search.aspx. [Accessed 11/24/2015].

Californiaherps. 2015. *A Guide to the Amphibians and Reptiles of California*. Available online at: http://californiaherps.com. [Accessed 06/08/2015].

California Air Resources Control Board (CARB). 2013. *State Area Designations*. June 2013. Available online at: http://www.arb.ca.gov/desig/adm/adm.htm. [Accessed 09/11/2015].

California Department of Conservation (DOC). 2015. *Fault-Rupture Hazard Zones in California*, California Geological Survey, 2007 and active AP map, 2015. Available online: ftp://ftp.consrv.ca.gov/pub/dmg/pubs/sp/Sp42.pdf [Accessed 08/27/2015].

California Department of Fish and Wildlife (CDFW). 2015. *California Natural Diversity Data Base* (*CNDDB: Auburn, Greenwood, Georgetown, Pilot Hill, Coloma, Garden Valley, Clarksville, Shingle Springs, and Placerville U.S. Geological Survey* (*USGS*) *7.5-minute series quadrangles* (*quadrangles*)), *Sacramento, CA*. [Accessed 07/28/2015].

California Department of Toxic Substances Control (CDTSC). 2014. *Envirostor Data Base*. Available online at: www.envirostor.dtsc.ca.gov. [Accessed 09/4/2015].

California Division of Mines and Geology. 1984. Fault Evaluation Report FER-156, Genoa Fault, Alpine County. February 14, 1984. [Accessed 08/27/15].

California Native Plant Society (CNPS). 2015. *Inventory of Rare and Endangered Plants* (online edition, v8-01a) (CNPS: Auburn, Greenwood, Georgetown, Pilot Hill, Coloma, Garden Valley, Clarksville, Shingle Springs, and Placerville quadrangles). [Accessed 07/28/2015].

California Regional Water Quality Control Board (CRWQCB). 2002. *Waste Discharge Requirements for El Dorado Irrigation District Deer Creek Waste Water Treatment Plant, El Dorado County*. Order No. R5-2002-0210. NPDES No. CA 0078662. Available online: http://www.waterboards.ca.gov/rwqcb5/board_decisions/adopted_orders/el_dorado/r5-2002-0210.pdf. [Accessed 08/14/15].

County of El Dorado. 2003. *El Dorado County General Plan Draft Environmental Impact Report* (State Clearinghouse Number 2001082030), prepared by EDAW, May 2003.

County of El Dorado. 2004a. *El Dorado County General Plan: Circulation Element*, July 19, 2004. Available online: https://www.edcgov.us/Government/Planning/Adopted_General_Plan.aspx. [Accessed 8/14/2015].

County of El Dorado. 2004b. *El Dorado County General Plan: Conservation and Open Space Element*, July 19, 2004. Available online: https://www.edcgov.us/Government/Planning/Adopted_General_Plan.aspx. [Accessed 8/14/2015].

County of El Dorado. 2004c. *El Dorado County General Plan: Land Use Element*, July 19, 2004. https://www.edcgov.us/Government/Planning/Adopted_General_Plan.aspx. [Accessed 8/14/2015].

County of El Dorado. 2004d. *El Dorado County General Plan: Parks and Open Space Element*, July 19, 2004. Available online: https://www.edcgov.us/Government/Planning/Adopted_General_Plan.aspx. [Accessed 8/18/2015].

County of El Dorado. 2004e. *El Dorado County General Plan: Public Health, Safety, and Noise Element*, July 19, 2004. Available online: https://www.edcgov.us/Government/Planning/Adopted_General_Plan.aspx. [Accessed 8/28/2015].

County of El Dorado. 2004f. *El Dorado County General Plan: Services and Utilities Element*, July 19, 2004. https://www.edcgov.us/Government/Planning/Adopted_General_Plan.aspx. [Accessed 10/30/2015].

County of El Dorado. 2004g. *El Dorado County Multi-Jurisdiction Hazard Mitigation Plan*. November 2004. Available online: http://hazardmitigation.calema.ca.gov/docs/lhmp/El_Dorado_County_LHMP.pdf. [Accessed 09/10/2015].

County of El Dorado. 2010. *El Dorado County Grading Ordinance*, August 10, 2010.

El Dorado County. 2002. El Dorado County Air Quality Management District, *Guide to Air Quality Assessment, Determining Significance of Air Quality Impacts Under the California Environmental Quality Act*. February 2002. Available online: http://edcgov.us/Government/AirQualityManagement/Guide_to_Air_Quality_Assessment.aspx. [Accessed 11/12/2015].

El Dorado County. 2005. *El Dorado County Air Quality Management, Asbestos Review Map*. July 2005. Available online: http://www.edcgov.us/Government/AirQualityManagement/Asbestos_Maps.aspx [Accessed 09/11/2015].

El Dorado County Fire District (EDCFD). 2015. *El Dorado County Fire Stations*. Available Online: http://www.eldoradocountyfire.com/district/stations.html. [Accessed 08/19/2015].

El Dorado County Fire Safe Council. 2004. *El Dorado County Wildfire Protection Plan*. November 1, 2004. Available online: http://www.edcfiresafe.org/fireplans/el-dorado-county.pdf. [Accessed 09/09/2015].

El Dorado County Fire Safe Council. 2015. *El Dorado County Western Slope Wildfire Protection Plan*. 2015. Available Online: http://www.edcfiresafe.org/edc-master-cwpp/. [Accessed 09/09/2015].

El Dorado County Office of Education (EDCOE). 2015. Districts and Schools Listings and Boundaries. Available Online: http://edcoe.org/districts-and-schools/districts-and-schools-listings. [Accessed 08/19/2015].

El Dorado County Transportation Commission. 2015. El Dorado County Airport Land Use Commission. Available Online: http://www.edctc.org/2/Airports.html [Accessed 09/4/2015].

El Dorado Disposal. 2015. Commercial Services. Available Online: http://www.eldoradodisposal.com/Commercial.aspx [Accessed 08/27/2015].

El Dorado Irrigation District (EID). 2011. *Serving El Dorado County Since 1925: A Brief History of El Dorado Irrigation District*, December 2011. Available Online: http://www.eid.org/home/showdocument?id=2152 [Accessed 08/14/2015].

EID. 2015. *El Dorado County Irrigation District, Wastewater*. Available online: http://www.eid.org/our-services/wastewater. [Accessed 08/14/2015].

Foothill Associates. 2012. *El Dorado County Parks and Trails Master Plan*. El Dorado County. 2012.

Foothill Associates. 2014. *Henningsen Lotus Park Conceptual Master Plan*, El Dorado County, 2014.

Foothill Associates. 2016. *Biological Resources Assessment* [for the] *±46.5-Acre Henningsen Lotus Park Improvements Project, El Dorado County, California*. March 3, 2016.

Nature Serve. 2015. Nature Serve Explorer: An Online Encyclopedia of Life [Web Application]. Version 7.1. Last updated July 2013. NatureServe, Arlington, Virginia. Available online at: http://www.natureserve.org/explorer. [Accessed 07/21/2015].

Rosenberg, D., J. Gervais, and D. Vesely. 2009. Conservation Assessment of the Western Pond Turtle in Oregon (*Actinemys marmorata*). Version 1.0. November 2009. U.S.D.I. Bureau of Land Management and Fish and Wildlife Service. U.S.D.A. Forest Service Region 6. Oregon Department of Fish and Wildlife, City of Portland. Metro.

Sacramento Metropolitan Air Quality Management District (SMAQMD). 2015. *Sacramento Metropolitan Air Quality Management District*, *CEQA Guide*, *Greenhouse Gas Emissions*, June 2015. Available online: http://www.airquality.org/ceqa/cequguideupdate/Ch6ghgFINAL.pdf). [Accessed: 09/14/2015].

Stebbins, R. C. 2003. *Western Amphibians and Reptiles*. 3rd Edition. Boston: Houghton Mifflin Co.

Storm Water Management Plan. 2004. *Western El Dorado County, Storm Water Management Plan*. 2004. [Accessed 08/21/25]. Available online: http://www.edcgov.us/Government/LongRangePlanning/StormWaterManagement/Storm_Water_Pollution_Prevention.aspx

U.S. Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS). 1974. *Soil Survey of El Dorado Area, California*. USDA, NRCS, in cooperation with the Regents of the University of California (Agricultural Experiment Station).

USDA, NRCS. 2015a. *Web Soil Survey*. Available online at: http://websoilsurvey.sc.egov.usda.gov/App/HomePage.html. Accessed [06/08/2015].

USDA, NRCS. 2015b. *National Hydric Soils List by State*. Available online at: http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/use/hydric/. Accessed [06/08/2015].

U.S. Geological Survey (USGS). 1953. *Coloma, California*. 7.5 -minute series topographic quadrangle. U.S. Department of the Interior.

Water Resources Consulting – Environmental. 1994. *Henningsen/Lotus Park Wetland Mitigation Plan*. June 1994.

Windmiller, Ric. 2015. *Henningsen Lotus Park Concept Plan Cultural Resources Assessment, Lotus, El Dorado County, California*. July 2015.

Zeiner, D.C., W.R. Laudenslayer Jr., K.E. Mayer, and M. White, eds. 1990. California's Wildlife Volume II: Birds. State of California: The Resource Agency, Department of Fish and Game, Sacramento, California. Available online at: http://www.dfg.ca.gov/whdab/html/cawildlife.html. Accessed [07/28/2015].

7.2 PERSONAL COMMUNICATION

El Dorado County Air Quality Management District (EDCAQMD). 2015. Personal Communication. September 16, 2015.

Rana Resources. 2013. Mark Jennings. Personal Communication. September 18, 2013.

Appendix A — Mitigation Monitoring and Reporting Program

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Henningsen Lotus Park Improvements Project Mitigation Monitoring and Reporting Program

Mitigation Measure (MM)	Implementing Responsibility	Monitoring Responsibility	Timing*	Verification of Compliance (Initials/Date)
Air Quality				
AQ — 1: Prior to implementation of any proposed future improvements that require a grading permit, the County shall consult with the El Dorado County AQMD. These consultations shall determine if a project-specific air quality analysis and/or GHG analysis for project construction would be required. If a project-specific air quality analysis or GHG analysis is required, the County shall conduct the analysis using the applicable standards in place at the time of development. The methodology may include, but not be limited to; project screening identified by the El Dorado County AQMD, the California Emissions Estimator Model (CalEEMod), Urban Emissions Model (URBEMIS) for air quality, or other methodology identified by El Dorado County AQMD. Should the project-specific analysis estimate that emissions, (including GHG emissions) could exceed = thresholds, the project shall incorporate the appropriate level of mitigation measures, which may include additional fugitive dust/particulate matter control as well as the applicable standard construction mitigation measures, or other measures identified to reduce GHG emissions in accordance with the current standards applicable at the time of development.	County	County	Prior to Construction	
Biological Resources				
BIO — 1: If construction is proposed during the nesting season for non-raptor migratory birds (February 1 through August 15), a pre-construction survey shall be conducted by a qualified biologist within 15 days of the start of project related activities. If nests of migratory birds are detected onsite, or within 100 feet of the project site, the County shall consult with CDFW to determine the size of a suitable buffer in which no new site disturbance is permitted until August 15, or until the qualified biologist determines that the young are foraging independently, or the	County	County and CDFW if Applicable	15 days Prior to Construction (during nesting season February 1 through	

Mitigation Measure (MM)		Implementing Responsibility	Monitoring Responsibility	Timing*	Verification of Compliance (Initials/Date)
	nest has been abandoned.			August 15)	
BIO — 2:	Vegetation clearing operations, including pruning or removal of trees and shrubs, shall be completed between September 1 and January 31, if feasible, to avoid migratory birds protected under 50 CFR 10 of the MBTA and/or Section 3503 of the California Fish and Game Code. If construction is proposed during the raptor breeding season (March 1 through August 31), a pre-construction raptor nest survey shall be conducted within 30 days prior to beginning of construction activities by a qualified biologist. If no active nests are found during the pre-construction survey, no further mitigation is required. If active nests are found, a quarter-mile (1,320 feet) initial temporary nest disturbance buffer area shall be established. If project related activities within the temporary nest disturbance buffer are determined to be necessary during the nesting season (approximately March 1 through August 31), then an onsite biologist/monitor experienced with raptor behavior shall be retained by the County to monitor the nest, and shall along with the project proponent, consult with the CDFW to determine the best course of action necessary to avoid nest abandonment or take of individuals. Work may be allowed to proceed within the temporary nest disturbance buffer if raptors are not exhibiting agitated behavior. The designated onsite biologist/monitor shall be onsite daily or less if approved by CDFW while construction related activities are taking place and shall have the authority to stop work if raptors are exhibiting agitated behavior.	County	County and CDFW if Applicable	Prior to Construction (during breeding season March 1 through August 31) and During Construction (vegetation clearing September 1 through January 1)	
BIO — 3:	A qualified biologist shall conduct a pre-construction survey for western pond turtle within 14 days prior to the start of ground disturbance within 500 feet of the river and the marshes. If no western pond turtles are observed, then a letter report documenting the results of the survey shall be provided to the County for their records, and no additional measures are recommended. If construction does not commence within 14	County	County and CDFW if Applicable	14 Days Prior to Construction	

Mitigation Measure (MM)		Implementing Responsibility	Monitoring Responsibility	Timing*	Verification of Compliance (Initials/Date)
	days of the pre-construction survey, or halts for more than 14 days, a new survey is required. If western pond turtles are found, additional avoidance measures are required including having a qualified biologist conduct a pre-construction survey within 24 hours prior to commencement of construction activates, performing a worker awareness trailing to all construction workers, and being present on the project site during any grading activities within 500 feet of the river and marshes for the purpose of relocating any western pond turtles found within the construction footprint to suitable habitat away from the construction zone, but within the Project Site.				
BIO — 4:	A qualified biologist shall conduct a pre-construction survey within 14 days prior to the start of construction activities for the coast horned lizard. If no coast horned lizards are observed, a letter report documenting the results of the survey shall be submitted to the County for their records, and no addition measures are recommended. If construction does not commence within 14 days of the pre-construction survey, or halts for more than 14 days, a new survey is required.	County	County and CDFW if Applicable	14 Days Prior to Construction	
BIO — 5:	A qualified biologist shall conduct a pre-construction survey for foothill yellow-legged frog within 14 days prior to the start of ground disturbance activities within 500 feet of the South Fork American River. If no foothill yellow-legged frogs are observed, then a letter report documenting the results of the survey shall be provided to the County for their records, and no additional measures are recommended. If construction does not commence within 14 days of the pre-construction survey, or halts for more than 14 days, a new survey is required. If foothill yellow-legged frogs are found, additional avoidance measures are required including having a qualified biologist conduct a pre-construction survey within 24 hours prior to	County	County and USFWS if Applicable	14 days Prior to Construction	

Mitigation Measure (MM)		Implementing Responsibility	Monitoring Responsibility	Timing*	Verification of Compliance (Initials/Date)
	commencement of construction activities, performing a worker awareness training to all construction workers, and being present within the Project Site during grading activities within 500 feet of the river for the purpose of relocating any foothill yellow-legged frogs found within the construction footprint to suitable habitat away from the construction zone, but within the Project Site.				
BIO — 6:	For any permanent or temporary placement of fill into jurisdictional waters of the U.S., authorization under Section 404 of the Federal Clean Water Act Permit shall be obtained from the Corps and a Section 401 Water Quality Certification shall be obtained from the RWQCB prior to the issuance of a grading permit. Any waters of the U.S. or jurisdictional wetlands that would be lost or disturbed shall be replaced or rehabilitated on a "no-net-loss" basis in accordance with the Corps mitigation guidelines. Habitat restoration, rehabilitation, and/or replacement shall be at a location and by methods agreeable to the Corps and RWQCB.	County	County and Corps	Prior to Construction	
BIO — 7:	If it is determined that project development would affect the bed, bank, or associated riparian vegetation of the South Fork American River or the ephemeral drainages, a Streambed Alteration Agreement shall be entered into with the CDFW pursuant to §1600 of the California Fish and Game Codes prior to the issuance of a grading or building permit by El Dorado County. If required, the County shall coordinate with CDFW in developing mitigation appropriate for potential impacts to riparian and/or wetland impacts and shall abide by the conditions of any executed agreement.	County	County and CDFW	Prior to Construction	
BIO — 8:	If the removal of oak trees is anticipated to occur, an Arborist Survey and Arborist Report shall be prepared for the site by an International Society of Arboriculture (ISA)-Certified Arborist to determine any mitigation that may be required to maintain consistency with the *El Dorado County Oak Woodland Management Plan*, which sets forth guidance on	County	County	Prior to construction	

Mitigation Measure (MM)	Implementing Responsibility	Monitoring Responsibility	Timing*	Verification of Compliance (Initials/Date)
Policy 7.4.4.4 of the El Dorado County General Plan.				
Cultural Resources				
CR — 1: Should buried archaeological deposits or artifacts be inadvertently exposed during the course of any construction activity, work shall cease in the immediate area and the El Dorado County Parks and Recreation Department shall be immediately contacted for inadvertent discovery of archaeological resources. A qualified archaeologist will be retained to document the find, assess its significance, and recommend further treatment. Work on the Project Site shall not resume until the archaeologist has had a reasonable time to conduct an examination and implement mitigation measures deemed appropriate and necessary by the agency with local jurisdiction in consultation with the qualified archaeologist to reduce impacts to a less than significant level.	County and Contractor	County	During Construction	
CR — 2: If evidence of a paleontological site is uncovered during grading or other construction activities, work shall be halted within 100 feet of the find and the El Dorado County Parks and Recreation Department shall be contacted for inadvertent discovery of resources associated with project construction. A qualified paleontologist shall be retained to conduct an on-site evaluation and provide recommendations for removal and/or preservation. Work on the Project Site shall not resume until the paleontologist has had a reasonable time to conduct an examination and implement mitigation measures deemed appropriate and necessary by the agency with local jurisdiction in consultation with the qualified paleontologist to reduce impacts to a less than significant level.	County and Contractor	County	During Construction	
CR — 3: In the event that any human remains or any associated funerary objects are encountered during construction, all work will cease within the vicinity of the discovery and the El Dorado County Parks and Recreation Department shall be immediately contacted for inadvertent discovery of resources	County and Contractor	County	During Construction	

Mitigation Measure (MM)	Implementing Responsibility	Monitoring Responsibility	Timing*	Verification of Compliance (Initials/Date)
associated with park construction. In accordance with CEQA (Section 1064.5) and the California Health and Safety Code (Section 7050.5), the El Dorado County coroner should be contacted immediately. If the human remains are determined to be Native American, the coroner shall notify the Native American Heritage Commission, who will notify and appoint a Most Likely Descendent (MLD). The MLD will work with a qualified archaeologist to decide the proper treatment of the human remains and any associated funerary objects. Construction activities in the immediate vicinity will not resume until a notice-to-proceed is issued.				
Geology and Soils				
GEO – 1: El Dorado County Parks and Trails Department shall apply for and comply with all current construction-related storm water permitting, monitoring and reporting requirements required by the RWQCB under NPDES, as applicable to project development at the time of construction of proposed improvements/facilities.	County	County and RWQCB	Prior to construction	
GEO – 2: Annually, prior to October 15 (the onset of the rainy season), El Dorado County Parks and Trails Department shall inspect and repair the Connector Trail to Highway 49, downstream park trails, river access trails, and other park areas that have the potential to contribute to substantial erosion and soil loss. Repairs shall prioritize any areas subject to erosion, as well as improper drainage and areas likely to form gullies during the rainy season.	County	County	Annually After Construction (prior to October 15)	
Noise				
Noise — 1: Construction activities shall be limited to: Monday through Friday 7:00 A.M. to 7:00 P.M. and 8:00 A.M. to 5:00 P.M. on Saturday, Sunday, and all federally recognized holidays. Any exceptions to these hours shall be evaluated on a case by case basis and require approval by the County of El Dorado.	Contractor	County	During Construction	

Mitigation Measure (MM)	Implementing Responsibility	Monitoring Responsibility	Timing*	Verification of Compliance (Initials/Date)
Noise — 2: All construction equipment shall be fitted with factory installed muffling devices and all construction equipment shall be maintained in good working order. All stationary construction noise sources (e.g. generators, compressors) shall be located as far away from noise sensitive land uses as feasible.	Contractor	County	Prior to Construction and During Construction	

Appendix B — *California Emissions Estimator Model (CalEEMod) Version 2013.2.2 for Henningsen Lotus Park Improvement Construction*

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HLP Improvements

Mountain Counties Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	1.42	Acre	1.42	61,855.20	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	8
Climate Zone	1			**Operational Year**	2016
Utility Company					
CO2 Intensity (lb/MWhr)	0	**CH4 Intensity (lb/MWhr)**	0	**N2O Intensity (lb/MWhr)**	0

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Construction would occur over 1.42 aces as in URBEMIS

Construction Phase - No demolition or architectural coating

Off-road Equipment - No arcitectural coating

On-road Fugitive Dust - No demolition or architectural coating

Architectural Coating - No architectural coating

Area Coating - No architectural coating

Landscape Equipment -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	200.00	43.00
tblConstructionPhase	NumDays	4.00	18.00
tblConstructionPhase	NumDays	2.00	5.00
tblConstructionPhase	PhaseStartDate	7/2/2016	7/4/2016
tblGrading	AcresOfGrading	6.75	1.50
tblGrading	AcresOfGrading	2.50	1.00
tblProjectCharacteristics	OperationalYear	2014	2016
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2016																74.4291
Total																**74.4291**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2016																74.4290
Total																**74.4290**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area																3.0000e-005
Energy																0.0000
Mobile																2.5265
Waste																0.0546
Water																0.0000
Total																**2.5811**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area																3.0000e-005
Energy																0.0000
Mobile																2.5265
Waste																0.0546
Water																0.0000
Total																**2.5811**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	6/1/2016	6/7/2016	5	5	
2	Grading	Grading	6/8/2016	7/1/2016	5	18	
3	Building Construction	Building Construction	7/4/2016	8/31/2016	5	43	
4	Paving	Paving	9/1/2016	9/14/2016	5	10	

Acres of Grading (Site Preparation Phase): 1

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	174	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	174	0.41
Grading	Rubber Tired Dozers	1	6.00	255	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	6.00	226	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	125	0.42
Paving	Paving Equipment	1	8.00	130	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	26.00	10.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust																0.0000
Off-Road																4.0650
Total																**4.0650**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling																0.0000
Vendor																0.0000
Worker																0.2172
Total																**0.2172**

3.2 Site Preparation - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust																0.0000
Off-Road																4.0650
Total																**4.0650**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling																0.0000
Vendor																0.0000
Worker																0.2172
Total																**0.2172**

3.3 Grading - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust																0.0000
Off-Road																12.0193
Total																**12.0193**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling																0.0000
Vendor																0.0000
Worker																0.7818
Total																**0.7818**

3.3 Grading - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust																0.0000
Off-Road																12.0193
Total																**12.0193**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling																0.0000
Vendor																0.0000
Worker																0.7818
Total																**0.7818**

3.4 Building Construction - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road																40.1088
Total																**40.1088**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling																0.0000
Vendor																4.2152
Worker																6.0702
Total																**10.2853**

3.4 Building Construction - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road																40.1088
Total																**40.1088**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling																0.0000
Vendor																4.2152
Worker																6.0702
Total																**10.2853**

3.5 Paving - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road																6.2457
Paving																0.0000
Total																**6.2457**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling																0.0000
Vendor																0.0000
Worker																0.7058
Total																**0.7058**

3.5 Paving - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road																6.2457
Paving																0.0000
Total																**6.2457**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling																0.0000
Vendor																0.0000
Worker																0.7058
Total																**0.7058**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated																2.5265
Unmitigated																2.5265

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	2.26	2.26	2.26	5,568	5,568
Total	2.26	2.26	2.26	5,568	5,568

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	14.70	6.60	6.60	33.00	48.00	19.00	66	28	6

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.381852	0.086091	0.200079	0.163903	0.085749	0.010610	0.015453	0.038109	0.001550	0.000665	0.009389	0.000881	0.005669

4.4 Fleet Mix

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated																0.0000
Electricity Unmitigated																0.0000
NaturalGas Mitigated																0.0000
NaturalGas Unmitigated																0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0																0.0000
Total																	**0.0000**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0																0.0000
Total																	**0.0000**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0				0.0000
Total					**0.0000**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0				0.0000
Total					**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated																3.0000e-005
Unmitigated																3.0000e-005

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating																0.0000
Consumer Products																0.0000
Landscaping																3.0000e-005
Total																**3.0000e-005**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating																0.0000
Consumer Products																0.0000
Landscaping																3.0000e-005
Total																**3.0000e-005**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated				0.0000
Unmitigated				0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 1.6919				0.0000
Total					**0.0000**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 1.6919				0.0000
Total					**0.0000**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated				0.0546
Unmitigated				0.0546

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.12				0.0546
Total					**0.0546**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.12				0.0546
Total					**0.0546**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Appendix C — *Biological Resources Assessment* [for the] *±46.5-Acre Henningsen Lotus Park Improvements Project, El Dorado County, California*, dated March 3, 2016

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Biological Resources Assessment

±46.5-Acre Henningsen Lotus Park Improvements Project
El Dorado County, California

Prepared for: County of El Dorado
Parks and Trails Division

Date: March 3, 2016

Submitted by:
FOOTHILL ASSOCIATES

Table of Contents

1.0 Executive Summary 1

2.0 Introduction 2

3.0 Regulatory Framework 3

3.1 Federal Jurisdiction 3
3.1.1 Federal Endangered Species Act 3
3.1.2 Migratory Bird Treaty Act 3
3.1.3 The Bald and Golden Eagle Protection Act 4
3.2 State Jurisdiction 4
3.2.1 California Endangered Species Act 4
3.2.2 California Department of Fish and Game Codes 4
3.2.3 California Department of Fish and Wildlife Species of Concern 5
3.3 Jurisdictional Waters 5
3.3.1 Federal Jurisdiction 5
3.3.2 State Jurisdiction 6
3.4 CEQA Significance Criteria 6
3.4.1 California Native Plant Society 7
3.5 El Dorado County General Plan 8
3.5.1 El Dorado County General Plan Section 7.4.4.4 19

4.0 Methods 21

5.0 Results 22

5.1 Site Location 22
5.2 Physical Features 22
5.2.1 Topography and Drainage 22
5.2.2 Soils 22
5.3 Wildlife Corridors 23
5.4 Biological Communities 24
5.4.1 Mixed Oak Woodland 24
5.4.2 Chaparral 24
5.4.3 Riparian 25
5.4.4 Himalayan Blackberry Scrub 25
5.4.5 Disturbed/Developed 25
5.4.6 South Fork American River 25
5.4.7 Seasonal Marsh 25
5.4.8 Perennial Marsh 25
5.4.9 South Fork American River 26
5.4.10 Ephemeral Drainage 26
5.5 Wildlife Observed 26
5.6 Special-Status Species 26
5.6.1 Listed and Special-Status Plants 27
5.6.2 Listed and Special-Status Wildlife 27
5.6.3 Nesting Birds of Conservation Concern Protected under the Migratory Bird Treaty Act and §3503.5 Department of Fish and Game Code 29
5.7 Sensitive Habitats 29
5.7.1 Oak Woodland Canopy 29
5.7.2 Potential Jurisdictional Waters of the U.S. 30
5.7.3 Riparian 30

6.0 Discussion and Recommendations 31
6.1 Brandegee's Clarkia 31
6.2 Western Pond Turtle 31
6.3 Coast Horned Lizard 32
6.4 Foothill Yellow-Legged Frog 32
6.5 Migratory Birds and Other Birds of Prey, including Northern Goshawk and White-Tailed Kite 33
6.6 Special-Status Bat Species, Including Townsend's Big-Eared Bat 33
6.7 Sensitive Habitats 34
6.7.1 Potential Jurisdictional Waters of the U.S. and Waters of the State 34
6.7.2 Oak Canopy 34
6.8 Summary of Avoidance and Minimization Measures 35
7.0 References 36

List of Tables

Table 1 — Biological Communities by Acreages 24

List of Figures

Figure 1 — Site and Vicinity 38
Figure 2 — Soils 39
Figure 3 — Biological Communities and Constraints 40
Figure 4 — CNDDB 41

List of Appendices

Appendix A — CDFW, CNPS, and USFWS Queries
Appendix B — Plants and Wildlife Observed within the Study Area
Appendix C — Regionally Occurring Listed and Special-Status Species

1.0 EXECUTIVE SUMMARY

Foothill Associates' biologists prepared this Biological Resources Assessment (BRA) for the±46.5-Acre Henningsen Lotus Park Improvements Project (Study Area), located in El Dorado County, California. The purpose of this BRA is to summarize the general biological resources within the Study Area, to assess the suitability of the Study Area to support special-status species and sensitive habitat types, to provide recommendations for regulatory permitting or further analysis that may be required, and to provide recommended mitigation measures to avoid or minimize potential impacts to special-status species and sensitive habitat types. This BRA was prepared in accordance with Mitigation Measure BIO-1 of the *El Dorado County Parks and Trails Master Plan Initial Study/Mitigated Negative Declaration* (Parks and Trails Master Plan IS/MND; El Dorado County 2012), which includes the Study Area.

Biological constraints within the Study Area include known or potential habitat for:

- Brandegee's clarkia (*Clarkia biloba* ssp. *brandegeeae*);
- Western pond turtle (*Emys marmorata*);
- Coast horned lizard (*Phrynosoma blainvillii*);
- Foothill yellow-legged frog (*Rana boylii*);
- Special-status bat species, including Townsend's big-eared bat (*Corynorhinus townsendii*);
- Migratory birds and raptors, including northern goshawk (*Accipiter gentilis*) and white-tailed kite (*Elanus leucurus*); and
- Sensitive habitats (oak woodland canopy, potentially jurisdictional waters of the U.S., and riparian habitat).

2.0 INTRODUCTION

This BRA summarizes the general biological resources within the Study Area, assesses the suitability of the Study Area to support special-status species and sensitive habitat types, provides recommendations for regulatory permitting or further analysis that may be required, and provides recommended mitigation measures to avoid or minimize potential impacts to special-status species and sensitive habitat types.

3.0 REGULATORY FRAMEWORK

Federal, State, and local environmental laws, regulations, and policies relevant to the California Environmental Quality Act (CEQA) review process are summarized below. The CEQA significance criteria are also included in this section.

3.1 Federal Jurisdiction

3.1.1 Federal Endangered Species Act

The U.S. Congress passed the Federal Endangered Species Act (FESA) in 1973 to protect those species that are endangered or threatened with extinction. FESA is intended to operate in conjunction with the National Environmental Policy Act (NEPA) to help protect the ecosystems upon which endangered and threatened species depend.

FESA prohibits the "take" of endangered or threatened wildlife species. "Take" is defined to include harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing, or collecting wildlife species or any attempt to engage in such conduct (FESA Section 3 [(3)(19)]). Harm is further defined to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns (50 CFR §17.3). Harass is defined as actions that create the likelihood of injury to listed species to such an extent as to significantly disrupt normal behavior patterns (50 CFR §17.3). Actions that result in take can result in civil or criminal penalties.

FESA and Clean Water Act (CWA) Section 404 guidelines prohibit the issuance of wetland permits for projects that jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species. The U.S. Army Corps of Engineers (Corps) must consult with the U.S. Fish and Wildlife Service (USFWS) and/or the National Marine Fisheries Service (NMFS) when threatened or endangered species under their jurisdiction may be affected by a proposed project. In the context of the proposed project, FESA would be initiated if development resulted in take of a threatened or endangered species or if issuance of a Section 404 permit or other federal agency action could result in take of an endangered species or adversely modify critical habitat of such a species.

3.1.2 Migratory Bird Treaty Act

Raptors (birds of prey), migratory birds, and other avian species are protected by a number of State and federal laws. The federal Migratory Bird Treaty Act (MBTA) prohibits the killing, possessing, or trading of migratory birds except in accordance with regulations prescribed by the Secretary of Interior.

3.1.3 The Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act (Eagle Act) prohibits the taking or possession of and commerce in bald and golden eagles with limited exceptions. Under the Eagle Act, it is a violation to "take, possess, sell, purchase, barter, offer to sell, transport, export or import, at any time or in any manner, any bald eagle commonly known as the American eagle, or golden eagle, alive or dead, or any part, nest, or egg, thereof." Take is defined to include pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, destroy, molest, and disturb. Disturb is further defined in 50 CFR Part 22.3 as "to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available (1) injury to an eagle, (2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or (3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior."

3.2 State Jurisdiction

3.2.1 California Endangered Species Act

The State of California enacted the California Endangered Species Act (CESA) in 1984. CESA is similar to the FESA but pertains to State-listed endangered and threatened species. CESA requires State agencies to consult with the California Department of Fish and Wildlife (CDFW), formally California Department of Fish and Game, when preparing California Environmental Quality Act (CEQA) documents. The purpose is to ensure that the State lead agency actions do not jeopardize the continued existence of a listed species or result in the destruction, or adverse modification of habitat essential to the continued existence of those species, if there are reasonable and prudent alternatives available (Fish and Game Code §2080). CESA directs agencies to consult with CDFW on projects or actions that could affect listed species, directs CDFW to determine whether jeopardy would occur and allows CDFW to identify "reasonable and prudent alternatives" to the project consistent with conserving the species. CESA allows CDFW to authorize exceptions to the State's prohibition against take of a listed species if the "take" of a listed species is incidental to carrying out an otherwise lawful project that has been approved under CEQA (Fish & Game Code § 2081).

3.2.2 California Department of Fish and Game Codes

Fully protected fish species are protected under Section 5515; fully protected amphibian and reptile species are protected under Section 5050; fully protected bird species are protected under Section 3511; and fully protected mammal species are protected under Section 4700. The California Fish and Game Code defines take as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." Except for take related to scientific research, all take of fully protected species is prohibited.

Section 3503 of the California Fish and Game Code prohibits the killing of birds or the destruction of bird nests. Section 3503.5 prohibits the killing of raptor species and the

destruction of raptor nests. Sections 2062 and 2067 define endangered and threatened species.

3.2.3 California Department of Fish and Wildlife Species of Concern

In addition to formal listing under FESA and CESA, species receive additional consideration by CDFW and local lead agencies during the CEQA process. Species that may be considered for review are included on a list of "Species of Special Concern," developed by the CDFW. It tracks species in California whose numbers, reproductive success, or habitat may be threatened.

3.3 Jurisdictional Waters

3.3.1 Federal Jurisdiction

The Corps regulates discharge of dredge or fill material into waters of the U.S. under Section 404 of the CWA. "Discharges of fill material" is defined as the addition of fill material into waters of the U.S., including, but not limited to the following: placement of fill that is necessary for the construction of any structure, or impoundment requiring rock, sand, dirt, or other material for its construction; site-development fills for recreational, industrial, commercial, residential, and other uses; causeways or road fills; fill for intake and outfall pipes and subaqueous utility lines [33 C.F.R. §328.2(f)]. In addition, Section 401 of the CWA (33 U.S.C. 1341) requires any applicant for a Federal license or permit to conduct any activity that may result in a discharge of a pollutant into waters of the U.S. to obtain a certification that the discharge will comply with the applicable effluent limitations and water quality standards.

Waters of the U.S. include a range of wet environments such as lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, and wet meadows. Boundaries between jurisdictional waters and uplands are determined in a variety of ways depending on which type of waters is present. Methods for delineating wetlands and non-tidal waters are described below.

- Wetlands are defined as "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" [33 C.F.R. §328.3(b)]. Presently, to be a wetland, a site must exhibit three wetland criteria: hydrophytic vegetation, hydric soils, and wetland hydrology existing under the "normal circumstances" for the site.

- The lateral extent of non-tidal waters is determined by delineating the ordinary high water mark (OHWM) [33 C.F.R. §328.4(c)(1)]. The OHWM is defined by the Corps as "that line on shore established by the fluctuations of water and indicated by physical character of the soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas" [33 C.F.R. §328.3(e)].

3.3.2 State Jurisdiction

CDFW is a trustee agency that has jurisdiction under Section 1600 *et seq*. of the California Fish and Game Code. Under Sections 1602 and 1603, a private party must notify CDFW if a proposed project will "substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake designated by the department, or use any material from the streambeds…except when the department has been notified pursuant to Section 1601." Additionally, CDFW may assert jurisdiction over native riparian habitat adjacent to aquatic features, including native trees over 4 inches in diameter at breast height (DBH). If an existing fish or wildlife resource may be substantially adversely affected by the activity, CDFW may propose reasonable measures that will allow protection of those resources. If these measures are agreeable to the parties involved, they may enter into an agreement with CDFW identifying the approved activities and associated mitigation measures.

Section 13260(a) of the Porter-Cologne Water Quality Control Act (contained in the California Water Code) requires any person discharging waste or proposing to discharge waste, other than to a community sewer system, within any region that could affect the quality of the waters of the State (all surface and subsurface waters) to file a report of waste discharge. The discharge of dredged or fill material may constitute a discharge of waste that could affect the quality of waters of the State. All of the wetlands and waterways in the Study Area are waters of the State, which are protected under this act.

Historically, California relied on its authority under Section 401 of the CWA to regulate discharges of dredged or fill material to California waters. That section requires an applicant to obtain "water quality certification" from the State Water Resources Control Board (SWRCB) through its Regional Water Quality Control Boards (RWQCB) to ensure compliance with State water quality standards before certain federal licenses or permits may be issued. The permits subject to Section 401 include permits for the discharge of dredged or fill materials (CWA Section 404 permits) issued by the USACE. Waste discharge requirements under the Porter-Cologne Water Quality Control Act were typically waived for projects that required certification. With the recent changes that limited the jurisdiction of wetlands under the CWA, the SWRCB has needed to rely on the report of waste discharge process.

3.4 CEQA Significance Criteria

Section 15064.7 of the CEQA Guidelines encourages local agencies to develop and publish the thresholds that the agency uses in determining the significance of environmental effects caused by projects under its review. However, agencies may also rely upon the guidance provided by the expanded Initial Study checklist contained in Appendix G of the CEQA Guidelines. Appendix G provides examples of impacts that would normally be considered significant. Based on these examples, impacts to biological resources would normally be considered significant if the project would:

- 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 CDFW or USFWS;

- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS;

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

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

- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; and

- Conflict with the provisions of an adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or other approved local, regional or State habitat conservation plan.

An evaluation of whether or not an impact on biological resources would be substantial must consider both the resource itself and how that resource fits into a regional or local context. Substantial impacts would be those that would diminish, or result in the loss of, an important biological resource, or those that would obviously conflict with local, State, or federal resource conservation plans, goals, or regulations. Impacts are sometimes locally important but not significant according to CEQA. The reason for this is that although the impacts would result in an adverse alteration of existing conditions, they would not substantially diminish, or result in the permanent loss of, an important resource on a population-wide or region-wide basis.

3.4.1 California Native Plant Society

The California Native Plant Society (CNPS) maintains a rank of plant species native to California that has low population numbers, limited distribution, or are otherwise threatened with extinction. This information is published in the Inventory of Rare and Endangered Vascular Plants of California. Potential impacts to populations of CNPS-ranked plants receive consideration under CEQA review. The following identifies the definitions of the CNPS ranks:

- Rank 1A: Plants presumed Extinct in California

- Rank 1B: Plants Rare, Threatened, or Endangered in California and elsewhere

- Rank 2: Plants Rare, Threatened, or Endangered in California, but more numerous elsewhere

- Rank 3: Plants about which we need more information – A Review List

- Rank 4: Plants of limited distribution – A Watch List

All plants appearing on CNPS List 1 or 2 are considered to meet CEQA Guidelines Section 15380 criteria. While only some of the plants ranked 3 and 4 meet the definitions of threatened or endangered species, the CNPS recommends that all Rank 3 and Rank 4 plants be evaluated for consideration under CEQA.

3.5 El Dorado County General Plan

In addition to federal and State regulations, the *2004 El Dorado County General Plan* (General Plan) includes goals, objectives, and policies regarding biological resources (County of El Dorado 2004). Sections relevant to this project are summarized below.

CONSERVATION AND PROTECTION OF WATER RESOURCES

GOAL 7.3: WATER QUALITY AND QUANTITY

Conserve, enhance, and manage water resources and protect their quality from degradation.

OBJECTIVE 7.3.1: WATER RESOURCE PROTECTION

Preserve and protect the supply and quality of the County's water resources including the protection of critical watersheds, riparian zones, and aquifers.

Policy 7.3.1.1 *Encourage the use of Best Management Practices, as identified by the Soil Conservation Service, in watershed lands as a means to prevent erosion, siltation, and flooding.*

Policy 7.3.1.2 *Establish water conservation programs that include both drought tolerant landscaping and efficient building design requirements as well as incentives for the conservation and wise use of water.*

Policy 7.3.1.3 *The County shall develop the criteria and draft an ordinance to allow and encourage the use of domestic gray water for landscape irrigation purposes. (See Title 22 of the State Water Code and the Graywater Regulations of the Uniform Plumbing Code).*

OBJECTIVE 7.3.2: WATER QUALITY

Maintenance of and, where possible, improvement of the quality of underground and surface water.

Policy 7.3.2.1 *Stream and lake embankments shall be protected from erosion, and streams and lakes shall be protected from excessive turbidity.*

Policy 7.3.2.2 *Projects requiring a grading permit shall have an erosion control program approved, where necessary.*

Policy 7.3.2.3 *Where practical and when warranted by the size of the project, parking lot storm drainage shall include facilities to separate oils and salts from storm water in accordance with the recommendations of the Storm Water Quality Task Force's California Storm Water Best Management Practices Handbooks (1993).*

Policy 7.3.2.4 *The County should evaluate feasible alternatives to the use of salt for ice control on County roads.*

Policy 7.3.2.5 *As a means to improve the water quality affecting the County's recreational waters, enhanced and increased detailed analytical water quality studies and monitoring should be implemented to identify and reduce point and non-point pollutants and contaminants. Where such studies or monitoring reports have identified sources of pollution, the County shall propose means to prevent, control, or treat identified pollutants and contaminants.*

OBJECTIVE 7.3.3: WETLANDS

Protection of natural and man-made wetlands, vernal pools, wet meadows, and riparian areas from impacts related to development for their importance to wildlife habitat, water purification, scenic values, and unique and sensitive plant life.

Policy 7.3.3.1 *For projects that would result in the discharge of material to or that may affect the function and value of river, stream, lake, pond, or wetland features, the application shall include a delineation of all such features. For wetlands, the delineation shall be conducted using the U.S. Army Corps of Engineers (USACE) Wetland Delineation Manual*

Policy 7.3.3.2 *intentionally blank*

Policy 7.3.3.3 *The County shall develop a database of important surface water features, including lake, river, stream, pond, and wetland resources.*

Policy 7.3.3.4 *The Zoning Ordinance shall be amended to provide buffers and special setbacks for the protection of riparian areas and wetlands. The County shall encourage the incorporation of protected areas into conservation easements or natural resource protection areas.*

Exceptions to riparian and wetland buffer and setback requirements shall be provided to permit necessary road and bridge repair and construction, trail construction, and other recreational access structures such as docks and piers, or where such buffers deny reasonable use of the property, but only when appropriate mitigation measures and Best Management Practices are incorporated into the project. Exceptions shall also be provided for horticultural and grazing activities on agriculturally zoned lands that utilize "best management practices (BMPs)" as recommended

by the County Agricultural Commission and adopted by the Board of Supervisors.

Until standards for buffers and special setbacks are established in the Zoning Ordinance, the County shall apply a minimum setback of 100 feet from all perennial streams, rivers, lakes, and 50 feet from intermittent streams and wetlands. These interim standards may be modified in a particular instance if more detailed information relating to slope, soil stability, vegetation, habitat, or other site- or project-specific conditions supplied as part of the review for a specific project demonstrates that a different setback is necessary or would be sufficient to protect the particular riparian area at issue.

For projects where the County allows an exception to wetland and riparian buffers, development in or immediately adjacent to such features shall be planned so that impacts on the resources are minimized. If 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.

Policy 7.3.3.5 *Rivers, streams, lakes and ponds, and wetlands shall be integrated into new development in such a way that they enhance the aesthetic and natural character of the site while disturbance to the resource is avoided or minimized and fragmentation is limited.*

OBJECTIVE 7.3.4: DRAINAGE

Protection and utilization of natural drainage patterns.

Policy 7.3.4.1 *Natural watercourses shall be integrated into new development in such a way that they enhance the aesthetic and natural character of the site without disturbance.*

Policy 7.3.4.2 *Modification of natural stream beds and flow shall be regulated to ensure that adequate mitigation measures are utilized.*

OBJECTIVE 7.3.5: WATER CONSERVATION

Conservation of water resources, encouragement of water conservation, and construction of wastewater disposal systems designed to reclaim and re-use treated wastewater on agricultural crops and for other irrigation and wildlife enhancement projects.

Policy 7.3.5.1 *Drought-tolerant plant species, where feasible, shall be used for landscaping of commercial development. Where the use of drought-tolerant native plant species is feasible, they should be used instead of non-native plant species.*

Policy 7.3.5.2 *A list of appropriate local indigenous drought tolerant plant materials shall be maintained by the County Planning Department and made available to the public.*

Policy 7.3.5.3 *The County Parks and Recreation Division shall use drought tolerant landscaping for all new parks and park improvement projects.*

Policy 7.3.5.4 *Require efficient water conveyance systems in new construction. Establish a program of ongoing conversion of open ditch systems shall be considered for conversion to closed conduits, reclaimed water supplies, or both, as circumstances permit.*

Policy 7.3.5.5 *Encourage water reuse programs to conserve raw or potable water supplies consistent with State Law.*

CONSERVATION OF BIOLOGICAL RESOURCES

GOAL 7.4: WILDLIFE AND VEGETATION RESOURCES

Identify, conserve, and manage wildlife, wildlife habitat, fisheries, and vegetation resources of significant biological, ecological, and recreational value.

OBJECTIVE 7.4.1: RARE, THREATENED, AND ENDANGERED SPECIES

The County shall protect State and federally recognized rare, threatened, or endangered species and their habitats consistent with Federal and State laws.

Policy 7.4.1.1 *The County shall continue to provide for the permanent protection of the eight sensitive plant species known as the Pine Hill endemics and their habitat through the establishment and management of ecological preserves consistent with County Code Chapter 17.71 and the USFWS's Gabbro Soil Plants for the Central Sierra Nevada Foothills Recovery Plan (USFWS 2002).*

Policy 7.4.1.2 *Private land for preserve sites will be purchased only from willing sellers.*

Policy 7.4.1.3 *Limit land uses within established preserve areas to activities deemed compatible. Such uses may include passive recreation, research and scientific study, and education. In conjunction with use as passive recreational areas, develop a rare plant educational and interpretive program.*

Policy 7.4.1.4 *Proposed rare, threatened, or endangered species preserves, as approved by the County Board of Supervisors, shall be designated Ecological Preserve (-EP) overlay on the General Plan land use map.*

Policy 7.4.1.5 *Species, habitat, and natural community preservation/conservation strategies shall be prepared to protect special status plant and animal*

species and natural communities and habitats when discretionary development is proposed on lands with such resources unless it is determined that those resources exist, and either are or can be protected, on public lands or private Natural Resource lands.

Policy 7.4.1.6 *All development projects involving discretionary review shall be designed to avoid disturbance or fragmentation of important habitats to the extent reasonably feasible. Where avoidance is not possible, the development shall be required to fully mitigate the effects of important habitat loss and fragmentation. Mitigation shall be defined in the Integrated Natural Resources Management Plan (INRMP) (see Policy 7.4.2.8 and Implementation Measure CO-M).*

The County Agricultural Commission, Plant and Wildlife Technical Advisory Committee, representatives of the agricultural community, academia, and other stakeholders shall be involved and consulted in defining the important habitats of the County and in the creation and implementation of the INRMP.

Policy 7.4.1.7 *The County shall continue to support the Noxious Weed Management Group in its efforts to reduce and eliminate noxious weed infestations to protect native habitats and to reduce fire hazards.*

OBJECTIVE 7.4.2: IDENTIFY AND PROTECT RESOURCES

Identification and protection, where feasible, of critical fish and wildlife habitat including deer winter, summer, and fawning ranges; deer migration routes; stream and river riparian habitat; lake shore habitat; fish spawning areas; wetlands; wildlife corridors; and diverse wildlife habitat.

Policy 7.4.2.1 *To the extent feasible in light of other General Plan policies and to the extent permitted by State law, the County of El Dorado will protect identified critical fish and wildlife habitat, as identified on the Important Biological Resources Map maintained at the Planning Department, through any of the following techniques: utilization of open space, Natural Resource land use designation, clustering, large lot design, setbacks, etc.*

Policy 7.4.2.2 *Where critical wildlife areas and migration corridors are identified during review of projects, the County shall protect the resources from degradation by requiring all portions of the project site that contain or influence said areas to be retained as non-disturbed natural areas through mandatory clustered development on suitable portions of the project site or other means such as density transfers if clustering cannot be achieved. The setback distance for designated or protected migration corridors shall be determined as part of the project's environmental analysis. The intent and emphasis of the Open Space land use designation and of the non-*

disturbance policy is to ensure continued viability of contiguous or interdependent habitat areas and the preservation of all movement corridors between related habitats. The intent of mandatory clustering is to provide a mechanism for natural resource protection while allowing appropriate development of private property. Horticultural and grazing projects on agriculturally designated lands are exempt from the restrictions placed on disturbance of natural areas when utilizing "Best Management Practices" (BMPs) recommended by the County Agricultural Commission and adopted by the Board of Supervisors when not subject to Policy 7.1.2.7.

Policy 7.4.2.3 *Consistent with Policy 9.1.3.1 of the Parks and Recreation Element, low impact uses such as trails and linear parks may be provided within river and stream buffers if all applicable mitigation measures are incorporated into the design.*

Policy 7.4.2.4 *Establish and manage wildlife habitat corridors within public parks and natural resource protection areas to allow for wildlife use. Recreational uses within these areas shall be limited to those activities that do not require grading or vegetation removal.*

Policy 7.4.2.5 *Setbacks from all rivers, streams, and lakes shall be included in the Zoning Ordinance for all ministerial and discretionary development projects.*

Policy 7.4.2.6 *El Dorado County Biological Community Conservation Plans shall be required to protect, to the extent feasible, rare, threatened, and endangered plant species only when existing federal or State plans for non-jurisdictional areas do not provide adequate protection.*

Policy 7.4.2.7 *The County shall form a Plant and Wildlife Technical Advisory Committee to advise the Planning Commission and Board of Supervisors on plant and wildlife issues, and the committee should be formed of local experts, including agricultural, fire protection, and forestry representatives, who will consult with other experts with special expertise on various plant and wildlife issues, including representatives of regulatory agencies. The Committee shall formulate objectives which will be reviewed by the Planning Commission and Board of Supervisors.*

Policy 7.4.2.8 *Develop within five years and implement an Integrated Natural Resources Management Plan (INRMP) that identifies important habitat in the County and establishes a program for effective habitat preservation and management. The INRMP shall include the following components:*

A. Habitat Inventory. This part of the INRMP shall inventory and map the following important habitats in El Dorado County:

1. Habitats that support special status species;

2. *Aquatic environments including streams, rivers, and lakes;*
3. *Wetland and riparian habitat;*
4. *Important habitat for migratory deer herds; and*
5. *Large expanses of native vegetation.*

The County should update the inventory every three years to identify the amount of important habitat protected, by habitat type, through County programs and the amount of important habitat removed because of new development during that period. The inventory and mapping effort shall be developed with the assistance of the Plant and Wildlife Technical Advisory Committee, CDFW, and USFWS. The inventory shall be maintained and updated by the County Planning Department and shall be publicly accessible.

B. *Habitat Protection Strategy. This component shall describe a strategy for protecting important habitats based on coordinated land acquisitions (see item D below) and management of acquired land. The goal of the strategy shall be to conserve and restore contiguous blocks of important habitat to offset the effects of increased habitat loss and fragmentation elsewhere in the county. The Habitat Protection Strategy should be updated at least once every five years based on the results of the habitat monitoring program (item F below). Consideration of wildlife movement will be given by the County on all future 4- and 6-lane roadway construction projects. When feasible, natural undercrossings along proposed roadway alignments that could be utilized by terrestrial wildlife for movement will be preserved and enhanced.*

C. *Mitigation Assistance. This part of the INRMP shall establish a program to facilitate mitigation of impacts to biological resources resulting from projects approved by the County that are unable to avoid impacts on important habitats. The program may include development of mitigation banks, maintenance of lists of potential mitigation options, and incentives for developers and landowner participation in the habitat acquisition and management components of the INRMP.*

D. *Habitat Acquisition. Based on the Habitat Protection Strategy and in coordination with the Mitigation Assistance program, the INRMP shall include a program for identifying habitat acquisition opportunities involving willing sellers. Acquisition may be by State or federal land management agencies, private land trusts or mitigation banks, the County, or other public or private organizations. Lands may be acquired in fee or protected through acquisition of a conservation easement designed to protect the core habitat values of*

the land while allowing other uses by the fee owner. The program should identify opportunities for partnerships between the County and other organizations for habitat acquisition and management. In evaluating proposed acquisitions, consideration will be given to site specific features (e.g., condition and threats to habitat, presence of special status species), transaction related features (e.g., level of protection gained, time frame for purchase completion, relative costs), and regional considerations (e.g., connectivity with adjacent protected lands and important habitat, achieves multiple agency and community benefits). Parcels that include important habitat and are located generally to the west of the El Dorado National Forest should be given priority for acquisition. Priority will also be given to parcels that would preserve natural wildlife movement corridors such as crossing under major roadways (e.g., U.S. Highway 50 and across canyons). All land acquired shall be added to the Ecological Preserve overlay area.

E. *Habitat Management. Each property or easement acquired through the INRMP should be evaluated to determine whether the biological resources would benefit from restoration or management actions. Examples of the many types of restoration or management actions that could be undertaken to improve current habitat conditions include: removal of non native plant species, planting native species, repair and rehabilitation of severely grazed riparian and upland habitats, removal of culverts and other structures that impede movement by native fishes, construction of roadway under and overcrossing that would facilitate movement by terrestrial wildlife, and installation of erosion control measures on land adjacent to sensitive wetland and riparian habitat.*

F. *Monitoring. The INRMP shall include a habitat monitoring program that covers all areas under the Ecological Preserve overlay together with all lands acquired as part of the INRMP. Monitoring results shall be incorporated into future County planning efforts so as to more effectively conserve and restore important habitats. The results of all special status species monitoring shall be reported to the CNDDB. Monitoring results shall be compiled into an annual report to be presented to the Board of Supervisors.*

G. *Public Participation. The INRMP shall be developed with and include provisions for public participation and informal consultation with local, State, and federal agencies having jurisdiction over natural resources within the County.*

H. *Funding. The County shall develop a conservation fund to ensure adequate funding of the INRMP, including habitat maintenance and restoration. Funding may be provided from grants, mitigation fees,*

and the County general fund. The INRMP annual report described under item F above shall include information on current funding levels and shall project anticipated funding needs and anticipated and potential funding sources for the following five years.

Policy 7.4.2.9 *The Important Biological Corridor (-IBC) overlay shall apply to lands identified as having high wildlife habitat values because of extent, habitat function, connectivity, and other factors. Lands located within the overlay district shall be subject to the following provisions except that where the overlay is applied to lands that are also subject to the Agricultural District (-A) overlay or that are within the Agricultural Lands (AL) designation, the land use restrictions associated with the -IBC policies will not apply to the extent that the agricultural practices do not interfere with the purposes of the -IBC overlay.*

- *Increased minimum parcel size;*
- *Higher canopy-retention standards and/or different mitigation standards/thresholds for oak woodlands;*
- *Lower thresholds for grading permits;*
- *Higher wetlands/riparian retention standards and/or more stringent mitigation requirements for wetland/riparian habitat loss;*
- *Increased riparian corridor and wetland setbacks;*
- *Greater protection for rare plants (e.g., no disturbance at all or disturbance only as recommended by U.S. Fish and Wildlife Service/California Department of Fish and Wildlife);*
- *Standards for retention of contiguous areas/large expanses of other (non-oak or non-sensitive) plant communities;*
- *Building permits discretionary or some other type of "site review" to ensure that canopy is retained;*
- *More stringent standards for lot coverage, floor area ratio (FAR), and building height; and*
- *No hindrances to wildlife movement (e.g., no fences that would restrict wildlife movement).*

The standards listed above shall be included in the Zoning Ordinance.

Wildland Fire Safe measures are exempt from this policy, except that Fire Safe measures will be designed insofar as possible to be consistent with the objectives of the Important Biological Corridor.

OBJECTIVE 7.4.3: COORDINATION WITH APPROPRIATE AGENCIES

Coordination of wildlife and vegetation protection programs with appropriate federal and State agencies.

PRESERVATION OF OPEN SPACE

GOAL 7.6: OPEN SPACE CONSERVATION

Conserve open space land for the continuation of the County's rural character, commercial agriculture, forestry and other productive uses, the enjoyment of scenic beauty and recreation, the protection of natural resources, for protection from natural hazards, and for wildlife habitat.

OBJECTIVE 7.6.1: IMPORTANCE OF OPEN SPACE

Consideration of open space as an important factor in the County's quality of life.

Policy 7.6.1.1 *The General Plan land use map shall include an Open Space land use designation. The purpose of this designation is to implement the goals and objectives of the Land Use and the Conservation and Open Space Elements by serving one or more of the purposes stated below. In addition, the designations on the land use map for Rural Residential and Natural Resource areas are also intended to implement said goals and objectives. Primary purposes of open space include:*

A. Conserving natural resource areas required for the conservation of plant and animal life including habitat for fish and wildlife species; areas required for ecologic and other scientific study purposes; rivers, streams, banks of rivers and streams and watershed lands;

B. Conserving natural resource lands for the managed production of resources including forest products, rangeland, agricultural lands important to the production of food and fiber; and areas containing important mineral deposits;

C. Maintaining areas of importance for outdoor recreation including areas of outstanding scenic, historic and cultural value; areas particularly suited for park and recreation purposes including those providing access to lake shores, beaches and rivers and streams; and areas which serve as links between major recreation and open space reservations including utility easements, banks of rivers and streams, trails and scenic highway corridors;

D. Delineating open space for public health and safety including, but not limited to, areas which require special management or regulation because of hazardous or special conditions such as earthquake fault zones, unstable soil areas, flood plains, watersheds, areas presenting

high fire risks, areas required for the protection of water quality and water reservoirs, and areas required for the protection and enhancement of air quality; and

E. Providing for open spaces to create buffers which may be landscaped to minimize the adverse impact of one land use on another.

Policy 7.6.1.2 *The County will provide for Open Space lands through:*

F. The designation of land as Open Space;

G. The designation of land for low-intensity land uses as provided in the Rural Residential and Natural Resource land use designations;

H. Local implementation of the Federal Emergency Management Agency's National Flood Insurance Program;

I. Local implementation of the State Land Conservation Act Program; and

J. Open space land set aside through Planned Developments (PDs).

Policy 7.6.1.3 *The County shall implement Policy 7.6.1.1 through zoning regulations and the administration thereof. It is intended that certain districts and certain requirements in zoning regulations carry out the purposes set forth in Policy 7.6.1.1 as follows:*

K. The Open Space (OS) Zoning District is consistent with and shall implement the Open Space designation of the General Plan land use map and all other land use designations.

L. The Agricultural (A), Exclusive Agricultural (AE), Planned Agricultural (PA), Select Agricultural (SA-10), and Timberland Production Zone (TPZ) zoning districts are consistent with Policy 7.6.1.1 and serve one or more of the purposes set forth therein.

M. Zoning regulations shall provide for setbacks from all flood plains, streams, lakes, rivers and canals to maintain Purposes A, B, C, and D set forth in Policy 7.6.1.1.

N. Zoning regulations shall provide for maintenance of permanent open space in residential, commercial, industrial, agricultural, and residential agricultural zone districts based on standards established in those provisions of the County Code. The regulations shall minimize impacts on wetlands, flood plains, streams, lakes, rivers, canals, and slopes in excess of 30 percent and shall maintain Purposes A, B, C, and D in Policy 7.6.1.1.

O. Landscaping requirements in zoning regulations shall provide for vegetative buffers between incompatible land uses in order to maintain Purpose E in Policy 7.6.1.1.

P. Zoning regulations shall provide for Mineral Resource Combining Zone Districts and/or other appropriate mineral zoning categories which shall be applied to lands found to contain important mineral deposits if development of the resource can occur in compliance with all other policies of the General Plan. Those regulations shall maintain Purposes A, B, C, D, and E of Policy 7.6.1.1.

Policy 7.6.1.4 *The creation of new open space areas, including Ecological Preserves, common areas of new subdivisions, and recreational areas, shall include wildfire safety planning.*

3.5.1 El Dorado County General Plan Section 7.4.4.4

The General Plan, adopted in 2004, regulates impacts to tree canopy under General Plan Policy 7.4.4.4. This policy set forth percentages of on-site canopy retention requirements for development projects until the County developed a County-wide strategy. In 2008, the County adopted the *El Dorado County Oak Woodland Management Plan* (OWMP) to implement these General Plan oak woodland protection policies. The County's adoption of the OWMP was challenged in court. In 2012, the Appellate Court upheld the CEQA challenge to the OWMP and directed the County to prepare an Environmental Impact Report for the OWMP. Currently, a General Plan amendment is being prepared to clarify and refine the County's oak tree protection policies.

As a result, only Option "A" of Policy 7.4.4.4 is applicable to oak woodland mitigation. Impacts to oak woodland canopy are currently assessed under the *Interim Interpretive Guidelines* amended October 12, 2007.

Policy 7.4.4.4 *For all new development projects (not including agricultural cultivation and actions pursuant to an approved Fire Safe Plan necessary to protect existing structures, both of which are exempt from this policy) that would result in soil disturbance on parcels that (1) are over an acre and have at least 1 percent total canopy cover or (2) are less than an acre and have at least 10 percent total canopy cover by woodlands habitats as defined in this General Plan and determined from base line aerial photography or by site survey performed by a qualified biologist or licensed arborist, the County shall require one of two mitigation options: (1) the project applicant shall adhere to the tree canopy retention and replacement standards described below; or (2) the project applicant shall contribute to the County's Integrated Natural Resources Management Plan (INRMP) conservation fund described in Policy 7.4.2.8.*

Option A

The County shall apply the following tree canopy retention standards:

Percent Existing Canopy Cover	Canopy Cover to be Retained
80–100	60% of existing canopy
60–79	70% of existing canopy
40–59	80% of existing canopy
20–39	85% of existing canopy
10-19	90% of existing canopy
1-9 for parcels > 1 acre	90% of existing canopy

Under Option A, the project applicant shall also replace woodland habitat removed at 1:1 ratio. Impacts on woodland habitat and mitigation requirements shall be addressed in a Biological Resources Study and Important Habitat Mitigation Plan as described in Policy 7.4.2.8. Woodland replacement shall be based on a formula, developed by the County, that accounts for the number of trees and acreage affected.

4.0 METHODS

Available information pertaining to the natural resources of the region was reviewed. All references reviewed for this assessment are listed in the **References** section. The following site-specific information was reviewed:

- California Department of Fish and Wildlife (CDFW). 2015. *California Natural Diversity Data Base* (CNDDB: *Auburn, Greenwood, Georgetown, Pilot Hill, Coloma, Garden Valley, Clarksville, Shingle Springs, and Placerville* U.S. Geological Survey (USGS) 7.5-minute series quadrangles (quadrangles)), Sacramento, CA. [Accessed 07/28/2015] (**Appendix A**);

- California Native Plant Society (CNPS). 2015. *Inventory of Rare and Endangered Plants* (online edition, v8-01a) (CNPS: *Auburn, Greenwood, Georgetown, Pilot Hill, Coloma, Garden Valley, Clarksville, Shingle Springs, and Placerville* quadrangles). [Accessed 07/28/2015] (**Appendix A**);

- U.S. Fish and Wildlife Service (USFWS). 2015. *Information for Planning and Conservation (IPaC) Trust Resource Report: Henningsen Lotus Park CEQA, El Dorado County*. [Accessed 07/28/2015] (**Appendix A**);

- U.S. Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS). 1974. *Soil Survey of El Dorado Area, California*. U.S. Department of Agriculture; and

- El Dorado County. 2012. *The El Dorado County Parks and Trails Master Plan Initial Study/Mitigated Negative Declaration.* El Dorado County.

Foothill Associates' biologists conducted general biological and focused botanical surveys and wetland delineations on May 22, 2015 and June 9, 2015. The surveys consisted of conducting botanical inventories, evaluating biological communities, mapping wetlands and waterways, and documenting habitat for special-status species with the potential to occur within the Study Area. Plants and wildlife observed within the Study Area are identified in **Appendix B**. The botanical inventory followed CDFW's (2009) protocol plant surveys. The delineations consisted of mapping wetlands and waterways. The results of the wetland delineation are summarized herein and are discussed in detail under a separate cover (Foothill Associates 2015a).

5.0 RESULTS

5.1 Site Location

The ±46.5-acre Study Area is located in a forested area along the South Fork American River in the Lotus-Coloma area within El Dorado County, California. Lotus Road extends southwest to northeast through the Study Area. The Study Area includes the existing Henningsen Lotus Park and can be located within Township 11 North, Range 10 East, within Section 18 of the *Coloma* quadrangle. The approximate location of the Study Area is 38° 48' 13.374" North, 120° 54' 21.178" West (**Figure 1**).

5.2 Physical Features

5.2.1 Topography and Drainage

The topography is comprised of moderately steep slopes on the eastern side of the Study Area, which descend to a mostly flat disturbed/developed park on the western side of the Study Area. Elevations range from 710 feet (216 meters) above mean sea level (MSL) in the southwestern portion of the Study Area to 1,000 feet (305 meters) above MSL in the northeastern portion of the Study Area.

The Study Area includes unnamed ephemeral drainages that flow northwest and drain into the South Fork American River on the northwest boundary of the Study Area. The South Fork American River receives water from upstream snowpack. The South Fork American River is a navigable water that flows into Folsom Lake, which empties into the American River, which is a tributary to the Sacramento River and ultimately to the Pacific Ocean.

5.2.2 Soils

The Natural Resources Conservation Service (NRCS) has mapped five soil units within the Study Area (**Figure 2**): **Auberry Coarse Sandy Loam, 9 to 15 Percent Slopes**, **Auberry Course Sandy Loam, 15 to 30 Percent Slopes**, **Auberry Very Rocky Coarse Sandy Loam, 30 to 50 Percent Slopes**, **Placer Diggings,** and **Tailings**. The NRCS has also mapped water, which lacks soils characteristics. General characteristics associated with these soil types are described below (USDA, NRCS 1974 and 2015a).

- **(ArC) Auberry Coarse Sandy Loam, 9 to 15 Percent Slopes**: This soil unit is moderately permeable and less than five percent of the surface consists of rock outcrops. Runoff is medium, and the erosion hazard is moderate. The Auberry series consists of deep, well drained soils that are formed in material weathered from intrusive, acid igneous rocks. The hydric soils list for El Dorado County does not identify this soil type as hydric (USDA, NRCS 2015b). This soil unit is found along the southern edge of the Study Area.

- **(ArD) Auberry Coarse Sandy Loam, 15 to 30 Percent Slopes**: This soil unit is similar to the ArC soil described above. It is moderately permeable, consists of less than five percent of rock outcrops on the surface, and is moderately steep. Runoff is medium to rapid, and the hazard of erosion is moderate to high. The hydric soils list for El Dorado County does not identify this soil type as hydric (USDA, NRCS 2015b). This soil unit is found in the eastern half of the Study Area.

- **(AtE) Auberry Very Rocky Coarse Sandy Loam, 30 to 50 Percent Slopes**: This soil unit is found in the steep, heavily forested areas on the east end of the Study Area. Five to 25 percent of the surface has outcrops of bedrock. Permeability is moderate, surface runoff is rapid, and the erosion hazard is very high. Similar to the other Auberry soils described above, this soil is formed in material weathered from intrusive, acid igneous rocks. The hydric soils list for El Dorado County does not identify this soil type as hydric (USDA, NRCS 2015b). This soil unit is found in the northeastern half of the Study Area.

- **(PrD) Placer Diggings**: Placer diggings consists of stony, cobbly, and gravelly material, commonly in beds of creeks and other streams, or of areas that have been Placer-mined and contain enough fine sand or silt to support some grass for grazing. The depth of the material is variable, ranging from six inches to five feet. Natural drainage varies from place to place. The hydric soils list for El Dorado County identifies this soil type as hydric (USDA, NRCS 2015b). This soil unit is found in the southwest end of the Study Area.

- **(TaD) Tailings**: Tailings consists of cobbly and stony tailings from dredge mining and hydraulic mining and in hard-rock mine dumps. All of the soil material has either been washed away, as in hydraulic mining, or has been buried, as in dredge mining, or mine dumps. Surface runoff is slight and the erosion hazard is none to slight. The hydric soils list for El Dorado County identifies this soil type as hydric (USDA, NRCS 2015b). This soil unit dominates the more level western end of the Study Area.

5.3 Wildlife Corridors

Wildlife corridors link together areas of suitable wildlife habitat that are otherwise separated by rugged terrain, changes in vegetation, or human disturbance. The fragmentation of open space areas by urbanization creates isolated "islands" of wildlife habitat. Fragmentation can also occur when a portion of one or more habitats is converted into another habitat, such as when woodland or scrub habitat is altered or converted into grasslands after a disturbance such as fire, mudslide, or grading activities. Wildlife corridors mitigate the effects of this fragmentation by: (1) allowing animals to move between remaining habitats, thereby permitting depleted populations to be replenished and promoting genetic exchange; (2) providing escape routes from fire, predators, and human disturbances, thus reducing the risk of catastrophic events (such as fire or disease) on population or local species extinction; and (3) serving as travel routes

for individual animals as they move within their home ranges in search of food, water, mates, and other needs.

The South Fork American River along the western boundary of the Study Area acts as a wildlife corridor that provides upstream and downstream linkages for wildlife. Although wildlife may travel within the South Fork American River, Lotus Road, which extends southwest to northeast through the central portion of the Study Area, acts as a barrier for travel between the South Fork American River and the mixed oak woodland to the east of the Study Area.

5.4 Biological Communities

The following biological communities occur within the Study Area: mixed oak woodland, chaparral, riparian, Himalayan blackberry scrub, disturbed/developed, seasonal marsh, perennial marsh, South Fork American River, and ephemeral drainage. **Table 1** summarizes the biological communities by acreages. Dominant vegetation observed within each biological community is discussed in detail below. A comprehensive list of plants observed within the Study Area is provided in **Appendix B**. The biological communities are depicted in **Figure 3**.

Table 1 — Biological Communities by Acreages

Biological Community	Total Acreage[1]
Mixed Oak Woodland	14.55
Chaparral	1.07
Riparian	3.82
Himalayan Blackberry Scrub	4.64
Disturbed/Developed	19.51
Seasonal Marsh	0.45
Perennial Marsh	0.65
South Fork American River	1.76
Ephemeral Drainage	0.06
Total	**46.51**

[1]GIS calculations may not reflect the exact acreage of the Study Area due to rounding.

5.4.1 Mixed Oak Woodland

Mixed oak woodland occurs throughout the Study Area. Dominant vegetation includes: interior live oak (*Quercus wizlizeni*), California black oak (*Quercus kelloggii*), gray pine (*Pinus sabiniana*), Ponderosa pine (*Pinus ponderosa*), California buckeye (*Aesculus californica*), wall bedstraw (*Galium parisiense*), filaree (*Erodium botrys*), Manzanita (*Arctostaphylos manzanita*), and Brandegee's clarkia.

5.4.2 Chaparral

Chaparral occurs within the western boundary of the Study Area. Dominant vegetation includes: coyote brush (*Baccharis pilularis*), California poppy (*Eschscholzia californica*), and buckbrush (*Ceanothus cuneatus* var. *cuneatus*).

5.4.3 Riparian

Riparian habitat occurs along the river corridor along the western portion of the Study Area. Dominant vegetation is comprised of a mixture of native and invasive species including: bigleaf periwinkle (*Vinca major*), ripgut grass (*Bromus diandrus*), poison oak (*Toxicodendron diversilobum*), black locust (*Robinia pseudoacacia*), willow (*Salix* sp.), Fremont cottonwood (*Populus fremontii* ssp. *fremontii*), California wild rose (*Rosa californica*), Himalayan blackberry (*Rubus armeniacus*), purpletop (*Verbena bonariensis*), tree of heaven (*Ailanthus altissima*), and California grape (*Vitis californica*).

5.4.4 Himalayan Blackberry Scrub

Himalayan blackberry scrub occurs within the southwestern portion of the Study Area. This biological community is comprised of dense thickets of Himalayan blackberry in predominately upland areas that lack hydrophytic soils. This biological community is impenetrable to access aside from a few narrow, manmade trails. Dominant vegetation interspersed throughout the Himalayan blackberry brambles includes: Fremont cottonwood, willow, black locust, Oregon ash (*Fraxinus latifolia*), and California sycamore (*Platanus racemosa*).

5.4.5 Disturbed/Developed

Disturbed/developed areas occur throughout the Study Area and are comprised of Henningsen Lotus Park, graded roads and parking lots, buildings, and unimproved trails. Dominant vegetation includes: interior live oak, California black oak, California sycamore (*Platanus racemosa*), gray pine, and ornamental landscape trees.

5.4.6 South Fork American River

The South Fork American River borders the Study Area on the north and west boundaries. Dominant vegetation is equivalent to the dominant vegetation of the riparian biological community discussed in **Section 5.4.3** above.

5.4.7 Seasonal Marsh

Two seasonal marshes occur within the southern portion of the Study Area. Dominant vegetation includes: narrow-leaved willow (*Salix exigua*) and whiteroot sedge (*Carex barbarae*).

5.4.8 Perennial Marsh

The perennial marsh occurs within the mixed oak woodland adjacent to the southern border of the Study Area. Dominant vegetation includes: Himalayan blackberry, Fremont cottonwood, and Goodding's black willow (*Salix gooddingii*).

5.4.9 South Fork American River

The South Fork American River borders the Study Area on the north and west boundaries. Dominant vegetation is equivalent to the dominant vegetation of the riparian biological community discussed in **Section 5.4.3** above.

5.4.10 Ephemeral Drainage

Several unnamed ephemeral drainages occur within the Study Area. Dominant vegetation includes: doveweed (*Croton setigerus*), Northern willow herb (*Epilobium ciliatum)*, and wall bedstraw (*Galium parisiense*).

5.5 Wildlife Observed

Wildlife observed foraging within the Study Area included: red-shouldered hawk (*Buteo lineatus*), black-headed grosbeak (*Pheucticus melanocephalus*), Brewer's blackbird (*Euphagus cyanocephalus*), acorn woodpecker (*Melanerpes formicivorus*), and goldfinch (*Spinus tristis*). A comprehensive list of wildlife observed within the Study Area is provided in **Appendix B**.

5.6 Special-Status Species

Special-status species are plant and animal species that have been afforded special recognition by federal, State, or local resource agencies or organizations. Listed and special-status species are of relatively limited distribution and may require specialized habitat conditions. Special-status species are defined as meeting one or more of the following criteria:

- Listed or proposed for listing under the CESA or the FESA;
- Protected under other regulations (e.g. MBTA);
- CDFW Species of Special Concern;
- Plant species ranked by the CNPS; or
- Receive consideration during environmental review under CEQA.

Special-status species considered for this analysis are based on the CNDDB, CNPS, and USFWS lists. CNDDB occurrences of special-status species documented within five miles of the Study Area are illustrated within **Figure 4** (CDFW 2015). **Appendix C** includes the common and scientific names for each species, regulatory status (federal, State, local, CNPS), habitat descriptions, and potential for occurrence within the Study Area. The following set of criteria has been used to determine each species potential for occurrence within the Study Area:

- **Present**: Species known to occur within the Study Area based on CNDDB records and/or observed within the Study Area during the biological surveys.

- **High**: Species known to occur on or near the Study Area (based on CNDDB records within five miles and/or based on professional expertise specific to the Study Area or species) and there is suitable habitat within the Study Area.

- **Low**: Species known to occur in the vicinity of the Study Area and there is marginal habitat within the Study Area **-OR-** Species is not known to occur in the vicinity of the site, however, there is suitable habitat on the site.

- **None**: Species is not known to occur on or in the vicinity of the Study Area and there is no suitable habitat within the Study Area **-OR-** Species was surveyed for during the appropriate season with negative results **-OR-** The Study Area does not provide suitable soils or occurs outside of the known elevation or geographic ranges **-OR-** Species is not known in El Dorado County.

Only those species that are known to be present or have a *high* or *low* potential for occurrence are discussed further in the following paragraphs.

5.6.1 Listed and Special-Status Plants

Brandegee's Clarkia

Brandegee's clarkia is an annual herb often found on roadcuts in chaparral, cismontane woodland, and lower montane coniferous forest from 246 to 3,002 feet (75 to 915 meters) above MSL. There are six CNDDB records for this species within five miles of the Study Area (**Figure 4**) (CDFW 2015). An estimated 1,000 individuals were observed along roadcuts and hillslopes within approximately 0.53 acres of the mixed oak woodland (**Figure 3**). This species is *present* within the Study Area.

5.6.2 Listed and Special-Status Wildlife

The special-status wildlife species that have a *high* potential to occur or were observed within the Study Area are western pond turtles. The following special-status wildlife species that have a *low* potential to occur within the Study Area include: coast horned lizard, foothill yellow-legged frog, northern goshawk, white-tailed kite, and special-status bats including Townsend's big-eared bat.

Species Present or with a High Potential to Occur

Western Pond Turtle

Western pond turtles are found in ponds, lakes, rivers, streams, creeks, marshes, and irrigation ditches with suitable basking sites (Californiaherps 2015). Suitable aquatic habitat typically has a muddy or rocky bottom and has emergent aquatic vegetation for cover (Stebbins 2003). Western pond turtles nest and overwinter in areas of sparse vegetation comprised of grassland and forbs with less than ten percent slopes, less than 492 feet (150 meters) from aquatic habitat (Rosenberg *et. al.* 2009). There is one CNDDB record for this species within five miles of the Study Area (**Figure 4**) (CDFW

2015). The South Fork American River provides aquatic habitat and the riparian area provides upland habitat for this species. The seasonal and perennial marshes provide aquatic habitat for this species. No western pond turtles were observed within the Study Area during the biological surveys. This species has a *high* potential to occur within the Study Area.

Species with a Low Potential to Occur

Coast (California) Horned Lizard

Coast horned lizard inhabits open areas of sandy soil and low vegetation in valleys, foothills, and semiarid mountains from sea level to 8,000 feet above MSL. This species is found in grasslands, coniferous forests, woodlands, and chaparral with open areas and patches of loose soil and in lowlands along sandy washes with scattered shrubs and along dirt roads (Nature Serve 2015). There are no CNDDB occurrences for this species within five miles of the Study Area (CDFW 2015). The sandy areas within the mixed oak woodland and chaparral provide habitat for this species. No coast horned lizards were observed during the biological surveys of the Study Area. This species has a *low* potential to occur within the Study Area.

Foothill Yellow-Legged Frog

Foothill yellow-legged frog inhabits permanent slow-moving streams or channels with rocky or muddy bottoms within areas of chaparral, open woodland, and forest. This species has been extirpated from an estimated 66 percent of its range in the foothills of the Sierra Nevada Mountains, especially south of Interstate 80 where it is nearly extinct. They are found in large perennial streams with rocky or bedrock habitat, although they prefer smaller streams (Nature Serve 2015). There is one CNDDB occurrence within five miles of the Study Area (**Figure 4**) (CDFW 2015). The occurrence is in Indian Creek, which is tributary to the South Fork American River. Although the South Fork American River provides marginal habitat, the portion of the river that occurs within or along the western border of the Study Area is fast moving with rapids and lacks backwater pools. No foothill yellow-legged frogs were observed during the biological surveys of the Study Area. This species has a *low* potential to occur within the Study Area.

Northern Goshawk

Northern goshawk nests in a wide variety of forest types including deciduous and coniferous forests. Northern goshawks generally nest in the largest trees of dense, old, or mature stands with high canopy closure (60 to 95 percent) and sparse groundcover. This species forages in heavily forested and open habitats (Nature Serve 2015). There are no CNDDB records for this species within five miles of the Study Area (CDFW 2015). The mixed oak woodland provides habitat for this species. No northern goshawks were observed during the biological surveys of the Study Area. This species has a *low* potential to occur within the Study Area.

White-Tailed Kite

White-tailed kite is a year-long resident in coastal and valley lowlands in California. White-tailed kite breed from February to October, peaking from May to August (Zeiner *et. al.* 1990). This species nests near the top of dense oaks, willows, or other large trees. There are no CNDDB records of this species within five miles of the Study Area (CDFW 2015). The trees within the mixed oak woodland, riparian, and Himalayan blackberry scrub provide nesting habitat for this species. No white-tailed kites were observed during the biological surveys of the Study Area. This species has a *low* potential to nest within the Study Area.

Special-Status Bats, including Townsend's Big-Eared Bat

California is home to several special-status bat species, including Townsend's big-eared bat. Bat numbers are in decline throughout the U.S. due to loss of roosting habitat, habitat conversion, and habitat alteration. There are no CNDDB occurrences for bat species within five miles of the Study Area (CDFW 2015). The buildings within the ruderal/disturbed areas provide roosting habitat for special-status bats. No bat species were observed roosting during the biological surveys of the Study Area. These species have a *low* potential to roost within the Study Area.

5.6.3 Nesting Birds of Conservation Concern Protected under the Migratory Bird Treaty Act and §3503.5 Department of Fish and Game Code

Migratory birds and other birds of prey, including those identified as *Birds of Conservation Concern* in Table 2 of **Appendix C**, are protected under 50 CFR 10 of the MBTA and/or Section §3503.5 of the California Fish and Game Code. Potentially occurring Birds of Conservation Concern include: black-chinned sparrow (*Spizella atrogularis*), Nuttall's woodpecker (*Picoides nuttallii*), oak titmouse (*Baeolophus inornatus*), Williamson's sapsucker (*Sphyrapicus thyroideus*), fox sparrow (*Passerella ilaca*), and Lewis's woodpecker (*Melanerpes lewis*). Migratory birds and other birds of prey have a *high* potential to nest within the Study Area during the nesting season. The generally accepted nesting season is from February 15 through August 31.

5.7 Sensitive Habitats

Sensitive habitats include those that are of special concern to resource agencies or those that are protected under CEQA, Section 1600 of the California Fish and Game Code, or Section 404 of the Clean Water Act. Sensitive habitats within the Study Area include: oak woodland canopy, potential waters of the U.S. (seasonal marsh, a perennial marsh, South Fork American River, and ephemeral drainage), and riparian habitat.

5.7.1 Oak Woodland Canopy

Oak canopy occurs within the approximately 14.55 acres of mixed oak woodland habitat within the Study Area. Oak woodland canopy is regulated under Section 7.4.4.4 of the *El Dorado County General Plan* (refer to **Section 3.5.1**).

5.7.2 Potential Jurisdictional Waters of the U.S.

Potential jurisdictional wetlands and waters of the U.S. within the Study Area total approximately 2.92 acres. The acreage includes approximately 0.45 acre of seasonal marsh, 0.65 acre of perennial marsh, 1.76 acres of the South Fork American River, and 0.06 acre of ephemeral drainages (**Figure 3**).

5.7.3 Riparian

Riparian habitat is considered a sensitive habitat. The California Department of Fish and Wildlife asserts jurisdiction over riparian habitat. A total of 8.46 acres of riparian habitat occurs within the Study Area. This includes 3.82 acres of the riparian biological community and 4.64 acres of Himalayan blackberry scrub (**Figure 3**).

6.0 DISCUSSION AND RECOMMENDATIONS

Biological constraints within the Study Area include known or potential habitat for:

- Brandegee's clarkia (*Clarkia biloba* ssp. *brandegeeae*);
- Western pond turtle (*Emys marmorata*);
- Coast horned lizard (*Phrynosoma blainvillii*);
- Foothill yellow-legged frog (*Rana boylii*);
- Special-status bat species, including Townsend's big-eared bat (*Corynorhinus townsendii*);
- Migratory birds and raptors, including northern goshawk (*Accipiter gentilis*) and white-tailed kite (*Elanus leucurus*); and
- Sensitive habitats (oak woodland canopy, potentially jurisdictional waters of the U.S., and riparian habitat).

6.1 Brandegee's Clarkia

Brandegee's clarkia is ranked 4 on the CNPS List and is present within the mixed oak woodland within the Study Area (**Figure 3**). Mitigation is not required for CNPS Rank 4 plants; however, the project should be designed to avoid impacts to this species, to the maximum extent feasible. A qualified biologist should delimit a minimum five-foot avoidance buffer around the plant populations with pin flags and high visibility construction fencing should be installed along the buffers prior to commencement of construction activities. If the plants cannot be avoided, a mitigation plan should be prepared. At minimum, the mitigation plan should include locations where the plants will be transplanted in suitable habitat adjacent to the project footprint, success criteria, and monitoring activities.

6.2 Western Pond Turtle

The South Fork American River and the seasonal and perennial marshes provide aquatic habitat and the riparian habitat provides upland habitat for western pond turtle. A qualified biologist should conduct a pre-construction survey for western pond turtle within 14 days prior to the start of ground disturbance within 500 feet of the river and the marshes. If no western pond turtles are observed, then a letter report documenting the results of the survey should be provided to the project proponent for their records, and no additional measures are recommended. If construction does not commence within 14 days of the pre-construction survey, or halts for more than 14 days, a new survey is recommended.

If western pond turtles are found, additional avoidance measures are recommended including having a qualified biologist conduct a pre-construction survey within 24 hours prior to commencement of construction activities, performing a worker awareness training to all construction workers, and being present on the project site during grading activities within 500 feet of the river and the marshes for the purpose of relocating any western pond turtles found within the construction footprint to suitable habitat away from the construction zone, but within the Study Area.

6.3 Coast Horned Lizard

The sandy soils within the mixed oak woodland and the chaparral provide habitat for Coast horned lizard. A qualified biologist should conduct a pre-construction survey within 14 days prior to the start of construction activities. If no coast horned lizards are observed, a letter report documenting the results of the survey should be submitted to the project proponent for their records, and no addition measures are recommended. If construction does not commence within 14 days of the pre-construction survey, or halts for more than 14 days, a new survey is recommended.

If coast horned lizards are found, additional avoidance measures are recommended including having a qualified biologist conduct a pre-construction survey within 24 hours prior to commencement of construction activities, performing a worker awareness training to all construction workers, and being present within the Study Area during grading activities within the mixed oak woodland and chaparral habitat for the purpose of relocating any coast horned lizards found within the construction footprint to suitable habitat away from the construction zone, but within the Study Area.

6.4 Foothill Yellow-Legged Frog

The South Fork American River provides marginal habitat for foothill yellow-legged frog. A qualified biologist should conduct a pre-construction survey for foothill yellow-legged frog within 14 days prior to the start of ground disturbance activities within 500 feet of the South Fork American River. If no foothill yellow-legged frogs are observed, then a letter report documenting the results of the survey should be provided to the project proponent for their records, and no additional measures are recommended. If construction does not commence within 14 days of the pre-construction survey, or halts for more than 14 days, a new survey is recommended.

If foothill yellow-legged frogs are found, additional avoidance measures are recommended including having a qualified biologist conduct a pre-construction survey within 24 hours prior to commencement of construction activities, performing a worker awareness training to all construction workers, and being present within the Study Area during grading activities within 500 feet of the river for the purpose of relocating any foothill yellow-legged frogs found within the construction footprint to suitable habitat away from the construction zone, but within the Study Area.

6.5 Migratory Birds and Other Birds of Prey, including Northern Goshawk and White-Tailed Kite

Migratory birds and other birds of prey, protected under 50 CFR 10 of the MBTA and/or Section 3503 of the California Fish and Game Code have the potential to nest within the trees and shrubs within the riparian habitat, Himalayan blackberry scrub, chaparral, mixed oak woodland, and disturbed/developed areas. Vegetation clearing operations, including pruning or removal of trees and shrubs, should be completed between September 1 and January 31, if feasible.

In accordance with Mitigation Measure BIO-2 of the Parks and Trails Master Plan IS/MND, if construction is proposed during the raptor breeding season (March 1 through August 31), a pre-construction raptor nest survey shall be conducted within 30 days prior to beginning of construction activities by a qualified biologist. If no active nests are found during the pre-construction survey, no further mitigation is required. If active nests are found, a quarter-mile (1,320 feet) initial temporary nest disturbance buffer area shall be established. If project related activities within the temporary nest disturbance buffer are determined to be necessary during the nesting season (approximately March 1 through August 31), then an onsite biologist/monitor experienced with raptor behavior shall be retained by the project proponent to monitor the nest, and shall along with the project proponent, consult with the CDFW to determine the best course of action necessary to avoid nest abandonment or take of individuals. Work may be allowed to proceed within the temporary nest disturbance buffer if raptors are not exhibiting agitated behavior. The designated onsite biologist/monitor shall be onsite daily or less if approved by CDFW while construction related activities are taking place and shall have the authority to stop work if raptors are exhibiting agitated behavior.

In accordance with Mitigation Measure BIO-2 of the Parks and Trails Master Plan IS/MND, if construction is proposed during the nesting season for non-raptor migratory birds (February 1 through August 15), a pre-construction survey shall be conducted by a qualified wildlife biologist within 15 days of the start of project related activities. If nests of migratory birds are detected onsite, or within 100 feet of the project site, the project proponent shall consult with CDFW to determine the size of a suitable buffer in which no new site disturbance is permitted until August 15, or until the qualified biologist determines that the young are foraging independently, or the nest has been abandoned.

6.6 Special-Status Bat Species, Including Townsend's Big-Eared Bat

The buildings within the disturbed/developed areas provide roosting habitat for special-status bats including Townsend's big-eared bat. If any buildings are proposed for demolition, pre-construction surveys for special-status bat species are recommended within 14 days prior to the start of building demolition. If no bats are observed, then a letter report documenting the results of the survey should be provided to the project proponent for their records, and no additional measures are recommended. If building demolition does not commence within 14 days of the pre-construction survey, or halts for more than 14 days, a new survey is recommended.

If bats are found, building demolition should be halted. The biologist should flag the building with construction tape and maintain the buffer zone until the bat is no longer roosting within the building. Once the biologist determines that the bat is no longer roosting, the project proponent should immediately remove the building, or install exclusionary netting around the building. The building should not be demolished until a biologist has determined that the building is no longer occupied by the bats.

6.7 Sensitive Habitats

6.7.1 Potential Jurisdictional Waters of the U.S. and Waters of the State

Potential jurisdictional waters of the U.S. within the Study Area total approximately 2.92 acres. These areas are potentially regulated by Sections 404 and 401 of the Clean Water Act. Additionally, these areas are protected under the *El Dorado County General Plan*. In accordance with Mitigation Measures BIO-4 and -5 of the Parks and Trails Master Plan IS/MND, if the project is designed to result in the placement of fill into jurisdictional waters of the U.S., then a Section 404 Clean Water Act Permit should be obtained by Corps and a Section 401 Water Quality Certification should be obtained by the RWQCB prior to the issuance of a grading permit. Any waters of the U.S. or jurisdictional wetlands that would be lost or disturbed should be replaced or rehabilitated on a "no-net-loss" basis in accordance with the Corps mitigation guidelines. Habitat restoration, rehabilitation, and/or replacement should be at a location and by methods agreeable to the Corps and RWQCB.

In accordance with Mitigation Measure BIO-3 of the Parks and Trails Master Plan IS/MND, if it is determined that project development would affect the bed, bank, or associated riparian vegetation of the South Fork American River or the ephemeral drainages, a Streambed Alteration Agreement shall be obtained from the CDFW pursuant to §1600 of the California Fish and Game Codes prior to the issuance of a grading or building permit by El Dorado County. If required, the County shall coordinate with CDFW in developing mitigation appropriate for potential impacts to riparian and/or wetland impacts and shall abide by the conditions of any executed agreement.

A minimum setback of 100 feet from perennial streams and 50 feet from the seasonal and perennial marshes is recommended, although pursuant to Policy 7.3.3.4 of the *El Dorado County General Plan*, a letter can be submitted to the County requesting a reduced buffer in some situations. Exceptions to riparian and wetland buffer and setback requirements may be permitted so long as appropriate mitigation measures and Best Management Practices are incorporated into the project design and are approved by the County.

6.7.2 Oak Canopy

Oak canopy occurs within the approximately 14.55 acres of mixed oak woodland within the Study Area. In accordance with Mitigation Measure BIO-6 of the Parks and Trails Master Plan IS/MND, if the removal of oak trees is anticipated to occur, an Arborist Survey and Arborist Report shall be prepared for the site by an International Society of Arboriculture (ISA)-Certified Arborist to determine any mitigation that may be required

to maintain consistency with the *El Dorado County Oak Woodland Management Plan*, which sets forth guidance on Policy 7.4.4.4 of the El Dorado County General Plan.

6.8 Summary of Avoidance and Minimization Measures

- Avoid impacts to Brandegee's clarkia or prepare mitigation plan for transplanting of any individuals that are anticipated for removal;

- Conduct a pre-construction survey for western pond turtle within 14 days prior to the initiation of construction activities within 500 feet of the South Fork American River or the seasonal or perennial marshes;

- Conduct a pre-construction survey for Coast horned lizard within 14 days prior to the initiation of construction activities;

- Conduct a pre-construction survey for foothill yellow-legged frog within 14 days prior to the initiation of construction activities within 500 feet of the South Fork American River;

- Apply for appropriate permits from the Corps, the RWQCB, and/or the CDFW if wetlands, waterways, or riparian areas will be impacted by the project;

- Conduct a pre-construction survey for active raptor nests within the Study Area within 30 days prior to initiation of construction activities if construction begins or trees are anticipated for removal during the raptor breeding season (March 1 through August 31);

- Conduct a pre-construction survey for active bird nests within the Study Area within 14 days prior to initiation of construction activities if construction begins or trees are anticipated for removal during the migratory bird nesting season (February 1 through August 15);

- Conduct clearing and tree and shrub removal operations between September 1 and January 31 to minimize potential impacts to nesting raptors and migratory birds;

- Conduct a pre-construction survey for roosting bats within the Study Area within 14 days prior to the building being removed if anticipated to be demolished; and

- Prepare an Arborist Report that identifies required mitigation for the removal of oak canopy if removal of oak trees is expected to occur.

7.0 REFERENCES

Baldwin, B.G., D.H. Goldman, D.J. Keil, R. Patterson, T.J. Rosatti, and D.H. Wilken, editors. 2012. *The Jepson Manual: Vascular Plants of California*, second edition. University of California, Berkeley.

Calflora. 2015. *The Calflora Database: Information on California plants for Education, Research and Conservation*. Berkeley, California. Available online at: http://www.calflora.org. [Accessed 07/17/2015].

Californiaherps. 2015. *A Guide to the Amphibians and Reptiles of California*. Available online at: http://californiaherps.com. [Accessed 06/08/2015].

California Department of Fish and Wildlife (CDFW), 2009. *Protocols for Surveying and Evaluating Impacts to Special-Status Native Plant Populations and Natural Communities*. State of California, California Natural Resources Agency. Department of Fish and Wildlife. November 24, 2009.

California Native Plant Society (CNPS). 2015. *Inventory of Rare and Endangered Plants* (*online edition, v8-01a*) (*CNPS: Auburn, Greenwood, Georgetown, Pilot Hill, Coloma, Garden Valley, Clarksville, Shingle Springs, and Placerville quadrangles*). [Accessed 07/28/2015].

CDFW. 2015. California Natural Diversity Data Base (*CNDDB: Auburn, Greenwood, Georgetown, Pilot Hill, Coloma, Garden Valley, Clarksville, Shingle Springs, and Placerville U.S. Geological Survey* (*USGS*) *7.5-minute series quadrangles* (*quadrangles*)), *Sacramento, CA*. [Accessed 07/28/2015].

El Dorado County. 2004. *El Dorado County General Plan*. Placerville, California. 2004.

El Dorado County. 2012. *The El Dorado County Parks and Trails Master Plan Initial Study/Mitigated Negative Declaration*. El Dorado County, California.

Foothill Associates. 2015a. *Draft Delineation of Waters of the United States: ±46.5-Acre Henningsen Lotus Park Improvements Project, El Dorado County, California*. Prepared for the U.S. Army Corps of Engineers. August 6, 2015.

Nature Serve. 2015. *Nature Serve Explorer: An Online Encyclopedia of Life* [Web Application]. Version 7.1. Last updated July 2013. NatureServe, Arlington, Virginia. Available online at: http://www.natureserve.org/explorer. [Accessed 07/21/2015].

Rosenberg, D., J. Gervais, and D. Vesely. 2009. *Conservation Assessment of the Western Pond Turtle in Oregon* (*Actinemys marmorata*). Version 1.0. November 2009. U.S.D.I. Bureau of Land Management and Fish and Wildlife Service.

U.S.D.A. Forest Service Region 6. Oregon Department of Fish and Wildlife, City of Portland. Metro.

Stebbins, R. C. 2003. *Western Amphibians and Reptiles*. 3rd edition. Boston: Houghton Mifflin Co.

U.S. Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS). 1974. *Soil Survey of El Dorado Area, California*. USDA, NRCS, in cooperation with the Regents of the University of California (Agricultural Experiment Station).

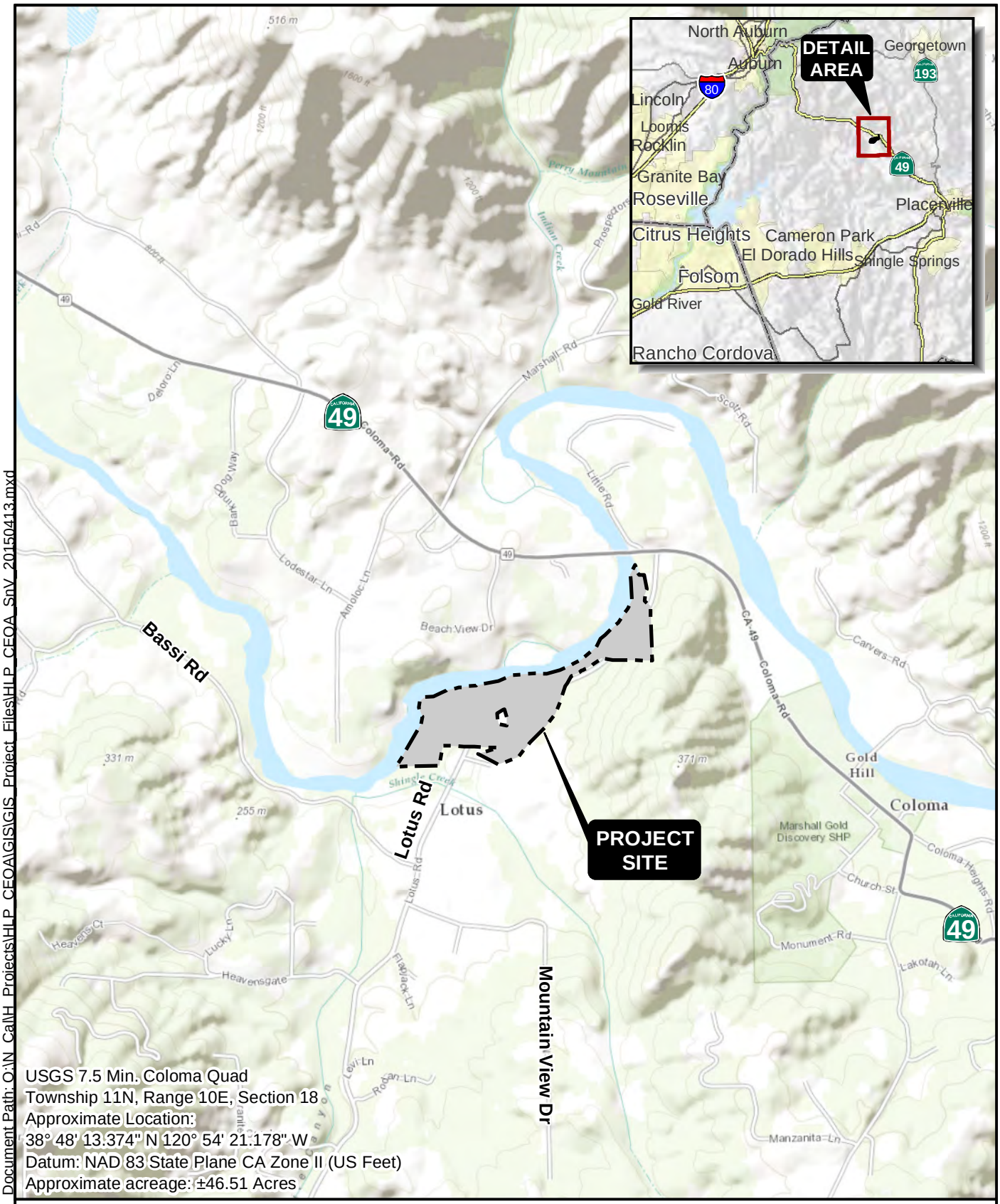
USDA, NRCS. 2015a. *Web Soil Survey*. Available online at: http://websoilsurvey.sc.egov.usda.gov/App/HomePage.html. Accessed [06/08/2015].

USDA, NRCS. 2015b. *National Hydric Soils List by State*. Available online at: http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/use/hydric/. Accessed [06/08/2015].

U.S. Fish and Wildlife Service (USFWS). 2015. I*nformation for Planning and Conservation (IPaC) Trust Resource Report: Henningsen Lotus Park CEQA, El Dorado County*. [Accessed 07/28/2015].

U.S. Geological Survey (USGS). 1953. *Coloma, California*. 7.5 -minute series topographic quadrangle. U.S. Department of the Interior.

Zeiner, D.C., W.R. Laudenslayer Jr., K.E. Mayer, and M. White, eds. 1990. *California's Wildlife Volume II: Birds*. State of California: The Resource Agency, Department of Fish and Game, Sacramento, California. Available online at: http://www.dfg.ca.gov/whdab/html/cawildlife.html. Accessed [07/28/2015].



USGS 7.5 Min. Coloma Quad
Township 11N, Range 10E, Section 18
Approximate Location:
38° 48' 13.374" N 120° 54' 21.178" W
Datum: NAD 83 State Plane CA Zone II (US Feet)
Approximate acreage: ±46.51 Acres

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SITE AND VICINITY

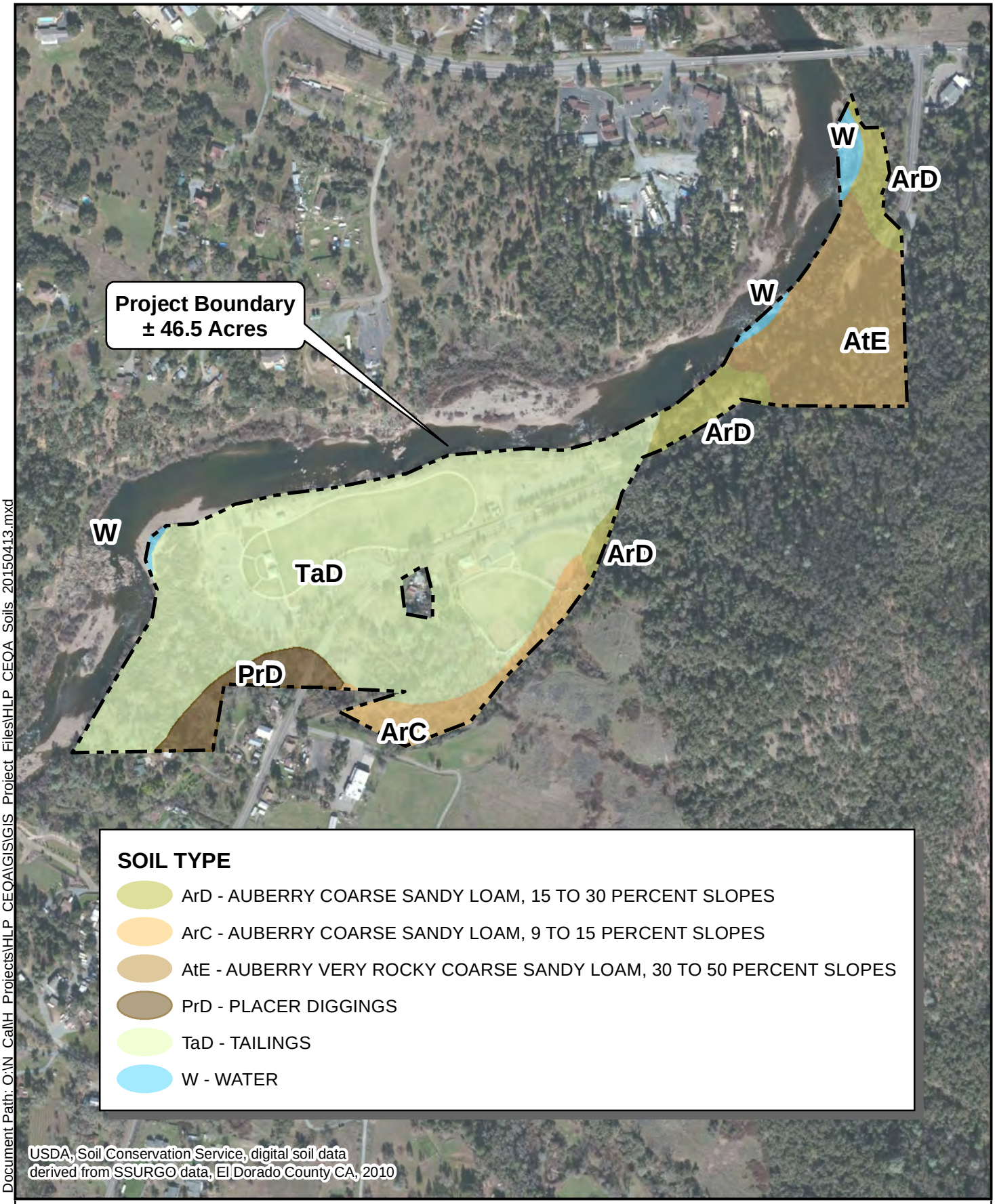
FOOTHILL ASSOCIATES
ENVIRONMENTAL CONSULTING • PLANNING • LANDSCAPE ARCHITECTURE

N

0 0.15 0.3
Miles
1 in = 0.3 miles

Drawn By: MUB
Date: 04/13/2015

FIGURE 1



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SOILS

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N

0 260 520
Feet
1 inch = 500 feet

Drawn By: MUB
Date: 04/13/2015

FIGURE 2

HENNINGSEN LOTUS PARK

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Project Boundary
± 46.5 Acres

Brandegee's Clarkia (0.53 Acres)

Biological Communities

- Himalayan Blackberry (4.64 Acres)
- Chaparral (1.07 Acres)
- Mixed Oak Woodland (14.55 Acres)
- Disturbed\Developed (19.51 Acres)
- Riparian (3.82 Acres)
- South Fork American River (1.76 Acres)
- Seasonal Marsh (0.45 Acres)
- Perennial Marsh (0.65 Acres)
- Ephemeral Drainage (0.06 Acres)

Other Features

- Culvert
- Park Boundary

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BIOLOGICAL COMMUNITIES AND CONSTRAINTS

N

0 300 600
Feet
1 inch = 300 feet

Drawn By: MUB
Date: 07/24/2015

FIGURE 3

HENNINGSEN LOTUS PARK

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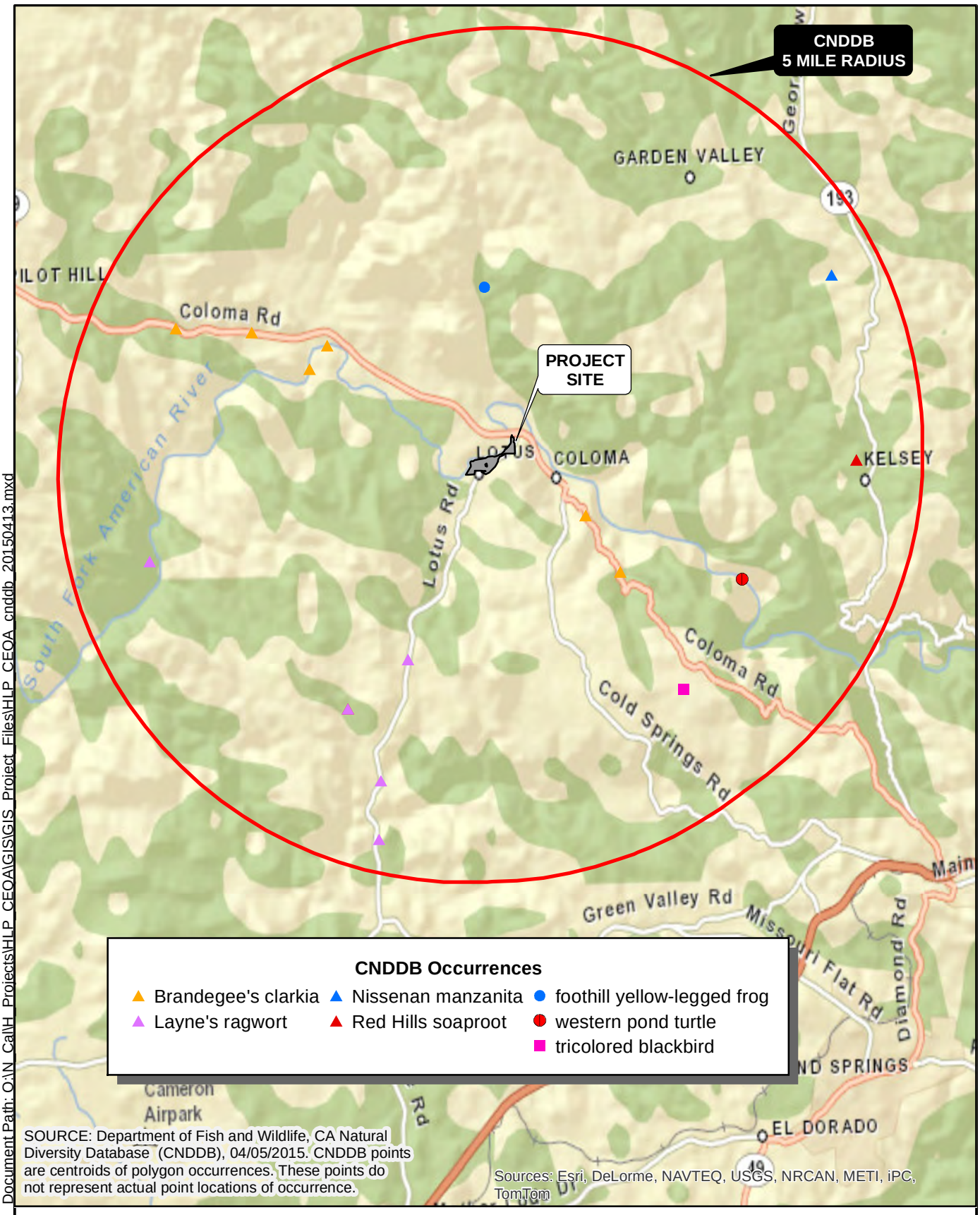

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CNDDB

FOOTHILL ASSOCIATES
ENVIRONMENTAL CONSULTING • PLANNING • LANDSCAPE ARCHITECTURE

N

0 1 2
SCALE IN MILES

Drawn By: MUB
Date: 04/13/2015

FIGURE 4

Appendix A — CDFW, CNPS, and USFWS Queries

CDFW CNDDB: *Auburn, Greenwood, Georgetown, Pilot Hill, Coloma, Garden Valley, Clarksville, Shingle Springs, and Placerville* Quadrangles

CALIFORNIA DEPARTMENT OF FISH and WILDLIFE **RareFind**

Query Summary:
Quad IS (Auburn (3812181) OR Clarksville (3812161) OR Coloma (3812078) OR Garden Valley (3812077) OR Georgetown (3812087) OR Greenwood (3812088) OR Pilot Hill (3812171) OR Placerville (3812067) OR Shingle Springs (3812068))

Print Close

CNDDB Element Query Results

Scientific Name	Common Name	Taxonomic Group	Element Code	Total Occs	Returned Occs	Federal Status	State Status	Global Rank	State Rank	CA Rare Plant Rank	Other Status	Habitats
Accipiter gentilis	northern goshawk	Birds	ABNKC12060	427	1	None	None	G5	S3	null	BLM_S-Sensitive | CDF_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern | USFS_S-Sensitive	North coast coniferous forest | Subalpine coniferous forest | Upper montane coniferous forest
Agelaius tricolor	tricolored blackbird	Birds	ABPBXB0020	452	5	None	None	G2G3	S1S2	null	BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_EN-Endangered | NABCI_RWL-Red Watch List | USFWS_BCC-Birds of Conservation Concern	Freshwater marsh | Marsh & swamp | Swamp | Wetland
Allium jepsonii	Jepson's onion	Monocots	PMLIL022V0	27	3	None	None	G1	S1	1B.2	BLM_S-Sensitive | USFS_S-Sensitive	Cismontane woodland | Lower montane coniferous forest | Ultramafic
Ammonitella yatesii	tight coin (=Yates' snail)	Mollusks	IMGASB0010	6	1	None	None	G1	S1	null	IUCN_VU-Vulnerable	Limestone
Andrena blennospermatis	Blennosperma vernal pool andrenid bee	Insects	IIHYM35030	15	1	None	None	G2	S2	null	null	Vernal pool
Andrena subapasta	an andrenid bee	Insects	IIHYM35210	5	2	None	None	G1G2	S1S2	null	null	null
											BLM_S-Sensitive | CDF_S-	

Aquila chrysaetos	golden eagle	Birds	ABNKC22010	311	2	None	None	G5	S3	null	Sensitive | CDFW_FP-Fully Protected | CDFW_WL-Watch List | IUCN_LC-Least Concern | USFWS_BCC-Birds of Conservation Concern	Broadleaved upland forest | Cismontane woodland | Coastal prairie | Great Basin grassland | Great Basin scrub | Lower montane coniferous forest | Pinon & juniper woodlands | Upper montane coniferous forest | Valley & foothill grassland
Arctostaphylos nissenana	Nissenan manzanita	Dicots	PDERI040V0	13	6	None	None	G1	S1	1B.2	BLM_S-Sensitive | USFS_S-Sensitive	Chaparral | Closed-cone coniferous forest
Ardea alba	great egret	Birds	ABNGA04040	35	2	None	None	G5	S4	null	CDF_S-Sensitive | IUCN_LC-Least Concern	Brackish marsh | Estuary | Freshwater marsh | Marsh & swamp | Riparian forest | Wetland
Ardea herodias	great blue heron	Birds	ABNGA04010	133	1	None	None	G5	S4	null	CDF_S-Sensitive | IUCN_LC-Least Concern	Brackish marsh | Estuary | Freshwater marsh | Marsh & swamp | Riparian forest | Wetland
Athene cunicularia	burrowing owl	Birds	ABNSB10010	1870	2	None	None	G4	S3	null	BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern | USFWS_BCC-Birds of Conservation Concern	Coastal prairie | Coastal scrub | Great Basin grassland | Great Basin scrub | Mojavean desert scrub | Sonoran desert scrub | Valley & foothill grassland
Balsamorhiza macrolepis	big-scale balsamroot	Dicots	PDAST11061	43	1	None	None	G2	S2	1B.2	BLM_S-Sensitive | USFS_S-Sensitive	Chaparral | Cismontane woodland | Ultramafic | Valley & foothill grassland
Banksula californica	Alabaster Cave harvestman	Arachnids	ILARA14020	1	1	None	None	GH	SH	null	null	Limestone
Banksula galilei	Galile's cave harvestman	Arachnids	ILARA14040	1	1	None	None	G1	S1	null	null	Limestone
Branchinecta lynchi	vernal pool fairy shrimp	Crustaceans	ICBRA03030	755	1	Threatened	None	G3	S2S3	null	IUCN_VU-Vulnerable	Valley & foothill grassland | Vernal pool | Wetland
Calystegia stebbinsii	Stebbins' morning-glory	Dicots	PDCON040H0	13	8	Endangered	Endangered	G1	S1	1B.1	SB_RSABG-Rancho Santa Ana Botanic Garden	Chaparral | Cismontane woodland | Ultramafic
Calystegia vanzuukiae	Van Zuuk's morning-glory	Dicots	PDCON040Q0	9	5	None	None	G2Q	S2	1B.3	null	Chaparral | Cismontane woodland | Ultramafic
											SB_RSABG-	

Ceanothus roderickii	Pine Hill ceanothus	Dicots	PDRHA04190	8	8	Endangered	Rare	G1	S1	1B.2	Rancho Santa Ana Botanic Garden	Chaparral | Cismontane woodland | Ultramafic
Central Valley Drainage Hardhead/Squawfish Stream	Central Valley Drainage Hardhead/Squawfish Stream	Inland Waters	CARA2443CA	11	1	None	None	GNR	SNR	null	null	null
Chlorogalum grandiflorum	Red Hills soaproot	Monocots	PMLIL0G020	82	22	None	None	G2	S2	1B.2	BLM_S-Sensitive	Chaparral | Cismontane woodland | Lower montane coniferous forest | Ultramafic
Clarkia biloba ssp. brandegeeae	Brandegee's clarkia	Dicots	PDONA05053	89	23	None	None	G4G5T4	S4	4.2	BLM_S-Sensitive	Chaparral | Cismontane woodland | Lower montane coniferous forest
Corynorhinus townsendii	Townsend's big-eared bat	Mammals	AMACC08010	619	2	None	Candidate Threatened	G3G4	S2	null	BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern | USFS_S-Sensitive | WBWG_H-High Priority	Broadleaved upland forest | Chaparral | Chenopod scrub | Great Basin grassland | Great Basin scrub | Joshua tree woodland | Lower montane coniferous forest | Meadow & seep | Mojavean desert scrub | Riparian forest | Riparian woodland | Sonoran desert scrub | Sonoran thorn woodland | Upper montane coniferous forest | Valley & foothill grassland
Cosumnoperla hypocrena	Cosumnes stripetail	Insects	IIPLE23020	12	7	None	None	G2	S2	null	null	Aquatic
Crocanthemum suffrutescens	Bisbee Peak rush-rose	Dicots	PDCIS020F0	31	16	None	None	G2Q	S2	3.2	null	Chaparral | Ione formation | Ultramafic
Desmocerus californicus dimorphus	valley elderberry longhorn beetle	Insects	IICOL48011	271	5	Threatened	None	G3T2	S2	null	null	Riparian scrub
Elanus leucurus	white-tailed kite	Birds	ABNKC06010	158	2	None	None	G5	S3S4	null	BLM_S-Sensitive | CDFW_FP-Fully Protected | IUCN_LC-Least Concern	Cismontane woodland | Marsh & swamp | Riparian woodland | Valley & foothill grassland | Wetland
Emys marmorata	western pond turtle	Reptiles	ARAAD02030	1143	8	None	None	G3G4	S3	null	BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_VU-Vulnerable | USFS_S-Sensitive	Aquatic | Artificial flowing waters | Klamath/North coast flowing waters | Klamath/North coast standing waters | Marsh & swamp | Sacramento/San Joaquin flowing waters | Sacramento/San Joaquin standing waters | South coast flowing waters | South coast standing waters | Wetland
Fremontodendron decumbens	Pine Hill flannelbush	Dicots	PDSTE03030	10	7	Endangered	Rare	G1	S1	1B.2	SB_RSABG-Rancho Santa Ana Botanic Garden | SB_UCBBG-UC Berkeley	Chaparral | Cismontane woodland | Ultramafic

											Botanical Garden	
Fritillaria eastwoodiae	Butte County fritillary	Monocots	PMLIL0V060	235	2	None	None	G3Q	S3	3.2	USFS_S-Sensitive	Chaparral | Cismontane woodland | Lower montane coniferous forest | Ultramafic
Galium californicum ssp. sierrae	El Dorado bedstraw	Dicots	PDRUB0N0E7	16	16	Endangered	Rare	G5T1	S1	1B.2	SB_RSABG-Rancho Santa Ana Botanic Garden	Chaparral | Cismontane woodland | Lower montane coniferous forest | Ultramafic
Haliaeetus leucocephalus	bald eagle	Birds	ABNKC10010	318	4	Delisted	Endangered	G5	S2	null	BLM_S-Sensitive | CDF_S-Sensitive | CDFW_FP-Fully Protected | IUCN_LC-Least Concern | USFS_S-Sensitive | USFWS_BCC-Birds of Conservation Concern	Lower montane coniferous forest | Oldgrowth
Horkelia parryi	Parry's horkelia	Dicots	PDROS0W0C0	36	4	None	None	G2	S2	1B.2	BLM_S-Sensitive | USFS_S-Sensitive	Chaparral | Cismontane woodland | Ione formation
Hydrochara ricksecker	Ricksecker's water scavenger beetle	Insects	IICOL5V010	13	1	None	None	G2?	S2?	null	null	Aquatic | Sacramento/San Joaquin flowing waters | Sacramento/San Joaquin standing waters
Lasionycteris noctivagans	silver-haired bat	Mammals	AMACC02010	138	2	None	None	G5	S3S4	null	IUCN_LC-Least Concern | WBWG_M-Medium Priority	Lower montane coniferous forest | Oldgrowth | Riparian forest
Lathyrus sulphureus var. argillaceus	dubious pea	Dicots	PDFAB25101	7	1	None	None	G5T1T2	S1S2	3	null	Cismontane woodland | Lower montane coniferous forest | Upper montane coniferous forest
Myotis yumanensis	Yuma myotis	Mammals	AMACC01020	259	1	None	None	G5	S4	null	BLM_S-Sensitive | IUCN_LC-Least Concern | WBWG_LM-Low-Medium Priority	Lower montane coniferous forest | Riparian forest | Riparian woodland | Upper montane coniferous forest
Oncorhynchus mykiss irideus	steelhead - Central Valley DPS	Fish	AFCHA0209K	31	1	Threatened	None	G5T2Q	S2	null	AFS_TH-Threatened	Aquatic | Sacramento/San Joaquin flowing waters
Packera layneae	Layne's ragwort	Dicots	PDAST8H1V0	48	34	Threatened	Rare	G2	S2	1B.2	SB_RSABG-Rancho Santa Ana Botanic Garden	Chaparral | Cismontane woodland | Ultramafic

Pekania pennanti	fisher - West Coast DPS	Mammals	AMAJF01021	680	1	Proposed Threatened	Candidate Threatened	G5T2T3Q	S2S3	null	BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | USFS_S-Sensitive	North coast coniferous forest | Oldgrowth | Riparian forest
Phrynosoma blainvillii	coast horned lizard	Reptiles	ARACF12100	728	4	None	None	G3G4	S3S4	null	BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern	Chaparral | Cismontane woodland | Coastal bluff scrub | Coastal scrub | Desert wash | Pinon & juniper woodlands | Riparian scrub | Riparian woodland | Valley & foothill grassland
Rana boylii	foothill yellow-legged frog	Amphibians	AAABH01050	806	7	None	None	G3	S3	null	BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_NT-Near Threatened | USFS_S-Sensitive	Aquatic | Chaparral | Cismontane woodland | Coastal scrub | Klamath/North coast flowing waters | Lower montane coniferous forest | Meadow & seep | Riparian forest | Riparian woodland | Sacramento/San Joaquin flowing waters
Rana draytonii	California red-legged frog	Amphibians	AAABH01022	1365	3	Threatened	None	G2G3	S2S3	null	CDFW_SSC-Species of Special Concern | IUCN_VU-Vulnerable	Aquatic | Artificial flowing waters | Artificial standing waters | Freshwater marsh | Marsh & swamp | Riparian forest | Riparian scrub | Riparian woodland | Sacramento/San Joaquin flowing waters | Sacramento/San Joaquin standing waters | South coast flowing waters | South coast standing waters | Wetland
Riparia riparia	bank swallow	Birds	ABPAU08010	296	1	None	Threatened	G5	S2	null	BLM_S-Sensitive | IUCN_LC-Least Concern	Riparian scrub | Riparian woodland
Sagittaria sanfordii	Sanford's arrowhead	Monocots	PMALI040Q0	93	1	None	None	G3	S3	1B.2	BLM_S-Sensitive	Marsh & swamp | Wetland
Viburnum ellipticum	oval-leaved viburnum	Dicots	PDCPR07080	38	4	None	None	G5	S3	2B.3	null	Chaparral | Cismontane woodland | Lower montane coniferous forest
Wyethia reticulata	El Dorado County mule ears	Dicots	PDAST9X0D0	25	25	None	None	G2	S2	1B.2	BLM_S-Sensitive | SB_RSABG-Rancho Santa Ana Botanic Garden	Chaparral | Cismontane woodland | Lower montane coniferous forest | Ultramafic

CNPS Inventory of Rare and Endangered: *Auburn, Greenwood, Georgetown, Pilot Hill, Coloma, Garden Valley, Clarksville, Shingle Springs, and Placerville* Quadrangles

CNPS California Native Plant Society

Rare and Endangered Plant Inventory

Plant List

29 matches found. Click on scientific name for details

Search Criteria

Found in 9 Quads around 38120G8

Scientific Name	Common Name	Family	Lifeform	Rare Plant Rank	State Rank	Global Rank
Allium jepsonii	Jepson's onion	Alliaceae	perennial bulbiferous herb	1B.2	S1	G1
Allium sanbornii var. congdonii	Congdon's onion	Alliaceae	perennial bulbiferous herb	4.3	S3	G3T3
Allium sanbornii var. sanbornii	Sanborn's onion	Alliaceae	perennial bulbiferous herb	4.2	S4?	G3T4?
Arctostaphylos mewukka ssp. truei	True's manzanita	Ericaceae	perennial evergreen shrub	4.2	S3	G4?T3
Arctostaphylos nissenana	Nissenan manzanita	Ericaceae	perennial evergreen shrub	1B.2	S1	G1
Balsamorhiza macrolepis	big-scale balsamroot	Asteraceae	perennial herb	1B.2	S2	G2
Calandrinia breweri	Brewer's calandrinia	Montiaceae	annual herb	4.2	S34	G4
Calystegia stebbinsii	Stebbins' morning-glory	Convolvulaceae	perennial rhizomatous herb	1B.1	S1	G1
Calystegia vanzuukiae	Van Zuuk's morning-glory	Convolvulaceae	perennial rhizomatous herb	1B.3	S2	G2Q
Ceanothus fresnensis	Fresno ceanothus	Rhamnaceae	perennial evergreen shrub	4.3	S4	G4
Ceanothus roderickii	Pine Hill ceanothus	Rhamnaceae	perennial evergreen shrub	1B.1	S1	G1
Chlorogalum grandiflorum	Red Hills soaproot	Agavaceae	perennial bulbiferous herb	1B.2	S2	G2
Clarkia biloba ssp. brandegeeae	Brandegee's clarkia	Onagraceae	annual herb	4.2	S4	G4G5T4
Claytonia parviflora ssp. grandiflora	streambank spring beauty	Montiaceae	annual herb	4.2	S3	G5T3
Cordylanthus tenuis ssp. brunneus	serpentine bird's-beak	Orobanchaceae	annual herb (hemiparasitic)	4.3	S3	G4G5T3
Crocanthemum suffrutescens	Bisbee Peak rush-rose	Cistaceae	perennial evergreen shrub	3.2	S2	G2Q
Delphinium hansenii ssp. ewanianum	Ewan's larkspur	Ranunculaceae	perennial herb	4.2	S3	G4T3
Eriogonum tripodum	tripod buckwheat	Polygonaceae	perennial deciduous shrub	4.2	S4	G4
Eriophyllum jepsonii	Jepson's woolly sunflower	Asteraceae	perennial herb	4.3	S3	G3

Fremontodendron decumbens	Pine Hill flannelbush	Malvaceae	perennial evergreen shrub	1B.2	S1	G1
Fritillaria eastwoodiae	Butte County fritillary	Liliaceae	perennial bulbiferous herb	3.2	S3	G3Q
Galium californicum ssp. sierrae	El Dorado bedstraw	Rubiaceae	perennial herb	1B.2	S1	G5T1
Horkelia parryi	Parry's horkelia	Rosaceae	perennial herb	1B.2	S2	G2
Lathyrus sulphureus var. argillaceus	dubious pea	Fabaceae	perennial herb	3	S1S2	G5T1T2
Lilium humboldtii ssp. humboldtii	Humboldt lily	Liliaceae	perennial bulbiferous herb	4.2	S3	G4T3
Packera layneae	Layne's ragwort	Asteraceae	perennial herb	1B.2	S2	G2
Sagittaria sanfordii	Sanford's arrowhead	Alismataceae	perennial rhizomatous herb	1B.2	S3	G3
Viburnum ellipticum	oval-leaved viburnum	Adoxaceae	perennial deciduous shrub	2B.3	S3	G5
Wyethia reticulata	El Dorado County mule ears	Asteraceae	perennial herb	1B.2	S2	G2

Suggested Citation

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USFWS List for *Planning and Conservation (IPaC) Trust Resource Report: Henningsen Lotus Park CEQA, El Dorado County*

HLP Improvements

IPaC Trust Resource Report

Generated July 28, 2015 10:12 AM MDT

US Fish & Wildlife Service

IPaC Trust Resource Report

Project Description

NAME

HLP Improvements

PROJECT CODE

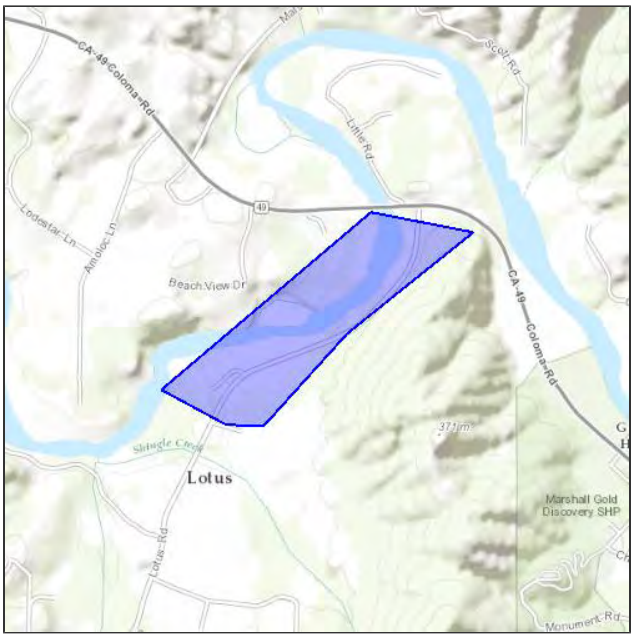
A5ND7-VL7TZ-DUTI3-MYZIT-YHNLCQ

LOCATION

El Dorado County, California

DESCRIPTION

No description provided



U.S. Fish & Wildlife Contact Information

Species in this report are managed by:

Sacramento Fish And Wildlife Office
Federal Building
2800 COTTAGE WAY, ROOM W-2605
Sacramento, CA 95825-1846
(916) 414-6600

Endangered Species

Proposed, candidate, threatened, and endangered species that are managed by the Endangered Species Program and should be considered as part of an effect analysis for this project.

This unofficial species list is for informational purposes only and does not fulfill the requirements under Section 7 of the Endangered Species Act, which states that Federal agencies are required to "request of the Secretary of Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action." This requirement applies to projects which are conducted, permitted or licensed by any Federal agency.

A letter from the local office and a species list which fulfills this requirement can be obtained by returning to this project on the IPaC website and requesting an Official Species List from the regulatory documents section.

Amphibians

California Red-legged Frog Rana draytonii — **Threatened**

CRITICAL HABITAT

There is **final** critical habitat designated for this species.

https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=D02D

Fishes

Delta Smelt Hypomesus transpacificus — **Threatened**

CRITICAL HABITAT

There is **final** critical habitat designated for this species.

https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=E070

Steelhead Oncorhynchus (=Salmo) mykiss — **Threatened**

CRITICAL HABITAT

There is **final** critical habitat designated for this species.

https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=E08D

Flowering Plants

Layne's Butterweed Senecio layneae **Threatened**

CRITICAL HABITAT
No critical habitat has been designated for this species.

https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=Q1O2

Pine Hill Ceanothus Ceanothus roderickii **Endangered**

CRITICAL HABITAT
No critical habitat has been designated for this species.

https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=Q0DK

Stebbins' Morning-glory Calystegia stebbinsii **Endangered**

CRITICAL HABITAT
No critical habitat has been designated for this species.

https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=Q0AU

Critical Habitats

Potential effects to critical habitat(s) within the project area must be analyzed along with the endangered species themselves.

There is no critical habitat within this project area

Migratory Birds

Birds are protected by the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act.

Any activity which results in the take of migratory birds or eagles is prohibited unless authorized by the U.S. Fish and Wildlife Service (1). There are no provisions for allowing the take of migratory birds that are unintentionally killed or injured.

You are responsible for complying with the appropriate regulations for the protection of birds as part of this project. This involves analyzing potential impacts and implementing appropriate conservation measures for all project activities.

Bald Eagle Haliaeetus leucocephalus — **Bird of conservation concern**
Year-round
https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B008

Black Swift Cypseloides niger — **Bird of conservation concern**
Season: Breeding
https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0FW

Black Rail Laterallus jamaicensis — **Bird of conservation concern**
Season: Breeding
https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B09A

Black-chinned Sparrow Spizella atrogularis — **Bird of conservation concern**
Season: Breeding

Brewer's Sparrow Spizella breweri — **Bird of conservation concern**
Season: Breeding
https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0HA

Burrowing Owl Athene cunicularia — **Bird of conservation concern**
Year-round

California Spotted Owl Strix occidentalis occidentalis — **Bird of conservation concern**
Year-round
https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B08L

Calliope Hummingbird Stellula calliope — **Bird of conservation concern**
Season: Breeding

Costa's Hummingbird Calypte costae — **Bird of conservation concern**
Season: Breeding

Flammulated Owl Otus flammeolus — **Bird of conservation concern**
Season: Breeding
https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0DK

Fox Sparrow Passerella iliaca — **Bird of conservation concern**
Year-round

Green-tailed Towhee Pipilo chlorurus — **Bird of conservation concern**
Season: Breeding

Lewis's Woodpecker Melanerpes lewis — **Bird of conservation concern**
Season: Wintering

Loggerhead Shrike Lanius ludovicianus **Bird of conservation concern**
Year-round
https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0FY

Nuttall's Woodpecker Picoides nuttallii **Bird of conservation concern**
Year-round

Oak Titmouse Baeolophus inornatus **Bird of conservation concern**
Year-round

Olive-sided Flycatcher Contopus cooperi **Bird of conservation concern**
Season: Breeding
https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0AN

Peregrine Falcon Falco peregrinus **Bird of conservation concern**
Season: Wintering
https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0FU

Short-eared Owl Asio flammeus **Bird of conservation concern**
Season: Wintering
https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0HD

Snowy Plover Charadrius alexandrinus **Bird of conservation concern**
Season: Breeding

White Headed Woodpecker Picoides albolarvatus **Bird of conservation concern**
Year-round

Williamson's Sapsucker Sphyrapicus thyroideus **Bird of conservation concern**
Year-round
https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0FX

Yellow-billed Magpie Pica nuttalli **Bird of conservation concern**
Year-round

Refuges

Any activity proposed on National Wildlife Refuge lands must undergo a 'Compatibility Determination' conducted by the Refuge. If your project overlaps or otherwise impacts a Refuge, please contact that Refuge to discuss the authorization process.

There are no refuges within this project area

Wetlands

Impacts to NWI wetlands and other aquatic habitats from your project may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal Statutes.

Project proponents should discuss the relationship of these requirements to their project with the Regulatory Program of the appropriate U.S. Army Corps of Engineers District.

DATA LIMITATIONS

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

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

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

DATA EXCLUSIONS

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

DATA PRECAUTIONS

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

Freshwater Emergent Wetland

PEMFx 0.109 acre

Freshwater Forested/shrub Wetland

PSSAx 14.4 acres

PFOC 3.8 acres

Riverine

R3UBH 256.0 acres

R3USC 1.16 acres

Appendix B — Plants and Wildlife Observed within the Study Area

Appendix B

Plants Observed within the Henningsen Lotus Park Study Area

Family	Scientific Name	Common Name	*
Anacardiaceae	*Toxicodendron diversilobum*	Poison oak	N
Apiaceae	*Sanicula crassicaulis*	Gamble weed	N
Apocynaceae	*Vinca major*	Bigleaf periwinkle	I
Asteraceae	*Artemisia douglasiana*	California mugwort	N
Asteraceae	*Baccharis pilularis*	Coyote brush	N
Asteraceae	*Carduus pycnocephalus* ssp. *pycnocephalus*	Italian thistle	I
Asteraceae	*Gnaphalium palustre*	Lowland cudweed	N
Asteraceae	*Lactuca serriola*	Prickly lettuce	I
Asteraceae	*Taraxacum officinale*	Dandelion	--
Brassicaceae	*Brassica nigra*	Black mustard	I
Cyperaceae	*Carex barbarae*	Whiteroot or Santa Barbara sedge	N
Cyperaceae	*Cyperus eragrostis*	Nutsedge	N
Ericaceae	*Arctostaphylos manzanita*	Manzanita	N
Euphorbiaceae	*Croton setigerus*	Dove weed	N
Fabaceae	*Cytisus scoparius*	Scotch broom	I
Fabaceae	*Medicago polymorpha*	Bur medic, bur clover,	I
Fabaceae	*Robinia pseudoacacia*	Black locust	I
Fabaceae	*Trifolium hirtum*	Rose clover	I
Fabaceae	*Vicia villosa*	Hairy vetch	--
Fagaceae	*Quercus kelloggii*	California black oak	N
Fagaceae	*Quercus wislizeni*	Interior live oak	N
Geraniaceae	*Erodium botrys*	Storksbill, filaree	I
Geraniaceae	*Geranium dissectum*	Cranesbill, wild geranium	I
Montiacear	*Claytonia perfoliata*	Miner's Lettuce	N
Oleaceae	*Fraxinus latifolia*	Oregon ash	N
Onagraceae	*Clarkia biloba*	Brandegee's clarkia	N
Onagraceae	*Clarkia unguiculata*	Elegant clarkia, woodland clarkia	N
Onagraceae	*Epilobium brachycarpum*	Annual fireweed	N
Onagraceae	*Epilobium ciliatum*	Northern willow herb	N
Papaveraceae	*Eschscholzia californica*	California poppy	N
Phrymaceae	*Mimulus guttatus*	Seep monkey flower	N
Pinaceae	*Pinus ponderosa*	Ponderosa pine	N
Pinaceae	*Pinus sabiniana*	California foothill pine	N
Plantaginaceae	*Plantago lanceolata*	English plantain, ribwort	I
Plantaginaceae	*Platanus racemosa*	California sycamore	N
Poaceae	*Avena barbata*	Slim oat, slender oat	I
Poaceae	*Bromus diandrus*	Ripgut grass	I
Poaceae	*Bromus hordeaceus*	Soft chess	I
Poaceae	*Cynosurus echinatus*	Bristly dogtail grass	I
Poaceae	*Hordeum murinum*	Wall barley	I
Poaceae	*Vulpia myuros*	Foxtail fescue	I
Polygonaceae	*Rumex crispus*	Curly dock	I
Rhamnaceae	*Ceanothus cuneatus* var. *cuneatus*	Buckbrush	N
Rosaceae	*Rosa californica*	California wild rose	N
Rosaceae	*Rubus armeniacus*	Himalayan blackberry	I
Rubiaceae	*Galium parisiense*	Wall bedstraw	--
Salicaceae	*Populus fremontii* ssp. *fremontii*	Alamo or Fremont cottonwood	N
Salicaceae	*Salix exigua*	Narrow leaved willow	N
Salicaceae	*Salix* sp.	Willow	--
Sapindaceae	*Aesculus californica*	California buckeye	N
Simaroubaceae	*Ailanthus altissima*	Tree of heaven	I
Verbenaceae	*Verbena bonariensis*	Purpletop	N
Vitaceae	*Vitis californica*	California grape	N
Zygophyllaceae	*Tribulus terrestris*	Puncture vine	--
Note: N = Native	**I = Invasive**		

Appendix B

Wildlife Observed within the Henningsen Lotus Park Study Area

Scientific Name	Common Name
Birds	
Cathartes aura	Turkey vulture
Buteo lineatus	Red-shouldered hawk
Euphagus cyanocephalus	Brewer's blackbird
Melanerpes formicivorus	Acorn woodpecker
Pheucticus melanocephalus	Back-headed grosbeak
Spinus tristis	Goldfinch

Appendix C — Regionally Occurring Listed and Special-Status Species

Table 1 — Regionally Occurring Listed and Special- Status Species

Special-Status Species	Regulatory Status (Federal; State; Local; CNPS)	Habitat Requirements	Identification/ Survey Period	Potential for Occurrence
Plants				
Big-scale balsamroot *Balsamorhiza macrolepis* var. *macrolepis*	--; --; --; 1B	Perennial herb found in chaparral, cismontane woodland, and valley and foothill grassland, sometimes in serpentinite soils, from 50 to 1,500 meters.	Blooming period: March–June	**None**; although the chaparral and mixed oak woodland provide habitat within the Study Area, this species was not observed during the May 22, 2015 and June 9, 2015 biological surveys that were conducted within the evident and identifiable blooming period.
Bisbee Peak rush-rose *Crocanthemum suffrutescens*	--; --; --; 3.2	Perennial evergreen shrub often found on gabbroic or lone soil, and often in burned or disturbed areas within chaparral from 75 to 670 meters.	Blooming period: April–August	**None**; although the chaparral provides habitat, the Study Area does not contain the soils required for this species and this species was not observed during the May 22, 2015 and June 9, 2015 biological surveys that were conducted within the evident and identifiable blooming period.
Brandegee's clarkia *Clarkia biloba* ssp. *brandegeeae*	--; --; --; 4	Annual herb often found on roadcuts in the chaparral, cismontane woodland, and lower montane coniferous forest from 75 to 915 meters.	Blooming period: May–July	**Present**; this species was observed within the Study Area within the mixed oak woodland. There are six CNDDB occurrences within five miles of the Study Area (CDFW 2015).
Brewer's calandrinia *Calandrinia breweri*	--; --; --; 4	Annual herb found on sandy or loamy soils, often in disturbed sites and burns within chaparral and coastal scrub from 10 to 1,220 meters.	Blooming period: March–June	**None**; although the chaparral provides habitat within the Study Area, this species was not observed during the May 22, 2015 and June 9, 2015 biological surveys that were conducted within the evident and identifiable blooming period.
Butte County fritillary *Fritillaria eastwoodiae*	--; --; --; 3	Perennial bulbiferous herb, sometimes found on serpentinite substrate, within chaparral, cismontane woodland, and lower montane coniferous forest from 50 to 1,500 meters.	Blooming period: March – June	**None**; although the chaparral and mixed oak woodland provide habitat within the Study Area, this species was not observed during the May 22, 2015 and June 9, 2015 biological surveys that were conducted within the evident and identifiable blooming period.
Congdon's onion *Allium sanbornii* var. *congdonii*	--; --; --; 4.3	Perennial bulbiferous herb found in serpentinite or volcanic substrate in chaparral or cismontane woodland from 300 to 990 meters.	Blooming period: April–July	**None**; the Study Area does not contain the soils required for this species.
Dubious pea *Lathyrus sulphureus* var. *argillaceus*	--; --; --; 3	Perennial herb found in cismontane woodland and lower montane coniferous forest from 150 to 930 meters.	Blooming period: April–May	**None**; although the mixed oak woodland provides habitat within the Study Area, this species was not observed during the May 22, 2015 and June 9, 2015 biological surveys that were conducted within the evident and identifiable blooming period.
El Dorado bedstraw *Galium californicum* ssp. *sierrae*	FE; CR; --; 1B	Perennial herb found on gabbroic soils in chaparral, cismontane woodland, and lower montane coniferous forest from 100 to 585 meters.	Blooming period: May–June	**None**; the Study Area does not contain the soils required for this species.
El Dorado County mule ears *Wyethia reticulata*	--; --; --; 1B	Perennial herb found on clay or gabbroic substrate within chaparral, cismontane woodland, and lower montane coniferous forest from 185 to 630 meters.	Blooming period: April–August	**None**; although the chaparral and mixed oak woodland provide habitat within the Study Area, this species was not observed during the May 22, 2015 and June 9, 2015 biological surveys that were conducted within the evident and identifiable blooming period.
Ewan's larkspur *Delphinium hansenii* ssp. *ewanianum*	--; --; --; 4.2	Perennial herb found on rocky soils in cismontane woodland and valley and foothill grassland from 60 to 600 meters.	Blooming period: March–May	**None**; although the mixed oak woodland provides habitat within the Study Area, this species was not observed during the May 22, 2015 and June 9, 2015 biological surveys that were conducted within the evident and identifiable blooming period.
Fresno ceanothus *Ceanothus fresnensis*	--; --; --; 4	Perennial evergreen shrub found occasionally in openings of cismontane woodland and lower montane coniferous forest from 900 to 2,103 meters.	Blooming period: May–July	**None**; the Study Area occurs outside the known elevation range for this species.
Humboldt lily *Lilium humboldtii* ssp. *humboldtii*	--; --; --; 4.2	Perennial bulbiferous herb often found in openings in chaparral, cismontane woodland, and lower montane coniferous forest from 90 to 1,280 meters.	Blooming period: May–July	**None**; although the chaparral and mixed oak woodland provide habitat, this species was not observed during the May 22, 2015 and June 9, 2015 biological surveys that were conducted within the evident and identifiable blooming period.
Jepson's onion *Allium jepsonii*	--; --; --; 1B	Perennial bulbiferous herb found on serpentinite or volcanic substrate in chaparral, cismontane woodland, and lower montane coniferous forest from 300 to 1,320 meters.	Blooming period: April–August	**None**; the Study Area does not contain the soils required for this species.
Jepson's woolly sunflower *Eriophyllum jepsonii*	--; --; --; 4.3	Perennial herb found in chaparral, cismontane woodland, and coastal scrub, sometimes on serpentinite soil, from 200 to 1,025 meters.	Blooming period: April–June	**None**; although the chaparral and mixed oak woodland provide habitat, this species was not observed during the May 22, 2015 and June 9, 2015 biological surveys that were conducted within the evident and identifiable blooming period.
Layne's butterweed (=ragwort) *Packera layneae*	FT; CR; --; 1B	Perennial herb often found on rocky, gabbroic, or serpentinite soils in chaparral and cismontane woodland from 200 to 1,000 meters.	Blooming period: April–August	**None**; although the chaparral and mixed oak woodland provide habitat, this species was not observed during the May 22, 2015 and June 9, 2015 biological surveys that were conducted within the evident and identifiable blooming period. There are five CNDDB occurrences for this species within five miles of the Study Area (CDFW 2015).

Special-Status Species	Regulatory Status (Federal; State; Local; CNPS)	Habitat Requirements	Identification/ Survey Period	Potential for Occurrence
Nissenan manzanita *Arctostaphylos nissenana*	--; --; --; 1B.2	Perennial evergreen shrub found on rocky substrate in closed cone coniferous forest and chaparral from 450 to 1,100 meters.	Blooming period: February–March	**None**; the Study Area occurs outside of the known elevation range for this species. There is one CNDDB occurrence for this species within five miles of the Study Area (CDFW 2015).
Oval-leaved viburnum *Viburnum ellipticum*	--; --; --; 2B	Perennial deciduous shrub found in chaparral, cismontane woodland, and lower montane coniferous forest from 215 to 1,400 meters	Blooming period: May–June	**None**; although the chaparral and mixed oak woodland provide habitat, this species was not observed during the May 22, 2015 and June 9, 2015 biological surveys that were conducted within the evident and identifiable blooming period.
Parry's horkelia *Horkelia parryi*	--; --; --; 1B	Perennial herb usually found on Ione formation and other soils in chaparral and cismontane woodland 80 to1,035 meters.	Blooming period: April–September	**None**; although the chaparral and mixed oak woodland provide habitat, this species was not observed during the May 22, 2015 and June 9, 2015 biological surveys that were conducted within the evident and identifiable blooming period.
Pine Hill ceanothus *Ceanothus roderickii*	FE; CR; --; 1B	Perennial evergreen shrub found on serpentinite or gabbroic substrate in chaparral and cismontane woodland from 245 to 1,090 meters.	Blooming period: April–June	**None**; the Study Area does not contain the soils required for this species.
Pine Hill flannelbush *Fremontodendron decumbens*	FE; CR; --; 1B	Perennial evergreen shrub found in chaparral and cismontane woodland on rocky gabbroic or serpentinite soils, from 425 to 760 meters.	Blooming period: April–July	**None**; the Study Area does not contain the required soils and occurs outside of the known elevation range for this species.
Red Hills soaproot *Chlorogalum grandiflorum*	--; --; --; 1B	Perennial bulbiferous herb found in serpentinite, gabbroic, and other soils, often in cismontane woodland, chaparral, and lower montane coniferous forest from 245 to 1,240 meters.	Blooming period: May–June	**None**; although the chaparral and mixed oak woodland provide habitat, this species was not observed during the May 22, 2015 and June 9, 2015 biological surveys that were conducted within the evident and identifiable blooming period. There is one CNDDB occurrence for this species within five miles of the Study Area (CDFW 2015).
Sanford's arrowhead *Sagittaria sanfordii*	--; --; --; 1B	Perennial rhizomatous herb found in marshes and swamps in assorted shallow freshwater areas from 0 to 650 meters.	Blooming period: May–October	**None**; although the perennial and seasonal marshes provide habitat, this species was not observed during the May 22, 2015 and June 9, 2015 biological surveys that were conducted within the evident and identifiable blooming period.
Serpentine bird's-beak *Cordylanthus tenuis* ssp. *brunneus*	--; --; --; 4.3	Annual hemiparasitic herb found sometimes on serpentinite soil in closed-cone coniferous forest, chaparral, and cismontane woodland from 475 to 915 meters.	Blooming period: July–August	**None**; the Study Area occurs outside of the known elevation range for this species.
Stebbins's morning-glory *Calystegia stebbinsii*	FE; CE; --; 1B	Perennial rhizomatous herb found on gabbroic or serpentinite soils, occasionally in openings in cismontane woodland and chaparral from 185 to 1,090 meters.	Blooming period: April–July	**None**; the Study Area does not contain the soils required for this species.
Streambank spring beauty *Claytonia parviflora* ssp. *grandiflora*	--; --; --; 4	Annual herb found in rocky soils in cismontane woodlands from 250 to 1,200 meters.	Blooming period: February–May	**None**; although the mixed oak woodland provides habitat, this species was not observed during the May 22, 2015 biological survey that was conducted within the evident and identifiable blooming period.
Tripod buckwheat *Eriogonum tripodum*	--; --; --; 4.2	Perennial deciduous shrub found often on serpentite soil in chaparral and cismontane woodland from 200 to 1,600 meters.	Blooming period: May–July	**None**; although the chaparral and mixed oak woodland provide habitat, this species was not observed during the May 22, 2015 and June 9, 2015 biological surveys that were conducted within the evident and identifiable blooming period.
True's manzanita *Arctostaphylos mewukka* ssp. *truei*	--; --; --; 4.2	Perennial evergreen shrub found in chaparral and lower montane coniferous forests, sometime roadside from 425 to 1,390 meters.	Blooming period: February–July	**None**; the Study Area occurs outside of the known elevation range for this species.
Van Zuuk's morning-glory *Calystegia vanzuukiae*	--; --; --; 1B.3	Perennial rhizomatous herb found in gabbro or serpentinite soils in chaparral and cismontane woodland from 500 to 1,180 meters.	Blooming period: May–August	**None**; the Study Area occurs outside of the known elevation range and does not contain the soils required for this species.
Wildlife				
Invertebrates				
Valley elderberry longhorn beetle *Desmocerus californicus dimorphus*	FT; --; --; --	Host plant is elderberry (*Sambucus* sp.) shrubs usually associated with riparian areas.	Adults emerge in spring until June. Exit holes visible year–round.	**None**; there are no elderberry shrubs within the Study Area.
Vernal pool fairy shrimp *Branchinecta lynchi*	FT; --; --; --	Found commonly in a small swale earth slump or basalt-flow depression basin with grassy or muddy bottom in unplowed grassland from 10 to 290 meters in the Central Valley and up to 1,159 meters in the South Coast Mountains Region	Wet season: December to May (adults) Dry season: June to November (cysts)	**None;** the Study Area does not provide habitat for this species.
Amphibians/Reptiles				
California red-legged frog *Rana draytonii*	FT; CSC; --; --	Requires a permanent water source and is typically found along quiet, slow-moving streams, ponds, or large marsh communities with emergent vegetation and deep water. Upland and bank areas required for aestivation periods.	Aquatic surveys of breeding sites between January and September. Optimally after April 15.	**None**; the Study Area does not provide habitat for this species.
Coast (California) horned lizard *Phrynosoma blainvillii*	--;CSC; --; --	Found in grasslands, coniferous forests, woodlands, and chaparral, with open areas and patches of loose sandy soil. Often found in lowlands along sandy washes with scattered shrubs and along dirt roads, and frequently found near ant hills.	Year–round (excluding extended periods of low temperatures or extreme heat)	**Low**; the mixed oak woodland and chaparral provide habitat for this species.

Special-Status Species	Regulatory Status (Federal; State; Local; CNPS)	Habitat Requirements	Identification/ Survey Period	Potential for Occurrence
Foothill yellow-legged frog *Rana boylii*	--; CSC; --; --	Typically found in permanent slow-moving streams or channels with rocky or muddy bottoms within areas of chaparral, open woodland, and forest. Extirpated from an estimated 66 percent of its range in the foothills of the Sierra Nevada Mountains, especially south of Highway 80 where it is nearly extinct.	March-June	**Low**: although the South Fork American River provides marginal habitat, the portion of the river that occurs within or along the western border of the Study Area is fast moving with rapids and lacks backwater pools. There is one CNDDB occurrence for this species within five miles of the Study Area (CDFW 2015).
Western pond turtle *Actinemys marmorata*	--; CSC; --; --	Found in ponds, marshes, rivers, streams, and irrigation ditches with aquatic vegetation and either rocky or muddy bottoms in woodland, forest, and grassland from 0 to 2,041 meters. Requires basking sites and suitable upland habitat for egg laying. Nest sites most often characterized as having gentle slopes (<15 percent) with little vegetation or sandy banks.	March through October	**High**; the perennial and seasonal marshes, South Fork American River, and riparian vegetation provide aquatic and upland habitat for this species. There is one CNDDB occurrence for this species within five miles of the Study Area (CDFW 2015).
Fish				
Central Valley steelhead *Oncorhynchus mykiss*	FT; --; --; --	Rivers and streams tributary to the Sacramento-San Joaquin Rivers and Delta ecosystems. There is a dam at Folsom Reservoir that prevents fish passage upstream.	Spawn in winter and spring.	**None**; while the South Fork American River is part of the historical range of this species, steelhead are anthropogenically blocked from this part of the American River system.
Delta smelt *Hypomesus transpacificus*	FT; CE; --; --	Found in shallow fresh or brackish water tributary to the Delta ecosystem; spawns in freshwater sloughs and channel edge waters.	Spawn December–July. Present year–round in the Delta.	**None**; the Study Area is outside of the known geographic range for this species.
Birds				
Bald eagle *Haliaeetus leucocephalus*	FD; CFP; --; --	Nesting restricted to the mountainous habitats near permanent water sources in the northernmost counties of California, the Central Coast Region, and on Santa Catalina Island. Winters throughout most of California at lakes, reservoirs, river systems, and coastal wetlands. Nests usually are in tall trees or on pinnacles or cliffs near water.	Winter	**None**; the trees within the Study Area do not provide breeding habitat.
Bank swallow *Riparia riparia*	--; CT; --; --	Nests in riverbanks and forages over riparian areas and adjacent uplands. Nests are in steep sand, dirt, or gravel banks, in burrows dug near the top of the bank along the edge of inland water, along the coast, or in gravel pits and road embankments.	April–July	**None**; the Study Area does not provide nesting habitat for this species.
Black rail *Laterallus jamaicensis*	--; CT; --; --	Saltwater, brackish, and freshwater marshes. This species is known from Alameda, Butte, Contra Costa, Imperial, Los Angeles, Marin, Napa, Nevada, Orange, Placer, Sacramento, San Bernardino, San Diego, San Francisco, San Joaquin, San Luis Obispo, San Mateo, Santa Clara, Santa Cruz, Solano, Sonoma, Sutter, and Yuba counties, in California.	Year–round	**None**; the Study Area is outside of the known geographic range for this species.
Black swift *Cypseloides niger*	--; CSC; --; --	Found nesting on steep cliffs or ocean bluffs with ledges, cavities or cracks for nesting along ocean shore, inland deep canyons and often behind waterfalls. Forages in a wide variety of habitats including forests, canyons, valleys, and plains. Breeding elevations range from 0 to 2,285 meters.	May to July	**None**; the Study Area does not provide nesting habitat for this species.
Golden eagle *Aquila chrysaetos*	--; CFP; --; --	Open and semi-open areas up to 12,000 feet in elevation. Builds stick nests on cliffs, in trees, or on man-made structures. Nests are most often on rock ledges of cliffs but sometimes in large trees (e.g., oak or eucalyptus in), on steep hillsides, or on the ground.	Year–round	**None**; the Study Area does not occur in semi-open areas and does not provide suitable foraging habitat for this species.
Northern goshawk *Accipiter gentilis*	--; CSC; --; --	Nests in coniferous forests including those dominated by ponderosa pine. Nests are constructed in the largest of trees of dense, old, or mature stands with high canopy closure.	Year–round	**Low**; the mixed oak woodland within the Study Area is not comprised of a mature stand with high canopy closure.
Peregrine falcon *Falco peregrinus*	FD; CE; --; --	Nests on man-made structures and in the hollows of old trees or open tops of cypress, sycamore, or cottonwood trees 50 to 90 feet above the ground, mostly in woodland, forest, and coastal habitats. Known from Alameda, Butte, Calaveras, Humboldt, Los Angeles, Mendocino, Napa, San Benito, San Diego, San Mateo, Santa Clara, Santa Cruz, Shasta, Siskiyou, Solano, Tehama, and Tuolumne counties in California.	Year–round (some migrate)	**None**; this species is not known to occur in El Dorado County.
Tricolored blackbird *Agelaius tricolor*	--; CSC; --; --	Found nesting in dense thickets of cattails, tules, willow, blackberry, wild rose, and other tall herbs near fresh water. Feeds in grass and cropland habitats in California. Tricolored blackbirds are highly colonial nesters, requiring nesting areas large enough to support at least 50 pairs.	Year–round	**None**; the riparian and Himalayan blackberry scrub are not large enough to support a minimum of 50 nesting pairs. There is one CNDDB occurrence for this species within five miles of the Study Area (CDFW 2015).
Burrowing owl *Athene cunicularia*	--; CSC; --; --	Nests in burrows in the ground, often in old ground squirrel burrows or badger, within open dry grassland and desert habitat.	Year–round; Breeding season surveys between March and August.	**None**; the Study Area does not provide nesting or wintering habitat for this species.
White-tailed kite *Elanus leucurus*	--; CFP; --; --	Nests in isolated trees or woodland areas with suitable open foraging habitat.	February 15 through August 31	**Low**; the mixed oak woodland provides nesting habitat for this species.
Raptors (hawks, owls and vultures) and other migratory birds	MBTA and §3503.5 Department of Fish and Game Code	Nests in a variety of communities including cismontane woodland, mixed coniferous forest, chaparral, montane meadow, riparian, and urban communities.	February 15 through August 31	**High**; the mixed oak woodland, chaparral, and riparian areas within the Study Area provide nesting habitat.

Special-Status Species	Regulatory Status (Federal; State; Local; CNPS)	Habitat Requirements	Identification/ Survey Period	Potential for Occurrence
Mammals				
Fisher *Martes pennanti*	FC; CSC; --; --	Inhabit dense coniferous or mixed forests, including early successional forest with dense overhead cover. Avoid areas with little forest cover or human disturbance. Prefer large areas of contiguous interior forest.	Year–round	**None**; the Study Area does not provide habitat for this species.
Townsend's big-eared bat *Corynorhinus townsendii*	--; CSC; --; --	Requires caves, mines, tunnels, buildings, or other human-made structures for roosting and reproduction.	Year–round	**Low**; the buildings within the disturbed/developed areas provide roosting habitat for this species.

Federally-Listed Species:
FE = federal endangered
FT = federal threatened
FC = candidate
PT = proposed threatened
FPD = proposed for delisting
FD = delisted

California State Ranked Species:
CE = California state endangered
CT = California state threatened
CR = California state rare
CSC = California species of special concern
CCT = California state threatened candidate

CNPS* Rank Categories:
1A = plants presumed extinct in California
1B = plants rare, threatened, or endangered in California and elsewhere
2 = plants rare, threatened, or endangered in California, but common elsewhere
3 = plants about which we need more information
4 = plants of limited distribution

Other Special-Status Listing:
SLC – species of local or regional concern or conservation significance

Source: Foothill Associates

Species list generated from queries of the USFWS, CNPS, and CNDDB databases for the *Coloma* quadrangle and eight surrounding quadrangles.

Table 2 — Nesting Birds of Conservation Concern Protected under the Migratory Bird Treaty Act (MBTA) and §3503.5 Department of Fish and Game Code

Birds of Conservation Concern	Habitat Requirements	Identification/ Survey Period	Potential for Occurrence
Black-chinned sparrow *Spizella atrogularis*	Found in brushy mountain slopes, open thickets of manzanita, scrub oak, chaparral, and sagebrush from low foothills up to 2130 meters.	March–September	**Low**; the chaparral provides habitat for this species.
California spotted owl *Strix occidentalis occidentalis*	Found in old growth forests from 300 to 2600 meters	Year–round	**None**; the Study Area does not provide habitat for this species.
Flammulated owl *Otus flammeolus*	Nests in open pine forests. Nest site is in cavity in tree, usually old woodpecker hole between 4 to 12 meters above ground.	April–September	**None**; the Study Area does not provide habitat for this species.
Nuttall's woodpecker *Picoides nuttallii*	Found in oak woodlands and riparian woods of California, rarely in conifers. Nest site is in cavity in trees.	Year–round	**Low**; the riparian and mixed oak woodland provide habitat for this species.
Oak titmouse *Baeolophus inornatus*	Nest site is in a cavity in tree, stump, fence post, or pole. Most commonly found in oak woodland where oaks meet streamside trees or pines, rarely found in coniferous forest in mountains.	Year–round	**Low**; the trees within the mixed oak woodland provide nesting habitat for this species.
Williamson's sapsucker *Sphyrapicus thyroideus*	Nest site is cavity in tree, often in aspen, pine, or fir, usually 1.5 – 18 meters above ground. Favors trees with dead heartwood and live outer layer, and may return to dig new nest holes in same tree year after year.	Year–round	**Low**; the pines in the mixed oak woodland provide habitat for this species.
Brewer's sparrow *Spizella breweri*	This species is a sagebrush obligate. Nest site is in tall and densely branching shrubs.	April–October	**None**; the Study Area is outside of the known geographic range for this species.
Calliope hummingbird *Stellula calliope*	Nest site is usually in a pine or other conifer, sometimes in deciduous shrub. Usually 2 to 12 meters up, can be much higher. Sometimes built on base of old pine cone. Breeds from 1,200 meters up to the tree line.	April–August	**None**; the Study Area is outside of the known geographic breeding range for this species.
Fox sparrow *Passerella ilaca*	Found in dense thickets in coniferous or mixed woodlands, chaparral, parks, and gardens, wooded bottomlands along rivers and creeks. Requires dense brushy cover during the nesting season. Sometimes nests up in shrubs or low trees, rarely more than 2 to 3 meters above ground.	Year–round	**Low**; the mixed oak woodland and chaparral provide habitat for this species.
Green-tailed towhee *Pipilo chlorurus*	Inhabits low shrubs, sometimes interspersed with trees and avoids typical forests, other than open pinyon-juniper woodlands. Nest site is on the ground or in low shrubs such as sagebrush or manzanita, one meter or less above the ground.	May–August 15	**None**; the Study Area is outside of the known geographic breeding range for this species.
Lewis's woodpecker *Melanerpes lewis*	Nest site is cavity excavated in tree (tree or limb usually dead), sometimes in utility pole, from 1.5 to over 30 meters above ground.	Year–round	**Low**; the Study Area provides habitat for this species.
Loggerhead shrike *Lanius ludovicianus*	Nest site is placed in a dense and often thorny tree or shrub, usually 1.5 to 10 meters above the ground. Nest is usually well hidden by foliage. Prefers semi-open country. Known from Alameda, Butte, Contra Costa, Fresno, Imperial, Inyo, Kern, Los Angeles, Riverside, San Bernardino, San Diego, San Joaquin, San Luis Obispo, Stanislaus, and Tulare counties.	Year–round	**None**; the Study Area is outside of the known geographic breeding range for this species.
Olive-sided flycatcher *Contopus cooperi*	Found in boreal and western coniferous forests. Breeds in montane and northern coniferous forests, at forest edges and openings. Nest is an open cup of twigs in trees.	May–September	**None**; the Study Area does not provide habitat for this species.
Short-eared owl *Asio flammeus*	Usually found in open areas with few trees, such as annual and perennial grasslands, prairies, dunes, meadows, irrigated lands, and saline and fresh emergent wetlands. Nests usually located on dry sites with enough vegetation to conceal incubating female. Known from Contra Costa, Fresno, Imperial, Los Angeles, Modoc, Monterey, San Mateo, and Solano counties in California.	Year–round	**None**; this species is not known to occur in El Dorado County.
Snowy plover *Charadrius alexandrinus*	Nests on the ground on broad open beaches or salt or dry mud flats, where vegetation is sparse or absent (small clumps of vegetation are used for cover by chicks); nests beside or under objects or in open areas. Known from Alameda, Del Norte, Humboldt, Imperial, Inyo, Kern, Kings, Los Angeles, Marin, Mendocino, Modoc, Monterey, Napa, Orange, Riverside, San Bernardino, San Diego, San Luis Obispo, San Mateo, Santa Barbara, Santa Clara, Santa Cruz, Siskiyou, Sonoma, Tulare, Ventura, and Yolo counties.	Year–round	**None**; this species is not known to occur within El Dorado County.
White-headed woodpecker *Picoides albolarvatus*	Nest site is in mountain pine forests in heavy dead stub of tree (especially pines, also aspens, oaks, and others), usually 2 to 5 meters above ground.	Year–round	**None**; the Study Area does not provide habitat for this species.

Migratory Bird Treaty Act and Golden Eagle Protection Act list generated from queries of the USFWS for the Study Area (USFWS 2015).